

# Accelerating Efforts to Reduce Ocean Plastic in Vietnam

# PROJECT REPORT

- **Objective:** Support implementation of Vietnam's NAP at national and provincial level
- Activity: Raising public awareness to
- foster behavior change at the community level



- Implementation period: 1 April 2022 – 15 March 2023
   Budget: \$72,461.5
  - Budget: \$78,461.5



# **ABBREVIATIONS**

DONRE	Department of Natural Resources and Environment
DOET	Department of Education and Training
MEL	Monitoring, Evaluation and Learning
тот	Training of Trainers



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## I. PROJECT DESCRIPTION/ INTRODUCTION

#### 1.1 Background

On December 4, 2019, the Prime Minister issued Decision no. 1746/QĐ-TTg: Introducing a national action plan for management of marine plastic litter by 2030. The decision has four General goals, including:

- Effectively implement Vietnam's initiatives and commitments to the world on solving plastic waste problems, with a focus on ocean plastic waste prevent the discharge of plastic waste from other sources, waste on land and activities at sea, striving to make Vietnam a pioneer in the region in reducing ocean plastic waste.
- Contributing to the successful implementation of the National Strategy on integrated solid waste management to 2025, with a vision to 2050 approved by the Prime Minister in Decision No. 491/QD-TTg dated May 7, 2018 and ensuring the effective development and implementation of the Project on strengthening plastic waste management in Vietnam.
- In line with the circular economy model approach, contributing to promoting the collection, recycling and reuse of plastic waste in Vietnam.
- Raise awareness, behavior and habits around use of single-use plastic products and nondegradable plastic bags of the community and society.

On February 5, 2021, the Minister of Agriculture and Rural Development signed Decision No. 687/QD-BNN-TCTS promulgating an action plan to manage ocean plastic waste in the fisheries sector, 2020- 2030. The plan clearly states that the common goal is to reduce plastic waste in seafood production, step by step management of ocean plastic waste with watershed-to-ocean approach, circular economy and green economy development; raising the awareness and social responsibility of the community including farmers, fishermen and businesses about plastic waste, contributing to the successful implementation of the objectives of the National Strategy on integrated solid waste management.

**Phu Yen** is a coastal province on the South Central Coast with a coastline of 189km stretching across 04 coastal districts and city. Along with many bays, beaches, lagoons, and cliffs, Phu Yen has diverse and rich natural conditions, and great potential for tourism development, marine economy, and biodiversity. In 2019, the total amount of Domestic solid waste generated in Phu Yen province was 524 tons/day. Two (2) big coastal district and city, Tuy Hoa city and Song Cau district, generated Domestic solid waste of 132 tons/day and 84 tons/day, respectively, accounting for 41% of the total amount of Domestic solid waste generated has increased compared to previous years, the generation of plastic waste and solid waste, in general, has been causing adverse effects on the environment and marine ecosystems, leading to harmful effects on the environment and marine ecosystem, negative impact on the regional economy.

Phu Yen province has developed an Action Plan for Management of Marine Plastic Litter by 2030 (NAP Phu Yen) with the aim of promoting and effectively implementing activities to manage and reduce emissions and impacts of plastic waste on the environment and human health, contributing to real implementation of the sustainable development goals in Phu Yen province and the country. The NAP Phu Yen focuses on reducing single-use plastic products that are difficult to process in residential areas, tourist areas, offices, and other communities; reducing and collecting waste from fishing equipment in coastal areas, bays, and marine protected areas

On December 23, 2021, the Directorate of Fisheries coordinated with IUCN and WWF to organize the "National Forum on Ocean Plastic Waste Management: Towards Sustainable Fisheries Development". The forum 1) Summarized plastic waste management activities to support the implementation of the Action Plan on Marine plastic waste management in the Fisheries sector and 2) Shared waste management initiatives, supporting the implementation of the Action Plan for marine plastic waste management in the



fisheries sector. During the discussion session, the Center for Supporting Green Development (GreenHub) shared the initiatives GreenHub is implementing, contributing ideas to support the Action Plan on Marine Plastic Waste Management in the Fisheries sector.

This work is coordinated by GreenHub with the cooperation of the Directorate of Fisheries, Department of Natural Resources and Environment (DONRE), the Department of Education and Training, the Women's Union and the Phu Yen Youth Union to deploy 4 components towards behavioral change to reduce ocean plastic waste, in support the Decision 2179/QĐ-UBND signed by the President of Phu Yen province on the "Action Plan For Management of Marine Plastic Litter by 2030 in Phu Yen province" (NAP Phu Yen) and the National Action Plan For Management of Marine Plastic Litter by 2030" (NAP). Proposed activities align with the goals outlined in the regional plan.

#### **1.2 Expected results**

The expected outcome of this work is to create behavior change effects towards reducing plastic waste emissions from the source into the ocean through communication activities. From there, supporting the communication and implementation of NAP in Phu Yen as well as directly contributing to its goals. Specifically,

#### Component 1: Communication of behavior change for fishing communities and coastal residents of Phu Yen

Component 1 creates a core group of members with enhanced capacity to develop and implement communication activities to reduce the amount of plastic waste generated from households and coastal residents in 04 coastal districts and city.

That contributes mainly to the realization of "raising awareness and changing the behavior of the community about the habit of using single-use plastic products, non-biodegradable plastic and plastic bags, and plastic products and materials that do not need to be used" of NAP by 2025

#### Component 2: Communicating behavior change through cleanup data in Phu Yen

The implementation of the cleanup campaign along the coast of Phu Yen in 04 districts contributes to NAP's goal of implementing beach collection and cleaning activities in 100% of marine and nature conservation zones in the province by 2030

#### Component 3: Communication to change behavior for zero waste schools in Viet Nam

Component 2 focuses on regulations on reducing and stopping the use of unnecessary single-use plastic products at schools in combination with education and communication to change the behavior of students and teachers.

That contributes mainly to the realization of NAP's goal of "reducing 50% of the total amount of plastic waste emitted into the sea and ocean in Phu Yen" in 2025.

#### **Component 4: National and provincial conference in NAP**

The Conference will connect stakeholders to join hands to support the implementation of NAP. It also towards 2 out of 4 main tasks and solutions of Decision No. 1746/QD-TTg:

- Develop and implement communication programs on the harmful effects of single-use products derived from plastic, non-degradable plastic bags to seas and oceans, marine ecosystems, the environment and health. human health; programs to collect and treat ocean plastic waste; ways and meanings of separating waste at source, changing habits of using single-use plastic products and non-biodegradable plastic bags.
- Advocate and call on organizations and individuals to increase recycling and reuse of plastic waste, promoting the building of a circular economy and green growth.

#### **1.3 Purpose and structure of the report**

This report details the implementation of the Accelerating Efforts to Reduce Ocean Plastic in Vietnam activities and presents the results of the project. The lessons learned outlined in section 5 were identified



in collaboration with the project partners and beneficiaries. Recommended next steps for ensuring the project interventions are developed and replicated locally in section 6.

# II. ACTIVITY IMPLEMENTATION

#### Component 2: Communicating behavior change through cleanup data in Phu Yen

#### Phase 1: Collecting Ocean plastic waste data

04 beach cleanup campaigns in 04 coastal districts and city in Phu Yen province have been implemented with the communication message "Our Ocean is not home for plastic". in response to International Coastal Clean up day in September and October 2022. The results achieved at each clean - up campaign are shown in the figures below:

**Dong Hoa district:** The beach selected to carry out the coastal cleanup campaign is a strait in the Vung Ro bay area with a large amount of plastic waste from aquaculture activities drifting ashore without management.

Currently, there are more than 400 aquaculture cages operating illegally in the Vung Ro Bay area. The large amounts of packaging of aqua feed accompanied by domestic waste from the operation of these cages is the main cause of plastic pollution in this area.



**Figure 1:** Plastic pollution at the site of the coastal clean-up campaign in Dong Hoa district





**Figure 2:** The results of the Dong Hoa coastal cleanup campaign

**In Song Cau district:** Similar to Dong Hoa district, Song Cau district also has a strong development of the leading fisheries industry in Phu Yen province. And aquaculture activities also bring the amount of animal feed packaging, plastic bags drifting uncontrollably around this area.

Song Cau beach cleanup campaign was held on September 17, 2022 at My Thanh neighborhood, Xuan Thanh ward, Song Cau district with the results shown in Figure 4.



**Figure 5:** The coastal clean-up campaign in Song Cau district

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The beach cleanup campaign in Dong Hoa district area was held on September 16, 2022 with the participation of volunteers who are students from high schools in Tuy Hoa City, Dong Hoa district and Tuy An district. The results of the Dong Hoa beach cleanup campaign are shown in Figure 3.



Figure 3: The coastal clean-up campaign in Dong Hoa district



Figure 4: The results of the Song Cau coastal cleanup campaign





**Figure 6**: The results of the Tuy An coastal cleanup campaign

**In Tuy Hoa city:** Tuy Hoa city is the center of marine tourism development of Phu Yen province. Tuy Hoa beach area is of interest to be cleaned regularly to serve tourists. or that reason, the amount of plastic waste collected at Tuy Hoa beach is mainly single-use plastic, food packaging arising from tourism activities. The campaign to clean up the Tuy Hoa coast was held on October 22, 2022 at the coast of Doc Lap street, Binh Kien commune with the results shown in Figure 9.



**Figure 8:** Single-use plastic collected in the Tuy Hoa coastal cleanup campaign

**In Tuy An district:** The beach selected to carry out the Tuy An beach cleanup campaign is named An Vu , in Phu Hoi village, An Ninh Dong commune. The beach is located near residential areas, markets. Plastic pollution in this area has a significant contribution from the activities of coastal communities. At the time of cleaning up, residents' activities of littering the sea and burning waste on the beach were recorded on September 18, 2022. The results of the Tuy An beach cleanup campaign are shown in Figure 6.



**Figure 7:** Burning waste is carried out by residents at the coastal area of Phu Hoi village, An Ninh Dong commune



**Figure 9:** The results of the Tuy Hoa coastal cleanup campaign



#### Phase 2: Online media campaign from the database collection from phase 1

The coastal clean- up campaign in 04 coastal districts and city in Phu Yen province - Our ocean is not a home of plastic is combined with communication on social networking platforms: Facebook, website, youtube,... to spread the effectiveness of raising awareness, change behavior to reduce ocean plastic waste.



Figure 10: "Our Ocean is not home for plastic" campaign was implemented in Dong Hoa district, Tuy An district, Song Cau district and Tuy Hoa city

The campaign's communication activities attracted the attention of the community on social networking platforms with 6453 hits for interesting and 719 online responses (data recorded at the time of reporting). Campaign media publications include infographics, communication stories and <u>highlight video</u> posted on <u>facebook GreenHub</u>, <u>Phu Yen Zero waste</u>, <u>GreenHub's website</u> and <u>youtube</u>.

# Component 1: Communication of behavior change to reduce plastic waste in aquaculture for coastal residents in Phu Yen

<u>Phase 1: Launching a program to find ambassadors to reduce ocean plastic waste in</u> <u>aquaculture at 04 coastal districts of Phu Yen province</u>

The collection of data through clean up activities with the Clean Swell application has shown a general picture of the current status of plastic waste in 04 coastal districts and city of Phu Yen. Since then, a training program to develop communication initiatives to change plastic reduction behavior in the community has been organized by GreenHub, Phu Yen Provincial Women's Union and WWF Vietnam on December 29, 2022.

90 women participating in the training from the Women's Unions of 9 districts and city of Phu Yen province were provided with:



1. Information on the Law on Environmental Protection in 2020, Phu Yen Province's Action Plan on Ocean Plastic Waste Management

2. Knowledge and guidance to develop communication initiatives to change behavior to reduce plastic consumption in the community

3. Methods for developing and implementing the plan + budget for implementing the community communication program



**Figure 11-13:** The training program to develop communication initiatives to change plastic reduction behavior in the community on December 29, 2022





After 1 day of training, 9 groups representing 9 districts and city have successfully developed 9 action plans with budget to implement local community communication initiatives to reduce plastic waste from the source.

Figure 14: Co-developing action plan at the training program to develop communication initiatives to change plastic reduction behavior in the community

Phase 2: 04 groups of ambassadors selected after the capacity-building program to carry out the communication plan to change the behavior of coastal residents in 04 coastal districts and city.



After assessing the feasibility in terms of time, resources and sustainability of the initiatives, GreenHub, Phu Yen Department of Natural Resources and Environment, Provincial Women's Union have selected 05 potential initiatives to pilot implementation, including:

1. Model "Joining hands to protect Green - Clean - Beautiful coastal residential area" in An Vu hamlet, Phu Hoi village, An Ninh Dong commune, Tuy An district:

#### Activities:

- Provide recycling bins + organic compost bins + other waste bins in An Vu hamlet to facilitate for residents to dispose of their waste in the right place instead of throwing domestic waste into the sea.

- Organize monthly beach cleanup campaign with the participation of residents of An Vu hamlet, local authorities, youth union, women's union to raise awareness and sense of keeping the sea clean.

- Communicate and educate residents to practice sorting waste, dumping waste in the right place, and composting in order to reduce waste from source

#### **Results:**

- A core force of 30 women trained in behavior change communication to carry out communication work for residents

 Mobilize 65 households that have thrown their household waste directly into the sea has changed their practice of sorting and reducing waste at source
 Collected 600 kg of uncontrolled domestic waste from households

- 200 kg of organic waste sorted and composted

- 50 kg of recycled plastic waste are collected/ month



**Figure 15-17:** Model "Joining hands to protect Green - Clean - Beautiful coastal residential area" in An Vu hamlet, Phu Hoi village, An Ninh Dong commune, Tuy An district



2. Model "Joining hands to protect Green - Clean - Beautiful coastal residential area" in Lang Ong hamlet, village 2, Xuan Hai commune, Song Cau district

#### Activities:

- Provide recycling bins + organic compost bins + hand-pulled waste truck in Lang Ong hamlet to facilitate for residents to dispose of their waste in the right place instead of throwing domestic waste into the sea.

- Communicate and educate residents to practice sorting waste, dumping waste in the right place, and composting in order to reduce waste from source

- Make murals to communicate about plastic waste to residents

#### **Results:**

- A core force of 30 women trained in behavior change communication to carry out communication work for residents

- 30 households committed to sort and recycle plastic waste

- 30 kg of recycled plastic waste are collected/ month





**Figure18-20:** Model "Joining hands to protect Green - Clean - Beautiful coastal residential area" in Lang Ong hamlet, village 2, Xuan Hai commune, Song Cau district



3. Model "Implementation of plastic waste reduction and management program" at Phan Luu Thanh Pedestrian Street, Ward 7, Tuy Hoa City

=> The initiative has been established and an implementation plan has been issued by Ward 7 Committee. However, the implementation time is the rainy season, the pedestrian street is temporarily closed to ensure safety, so the plan to implement the initiative has not been implemented in February and March 2023. The plan is reserved for using other resources to implement in the future

4. Model "Filling station -Reducing residential waste" in Dong Phuoc village, Hoa An commune, Phu Hoa district Activities:

- Install equipment to make bio - detergent from fruit peels

- Installation of a composting facility- Install recycling bins

- Implement and maintain organic waste collection for biodetergent and composting, collection of plastic bottles for reuse as bio-detergent containers.

- Implement and maintain a weekly organic-based biodetergent exchange program to promote segregation practices - reduce landfill waste

- Organize communication programs to mobilize the participation of residents and the community

#### **Results:**

- 850 kg organic waste were collected for making biodetergent and composting

- 350 recyclable waste were collected

- 1000 plastic bottle were collected for for reuse as bio-detergent containers



**Figure 21 -23:** Model "Filling station - Reducing residential waste" in Dong Phuoc village, Hoa An commune, Phu Hoa district

5. Model "Promoting fishermen to bring plastic waste back to shore" in Vung Ro Bay, Hoa Xuan Nam commune, Dong Hoa district

Through the cleanup and data collection activities in component 2. GreenHub worked with the authorities of Hoa Xuan Nam commune and the Sea and Islands Department of Phu Yen province to support the local authority in developing a plan to improve the plastic pollution status in this area.



After the process of developing the plan and mobilizing the participation of local authorities (Dong Hoa District People's Committee), Plan No. 01/PA-UBND dated February 14, 2023 of the People's Committee of Hoa Xuan Nam Commune on collection, transportation and treatment of waste in Vung Ro Bay in 2023 has been issued and approved for implementation by Dong Hoa District People's Committee. In addition, the plan has additional support from WWF Vietnam and the Department of Natural Resources and Environment of Phu Yen province.

#### The main activities of the plan include:

- Communicating, advocating and implementing the commitment to bring waste to shore
- Implementing waste management in aquaculture rafts
- Cleaning up the beach in the district
- Improving existing waste management system

Besides, mural paintings have also been made in 04 coastal districts and city to increase communication efficiency with the residential community.







Figure 24-29: Mural paintings in 04 coastal districts and city

#### <u>Phase 3: Summarize the performance results of ambassadors in the regions and share</u> <u>knowledge and experiences</u>

After the pilot of implementation period as well as monitoring, evaluation and learning, the conference to summarize, share results and learn from the experience of implementing a communication initiative to change behavior to reduce plastic consumption in the community were organized on February 23, 2023.



**Figure 30-33:** The conference to summarize, share results and learn from the experience of implementing a communication initiative to change behavior to reduce plastic consumption in the community



From the sharing and discussion in this workshop, 04 models in 04 coastal districts and city

- 1. has received the attention and support of the local government and people, and also commented on the advantages and disadvantages of the model
- 2. shared lessons learned and motivations for other localities in the province to develop and implement programs to promote efforts to reduce ocean plastic waste
- 3. has attracted continued support resources from WWF Vietnam to accompany the development and replication phase in the future.

#### Component 3: Communication to change behavior for zero waste schools in Viet Nam

#### Behavior change Communication plan for Zero waste schools and more (ZHub) alliance

#### Phase 1: Build a communication roadmap and pre-survey

The Knowledge - Awareness - Behavior (KAP) survey was conducted for teachers and students of primary schools in Phu Yen from October to November 2022. Survey activities were widely carried out at primary schools in 8 districts of Phu Yen province , including:

- La Hai Town Primary School
- Hoa Tan Tay Primary School
- Hai Rieng 1 Town Primary School
- Hoa Thang 2 Primary School
- Vo Nguyen Giap Primary School
- Nguyen Huu Tho Primary School
- Song Cau Primary School
- Cung Son 2 Town Primary School



The number of people surveyed includes: 277Figure 34: Teacher conducts KAP survey on<br/>smartphoneteachers, school officials and 426 studentssmartphone

The survey shows that teachers and school officials have basic knowledge about plastic waste, a good level of awareness, but the practice is not commensurate with their awareness level. In addition, primary school students do not have much knowledge about plastic waste, but their awareness and practice are relatively good and tend to change positively.

#### Phase 2: Implement communication and monitoring – improvement for ZHub

To promote improvements for ZHub - Zero waste schools and more alliance, GreenHub sought and mobilized the participation of local government partners and international organizations to join hands in developing a network of zero-waste schools in Phu Yen province. On September 7, 2022, GreenHub cooperated with Phu Yen Department of Education and Training, WWF Vietnam to develop a plan to implement the construction of "Zero waste school in the locality. The main contents of the plan include:

- Strengthening support for the practice of waste classification and reduction of plastic waste at 05 schools in Tuy Hoa city with activities to launch movements to reduce single-use plastic and capacity building training for genvironmental clubs in schools
- Expanding zero waste practice in primary schools in 08 districts of the province with activities as follow: KAP survey ; School waste audit; Developing action plans to implement zero waste schools; Training on zero waste practice; Support for MRF model building equipment at schools





In addition, the communication product -Zhub notebooks are also designed and manufactured to support the alliance's communication activities.

Figure 35: The communication product - Zhub notebooks

Material Recovery Facilities (MRF) in schools were provided to facilitate students to practice zero waste



Figure 36-37: Material Recovery Facilities (MRF) in schools

#### Communication to change behavior to reduce plastic waste in schools in Phu Yen

Phase 1: Select 04 schools to participate in the action school program to support NAP.

According to the coordination plan developed and implemented between GreenHub, WWF Vietnam, Phu Yen Department of Education and Training, 13 schools, including 9 primary schools, 1 secondary school and 3 high schools have been mobilized to participate in the implementation of the plan. The list of zero waste schools is as follows:

- La Hai Town Primary School, Dong Xuan district
- Hoa Tan Tay Primary School, Tay Hoa district
- Hai Rieng 1 Town Primary School, Song Hinh district
- Hoa Thang 2 Primary School, Phu Hoa district
- Vo Nguyen Giap Primary School, Dong Hoa district
- Nguyen Huu Tho Primary School, Tuy An district
- Song Cau Primary School, Song Cau district
- Cung Son 2 Town Primary School, Son Hoa district
- Kim Dong Primary School, Tuy Hoa city
- Ngo Gia Tu High School, Tuy Hoa city
- Nguyen Du Primary Secondary School, Tuy Hoa city
- Duy Tan High school, Tuy Hoa city
- Phu Yen Ethnic Boarding High School, Tuy Hoa city

Phase 2: Develop goals and roadmaps for each school

By December 2022, there are 11 schools out of 13 participating in the school action program to support NAP in finalizing the development of a zero-waste implementation plans to reduce domestic waste in



general and plastic waste in particular at schools. In which, 5 schools in Tuy Hoa city have issued plans from 2021 with the support of WWF Vietnam, and 6 more action plans to implement zero-waste practice have been issued by leaders of schools in 2022 as part of the project interventions. School action plans contribute to NAP support with the following goals/ program:

Table 1: The goals/ program of the zero-waste implementation plans to reduce domestic waste in general and plastic waste in particular at schools

Policy:	Education
<ul> <li>Develop regulations to reduce the use of single- use plastics and protect the environment in schools for students, staff and teachers (according to Action Program No. 08 - Ctr/TU of Phu Yen Provincial Party Committee);</li> <li>Include the issue of plastic waste in the monthly briefing program;</li> <li>Putting the criterion "Zero waste" into the weekly, monthly, quarterly and yearly evaluation criteria of emulation and commendation.</li> </ul>	<ul> <li>Training on knowledge about plastic waste and environment for officials and teachers of school;</li> <li>Integrating knowledge about plastic, waste and environment into core subjects: English, literature, civic education, ethics, etc;</li> <li>Organize training programs on plastic waste and environment knowledge through extracurricular programs.</li> </ul>
<ul> <li>Communication</li> <li>Organize contests to learn knowledge about plastic waste and environment for students;</li> <li>Integrating plastic waste into the theme of cultural programs at schools;</li> <li>Broadcasting, propagating knowledge and plastic reduction practices;</li> <li>Launching the emulation movement in schools.</li> </ul>	<ul> <li>Practice</li> <li>Building a model of a Zero-waste school;</li> <li>Establishing an environmental club;</li> <li>Auditing waste at school.</li> </ul>

<u>Phase 3: Communication activities and roadmaps implementation at schools</u> **Zero waste trainings:** 





The training on zerowaste schools provided knowledge about the dangers of plastic waste and guided the application of zero-waste practices at schools to reduce ocean plastic waste, contributing to



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*Final Report – March 2023* enhancing local waste management efficiency for 277 teachers and officials of 08 primary schools in Phu Yen province from 18th to 28th October 2022.

**Figure 38-41:** The zero waste trainings were implemented in 08 district of Phu Yen province

#### Enforce regulations to reduce plastic waste in schools:

In addition to training activities to increase knowledge and awareness, with the support of GreenHub's technical advice, schools have issued policies to tighten the comsume of single-use plastic of students and school teachers, officials.

**Duy Tan High School** has issued regulations on waste classification for students, teachers, and school staff in classrooms, cafeterias, and dormitories in order to treat at the source to reduce organic waste and recyclable waste to landfill. Accompanying that is the requirement to reduce the single-use plastic product in school.

The goal of the regulation is: "Waste must be classified at the source in order to make efficient use of waste resources, reuse waste, minimize the use of single-use nondegradable plastics, contribute to reducing environmental pollution by waste, protect

the living environment"



Figure 42: Duy Tan High School' s regulations on waste classification



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**Ngo Gia Tu High School and Phu Yen Ethnic Minority Boarding School** issued the Zero plastic waste regulation at school in November 2022 with the specific contents as follows:

Classes follow the 5 NO rule:

- DO NOT release balloons during public holidays and activities.

- DO NOT use disposable water bottles.
- DO NOT print posters in school-wide activities.
- DO NOT use nylon to cover books.
- DO NOT use single-use plastic.

The emulation board monitors and deducts points for violations (10 points / case) and commends and adds points (no more than 20 points / time / class) with classes that perform well according to regulations.

**Figure 43:** The Zero plastic waste regulation of Ngo Gia Tu High School and Phu Yen Ethnic Minority Boarding School

#### Zero waste school contests:

Provincial level zero waste school contests were jointly launched and organized by Phu Yen Department of Education and Training, GreenHub, WWF Vietnam from January 5, 2023 to February 27, 2023. The contests have provided a space to connect and emulate between zero-waste schools in Phu Yen province, creating a playground for students to learn about plastic waste knowledge and zero-waste practice. The contests have attracted the participation of 13 schools with more than 1500 students directly participating and attracted the attention of the entire education sector in the province through websites and local newspapers.

#### a. Drawing contest with the theme "Our ocean is not home for plastic"

Specific topics of the contest:

- Current status of plastic pollution in the oceans
- Current status of harmful effects of plastic waste on the marine environment and marine organisms
- Do not use and dispose of uncontrolled plastic waste
- Actions to reduce or prevent ocean plastic waste





Figure 44-47: Drawing contest with the theme "Our ocean is not home for plastic"

The contest received 160 paintings made by students from 8 primary schools representing 8 districts and city. The contest products clearly show that information, knowledge and awareness about ocean plastic waste has reached students in the process of students creating and developing pictures with the theme "Our ocean is not home for plastic"

#### b. Zero-waste school contest

Specific topics of the contest:

- Zero-waste schools and zero-waste practices
- Reduce plastic waste in general and single-use plastic in particular

#### The contest consists of 3 parts:



#### 1. Greeting test

Time for each team should not exceed 7 minutes. The teams must highlight the communication theme The Zero Waste School promotes student participation as well as the character of their school in environmental education in schools.

#### 2. Talent test

The skits of each team competed in the form of theatrical genres. Time for each team should not exceed 15 minutes. The content reflects the dangers of plastic waste, singleuse plastics and communicate measures Zero waste schools and zero waste practices.







3. Knowledge test - Presentation test

- Each team appoints 1 member to participate in the competition, the presentation time must not exceed 7 minutes.

- Presentation content: What should students do to raise awareness about environmental protection; to make the school more green clean - beautiful.



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Figure 48-50: Zero-waste school contest

These contests not only bring information and knowledge to students and teachers effectively through actively exploring the topic and preparing the content of the contest, but also promote this target group's interest in plastic waste issues through extracurricular activities, experiences, thereby contributing to changes in their plastic use behavior.





#### Figure 51 -53: Zero-waste school contests

# Component 4: National and provincial conference in NAP in collaboration with Ocean Conservancy

#### National conference to support NAP in fisheries sector

On January 11, 2023, the Workshop "Forum of ocean plastic waste in fisheries sector" was jointly organized by the Directorate of Fisheries, GreenHub, the Department of Agriculture and Rural Development of Nam Dinh province with the sponsor Ocean Conservancy, and accompanied by WWF Vietnam and IUCN. The workshop attracted the participation of agencies, departments, non-governmental organizations, universities from provinces: Hanoi, Hai Phong, Quang Nam Nha Trang, Ho Chi Minh, Nam Dinh, Quang Ninh, ...

The workshop shared the main results, lessons learned from projects and programs on ocean plastic waste in the fisheries sector implemented in 2022, including:

- The program "Raising public awareness, changing behavior on reducing ocean plastic waste in Vietnam" implemented by GreenHub
- Share "Ghost Gear Initiative" of Global Ghost Gear Initiative (GGGI), Ocean Conservancy
- A number of activities WWF has carried out related to plastic waste in the fisheries sector
- Monitoring of plastic waste in marine protected areas (MPAs) by IUCN
- Management of marine plastic waste in the fisheries sector in Quang Ninh province
- Management of marine plastic waste in the fisheries sector community level in Vietnam by SGP (UNDP)
- Phenikaa University's project related to plastic waste in the fisheries sector









Figure 54-57: National conference to support NAP in fisheries sector

In addition, the forum also discussed a number of recommended policies from the implementation of a number of pilot models to reduce plastic waste/encourage the collection of plastic waste from seafood activities, specifically: First of all, plastic reduction activities at fishing ports and fishing vessels ("Plastic waste management for fishing vessels and fishing ports implements Appendix V to the Marpol Convention – Da Nang, 2022", "Waste collection by trawl fishing boats – Phu Yen, 2022", "Mechanism to encourage recycling and exchange of plastic waste in fishing, Da Nang, Kien Giang, Phu Yen, 2023).

Based on the results and lessons learned and shared discussions, the workshop also provides opportunities for cooperation among stakeholders for activities to reduce plastic waste in the fisheries sector industry in the future.

#### Provincial conference to support NAP in Phu Yen in collaboration with Phu Yen's DONRE

On the morning of December 23, the Women's Union of Phu Yen Province, in collaboration with the Provincial People's Committee, the Department of Natural Resources and Environment, GreenHub held a workshop to improve the quality of communication on environmental protection. The workshop was attended by more than 100 delegates who are representatives of the provincial Party Committee, leaders of relevant departments, experts in the field of environment in Phu Yen and others locals, representatives of Women's Unions of districts and city, model of environmental protection in the locality.

Participating in the workshop, participants shared and discussed about:

- 1. coordination between departments and mass organizations in communication work,
- 2. experience in mobilizing the community to participate in waste management activities
- 3. experience in building a model to mobilize the religious community to participate in environmental protection,
- 4. experience in environmental protection in aquaculture and tourism development;
- 5. experience in mobilizing women and students to reduce plastic waste through communication initiatives





Figure 58-61: Provincial conference to support NAP in Phu Yen

The presentations presented at the workshop showed a general overview of outstanding activities as well as difficulties and limitations in environmental protection communication that mass organizations and sectors have implemented. To solve the problem of environmental pollution, not an individual can do it, but it takes the synergy of the whole community. With the role of socio-political organizations with a large network of members and union members from the province to the commune level, it is very important to further promote, for associations and mass organizations to become effective communication and advocacy channels.

## III. PROJECT RESULTS

The results of the component 2,3 of the project against the main indicators in the Monitoring, Evaluation and Learning (MEL) framework are provided in Table 2.



#### Table 2: Project results against the main indicators in the MEL framework

			Timeline												Means of
No	Activity	2022							2023			Indicators	Target /	Actual	verification (data
		6	7	8	9	1 0	1 1	1 2	1	2	3		KPIs		source)
Com	ponent 1: Communicati	on	of b	eha	ivioi	<sup>.</sup> char	nge to	o red	uce	pla	stic	waste in aquaculture for coa	stal residen	ts in Phu	Yen
A1	Launching a program to find ambassadors to reduce ocean plastic waste in aquaculture at 04 coastal districts of Phu Yen province							x				# core groups of behavior change communication activities are built and capacity building	4	9	<u>A1</u>
A2	04 groups of ambassadors selected after the capacity-building program to carry out the communication plan to change the behavior of coastal residents in 04 coastal district and city.								x			# creative media products built by the community to serve community communication	4	4	
									x			# plans/targets to change behavior to reduce plastic waste were developed and implemented in 04 coastal districts and city	4	4	List of approved initiatives.pdf
										х	x	# art-works: mural villages	4	4	<u>A2</u>
A3	Summarize the performance results of ambassadors in the regions and share knowledge and experiences									x		# kg of recyclable waste collected for circular economy through changing the behavior of the community		1480	<u>A3</u>
Com	ponent 2: Communicati	ng l	beha	avic	or ch	ange	thro	ugh (	clear	nur	o da	ta in Phu Yen	1		1



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B1	Collecting Ocean plastic waste data					x	x				# coastal districts and city are allowed to carry out the cleanup campaign	4	4	Photos and videos of Clean-up campaign in 04 coastal districts and city
											# ocean plastic waste database built and documented	1	1	Database entered into Clean Swell
B2	Online media campaign from the database collection from phase 1				x	x			<ul> <li># infographics developed and published in</li> <li>GreenHub's social media channels</li> </ul>	0	4	Infographics		
											<ul> <li># highlight videos</li> <li>developed and published in</li> <li>GreenHub's social media</li> <li>channels</li> </ul>	0	1	<u>Highlight video</u>
Com	ponent 3: Communicati	on t	to cł	nan	ge b	eha\	vior f	or ze	ro w	vaste	schools in Viet Nam			
C1	Behavior change Communication plan for Zero waste schools and more alliance				x	x	x	x						
C1.	Phase 1: Build a communication roadmap and pre- survey										# students, teachers, school officials who took Knowledge - Awareness _ Practice (KAP) survey		703	List of survey participants and survey database
1						x	x				# teachers, school officials who receive training on implementing zero-waste school		277	List of training participants and zero - waste school training plan
C1. 2	Phase 2: Implement communication and monitoring – improvement.										# communication plan/roadmap for Zero waste schools and more is	1	1	Plan developed and issued by Department of Education and



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	Communication											developed and			Training of Phu Yen
	ideas may include											implemented			province
	(but are not limited											implemented			province
	to):														
	Communication to														
C2	change behavior for					x	х	х							
C2	ZHub in Phu Yen					^	^	^							
															Plan developed and
															issued by
	Phase 1: Select 04														Department of
C2.	schools to participate											# schools participating in			Education and
1	in the action school					х						the action school program	4	13	Training of Phu Yen
-	program to support NAP.											to support NAP.			province including
							the list of schools								
															participating
															Action Plan to
	Phase 2: Develop											# roadmaps developed to			implement a zero-
C2.	goals and roadmaps for each school					x					reduce plastic waste 30%,	4	6	waste school	
2						~					reduce > 90% of 1 type of		-	developed and	
												single-use plastic at schools			issued by schools
															Regulations to
															reduce plastic are
	Phase 3:											# communication			issued and launched
	Communication											campaigns to change			to apply for
C2.	activities and						х	х				consumer behavior and	4	9	students, teachers
2.5	roadmaps											reduce plastic waste are		-	and school officials
	implementation at											implemented in schools in			in schools
	schools											Phu Yen			<u>C3</u>
															<u>C2</u>
<u> </u>	Report -														
C3	Documenting								х						
Com	ponent 4: National and	pro	vinc	cial d	conf	feren	ce in	NAP	in c	olla	aboi	ration with Ocean Conservan	су		
		-											-		

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	Collaborate with								
	Ocean Conservancy								
	to include the GGGI's								
D1	Best Practice					# national conference in			
	Frameworks for the					NAP is organized in			
	Management of			x	collaboration with the	1	1	<u>D1</u>	
	Fishing and Aquaculture Gear in					Directorate of Fisheries (DOF) and Ocean			
	the conference to					Conservancy			
	support NAP in								
	fisheries sector								
	Provincial								
	conference to					# Phu Yen Province			52
	support NAP in Phu Yen in collaboration					conference in NAP is organized in collaboration with Phu Yen DONRE and		1	<u>D2</u> NAP Phu Yen
D2	with Phu Yen's		х				1		Conference
	DONRE and								Presentations
	Women's Union					Ocean Conservancy			



## IV. MANAGEMENT AND ADMINISTRATIVE ISSUES

#### 4.1 Project start up

GreenHub signed a 11 and a half months contract with Ocean Conservancy in April 2022 to implement the Accelerating Efforts to Reduce Ocean Plastic in Vietnam project in Phu Yen Province commencing on 1st April 2022. The project approval process was GreenHub's focus during the first part of the project period. GreenHub received the official letter of agreement from the People's Committee of Phu Yen Province and officially commenced activities implementation on the 6th July 2022.

#### 4.2 Variations to work plan / budget

The grant provided to GreenHub was utilised within the budget and in line with the work plan stipulated in the contract it signed with Ocean Conservancy.

#### 4.3 Risk management

The main risks to successful implementation identified by GreenHub prior to the commencement of the project included delays in obtaining government approval to implement the project, and disruptions to activities due to extreme weather events and Covid-19 related restrictions. While the government approval process was relatively straightforward, it did result in project implementation being delayed until the start of the wet season. However, no activities were impacted by extreme weather events, such as typhoons. Further Covid-19 related restrictions also did not eventuate, and all activities were implemented during the project period in adherence with Covid-19 safety protocols.

#### 4.4 Stakeholder engagement

In implementing the project, GreenHub leveraged and built upon its relationships with its key partners to its Zero Waste Program, namely the Directorate of Fisheries, Phu Yen Women's Union, Phu Yen Department of Natural Resources and Environment, Phu Yen Department of Education and Training, WWF Việt Nam and IUCN.

**Phu Yen Women's Union** cooperated with GreenHub in coordinating and implementing all activities in component 1, and partially coordinates in component 4 of the project. Leaders of the Women's Union played an important role in directing and mobilizing the participation of representatives of women's members across the province to participate in the training program in order to find and implement 04 behavioral change communication initiatives in community. In addition, the monitoring, evaluation and learning of community initiatives also have great contributions from leaders of the Women's Union from commune, district to provincial levels.

**Phu Yen Department of Natural Resources and Environment (DONRE**): DONRE is GreenHUb's strategic technical partner in the locality when it is responsible for advising on project aproval for leaders of Phu Yen province. Along with that, they also actively participate in technical consulting activities for all project activities, and direct the coordination of commune and district levels of natural resources and environment departments to facilitate the implementation of the project. In addition, DONRE cooperated with the Women's Union to co-organize the Provincial conference to support NAP in Phu Yen (component 4)

**Phu Yen Department of Education and Training (DOET):** DOET cooperated with GreenHub in coordinating and implementing all activities in component 3. They not only play a big role in promoting the active participation of schools in the project but also contribute resources to co-implement training activities in 08 districts in the province. Besides,DOET representatives have actively participated in the process of coorganizing the zero- waste school contests in Phu Yen.



**WWF Vietnam** coordinated and contributed resources to co-deploy with GreenHub some activities of component 1, component 3, component 4 of the project. They play an active role in co-developing and implementing activities with schools, DOET and media initiatives, Women's Union.

**IUCN** is a companion organization that has coordinated with the Directorate of Fisheries, GreenHub, Nam Dinh Department of Agriculture and Rural Development and WWF Vietnam to organize the National conference to support NAP in fisheries sector

#### 4.5 Project close out

The workshop was organized by GreenHub in Tuy Hoa city with the participation of representatives from Ocean Conservancy sponsors, leaders of local government coordination partners, including: Phu Yen Environmental Protection Sub-Department, Phu Yen Women's Union, Phu Yen Department of Education and Training, and the strategic partner is WWF Vietnam. Together with representatives of the People's Committees of 04 coastal districts and city, the People's Committees of communes and wards participated in the project implementation, and universities, schools, business organizations, newspapers and local television accompanied the project implementation project in Phu Yen and other stakeholders.

At the workshop, Phu Yen Department of Education and Training, Phu Yen Department of Natural Resources and Environment, Phu Yen Provincial Women's Union and GreenHub respectively shared the results and lessons learned in coordinating the implementation of 04 components of the project in Phu Yen. From there, the project received the contributions of partners and stakeholders for the orientation to maintain and develop the results of the project in the future. The results of this session are detailed in section 5, 6 below.















**Figure 62-67:** Workshop to share results and lessons learned from implementing "Accelerating Efforts to Reduce Ocean Plastic in Vietnam" project

### V. DEVELOPMENT IMPACT AND LESSONS LEARNED

In implementing the Accelerating Efforts to Reduce Ocean Plastic in Vietnam Project in Phu Yen Province, GreenHub made a significant impact and learned some valuable lessons. This section provides an analysis of the key achievements and lessons learned as identified by GreenHub and its project partners, as well as the beneficiaries, throughout the course of the project.

<u>Key achievements:</u>

- Cleaning and data collection of ocean plastic waste using Clean Swell application at 04 typical beaches in 04 coastal districts and city shows an overview of ocean plastic waste pollution in these coastal areas. 1941 kg plastic waste quivalent to 13,890 pieces of marine plastic collected, contributing to improving coastal plastic waste pollution in Phu Yen.
- Based on the plastic pollution problems identified at the beaches that were cleaned up in component 2 of the project. Behavior changes communication interventions have been developed and implemented in these coastal districts and city to improve plastic consumption inland and discharge into the sea. Besides, each coastal district and city has a core force that strengthens the local community's communication capacity as a foundation for the locality to maintain and develop these behavior change communication interventions of the project.
- More than 2203 students, 703 teachers of 13 schools from 9 districts and city of Phu Yen province have been raised awareness and strengthened communication capacity about ocean plastic waste in general, single-use plastic in particular. Through KAP surveys, training programs, consultations, extracurricular practices, and participation in the zero-waste school contests, the project has established a point model of zero-waste schools as well as a core force to replicate zero-waste practice in all districts and city of Phu Yen. Regulations banning the use of single-use plastics in zero-waste schools are also making great contributions to the province's plastic reduction emitted into the sea and ocean goal.
- National and provincial conferences were held to review the implementation of national NAP promotion projects and programs in the fisheries sector and plans and programs to promote NAP in Phu Yen. The sharing of results and lessons learned by governments, NGOs, social organizations, businesses and universities,... from central to provincial and district levels for NAP implementation has been provides an overview of the NAP process being implemented in Vietnam and opens up opportunities for future collaboration.

#### Lessons learned:



- Partnering with the Women's Union, DONRE, DOET was extremely important for engaging districts, city, schools and communities to participate in the project and supporting them during its implementation. The implementation of the project in the same districts and city in the province with a short time allowed will not be possible without the coordination of the provincial government. Their management role and understanding of local issues enable project interventions to meet community needs and local circumstances. Many beneficiaries were initially hesitant to participate in the project, but having members of the Women's Union, DONRE, DOET act as coordinator and convey the role of the project to the community makes beneficiaries quickly feel comfortable coordinating with project activities
- The integration of project interventions into local action plans plays a great role in facilitating project implementation. Having the same goals and activities and co-implementing them helps to achieve very high efficiency in using resources in terms of both time and human resources of both the project and the locality. The project has integrated 2/4 of the project components to coordinate implementation with action plans of Phu Yen province. This has brought active participation in coordination mechanism and local resources for project activities. Specifically, DOET's resource contribution to component 3 and DONRE to component 4.
- The selection of active Women's Union members as leaders of community behavior change communication initiatives will help ensure that the monitoring evaluation learning process of the models is strictly managed by the Provincial Women's Union. Leaders of the initiatives have extensive experience in conducting community outreach, and have the ability to reach thousands of people with their "Our ocean is not home for plastic" messages through their work with their local Women's Unions. Their involvement in the Women's Union will also help facilitate the building of networks and sharing of knowledge between the initiative groups, with the Provincial Women's Union acting as the focal point that connects the initiative leaders from the different districts.
- Behavior changes communication programs in coastal communities and schools began to raise awareness among beneficiaries and facilitate to change behaviors. However, the beneficiaries are coastal communities still face significant challenges, headed by their precarious economic situation characterized by low and uncertain incomes, make it difficult for them to priorities environmental issues. And the beneficiaries are students who are under great pressure about the amount of curriculum knowledge to pass exams, lack of space and time to pay attention and participate in capacity building programs and knowledge about the environment in general and the problem of plastic waste in particular.

# VI. NEXT STEPS TOWARDS SUSTAINABILITY

The Ocean Conservancy's Grant was used to promote the implementation of the action plan on ocean plastic waste management in Phu Yen Province, which will be issued in 2021. Communication programs and supports are provided to the coastal area, students, teachers and the community through the project's components create conditions for raising awareness, changing mindsets, and changing behaviors of beneficiaries. By passing on their information, knowledge to their families and communities, beneficiaries will also foster behavior change in their communities, thus helping change behavior of bigger communities and reduce the amount of plastic ending up in the ocean.

Behavior changes communication program implemented under the Accelerating Efforts to Reduce Ocean Plastic in Vietnam project will also serve as a model for replication for other localities with Lessons learned



drawn by GreenHub and their partners and integrated into future Zero Waste interventions in Phu Yen and elsewhere in Vietnam.

The Accelerating Efforts to Reduce Ocean Plastic in Vietnam project has only gone a small way, however, towards addressing the communication gaps identified. GreenHub will require additional funding to address the remaining needs during the next phase of their support to help end ocean plastic pollution in coastal areas through its Zero Waste Program in Phu Yen Province. The areas identified by GreenHub in consultation with its Zero Waste Program partners include:

- <u>Prevent plastic waste from the source into the ocean</u>: Facilitating zero-waste practices including refuse, reduce, reuse, recycle and ROT is applied as a core solution to reduce waste at the main generation sources identified such as: households, markets residential areas, hotels, restaurants, tourists tourism areas, fishing boats, aquaculture rafts fisheries areas.
- Policy advocacy on avoiding single-use plastic: Regulations on banning and restricting single-use plastics should be promoted for promulgation and implementation in all levels, sectors, government agencies, schools, businesses, organizations, associations and unions. ... to create a positive impact on the community. The results, lessons learned from policy implementation at various levels and different target groups will create a positive foundation for a policy to limit single-use plastics to be issued and applied across the province.
- Climbing the circularity ladder: In order for solid waste management to be associated with the economic benefits of beneficiaries, helping to increase incomes for coastal communities, GreenHub and its partners will also help beneficiaries to climb the circularity ladder from the project from waste sorting, waste collection to recycling or input providers and value producers through new market- driven business models that manufacture reusable bags, other consumer packaging, and souvenirs out of repurposed plastics. The communities may also be supported in making compost from organic waste they collect, and bio-detergent to use in the home and/or sell. These production models receive training will on product development, business planning and management, marketing and access finance, and be provided with support in accessing markets, such as through facilitating business-to-business exchange events and organizing product exhibitions.



**Figure 68:** GreenHub project supporting women entrepreneurs repurpose plastic waste into souvenirs in Halong City



**Figure 69:** Recycled fishing net bags developed in Phu Yen by GreenHub's partners

Strengthening coastal waste collection and

<u>management capacity</u>: One of the causes of ocean pollution is the limited capacity of waste collection and management in rural areas. Therefore, it is very necessary to strengthen the capacity and provide



technical support to the local staffs. In addition, the facilitation of informal collectors contributes positively to the formal collection system by strengthening capacity, clarifying their roles and formalizing their participation will help improve the efficiency of plastic waste collection and management into the oceans and landfills.