

**Project title: PUBLIC-PRIVATE PARTNERSHIP GROUP ON PLASTIC WASTE MANAGEMENT IN SHRIMP INDUSTRY IN VIETNAM**

**Project duration: 2022-2025**

**Geographic area of the proposed project: Bac Lieu, Soc Trang, Ca Mau provinces**

## **Project idea:**

### **What is the problem to be solved / the situation to be improved?**

In the past 20 years, brackish water shrimp farming has grown strongly in both areas and output, significantly contributing to the development of the fisheries industry as well as the entire economy, and becoming the main export of Vietnam. The Mekong Delta is a key area for brackish shrimp production, accounting for over 90% of the area and 80% of the output. According to statistics, the export turnover of brackish water shrimp nationwide in 2020 reached 3.7 billion USD, of which the Mekong Delta accounts for over 90% (VASEP, 2020). In recent years, due to the influence of climate change, as well as the requirements from the market, the model of super-intensive shrimp farming has been increasingly developed.

However, along with this development, the amount of plastic materials used in shrimp farming has also increased rapidly. Plastic materials are used in all stages of shrimp farming such as tarpaulins, fans, cages, water pipes, buoys, packaging for aquatic seeds, feed, drugs, and aquaculture products, tools to catch, net, sack.

According to data from the Directorate of Fisheries in 2020, the shrimp farming area reached 736.5 thousand hectares, of which plastic materials are mainly on the scale of industrial farming and super-intensive farming such as pond tarpaulins, plastic film, etc. The equivalent use of plastic is about  $144,815 \div 150,150$  tons of plastic.

However, the rate of collection and reuse of these plastic materials is quite high, about over 95%, so the amount of plastic discharged into the environment is only about  $7,240 \div 7,507$  tons of plastic per year. But with the current rapid development trend of super-intensive shrimp farming, along with the convenience of using plastic materials, the amount of plastic waste in shrimp farming will increase rapidly day by day. Therefore, it is necessary to take measures to treat and prevent the discharge of plastic waste from shrimp farming into the environment.

### **What are the main causes for this problem?**

The main cause of this problem is the rapid development of brackish water shrimp farming, especially the model of industrial and super-intensive shrimp farming. Currently, in brackish water shrimp farming, plastic materials bring many effects, convenient in production, high durability, high wind and sun resistance, .... so more and more widely used and tends to increase. However, due to people's usage habits and awareness of collecting, classifying and treating plastic waste be limited.

At the same time, farming in areas has not been planned or spontaneous, small-scale investment is not methodical, so plastic waste is not collected according to regulations. Plastic materials,

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especially pond tarpaulins (thickness less than 3mm) are not concerned about quality, floating goods have a clear origin, just use from 1 year to 3 years have been damaged and cannot be reused or recycled and farmers pile it up and burn it at the shore of aquaculture ponds.

### **Which of these causes does the project address and what is the rationale behind this choice?**

The first is the rapid, spontaneous development without planning of industrial and super-intensive shrimp farming models in the area.

The second is the convenience of using plastic materials in the stages of shrimp farming from pond preparation to production, so they are used a lot.

Accompanying that is the awareness and knowledge in the collection, classification, and reuse of used plastic materials of the people is not good.

In addition, the linkage between actors in the chain is not comprehensive enough to be able to work together to provide a complete solution.

Therefore, The taskforce established will have specific activities on collecting, sorting, recycling and reusing plastic waste, raising people's awareness, and creating linkages and promote actors in the value chain to act together for the goal of reducing plastic waste in shrimp farming.

### **Where did the idea for the project originate from?**

The idea for the project originated from is the current situation of brackish water shrimp farming. The rapid, spontaneous and unplanned development of super-intensive shrimp farming models brings great benefits in terms of output, manage the pond environment also entails many unpredictable consequences in plastic waste. Because super-intensive shrimp farming models use mostly plastic materials in all stages of farming. Currently, plastic waste is treated quite carefully, only 5% is discharged into the environment, but the way to handle, collect and recycle such waste is not organized and reasonable.

To address this, ICAFIS presented the ideas to establish a PPP group to reduce plastic waste in shrimp sector at the consultation meeting organised by DFISH/MARD about the Environmental Protection Plan of Fisheries sector (2021-2023). At the meeting, IUCN presented business platform including VB4E to mobilise business participation on environmental protection and incubating new ideas connecting between businesses and environmental issues. As such, IUCN, ICAFIS and DFISH have some followed up discussion to develop this idea.

### **Are there other organisations working on the same problem in the project area?**

There are some research in shrimp farming of WWF, VIFEP, WORLDBANK, UNDP, IDH, etc...

### **What would be the project objectives, main activities, main results and outputs / deliverables?**

- **Project objectives**
- Common Goals

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The purpose of the Taskforce is to coordinate and cooperate in building a chain to reduce plastic waste in aquatic products.

- Specific goals

+ Promote the chain link in the collection, recycling, and production of plastic products used in shrimp culture, through the chain, 50% of the plastic waste is properly collected and recycled.

+ Promote the linkage chain, commit to reducing plastic waste in farming through using alternative products or products from the recycling chain, through the link chain 30% of plastic waste is put into reuse.

+ Promote innovation and application of new technologies in recycled products and plastic substitutes in shrimp culture.

+ Develop a code of responsible practice for reducing plastic waste in the shrimp supply chain.

### • Main activities

#### **Activities in collecting plastic materials from shrimp farming**

+ Organize the collection of all plastic waste materials used in shrimp farming

+ Waste will be classified at source (at the farm) according to 02 groups:

- The group of recyclable plastics, which will be gathered at the Association's gathering point (by province) and reclassify according to the purpose of recycling: i) Reuse for other environmentally friendly purposes (depending on the use and purpose of use); ii) Remanufacturing (directly) using waste products of this stage to put into produce products applied in other stages or fields; or iii) Making recycled plastic beads, plastic products that are not used in the above 2 activities will be chopped and sold for companies producing recycled plastic pellets

- The groups of plastics, which are less likely to be recycled, will be contracted with a local environmental company to collect and collect them at a centralized location for treatment.

#### **Activities in recycle, reuse – rotation**

The group of recyclable plastics, after being sorted and gathered, will be treated as follows:

+ Reuse for other environmentally friendly purposes (depending on use and purpose of use)

+ Remanufacturing (directly) utilizing waste products of this stage to put into production of products for application of other stages or fields.

+ Making recycled plastic beads, plastic products that are not used in the above 2 activities will be chopped and sold to companies producing recycled plastic beads.

#### **Working to improve the image of the shrimp industry associated with reducing plastic waste.**

+ Build media publications to share stories with consumers in importing countries, at forums and networks about reduce plastic waste in the world...

+ Promote the inclusion of practice criteria to reduce plastic waste as one of the criteria for achieving the plus points of sustainable production standards (VietGAP, ASC, BAP, GlobalGap...) or the practice criteria of buyers.

+ Promote the inclusion of plastic waste reduction practice criteria as one of the GOOD selection criteria of consumer recommendations (green label, seafood good choice/best choice).

+ Organize events to honor units and product chains with good practices to reduce plastic waste (Typical units in the seafood industry, Corporate social responsibility - CSR Awards, Forbes ...).

#### **How many people will benefit from the project?**

About 10,000 people are expected to benefit from this project.

## How do you define if the project was a success?

The success of the project can be assessed by:

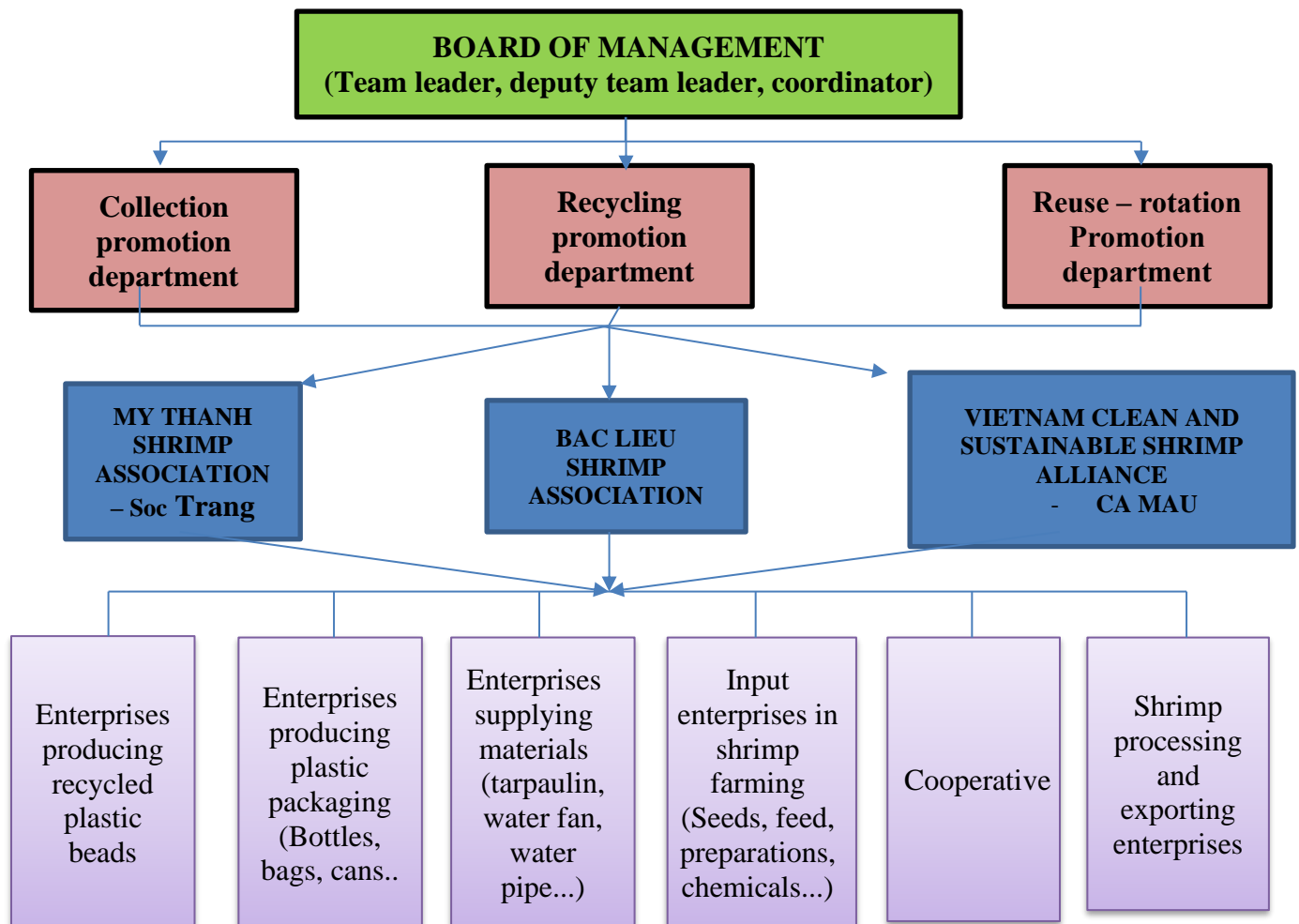
- The benefits and effectiveness of the project have been realised compared to the original plan:
  - (i) The amount of plastic waste collected and recycled – 50%;
  - ii) The amount of plastic waste used to revolving chain through the link – 30%;
  - iii) Quantity of innovation and application of new technologies in recycled products, plastic substitutes in shrimp farming;
  - iv) A Code of Responsible Practice for Reducing Plastic Waste in the Supply Chain.
- Time/schedule to deliver output for the project: TBC

## Relevance to VB4E thematic areas

How would the project relate to VB4E 8 focus areas?

The project related focus area: Plastic waste management, Marine & Coastal conservation

## Management structure



**Total Budget:** - Budget: 100,000 USD – 200,000 USD (or flexible based on the proposed activities)



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**Co-financing:** in-kind and in-cash contribution from cooperatives, shrimp associations, IUCN, ICAFIS, DFISH, etc

Please contact coordinator at [VB4EAlliance@gmail.com](mailto:VB4EAlliance@gmail.com) for further information if you are interested in the project idea.