

Indonesia Undulate Venus Clam Dredge (Bumble Bee) FIP Site Visit Research

Gresik, 29th - 30th May 2025

Prepared by

Key Traceability Ltd.

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Key Traceability Ltd.

+44 7505 122728

Info@keytraceability.com

England Registered Company 09730288

70 Londesborough Road, Portsmouth, PO4 0EX

1. Introduction

The fishery is the Indonesia undulate venus clam (*Paratapes undulatus*) dredge fishery. There are 25 small boats in the FIP fleet, all measuring below 5 GT. The boats operate exclusively in the Indonesian EEZ, in the Gresik and Sidoarjo regencies of East Java. The operational grounds are within the fishery management area (FMA) 712. Artisanal fisheries within Indonesia are managed by Provincial governing bodies. However, legal framework is dictated by the Indonesian Ministry of Marine Affairs and Fisheries (MMAF).

The undulate venus clam fishery has recently established a fishery improvement project (FIP) via FisheryProgress, with the aim of meeting the requirements of the MSC Fisheries Standard by 2030. The FIP aims to improve the transparency and ensure the sustainability of the resource. The FIP is coordinated by members from Key Traceability (KT), a seafood sustainability consultancy company based in the UK. Upon completion of the pre-assessment for the fishery, KT reported on the paucity of data on the target species, as well as within the management measures for the fishery. Furthermore, little was known about the human rights and social responsibility within the fishery. Therefore, it was decided that a short site visit to the fishery would be beneficial to the overall understanding of the fishery practices, which is essential for the progression of the FIP.

Site visit

The site visit to the clam fishery took place between the 29th and 30th of May 2025. A member of the KT team travelled to the Gresik region of Surabaya, Indonesia to meet with the fishers working in this fishery, as well as the representative of Rex Canning Ltd., Denny Alghafihqi.

The aim of the visit was to gather detailed information on key aspects of the clam fishery, including fishing practices, environmental conditions, social aspects, and the involvement of local communities within the industry.

Although no undulate venus clams were caught during the visit, the overall fieldwork went ahead smoothly. KT had the opportunity to meet with a supplier, a collector, and four active fishers involved in the fishery. The discussions and interviews were conducted in a positive and cooperative atmosphere, revealing meaningful insights into the fishers' routines, the challenges they face, and their observations on environmental trends. The fishers expressed their concern over the decline in clam stocks observed in recent years, as undulate venus clam is a species that is often affected by natural condition changes. For example, small numbers of undulate venus clam have been harvested in the Gresik region over the past six months due to adverse weather conditions affecting the stock.

Findings

After lengthy discussions and interviews with the fishers in Gresik, it was found that the majority of the undulate venus clam catch is sold to international markets. Meanwhile, other clam species are sold for the local/domestic market.

Based on information from the fishers, the undulate venus clam is a species that is highly affected by weather changes. Strong ocean currents, excessive rainfall, and large amounts of freshwater and mud travelling into the estuary can prevent adequate growth in juveniles, and lead to death in some cases. Over the past three years, the supplier in Gresik informed KT that they have not supplied Rex Canning with undulate venus clam because they have not been able to harvest the stock since 2022. According to the supplier, Rex Canning sources undulate venus clam from Ujungpangkah (Gresik), Sidoarjo, Pasuruan, and Madura strait. All fishing areas are within FMA 712 and found within East Java.

The fisher interviews revealed an optimistic outlook on the Gresik fishery for the rest of the year as they have already encountered juvenile individuals of undulate venus clam and thus expect that fishing will return to normal over the next few months.

2. Species Information

Target species

Main target species

The main target species is undulate venus clam, as the price is about 30% higher compared to other clam species.

Alternative target species

During the harvesting of undulate venus clams, the fishers also encounter blood clam (*Tegillarca granosa*) (Figure 1) and green mussels (*Perna canaliculus*) (Figure 2). In the case of adverse weather impacting the availability of undulate venus clams, the fishers will target these two species for sale in the domestic market.



Figure 1: Photo of blood clam (*Tegillarca granosa*) caught by fishers in the Indonesia undulate venus clam – dredge FIP. Source: Key Traceability.



Figure 2: Photo of two fishers from the Indonesia undulate venus clam FIP carrying green mussel catch. Source: Key Traceability

Bycatch

Primary species

Due to the paucity of information on clam fisheries management in Indonesia, it is unclear whether any of the bycatch species' stocks have specific management in place to monitor stock health. Therefore, at this stage of the FIP, there appears to be no primary species bycatch. However, this is subject to change when we receive more information about the fishery and the management system responsible for it.

Secondary species

Along with blood clam and green mussels, fishers also encounter white clam (the species has not yet been identified but it is under investigation). The white clam typically contributes to 10-15 % of the total catch, meaning that it would be considered as a main secondary species. At this stage, as the white clam has not been formally identified, we are unable to estimate the impact of the fishery on the health of its stock. Further investigation into the potential impacts of the fishery will be required.

ETP Species

The interviews with the fishers revealed that there are no ETP species caught by the dredge fishing gear. Photos of the boats and the dredge gear support this information, as it is a small-scale fishery designed to target clam and bottom-dwelling animals only. In Figure 4, it is evident that the dredge gears are small and narrow, so the entrapment of ETP megafauna is unlikely. However, third-party verification will be essential to ensure the reliability of this estimation.

3. Fishing operations

Fishing season

Discussions with the fishers revealed that the fishing season for undulate venus clam is typically only three months, between September and November. In those months, each boat can catch 150 - 500 kg of target clam daily. This is lower than the estimated 1000kg per day that the FIP was previously told and requires further investigation.

Monthly fishing reports were made available to the FIP in 2024 in which the FIP was informed that whilst there are high and low seasons (high: June to December; Low: January to May), the boats still catch the target species year-round. Likewise, the FIP has catch reports from 2023 to mid-2024 that evidence this. However, as this site visit took place in Gresik, the information received regarding fishing

periods may be specific to this area and not indicative of the whole fishery in East Java. This requires further investigation, and a supplementary site visit is due to take place in August to verify.

Fishing License

All the 11 boats that fish in the Gresik region and regularly catch undulate venus clam are registered in the Local Fisheries Agency and receive permits to catch the species.

Fishing Boats

Most of the wooden fishing boats for the clam are under 5 GT (Figure 3). Typically, between four and five fishers work on the boats during each fishing trip.



Figure 3: Photo of one of the wooden fishing boats used by the fishers operating in the Indonesia undulate venus clam FIP. Source: Key Traceability.

Fishing gear and fishing ground

Based on the Ministry of Fisheries Regulation No 36 of 2023, the fishing boats are permitted to use dredge fishing gears for their clam harvest. Dredging is an active method of fishing, unlike gillnets. Whilst considered unlikely to interact with marine megafauna, due to its small size, this is still to be verified by third-party data. The fishers described the gear as being selective and that it does not harm the ecosystem. The main habitat of the target clams is in coastal waters that have muddy sand at a depth between 8 to 15 meters, and relatively calm waters. The boat usually takes two hours to go to

the fishing ground. As the fishery operates within the muddy seafloor, the extent of habitat damage is reduced, compared to a rockier habitat.

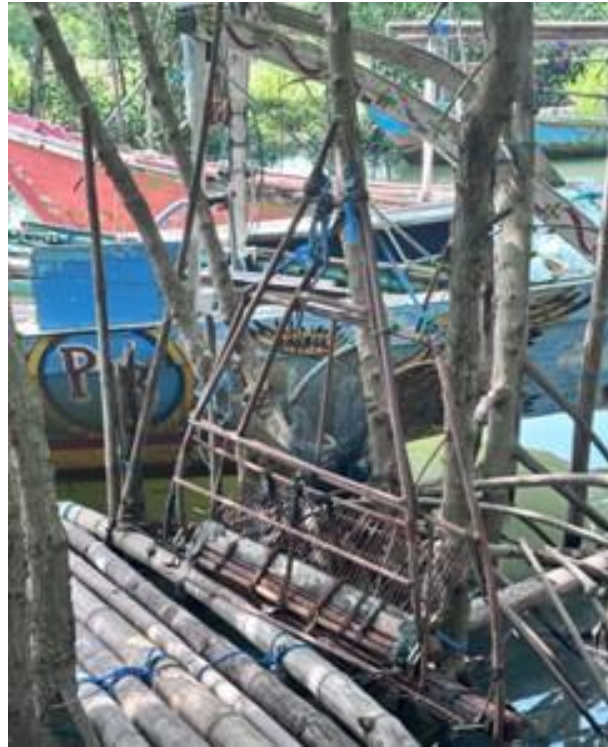


Figure 4: Photo of the dredge gears from one of the boats in the Indonesia undulate venus clam FIP. Source: Key Traceability.

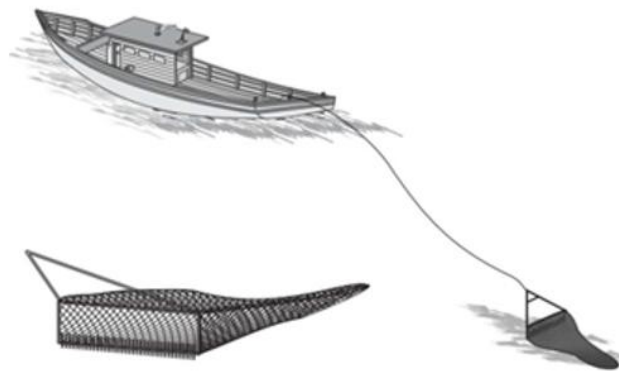


Figure 5: Diagram of typical dredge fishing operations. Source: The Ministry of Marine Affairs and Fisheries

General Supply Chain

The general supply chain for the undulate venus clam is as follows:

1. The clam landed in the Ujungpangkah (Gresik) Fishing Port.
2. Then the fishers weight it and sell to the collector.
3. The fishers will receive the payment from the collector (Faisol) in the same day they sell it.

4. The collector will bring the clam to the facility to be boiled/cooked and pick the meat. After that the collector will send the clam meat to the supplier: Agus Priyanto.
5. The supplier will clean the clam meat, pack and send it to the processing plant (Rex Canning)
6. The processing plant will process the clam meat, pack it, and export it to the international market.

Data collection

The catch data is well maintained by the collector, both for undulate venus clam and for the white clam, blood clam and green mussel.

4. Social Assessment

The social responsibility characteristics of the fishery is an area not well understood, therefore, an initial fact-finding site visit to better understand the current situation in the fishery relating to common criteria such as forced labour, child labour, health and safety was conducted. This social assessment presents the findings from the site visit by KT's Indonesia-based consultant on the social conditions in the fishery. The aim was to identify risks and highlight any obvious and serious issues (if any). The process was not a social audit, and the exercise is not sufficient to be listed on FisheryProgress against their human rights and social policy. This is merely a fact-finding assessment to understand more about the processes and identify areas for improvement (if necessary).

Forced and Child Labour

All fishers were Indonesian nationals and lived in local communities. Fishers were free to decide on which boats to work and are free to switch from one to another based on their own preferences. There was no indication of anyone being compelled to work in the fishery either physically, financially, or otherwise.

There is no written contract for the crew members who work for the clam fishing boats. Most of the fishers come from the same village and know each other with boat owners and other fishers. The employment arrangement is only based on gentle or casual agreement without a long-term commitment. If the fishers believe they are being treated unfairly, they can terminate the agreement anytime and join another boat or work in another sector. The boat owner reportedly treats the fishers fairly to avoid employee losses.

In general, the relationship among crew members and boat owners is good, as they know each other as neighbors.

During the visit, KT did not see any fishers working underage. From the explanation of the fishers, there were no high school graduates who worked directly as fishers. The fishers involved in the site visit were all over 20 years of age.

Working hours

The boats leave the port in the morning and return at the end of the day. The fishers usually work for 10 hours/day including the return trip to the fishing ground. Operations begin at 6 am, and the journey to the fishing ground takes around two hours. Once there, the fishers work about five hours to release and pull the dredge manually. After five hours working, fishing ceased, and the boats then return to the port. In the afternoon, the fishers have additional work to check and maintain the fishing gear for about an hour. The fishers confirmed that they receive adequate rest daily.

Earning

The fishers receive a daily earning based on profit sharing scheme, common in many fisheries around the world, including the UK and USA. The total catch of clam sold will be deducted for the fuels and meals. The rest will be shared equally based on the number of the crew members with one additional portion for the boat. The boat owner is also part of the crew and receives one portion of profit sharing as well as the boat profit.

During the fishing season for the undulate venus clam, each crew member can receive at least two times the amount of the legal minimum wage. Usually, in the peak season, each fisher can earn between IDR 400,000 - 700,000 (~ USD 25 - 45) daily.

Freedom of Association and Worker Organisation

The fishers in Banyuurip village have established Rukun Nelayan Tirta Buana, a fishers organization. Most of the fishers in Banyuurip are the member of this organization and hold the membership card. Each fisher can raise any concern through the organization, which acts as a grievance mechanism for the fishers. The organization also can mediate the issues and dispute among fishers if it happens.



Figure 6: The store of KUB Rukun Nelayan Tirta Buana. Source: Key Traceability.

In addition, Rukun Nelayan Tirta Buana also has a business unit: Join Business Group (KUB). The KUB functions as a provider to support fishing activities. A certain percentage of KUB's profit will be shared with Rukun Nelayan Tirta Buana members to improve their welfare.

Health and Safety

To ensure the health and safety of the fishers, each boat is equipped with life jackets and raincoats. In case of an emergency, fishers can use their mobile phones to call for aid, as network coverage is still accessible due to the proximity of the fishing ground to the shore. There was no evidence that the boats had lifebuoys, medical kits, fire extinguishers, or handheld flares. So far, there have been no major injuries reported during fishing activities in the Ujungpangkah area.

Conclusions and Recommendations

The fishery is artisanal in nature, including individual boat owners and local fishers that are free to work onboard or elsewhere. There are no written contracts or policies in place, which are commonly needed in social standards, but this does not seem to lead to any human rights issues. Child labour

does not seem to be a problem in the fishery because of the fishers interviewed, all were above 20 years of age. Crew have access to grievance mechanisms via their trade unions and get paid according to their catch. The boats have life jackets available on board, but other health and safety equipment was unavailable. However, there were no reported incidents of injuries or deaths. Based on the brief investigation undertaken so far, the social risks in this fishery appear to be low. But for greater detail and certainty a full social risk assessment would need to be undertaken.

To improve social performance in the fishery it is recommended that the focus is on fisher safety, looking at ways of providing a safer working environment. This could include boat safety inspections, protective equipment for workers and training e.g., fire safety, sea survival, first aid. Further investigation of crew payments and the age of fishers is recommended outside of the main season, at other times of the year to check how the situation might change at other times.