In 2012 the Committee on World Food Security adopted the Voluntary Guidelines on the Governance of Tenure. As a follow-up, the Voluntary Guidelines for Securing Sustainable Small-scale Fisheries were adopted by the member states of the Food and Agriculture Organization of the United Nations (FAO). Implementation of these Guidelines are at the core of Sustainable Development Goal (SDG) 14.2.

The Guidelines define tenure as “systems that define and regulate how people, communities and others gain access to natural resources, whether through formal law or informal arrangements. The rules of tenure determine who can use which resources, for how long, and under what conditions. They may be based on written policies and laws, as well as on unwritten customs and practices”.

The Guidelines emphasize that they are voluntary, global in scope and with a focus on the needs of developing countries; they are to be understood in the context of food security and poverty eradication.

In this article, I will present a case from the west coast of Sweden, where food security and poverty issues are not part of the context. The case puts into evidence that securing tenure is also relevant for the small-scale fisheries in a high-income and modern society.

The case is about prawn fishermen who have witnessed periods of incursion of offshore fisheries in their ‘home waters’, scaling up the units for management of fisheries and the establishment of a national marine conservation park.

The features of the area and the fisheries

In Northern Bohuslän, close to Norway, there is an archipelago with a deep-sea fjord, known as the Norwegian Trench. The area is considered an important habitat for shellfish, and is shown to have the highest diversity of marine species in Sweden.

Trawling for prawn (*Pandalus borealis*) in the area began over more than a century ago, in 1902. Approximately 20 vessels of the size 10-20 m operate in the area and do deep-sea trawling for prawns in the Trench. Even when, in another context, the size of the vessels could be understood as too large to be referred as ‘small-scale’, the modality of the fisheries, the operative rules in place and their permanence in what the fishermen refer to as ‘home waters’ give this fishery a small-scale character.

Safe biological limits

The prawns enter the area in their early larvae phases and remain thereafter confined to the area during their adult phase. The status of the prawn is within the safe biological limits and the landings from the area have been rather stable (about 200 tons per year). The Trench stretches 70 km along the Swedish coast and continues into Norwegian waters and towards the North Sea. It is a long submarine corridor with...
irregular depth and width, and with short lateral branches. Working these waters requires local situational knowledge. The behaviour of the prawns and the characteristics of the trench have been used as boundaries by the fishermen to design voluntary access rules to avoid conflicts due to physical interference between the trawlers.

**Securing tenure in the context of an expanding offshore fisheries**

Protocols from fishermen’s meetings and circular letters from the 1950s provide information on the adoption of closed areas, fishing stops, fishing hours, night trawling prohibition, minimum landing size and price regulations. The temporary exclusion of Swedish fishermen from Norwegian territorial waters in the 1950s, the collapse of the Atlanto-Scandian herring in the 1960s and, finally, the establishment of the exclusive economic zone (EEZ) regime in the late 1970s, and the modernisation of the fleets by means of subsidies were all events that introduced more industrial and offshore fisheries into the ‘home waters’ of the small-scale fishermen. The prawn fishermen confronted temporary conflicts, and the erosion of the local rules was followed by inequitable sharing of resources and difficulties to compete in the market.

All these factors gave rise to the design of output and input regulations and rules, with distributive effects in the prawn fisheries. Output regulations are rules to limit the harvest, while input regulations are rules to limit investment in gear, time and men on board. The prawn fishermen agreed on a ration system, that is, a system consisting of individual weekly non-transferable quotas for a maximum of four fishermen on board, and three fishing days per week. Trawling during nights and Sundays has not been permitted. The size of the quota is adapted through the year and varies with the size of the total allowable catch (TAC) agreed on. In the 1960s, the prawn fishermen agreed on limiting the size of the trawls in the area, specifying both their physical dimensions and number of meshes as well as the minimum landing size (MLS). According to the fishermen, the introduction of this smaller trawl was related to the limited resources available locally and to the increasing number of larger trawlers operating in the area, which drastically affected the catch of other fishermen trawling in their wake.

The prawn fishermen’s ways to secure tenure had a clear exclusion and distributive effect because, together with the rules limiting the number of fishing days and the night trawling prohibition, they render negative the benefit-cost ratio for potential non-local users. Local rules, in general, were not supported by the Fishermen’s Association that supported open access to all waters and resources under robust generic rules.
Inability to secure tenure from large fisheries management units

Over time, the State has taken a more predominant role in fisheries management, which culminated in the entrance of Sweden in the European Union and the implementation of the Common Fisheries Policy (CFP). In the 1980s, to account for the mobility of fish stocks and allow for flexibility of fishing, the Swedish system made use of relatively large units of management and a semi-open access system under generic rules, as preferred by the Fishermen's Association.

While the prawn fishermen view the prawns in the Trench as a local stock, the scientists and the Associations talked about one stock in the North Sea and the unit for defining quotas. This way of defining output boundaries, based on the principle of “one stock, one TAC, one common Swedish quota for all prawn fishermen” forced the fishermen to share quotas with the modern fleet on an equal, non-equity basis.

In this context, most local voluntary rules were no longer legitimized by the Fishermen's Associations and it was very difficult for the prawn fishermen to get their management system to work. The fishing strategies were based on a 'hit-and-run' approach, and the annual prawn quota was rapidly exhausted. Such a strategy was not suitable to maintain a stable market and income throughout the year. A loss of trust between the prawn fishermen and the Fishermen's Association, the scientists and the authorities was the inevitable result.

These tendencies are neither new nor specific to Sweden, and many authors have identified them as tendencies that progressively led to the marginalization of the local coastal fishermen in Europe.

Securing tenure in the context of nature conservation

The establishment of a marine research centre in the area was followed by reef building of cold water corals and sponges in the Trench. Reports published by the Swedish Environmental Protection Agency in the 1990s identified the archipelago of Koster-Väderö and the Norwegian Trench as one of the prioritised sites selected for the establishment of a marine national park. The prawn fishermen saw the national park as the end of 100 years of prawn fisheries and all their local management efforts.

In 1995 a group of local prawn fishermen was invited by the scientists from the research centre and a nature conservation NGO to discuss the need to protect the corals in the Trench. Following this meeting, the local fishermen created an informal group to discuss how to proceed with the new threat. During this period, the fishermen requested help from the Association, and tried traditional protest methods such as demonstrations on the streets, engaging local politicians and sending letters to the King.

A long process of negotiations, led by the County Board Administration and involving the scientists, the municipality and the national fisheries authorities, then began. The negotiations were successful and in 2001 a number of hotspots where trawling is forbidden were identified. Moreover, the fishermen gained legal support for the exclusion of harmful technology and larger trawlers from the area. This process of negotiation was the first step to legitimate the prawn fishermen's tenure system and their local rules.

With that in place, all the preparations for the first Swedish marine national park started. At the same time, overfishing was seen as a problem, and the debate about the marginalization of the small-scale fisheries raged in Europe.
The Swedish government was seeking for future work with co-management of coastal fisheries, and a national co-management initiative was established. The prawn fishermen were selected for one of the projects. The Koster-Väderö co-management initiative had a steering committee involving representatives from fisheries and local authorities, local scientists, the prawn fishermen and recreational fishermen, and NGOs. The steering committee was supported by a project assistant.

In the beginning, the local opposition to the national park was strong all along the coast. Nobody in the area was prepared to put at risk, and lose, the local prawn fisheries which is central to the economy of the area. The co-management initiative took steps to make sure that the park will not exclude the local fishermen. Among the activities carried out were:

- the development of a common vision on the purposes and objectives of the work
- the dissemination of knowledge to the public about the biology of the area and its importance for the local fisheries
- education for all fishermen operating in the area, to be combined with an ‘environmental licence’, carried out in collaboration with the research centre and educators
- a training package for politicians, civil servants and managers on fishing technology and the practice of fisheries in the area, carried out by the local fishermen in collaboration with an educator, and guest houses and restaurants
- continuous development of gear to maximize economic returns and reduce the impacts on the environment, in collaboration with fishermen, technicians and scientists
- development of a self-control system of documentation on board, in collaboration with the fishermen and coastguards, and supervised by consultants
- labelling of local marine products, in collaboration with the fishermen, local business people and marketing specialists
- a continuous evaluation of the effects of the banning of trawling in the hotspots, in collaboration with the fishermen, scientists and the authorities
- fundraising for projects, in collaboration with the project assistant, national authorities, the local government and the EU fisheries fund

During one year of work, nine representatives of the professional fishermen participated in 45 meetings. The work was intensive, with the fishermen organized in teams of four to six, and the wishes expressed were many.

As a part of the process, the directors of fisheries and the environment national authorities signed a letter which supported the co-management initiative to discuss and prepare recommendations on the management of fisheries in the future national park. Moreover, in 2007 a study was commissioned on how the park could be organized and managed to ensure local participation and sustainable use. In September 2009 the Kosterhavets Marine National Park opened and the co-management initiative and the prawn fishermen are represented in the steering board of the park.

The prawn fishermen’s efforts to secure tenure gave good results. They have also won an environmental award. In retrospective, the case has many elements and guiding principles that are central to the SSF Guidelines. Even when the Guidelines “are to be understood in the context of food security and poverty eradication”, they are highly relevant to the implementation of SDG 14.2 worldwide.