

Conflicts and Justice

The conflicts arising from shrimp aquaculture in central America can be usefully analyzed from the perspective of environmental justice

Governments in many countries have promoted the shrimp aquaculture industry, through development agencies and international financial institutions, as a vehicle for developing impoverished regions. This is the case in the Gulf of Fonseca region of Nicaragua and Honduras (on the Pacific Coast), one of the most densely populated areas in Central America and, at the same time, one of the poorest, whose economy, to a large extent, directly depends on artisanal fishing, specifically, the harvesting of shellfish.

Nicaragua, respectively, in 2008, with increases in total production of more than 200 per cent in both countries over the last 10 years (1998-2008). Most of the production is destined for export, mainly for the United States (US) and European markets. Thus, where estuaries and natural lagoons used to be, large ponds for producing shrimp have sprung up; in Nicaragua, the surface area under production expanded from 771 ha in 1989 to 10,396 ha in 2009, and in Honduras from 750 ha in 1985 to 14,954 ha in 2000.

Who was behind this impressive expansion? On the investment side, international financial institutions such as the World Bank's International Finance Corporation, injected capital in the first years of activity. In the field of commerce, the export of shrimp to Europe was initially promoted by the Generalized System of Preferences+ (GSP+), which was replaced from 2012 by the Association Agreement between Central America and the European Union (EU), and to the US by the Dominican Republic-Central America Free Trade Agreement (DR-CAFTA), agreements which levy a zero tariff for the export of shrimp. Central American countries also make available a series of mechanisms to promote external investment, such as tax concessions, foreign-investment guarantees, and export incentives. For instance, the Spanish company Pescanova operates in tax-free zones in both Nicaragua and Honduras.

The demands of the shrimp export market have favoured an ever-more intensive and technologically based production.

The negative environmental impacts caused by the promotion of this industry as a mechanism for development are well-studied and widely questioned. However, there are few references about its serious social impacts, such as the growing socio-environmental conflicts which are often generated between coastal communities and actors in the aquaculture industry.

Industrial aquaculture activities began in Honduras at the start of the 1970s and in Nicaragua in the second half of the 1980s, with small-scale projects. But what began with small experimental trials have grown markedly, and, according to data from the Food and Agriculture Organization of the United Nations (FAO), reached a total production of 26,584 tonnes and 14,690 tonnes in Honduras and

Intensive production

The demands of the shrimp export market (high production, compliance with product standards, etc.) have

This article, by **Maria Mestre Montserrat** (mmestre@ent.cat) and **Miquel Ortega Cerdà** (mortega@ent.cat) of the Fundació ENT, has been translated by Mark Lawrence

favoured an ever-more intensive and technologically based production model, involving high investment costs at both start-up and production levels. These demands have closed the sector to small community-based shrimp-farming organizations, which, especially in Nicaragua, used to have an important presence when this activity was starting. Thus, small co-operatives have been progressively absorbed by large transnational companies. Spanish companies like Pescanova and Jaime Soriano (Dagustín) are among the leaders in the sector. Pescanova is particularly prominent, accounting for 58 per cent of the total production area in Nicaragua in 2008. Beyond these areas under concession in both countries, this concentration is replicated along the whole product chain. The chain is thus characterized by a strong vertical integration where a few integrated companies control the whole production process (larval hatchery production, feeding, processing plants and distribution in the global market), which hinders the emergence of alternatives for artisanal producers.

In reality, what was supposed to be a source of wealth for the regional economy has ended up disempowering local fishing communities *vis-à-vis* the use of natural resources, whilst generating serious social conflicts.

The industrial sites are located in areas populated by very poor communities reliant on communal use of coastal resources. The principal response of the shrimp industry to the theft of their product is to take armed surveillance measures, both private and stataal, as has been happening in Nicaragua where, since 2008, there has been an agreement between the Association of Aquaculturalists of Nicaragua and the army and navy. The implementation of this has made access to coastal resources more difficult, generating conflict situations and, at the same time, impoverishing the population even more, fermenting marginalization and thereby creating greater incentives for theft.

According to various sources, successive conflicts between the

security forces guarding aquaculture farms and local fishermen have caused 12 deaths in Honduras over the past years, and at least one death in Nicaragua, with injuries reported from both countries, causing disabilities in some cases. There have also been documented cases of irregular detentions following miscarriage of justice and accusations which people from fishing communities believe to be false (theft, criminal association, illegal occupation of lands, threats to industry, etc.). Equally, fishermen have reported cases where navigation to their fishing grounds through the estuarine channels has been restricted, and cases of detentions and harassment at sea, and harassment in the form of constant demands for documentation to be shown. In Honduras, people engaged in campaigns resisting the expansion of the shrimp industry into protected areas have also been detained.

Attempts to mitigate this conflict through improving the way security is managed are too superficial to deal with the underlying problems with the development of the aquaculture model in the region; they allow no scope for creative processes to facilitate improved development of the zone. In order to construct possible alternatives to reduce social conflict, alongside an improving environment and quality of life in the region, we shall now provide an analysis based on environmental justice, which will offer a series of alternative proposals.

If we analyze the entirety of public policies promoting this production model from an environmental-justice-based perspective, as defined by David Scholsberg, then four dimensions must be taken into consideration. Comparing the current situation with a desirable objective, it becomes clear

MARIA MESTRE MONTSERRAT



A guard in a shrimp farm in Gulf of Fonseca, Honduras. Central American farmers are quick to protect their property

Dimensions of Environmental Justice	Main Problems Detected
<p>Distributive environmental justice</p> <p><i>Are access to coastal resources and their benefits fairly distributed between transnational aquaculture companies and local communities?</i></p>	<ul style="list-style-type: none"> • Small-scale fishermen have seen their access to the coast impeded or blocked altogether due to the expansion of aquaculture. • Local communities have lost their rights to exploit fishing grounds. Large companies swallow up small co-operatives. • Local communities have difficulties securing the capital required to intensify production along export-oriented lines (use of machinery, use of hatchery-produced larvae, much more expensive than wild ones, etc.). • No product distribution or trade channels exist other than for export, as all are controlled by an oligopoly of large companies.
<p><i>Who suffers from the negative repercussions of this use of resources?</i></p>	<ul style="list-style-type: none"> • There are numerous cases where fishery resources have been directly negatively affected by pollution and physical degradation of estuaries.
<p>Environmental justice and the recognition of all stakeholders</p> <p><i>Are shrimp production co-operatives and small-scale fishermen recognized as equal partners in policy decision-making processes? Are they compensated when industrial shrimping impacts negatively on them?</i></p>	<ul style="list-style-type: none"> • At State and regional levels in Central America, there is no representation, either for associations of shrimp production co-operatives or for small-scale fishermen, unlike industrial aquaculturalists who enjoy a strong presence. • Representative structures are weak due to the lack of training for local associations. • Local communities are not recognized as injured parties by industrial fish farming (very limited corporate social responsibility and links to companies' own interests, etc.)
<p>Environmental justice and decision-making processes</p> <p><i>Do local stakeholders have a real chance of participating in the public decisions affecting them?</i></p>	<ul style="list-style-type: none"> • The associations of shrimp production co-operatives and small-scale fishermen do not participate in agreements on good practices in shrimp farming, in drawing up codes of conduct, etc. • Local associations do not possess sufficient organizational capacity to be able to participate.
<p>Environmental justice and lack of access to resources</p> <p><i>Does industrial aquaculture limit free access to resources, thereby cutting off local populations from their sources of livelihood?</i></p>	<ul style="list-style-type: none"> • Fishermen are prevented from accessing their main food source due to the barriers created by the operations of industrial aquaculture. • There have been numerous disputes and accusations between local communities and the industry, which have generated various clashes, giving rise to violations of human rights (deaths of small-scale fishermen, aggression, harassment, etc.).

that behind all these conflicts lurks the failure of specific policies as tools for development. The table details the main problems that may be detected using the four dimensions of environmental justice.

These results clearly show that any solution to socioeconomic conflicts in the region must go way

beyond those based on security policies. Rather, finding a solution to these social problems requires the development of a package of alternative policies to this model, or of policies for managing those conflicts already generated.

Some examples of the measures to be implemented include:

1. There must be a review of the function of aquaculture, adapting the current production model to the socio-environmental capacities and features of the region.

This means that the models of aquaculture that are being promoted must be reviewed and an appropriate differentiation made between the diverse farming systems (artisanal, extensive, semi-intensive and intensive).

It is also necessary to re-evaluate the role of small-scale fisheries. There must be preference given to those methods of exploitation that result in a better distribution of wealth in the region, a better distribution of net social benefits and a lower impact on the environment.

Such a policy review requires an integrated, rather than a merely sectoral, approach with regard to, among other things, land-use management (guaranteeing fair access to natural resources), criteria for allocating user rights, development policies, policies that support productive activity at the national level, and negotiation processes for international trade agreements.

Equally, there needs to be a more rigorous application of such environmental and labour legislation as already exists.

2. Processing and marketing chains for artisanal fishery products must be created and strengthened.

A better redistribution of wealth in the region requires alternative chains to the current ones (which are mainly centred on export and controlled by a few, large-scale stakeholders). This shift from conventional to new processing and distribution chains requires an initial support phase on the part of the public administration, and must take into account difficulties likely to arise in reversing already existing links between small producers, large distributors and brokers, especially in the financial field.


3. Associations of fishermen and small aquaculture producers must be strengthened, and their

participatory decision-making processes enhanced.

If we want development of the region to be improved, it is necessary for the interests of small-scale producers and fishermen to be vigorously defended as quickly as possible. This requires significant improvements in their political articulation and greater independence in the way they represent themselves to institutions. Integrating interests between small producers is not an easy process and requires resources and an initial boost, which must be provided by diverse organizations: administration, non-governmental organizations (NGOs), and so on. In parallel to the creation of these self-representational structures, there must also be improvements implemented in the systems that allow participation of these entities in decision-making processes, especially when these take place at State and international levels.

4. Policies must be implemented that are aimed at resolving specific conflicts between fishery and aquaculture uses.

It is necessary to incorporate significant improvements in the planning of land use, ensuring equitable access to marine resources and available lands, and to establish mediation channels to deal with the conflicts that arise. This proposal should be understood as a mechanism to allow the emergence of the right conditions to provide a comprehensive review of the development model in the region. It is not a solution in itself to socio-environmental conflicts, for the measures described will only ease conflicts without solving the structural faults which cause them, and cannot, therefore, contribute significantly in the medium and long term to their disappearance.

But the main question arising is: Even with evidence of failure, do the national and international organizations responsible for developing policies in the zone have the will or the capacity to adopt a development strategy that will halt the machinery of this destructive model of shrimp production? 

For more 

ecologistasenaccion.org/article22438.html#outil_sommaire_0

Stop Trade in Blood-stained Prawns

www.lulu.com/spotlight/Fundacio_ENT
Shrimp Aquaculture in Central America

naturskyddsforeningen.se/in-english/marine-ecosystems-and-fisheries/organic-shrimp-farming/

Organic Shrimp Farming in Ecuador

fao.org/docrep/014/i2142b/i2142b.pdf
Regional Review on Status and Trends in Aquaculture