

commercial fishing vessels within municipal waters. This has also resulted in increase resource competition and displacement of municipal fisherfolks from their traditional fishing areas. The author presents community perceptions on positive impacts of municipal water delimitation based on the experiences of selected municipalities in the Philippines. The lack of understanding of most local government units (LGUs) and fishing communities about the value added of having their territorial water boundaries impede the successful municipal water delimitation. The author concludes that sustainable fisheries management practices such as multiple use zoning, municipal water delimitation and designation of women-managed areas resolves resource use conflict and marginalization of fisherfolks from their fishing grounds. It is recommended that a sustainable fisheries management framework that grants priority use rights to municipal fisherfolks and enhances the fisheries management capabilities of the LGUs and fishing communities should be adopted.

16:20 **Harvesting for direct versus indirect human consumption: the Peruvian small-scale fishery paradoxes**

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The Peruvian anchoveta fishery is the largest national fleet worldwide targeting a single species. Fish are targeted by both an industrial fleet (GRT > 32 tons), whose landings (about six million tons per year) are directed nearly exclusively at fishmeal and fish oil production, and by an artisanal fleet (GRT < 32 tons; about 200,000 tons per year), whose catches are, in principle, mostly used for direct human consumption (canned, frozen, fresh or smoked). In practice, however, most of the artisanal fleet's catch in recent years is also destined for fishmeal production. As a result, supply chains for direct human consumption (DHC) appear to only receive < 1% of total anchoveta landings. Although DHC of anchoveta has apparently increased over the last 10 years, the continued low overall rate of DHC constitutes a paradox in a country where severe malnutrition continues to affect a substantial portion of the population. Furthermore unemployment is high in Peru, especially for unqualified or poorly qualified people that could benefit from changes in the present exploitation and transformation of the anchoveta supply chains. Another paradox, which also explains partly the first one, is that the price of fresh anchoveta for DHC is similar to the price for IHC despite higher costs of production for the former. Furthermore, the environmental impact of IHC is much higher than for DHC for the same delivery of protein. Here we compare prices, added values and environmental impacts of the IHC and DHC supply chains used by the Peruvian SCF.

16:40 **Are you a local or an outsider? Understanding networks in small-scale fisheries off the Ecuadorian coast**

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Small-scale fisheries have been providing the livelihood source for the coastal population of Ecuador since pre-Hispanic times. Some of the artisanal fishing areas overlap with sites with protection status established with the intention to reduce the stress on the marine resources. Within the Marine Protected Areas in Ecuador, several conflicts among the users of the fishing resources and outsiders arise due to differences in perceptions, values and attitudes toward the use, management and conservation of these resources and their ecosystems. How do the people from different origins, education, professional backgrounds, and cultures react and feel about small-scale fisheries management issues in these protected areas? How do these networks of small-scale fisheries actors influence the feasibility and applicability of conservation measures? How are these actors' interactions perceived among them? The differences and similarities among the small-scale interest groups allow for identification of the key issues and better integration of their views into the decision and policy making process. These differences and similarities within the actor's network and between the local actors and the outsiders are determined by the perception of the local population toward the natural environment surrounding them. Those coming from outside and those born in the place hold different attitudes toward the site and so, different approaches should be taken in order to design and implement decisions and actions toward small-scale fisheries. Having a clear understanding of these differences and similarities among the small-scale interest groups will enable successful conservation and management of fish resources in Ecuador.

Fréon Pierre, Domalain Gilles, Domalain-Faussey C., Estrella C., Landa Y., Iriarte F., Durand H., Sueiro J.C., Negron R., Tyedmers P., Voisin S. (2010).

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