

Title: **Environmental and Socio-Economical Impacts of the Peruvian Anchoveta Supply Chains: Work Plan and First Results**

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Abstract: The Peruvian anchoveta fishery (the largest mono-specific fleet worldwide) supplies mostly a chain of fishmeal and fish oil aimed at producing animal feeds, mostly in other continents, whereas others supply chains for direct human consumption only use <1% of the anchoveta landing. Although improving during the last 10 years, this situation is surprising in a country where part of the human population suffers from malnutrition when not starvation (having also in mind that anchoveta products are rich in proteins and with high content in omega 3). Furthermore, the viability of the fishmeal and fish oil supply chain is questionable due to its high impact on the environment and its low employment rate. Its energy consumption (and related fossil fuel use, green house effect production, etc.) is high all along the supply chain: extraction, transformation, inter-continental transport of fish products and animal protein outputs, etc. A research program, lead by IMARPE and IRD, was launched in 2009 and will quantify the environmental and socio-economical impacts of the Peruvian anchoveta supply chains for direct and indirect human consumption, from end to end. The first step will be a comparison of impacts resulting from the extraction phase according to the type of boat (small-scale, semi-industrial or industrial) and, within each of these three categories, to boat size (ranging from 2 to 600 t of holding capacity, with large overlapping between boat types. Partial results on this first step will be presented, in particular a life cycle analyses, employment and economical rent.