Eco-labelling in fisheries along West African coast : the potentials and pitfalls

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In the context of Ocean resource depletion and marine biodiversity erosion, most of initiatives focus on value chain promotion in addition and in combination with all activities related to fisheries co-management, eco-labelling and fair trade models to create synergies and maximize benefits and long term sustainability of the fishery. While industrial fisheries will never be able to cope with ecofriendly criteria, sharps argument favor small-scale or artisanal fisheries to developpe schemes rending better fish quality. Thanks to higher quality, the fishermen have access to premium market, get higher earnings and social provisions.

Illustration of two main trajectories

In developping countries, and especially in West-african sea countries such as Senegal and Mauritania, two main trajectories could be highlighted: in one hand, valorisation of origin-based products (promotion of products as origin), which are more or less « traditional », export oriented and supposed to integrate world market, to improve value chain thanks to international norms, labels and even, ecocertification; in the other hand, local traditional products, with a well established reputation and distributed through diversified commercial chains (local, national and interreregional) controled by women producers, not candidate to ecocertification or official labellisation, but rather to quality signs and collective brand.

The first one, very few and limited (in exchanged volume, extension of production area, involved actors along the sea food chain) could be illustrated through the study case of mullet fishery ecocertification in Mauritania [29, 30 ,31, 32]. Mullet fishery system is the basis of Imrâgen livelihood. Mullet (*Mugil cephalus* Linné) and processed products are the main (unique) source of income : dried fish (*tishtâr*), salted and crushed fish (*khlî*), *poutargue*, gonads pressed, salted and dried (*beydh ezôl*) and oil from fish head and internal organs (*dhen*) are traditionnaly processed and sold by Imrâgen fishermen wifes. With the creation of PNBA (National Park of Banc d'Arguin) in 1976, Imrâgen population is divided into two communities : inside the Marine Protected Areas, strong constraints in terms of resources access and uses are imposed, in favor of « traditional » and « ecological » fishing methods (only « shoulders » net, canoë with veil called « lanches », etc.) ; outside, motorized small-scale fishing with various gillnets develops. Since mid-1990s, processing activities controled by women are in crisis, due to several factors, among which: growing fishing effort linked to increasing fishermen populations (from Mauritania and Senegal) and less selective gears outside the Park ; increasing demand of *Mugil* gonads sold fresh by wholesalers to Nouakchott companies and exported to European market.

In 2001, IUCN (International Union for Conservation of Nature) and FIBA (International Fund for Banc d'Arguin) decide to support Imrâgen fishery system inside the Park in promoting mullet products as origin. This project, which aims at mid-term an eco-certification of *Mugil* fishery, has three goals : *Mugil* stocks preservation, traditional knowledge conservation and Imrâgen economic development. Innovations concern landing fish access (microcredit), production and processing conditions (training in hygienic norms and Western criteria of quality ; distribution of working riel: buckets, pots, knifes, balances, cupboards, etc., new), packaging and sales. During the fishing campaign 2006-2007, a test was proposed to the women of two villages of the Park. It concerns above all *poutargue* product, which has a high value (around 200 $/kg on world market) and is destinated to European consumers, living in Nouakchott. Poutargue is putting under vacuum to improve the appearance and the preservation. The product is bought to the women between 20 and 30 $M/kg according to its quality, a little more than the price offered by the local wholesaler, and sold around 60 $/kg in Nouakchott in supermarkets as well as in the headoffice of the PNBA. At the end of season, benefices are supposed to be redistributed to the women.

Contacts are established between IUCN and Marine Stewardship Council (MSC), leading international organisation for fisheries eco-certification, whose principles are consistent with FAO-Guidelines for Eco-labelling of marine capture fisheries [2]. At the end of November,

2007, MSC declares officially PNBA mullet fishery ecocertification is undergoing full assessment procedures.

Another initiative in favor of « poutargue » promotion is conducted by a Mauritanian NGO, called « Mauritanie 2000 » supported by Slow Fish [23, 32]. It concerns all the Imrâgen women of the coast (inside and ouside the Park) involved in p*outargue* production and aims to improve processing techniques and products packaging and so, give opportunities to enter new markets. Today, the *poutargue* of Imrâgen is one of the ten "sentinels " products, qualified by Slow-Food in Africa. This concept « sentinel » designates local product and the attached know-how, badly known and jeopardised of disappearance.

The second trajectory is well illustrated by Saloum or Casamance cockles exploitation and value-adding initiatives that aim to develop alternatives sustainable activities in a context of rural crisis (drought, population pressure, renewable resource overexploitaiton, decline of cereal culture, migration of young people, etc.)[17, 33]. Most of them focus on women, who play a main role in fish and cockles collect, processing and trade. Initiatives are either exogenous like Enda Graf Sahel project called « Women and Cockles », either endogenous, in the hand of women entrepreners like Alimatou Sarr from Dionewar or supported by Santa Yalla project of Casamance. Women replicate the traditional organisation of « age group » into operational groups and co-operatives (Economic Interest Group) officially recognised and supported by funding agencies. The process of labelling mainly consists of guaranteeing the safety of the product (flushing and washing several times with water, addition of chlorine, three successive cookings) and improving its presentation and its traceability (vacuum bagging, labelling). Innovations also include exploitation techniques in favor of mangrove ecosystem and biodiversity conservation. For example, the Japanese cooperation has introduced oyster seedings in shallow waters. Traditional and sustainable techniques of shellfish collect are also encouraged, such as the “Moundé” baskets, which ensures that the smallest shellfish are not harvested.

Terriorial qualification of seafood: new challenges

Certification tools are not the panacea. As a matter of fact, West African artisanal or processed seafood products are very few to be certified, and even less to candidate to be certified. According to a GTZ-feasibility study on eco-labelling in Senegal [27], only 4 fish could be candidated : shrimp, lobster, octopus and cuttlefish. Mismatches beetween certification requirement and the reality of many small-scale fisheries are obvious. Also, only few developing countries’ fisheries have been applying for certification by the MSC. Main reasons are the predominant small-scale multi-gear and multi-species fisheries, the general lack of data and organisational structure, the lack of fishery management and regulation and also insufficient capacities and capabilities for efficient enforcement [1, 4].

In the case of Fair-fish in Senegal, according to his director Billo Heinzpeter Studer [5], project stops because :1) there was a too long period till first success ; 2) there was a huge gap between demands of Swiss supermarket Migros and conditions of small-scale fisheries in Senegal and so, continuous needs of increasing project funds ; 3) Swiss project management was optimistic : regarding the gap between demands and conditions, there was a too long period of remuneration of the local team by time instead of achievement ; 4) local staff was overstrained. There was a mutual frustration by not fulfilled tasks that leads to cumulated cases of neglect of duties ; 5) one-track orientation and one retail chain lead to dependancy and heteronomy.

Labels and official signs to guaranty products quality « theoritically » allow consumers to make informed choice and producers to secure their market acces (stability of furniture and quality, credibility), increase their income (higher price of local products) and improve their farming and fishing system (sustainable and equitable share of benefices). However, as it is pointed out by many studies on eco-labelling in developping countries [1, 27, 32, 33], tensions

are significant between markets, norms and actors involved in these processes. Also, international market induces more complex networks with new middlemen (wholesalers, retailors) and longer chain between producers and consumers. Moreover, local norms are not compliant with increasingly stringent food safety, hygiene and product traceability norms. So, there are sharp tensions beween origin-products typicity and standardisation. Basis of quality criteria often lack of transparency and certificate organisms are not enough independant. Role of government in voluntary labelling and certificat and implication of actors along the entire supply chain are also in question: degrees of acceptance vary from one stakeholder to another. As tools are heavy, expensive and binding, some actors are *de facto* excluded from this value-chain [33].

Lessons from African eco-labelling initiatives in fishery

African ecolabelling in fishery studies and Biodivalloc program analysis [5,27,29,33] demonstrate labelling tools have to be choosen according to the market orientation and adapted to the local context.

Labelling tools are free and volontary. They encompass various procedures and steps, from « simple » labels and norms to certifications (which need guaranty and third external organism to certificate), from informal to official signs of quality. Each of them have threats and opportunities [29]. Also, official signs of quality allow public recognition but they cost a lot ; they allow immediate credibility but also possible sanctions ; price is higher but multiple diversified networks are unadequate and local specificities not preserved. On the opposite, informal signs or collective brand are more adaptable, more flexible to local context but not recognised ; reputation is based on confident and self control, which is not enough to construct credibility and justify higher price.

A major stake concerns « quality », currently focused on two aspects, sanitation and sustainability [34]. In fact, two kinds of quality has to be distinguised [35]: intrinsic depends on the products themselves –gustatory, nutritional or medical value (see for instance in France Red Label and AOC) ; "extrinsic" quality is conferred by the conditions of exploitation, processing and marketing –respect for the environment, responsible and sustainable uses, poverty reduction, equitable sharing of benefits generated by Protected Areas, etc. (see for instance Fair-trade, IGP, ecocertification). Some of these criteria are compatible, but very often they are contradictory –for instance hygiene criteria often conflict with organoleptic criteria, normalisation does not fit with specification (or typicity) [5, 30].

In the case of mullet fishery and cockles exploitation, the two trajectories have diverse promises and threats : *poutargue*, high-valued product, export-oriented, is not really an Imrâgen product ; innovations, imposed by international norms and eco-certification via MSC are not always well accepted by local actors, but they ensure access to « market niches». On the contrary, cockles are traditional identary products[iii]. The « old » food chain for domestic consumers and the improved food chain for urban or foreign, richer and warned consumers, could co-exist and respond to high and diversified demand on the local, national and African market. Nevertheless, cockles cannot be exported towards European or Asian markets because of sanitary constraints. Elaborate a collective brand could be a better tool than ecocertification to protect biodiversity and promote local products on national markets [17,29].

Conclusion : Issues and recommandations

Most of the eco-labelling processes aim first to improve local products value chains. They are oriented to market niches and are *per se* limited in terms of exchanged volumes. Beyond legal and commercial goals, ethical and ecological preoccupations have growing place. Quality economy, solidarity, equity and responsability are becoming key words. However, as illustrated by Senegalese and Mauritanian studies, these tools suffer from inner tensions. Innovative processes lead to various changes, especially in terms of : resource and territory access, social

organisation (with complex recomposition of actors'power, from producers to consumers), value-chain and quality criteria. These tools, which are supposed to alleviate poverty, on the contrary could stress disparities and aggravate inequities (beteen men and women, young and elder, résident and migrant, etc.). In the context of African food crisis, another major stake is to guaranty for every body the access to a secure, heathy diet and quality (intrinsic and extrinsic) products.

Finally, the success depends on 1) the capacity of the producers to get organized and identify the relevant markets for their products, 2) consumers awareness for sustainable issues related to production, food quality and trade and responsiveness (militant market and consumers reliability) [4, 36].

To prevent the mismatches, following recommandations are suggested : 1) Strenghten the links between eco-labelling incentives and coastal management policies ; incorportate seafood products promotion in the ICZM ; considere ecolabelling as a tool of marine biodiversity conservation. There is a need of public incentives and local actors' capacity-building support. Particuliar attention has to be paid to property rules (access and uses right, benefices sharing, actors interactions) ; 2) conduct markets analysis at various scales (especially at West African scales) and study complexity of value-chain and market segmentation and/or competition and substitution ; 3) promote informations sharing and initiatives exchanges among all stake-holders ; make Localised Seafood Systems more recognised ; create a meeting and advertising place like a « house of seafood products ».

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Footnotes

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** Main processed fish are : *gej* (putrified, salted, dried fish), sali (salted-dried), *kecax* (braised-dried)*, yeet* (putrified, salted, dried volute), *pañe* (boiled-dried arks*), tuffë* (boiled-dried murex*), yoxos* (grilled-dried oyster*), tambajang* (salted-dried pelagic fish), *metora* (smoked).

*** Other Imrâgen products – *tishtar*, oil, etc- have the same trajectories than cockles.There is room for collective brands -like Park label- to furnish national markets and West African markets.