TUNA FISHERIES CATCH LANDED IN ABIDJAN (CÔTE D'IVOIRE) AND SOLD ON LOCAL FISH MARKET FOR THE PERIOD 1982-2013 (PRELIMINARY DATA)

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SUMMARY

This note presents data collected (quantities by type of vessels and flags, species composition, size structure) since 1982 on catches landed by tuna fisheries in Abidjan and sold on local market.

RÉSUMÉ

Cette note présente les données recueillies (quantités par type de navires et pavillons, composition par espèce, structure des tailles) depuis 1982 concernant les prises débarquées par les pêcheries de thonidés à Abidjan et vendues sur le marché local.

RESUMEN

Este documento facilita los datos recopilados (cantidades por tipo de buque y pabellón, composición por especies y estructura de tallas) desde 1982 para las capturas desembarcadas por las pesquerías de túnidos en Abiyán y comercializadas en el mercado local.

KEYWORDS

Local market, Data collection, By-catch, Tuna fisheries, Purse seining

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Introduction

This document presents preliminary data on fish landed by tuna fisheries and sold to the local market in Abidjan from 1982 to 2013. This fish are major tunas that are rejected by canneries, undersize and little tunas (skipjack, bullet tuna, yellowfin, bigeye, little tunny) and also appreciated species caught as by-catch like marlin, sailfish, wahoo, dolphinfish, barracuda, triggerfish and shark. Generally called "Faux Poisson" in French, because it was initially considered as the fish basket given to the fishermen at the end of the trip, this category of fish is now representing a significant component of the landing due to growing bycatch associated with DFAD fishing developpement and sharp local demand in Abidjan city.

Origin of data

As indicated in Chavance *et al*. (2010), monitoring the fish landed and sold through the local market, is by nature a very difficult task. Since the beginning, it has been considered unrealistic neither to collect formal data (formularies, invoices …) neither to estimate directly weights. It then has been preferred to evaluate the number of transports units associated with weight coefficient. For specimens (billfishes, sharks), numbering of heads are used in order to avoid double counting associated with a mean weight by types of specimen. Weight coefficients by transport units were fixed empirically periodically by observers and try to reflect changes occurring in transport practices. Since May 2009, a weighbridge has been installed at the fishing port exit and generates exact weights of transport unit each one being inventoried and its specific net weight defined. All industrial vessels, in principle, are systematically monitored for their landings destined to local market whatever their nationality and their type (fishing or carrier vessels). These data were collected through a collaboration between France (IRD), Spain (IEO) and Côte d'Ivoire (CRO).

Computation

Total estimates of landings are obtained by summing up the product of the numbering of transport units (vehicle, bags, pieces …) by their reference weights. When direct weights are available, they are also used. The precise origin of the product (vessels, type of boats, nationality, fleet and date of landings) is therefore known. Species composition before 2005 has been estimated using species composition given by N'Goran (2000) (**Table 1 and Figures 1 to 6**). Since 2005 species composition of the landings destined to local market is done by dedicated port samplers that estimate visually the percentage of species for each vehicle. This species composition is applied for fish landed in bulk when available.

Length measurements have been set in place in a regular manner since 2007. They occur on board vessel (all type and all nationality) for samples around 200 individuals each and concerns uniquely tuna fish species (major and minor). Percentage of species composition of these samples may therefore also be used to estimate composition among tunas.

Structure of data set folder ABJ_LM_1982-2013.xls

LANDINGS:

- Annee (year)
- Mois (month)
- ICCAT_FLAG (Vessel flag)
- L_TYP_B (Type of vessel)
- FAO_Species_Code_2 (FAO species code)
- Quantite (Quantities in tons)

LENGTH

- Annee (year)
- Mois (month)
- ICCAT_FLAG (Vessel Flag)
- L_TYP_B (Type of vessel)
- FAO_Species_Code_2 (FAO species code)
- V_LONG (Lower Fork Length size classe in cm)
- Nbre (Number measured)
- Poids_echant_kilo (Weigth in kg in samples)

References

Chavance Pierre, Alicia Delgado de Molina, Monin Justin Amandè, Floch Laurent, Dewals Patrice, Tamegnon Athanase. 2011. Faux poisson landed in Abidjan for the period 1982-2010. Preliminary data. ICCAT Tropical tuna species group intersessional meeting on the Ghanaian statistics analysis (Phase II), Madrid, May 30 - June 3, 2011.

Chavance Pierre, Jean Baptiste Amon Kothias, Patrice Dewals, Renaud Pianet, Monin-Justin Amandè, Alicia Delgado de Molina and Aude Djoh. Statistics on tuna surface fishery's bycatch landed in Abidjan, Côte d'Ivoire, for the 1982-2009 period. Collect. Vol. Sci. Pap. ICCAT, 66(5): 2104-2112.

N'Goran Nestor. 2000. Estimation des quantités de faux poisson débarquées au port d'abidjan. Annexe 3.7.3. (Document multigraphié).

Table 1. Species composition of fish product landed by tuna fisheries in Abidjan as estimated by N'Goran (2000).

FAO_Species_Code_2	prop
SKJ	0.131
BET	0.021
YFT	0.062
TUX	0.65
BIL	0.024
TRI	0.013
SHX	0.004
PEL	0.095
Total	1.000

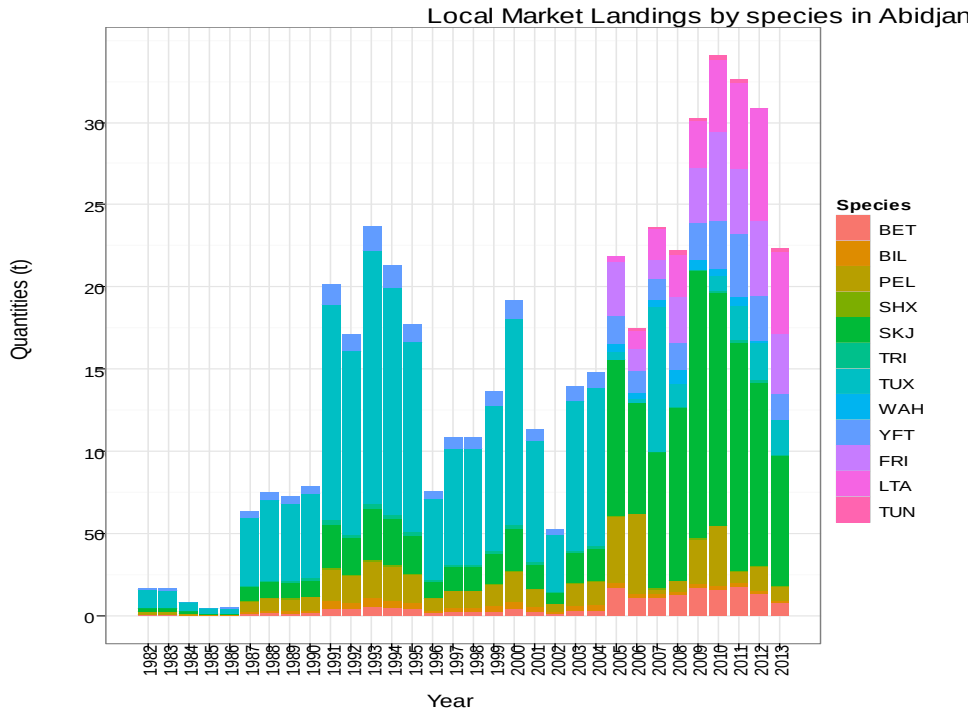

Figure 1. Total fish landed by species groups by tuna fisheries in Abidjan (Côte d'Ivoire) destined to local market. Catch composition before 2005 is estimated from Ngoran (2000) and, after 2005, by permanent monitoring.

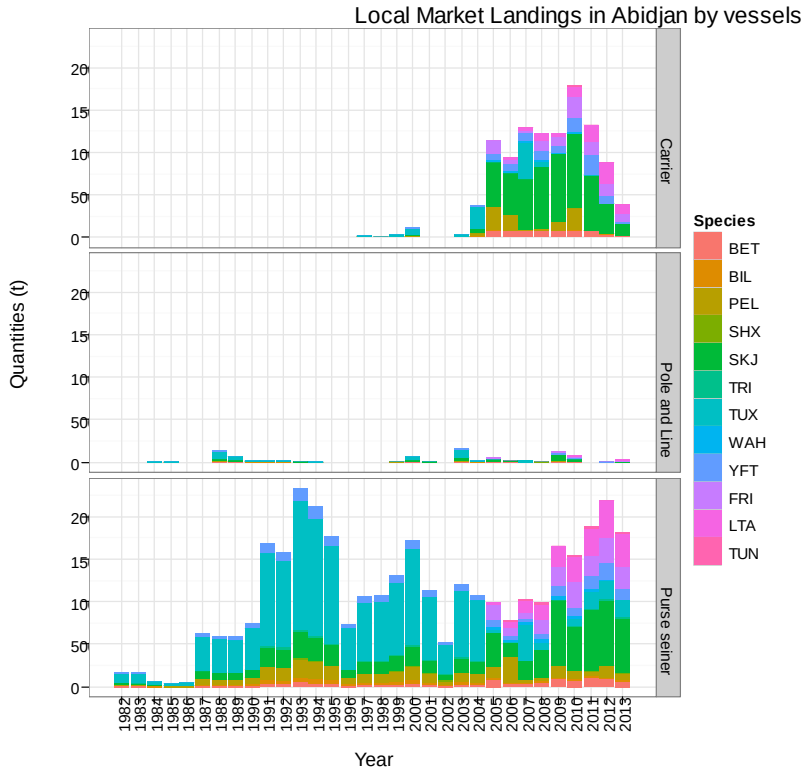

Figure 2. Total fish caught by species group and main vessel types landed by tuna fisheries in Abidjan (Côte d'Ivoire) destined to local market. Catch composition before 2005 is estimated from Ngoran (2000) and, after 2005, by permanent monitoring.

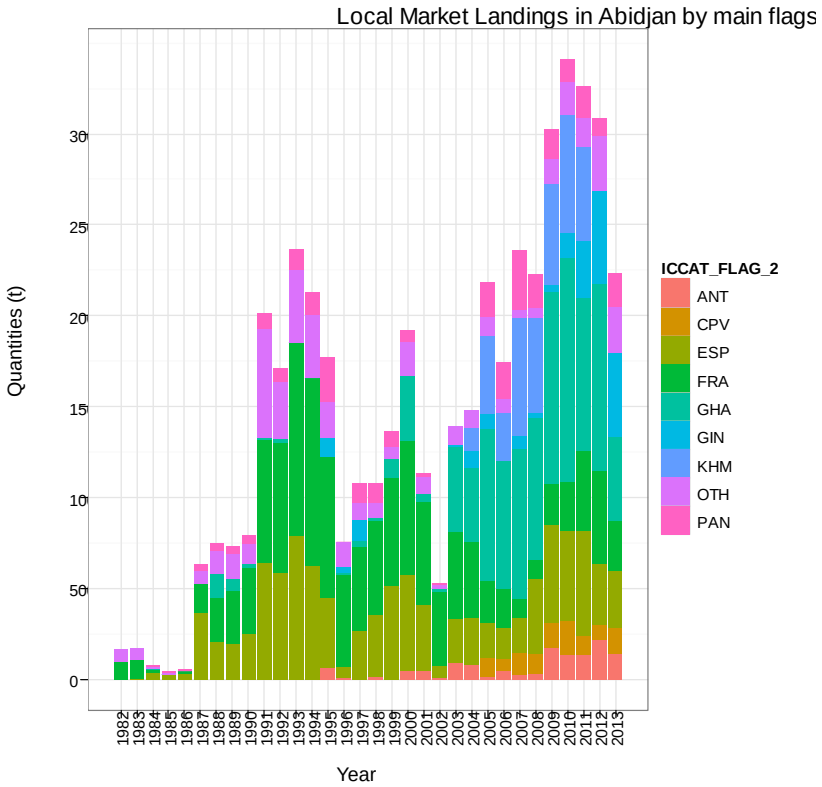

Figure 3. Total fish caught by main fishing countries identified by flag landed by tuna fisheries in Abidjan (Côte d'Ivoire) and destined to local market.

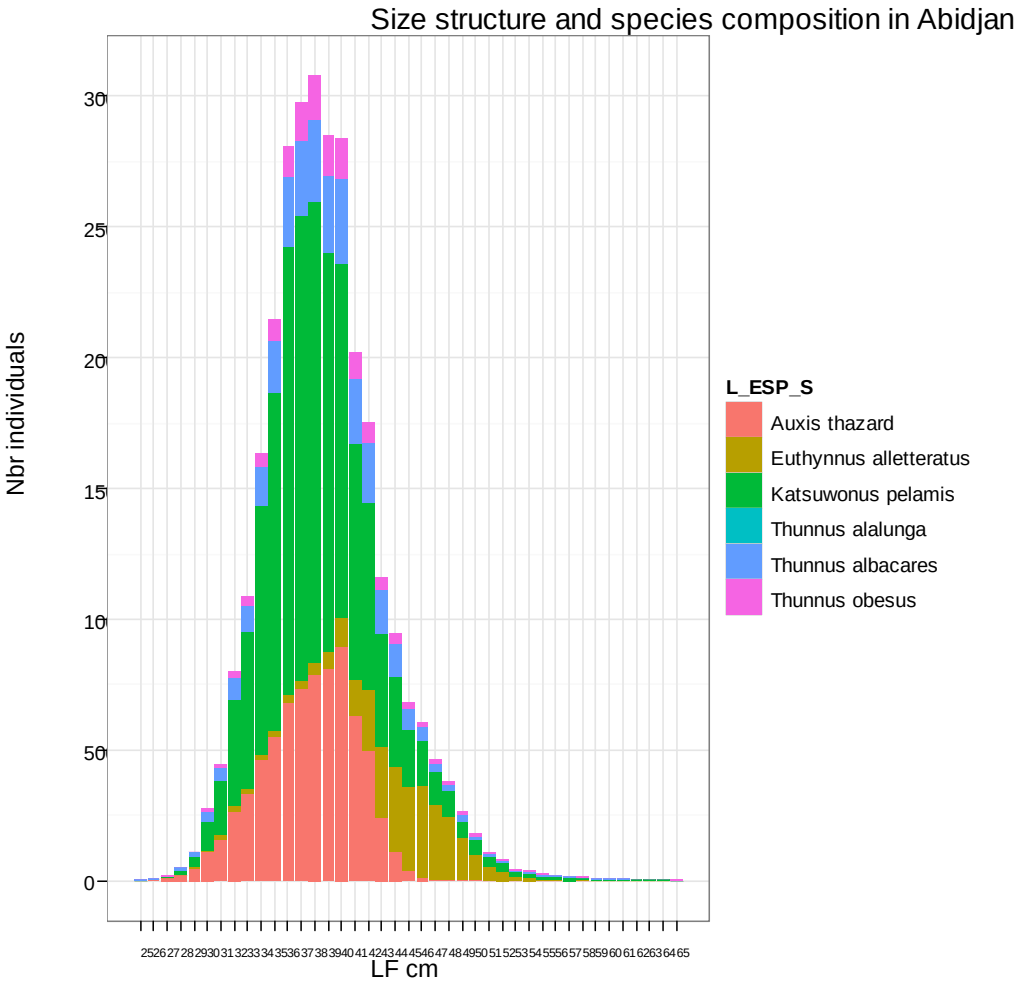

Figure 4. Total size structure and species composition of fish landed in Abidjan (Côte d'Ivoire) and destined to local market.

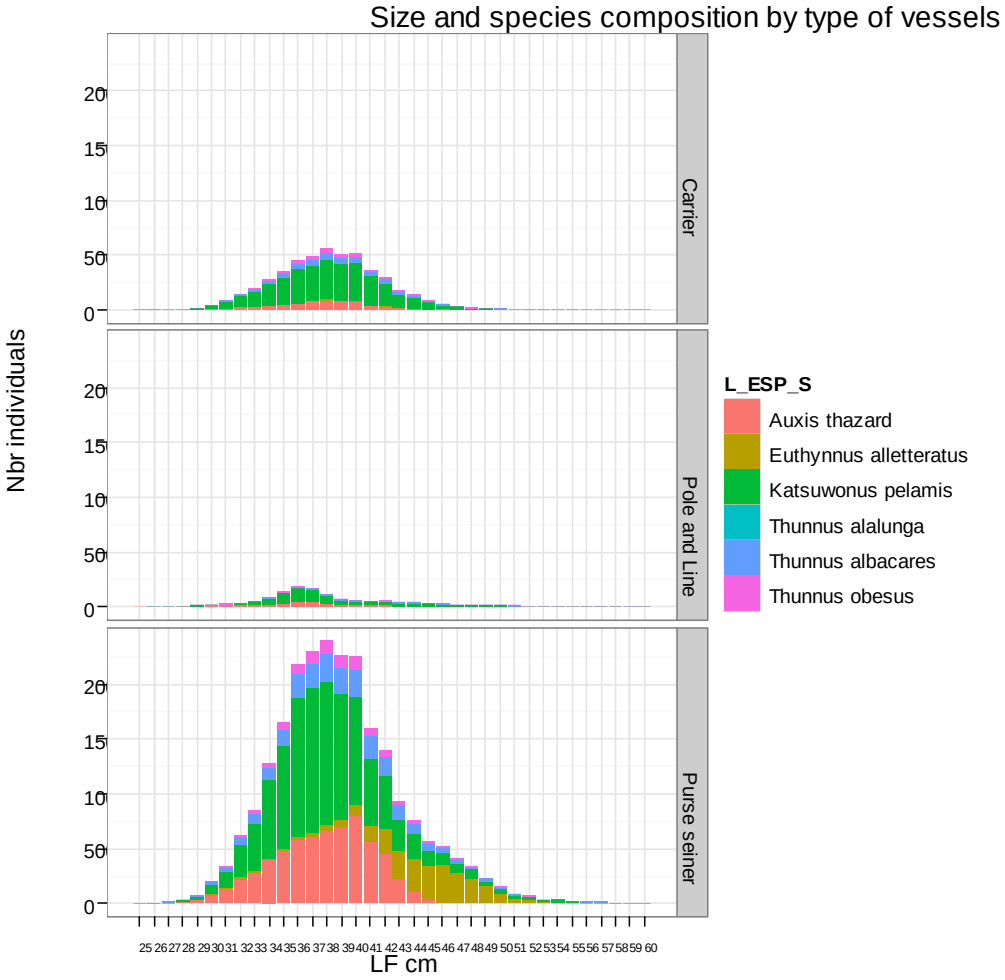

Figure 5. Size structure and species composition of fish landed by type of type of vessels in Abidjan (Côte d'Ivoire) and destined to local market.

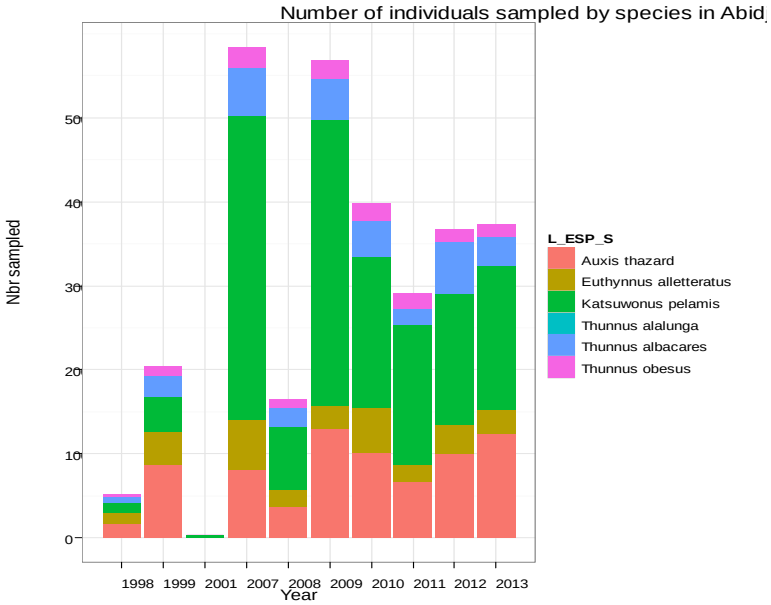

Figure 6. Number of individuals measured by year and species in Abidjan (Côte d'Ivoire) and destined to local market.