

WHAT ? (For research need)

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		Tuna	Penaeus	"By-catch"	Panulirus	Scylla serrata	Octopus	Small pelagics	Multispecific demersal
Data	Catches	X	X	X	X	X	X		
	Efforts	X	X		X	X			
	Length frequency	X	X		X	X			
	Stage of maturity		X		X	X			
	"Scientific survey"		X					?	?
Parameters	recruitment		X						
	growth		X						
	natural mortality		X						
	age of first capture		X		X	X			
	age at maturity		X		X	X			
	longevity		X						
Assesment	fishng mortality		X						
	total biomass		X					X	X
	MSY		X		X	X			
	Yield per recruit (Y/R)		X						
Institutions		USTA IOTC	DPRH PNRC IRD	CSP PNRC	DPRH FAO	DPRH JICA	DPRH JICA

VPA → Estimation of the Fishing mortality

→ Explanation and predict modelling of Thomson and Bell

Foreign Vessel fishing in the Malagasy EEZ

Foreign Vessel fishing in the Malagasy EEZ

Number of vessels

with License	2002	2003	2004	2005	2006	2007
European seiner	40	40	33	37	39	39
European Longliners	40	40	39	33	40	33
Asiatic longliners	65	65	6	19	47	24

Licenses fees of tunas fishing allowed a recipe in foreign currencies to the Country :

Reference of capture	11 000 t
License fees	65 Euros /t
Financial Contrepart :	
Access in Malagasy ZEEs	715 000 Euros/year
Promotion of Responsible Fishing	275 000 Euros/year

-Income resulting from operations of supply (Salt, ...), from naval repair (SECREN) and from the other Services (transshipment, ...)

- Existing of the Canning factory of tuna - Antsiranana (PFOI)

Indian Ocean Tuna Commission

Asiatic Longline fleets do not supply logbook data.

AVDTH

Acquisition and Validation of Tunas Data purposes standardized grids by seizure of fishing statistics to the tropical tuna and Tools to their validation and to their export.

AVDTH is an ACCESS application.

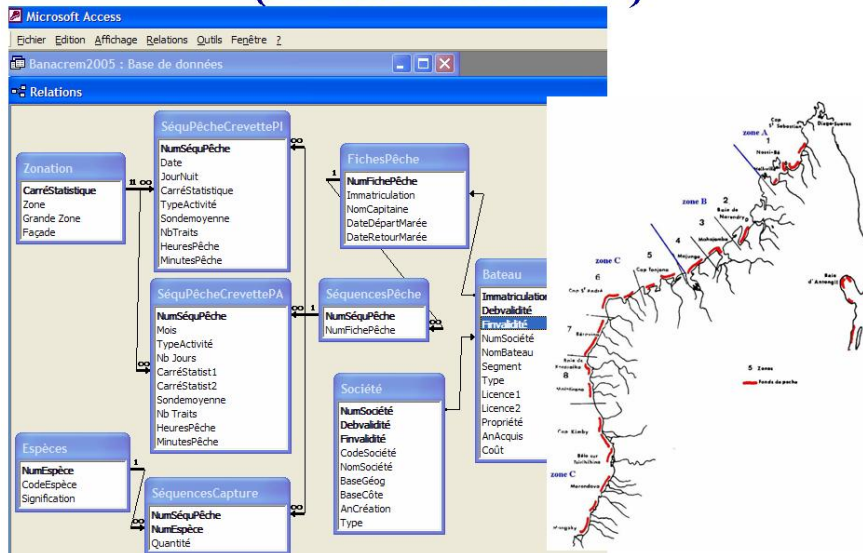
Catch survey for artisanal and industrial prawn fisheries

- Logbook is set up since 1993
- Standardization of the Logbook was introduced in 1995
- Database BANACREM (*National Base on Statistics of Malagasy Shrimps Fishing*) was operational since 1998, and managed by Fisheries Administration

Databases BANACREM

(Table and Link)

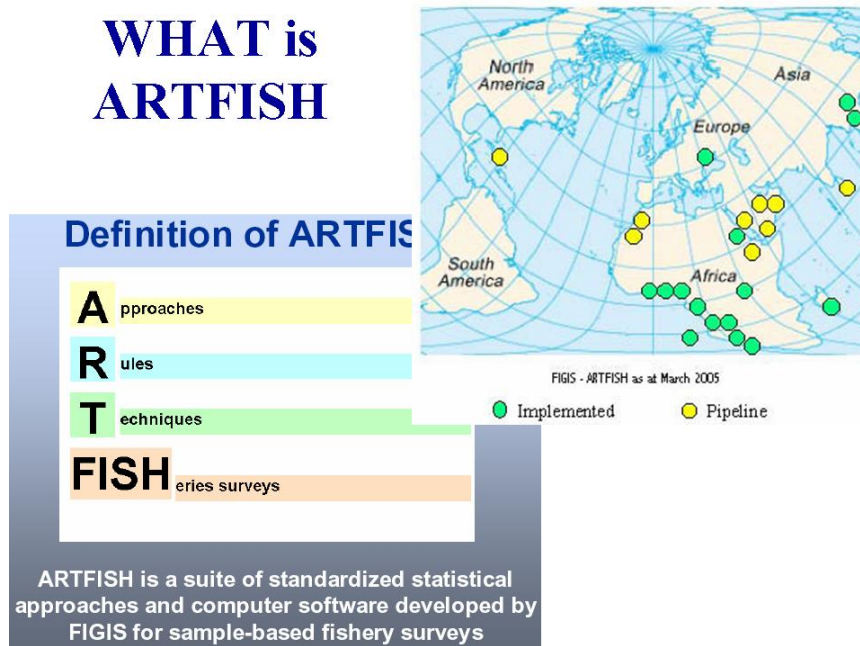
Databases BANACREM (Table and Link)



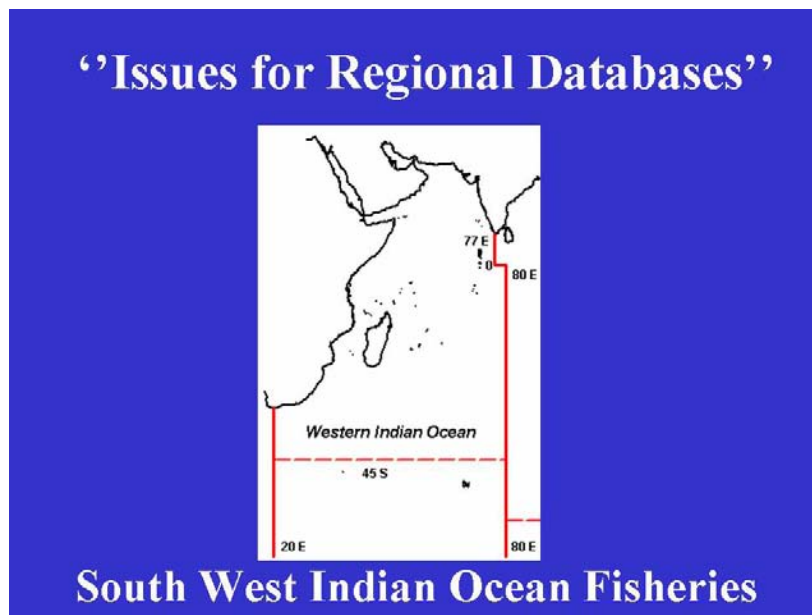
Statistics of traditional fisheries

- **Frame Survey**: Complete census or count of the main units (Fishermen, Boat, Fishing Gear, ...) is essential for statistical collection from Traditional fisheries

WHAT is ARTFISH



“Issues for Regional Databases”



Basic Fishery Data need to Fisheries management

GLOBAL :

- Time series of catch and effort statistics by fishery and fleet
- Total catch in number and nominal weight by species
- Discard statistics

Designing the Programme

WHY ? :

- Identify problems in the Fisheries

- **Identify Policy, Research and Management Objectives**

WHAT ? :

- **Identify types of indicators witch will be required (simple trends, MSY/MEY, ...)**
- **Biological, Economic, Socio-cultural indicators to guide management decision?**
- **What data (variables) are possible to collect, What data are essential, and What data are only desirable.**

HOW ? :

- **Standardization**

Issues for standardization

Apply international Classifications and Codes :

- **International Standard Statistical Classification of Fishery Vessels (ISSCFV)**
- **International Standard Statistical Classification of Fishing Gear (ISSCFG)**

Thanks