

Experiences on “Fisheries Data Collection” in the South West Indian Ocean Islands and archipelagos

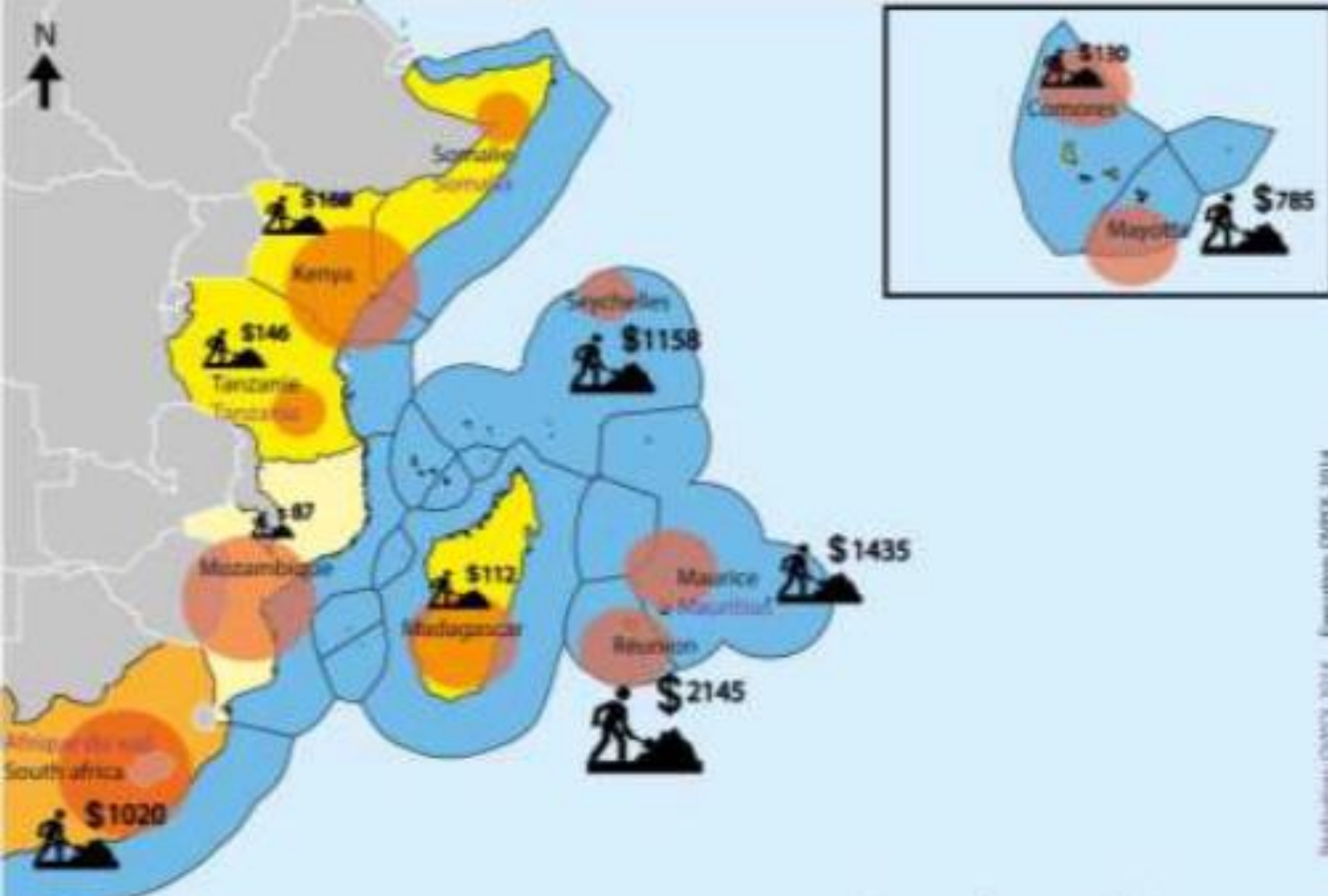
THEME SESSION: Fisheries data collection:
Playing in the same team or the paradigm shift



Oceans
Governance
In Archipelagic Regions
International Conference
7-10 October 2019
Faial (Azores)
Portugal

Teresa Athayde
Independent Consultant

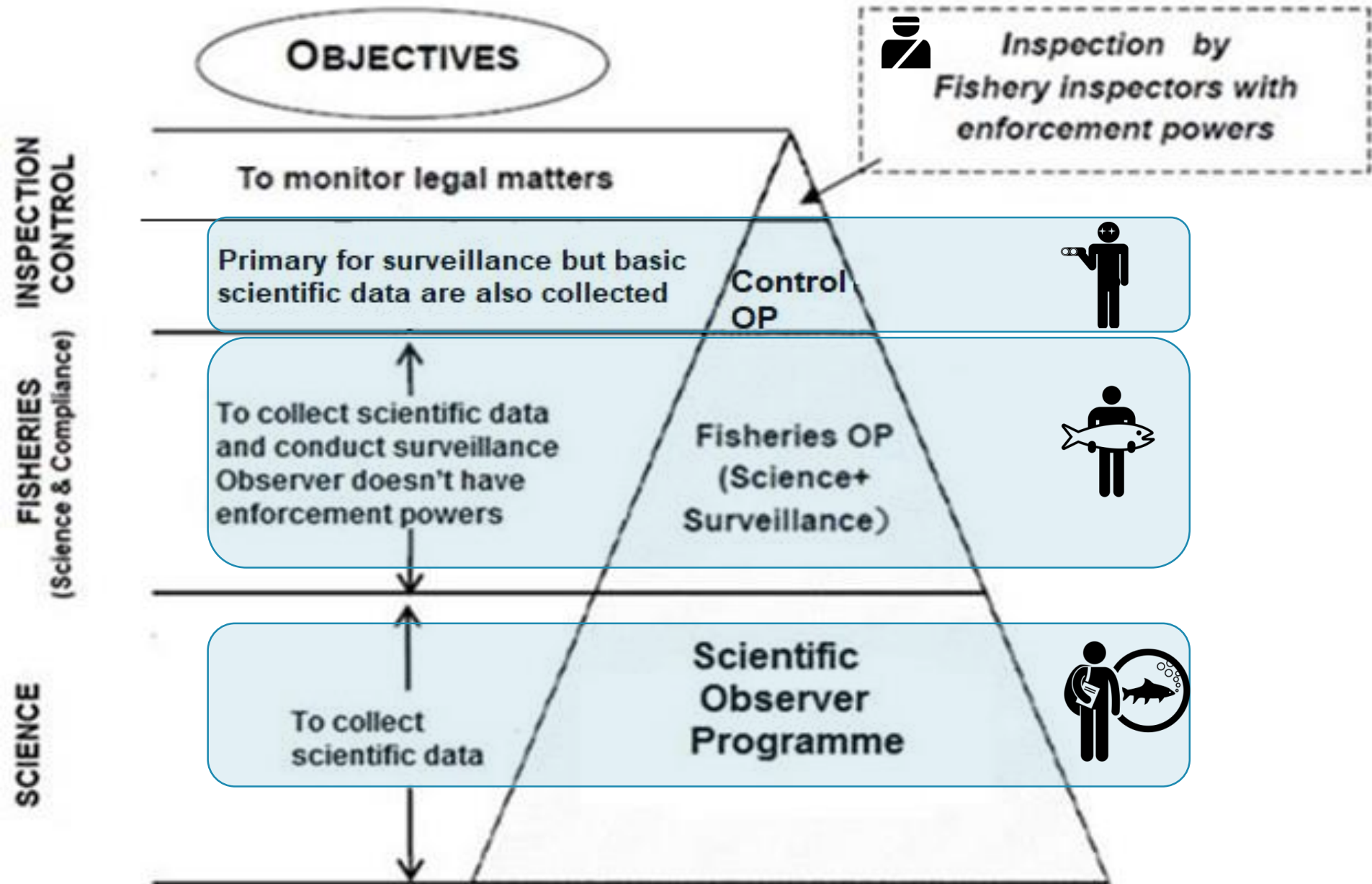




Map of the World, 2014. © 2014. All rights reserved.

Socio-economic characteristics of the SWIO coastal states (Human development index, 2014 by

Type of Monitoring Programs found in the SWIO



Type of 'Fisheries' covered by Monitoring Programs in the SWIO

Depending on the scale, degree of sophistication of gears, and on the method of fishing used, fisheries in the SWIO can be subdivided into:



- **artisanal** (daily trips, low sophistication)



- **small-scale** (daily trips, medium sophistication)



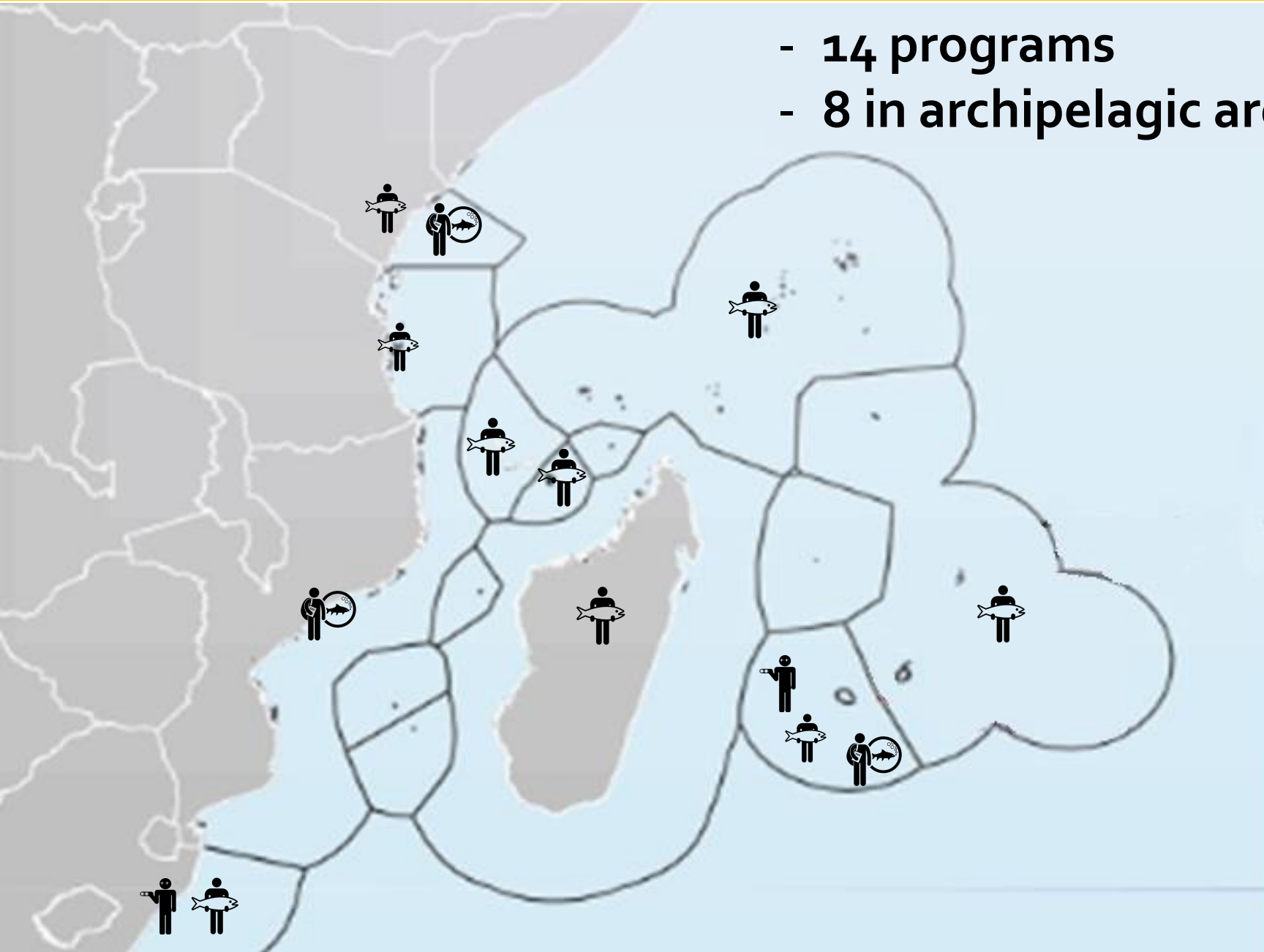
- **semi-industrial** (weekly trips, medium sophistication)



- **industrial** (weekly to monthly trips, high sophistication)

Monitoring programs implemented in the SWIO

- 14 programs
- 8 in archipelagic areas



Gap Analysis of 'Monitoring Programs' of the SWIO

Athayde T. 2016 (SwioFish - IOC/COI)



CHALLENGES /
DIFFICULTIES ID

GAPS, STRENGTH
WEAKNESSES
ANALYZED

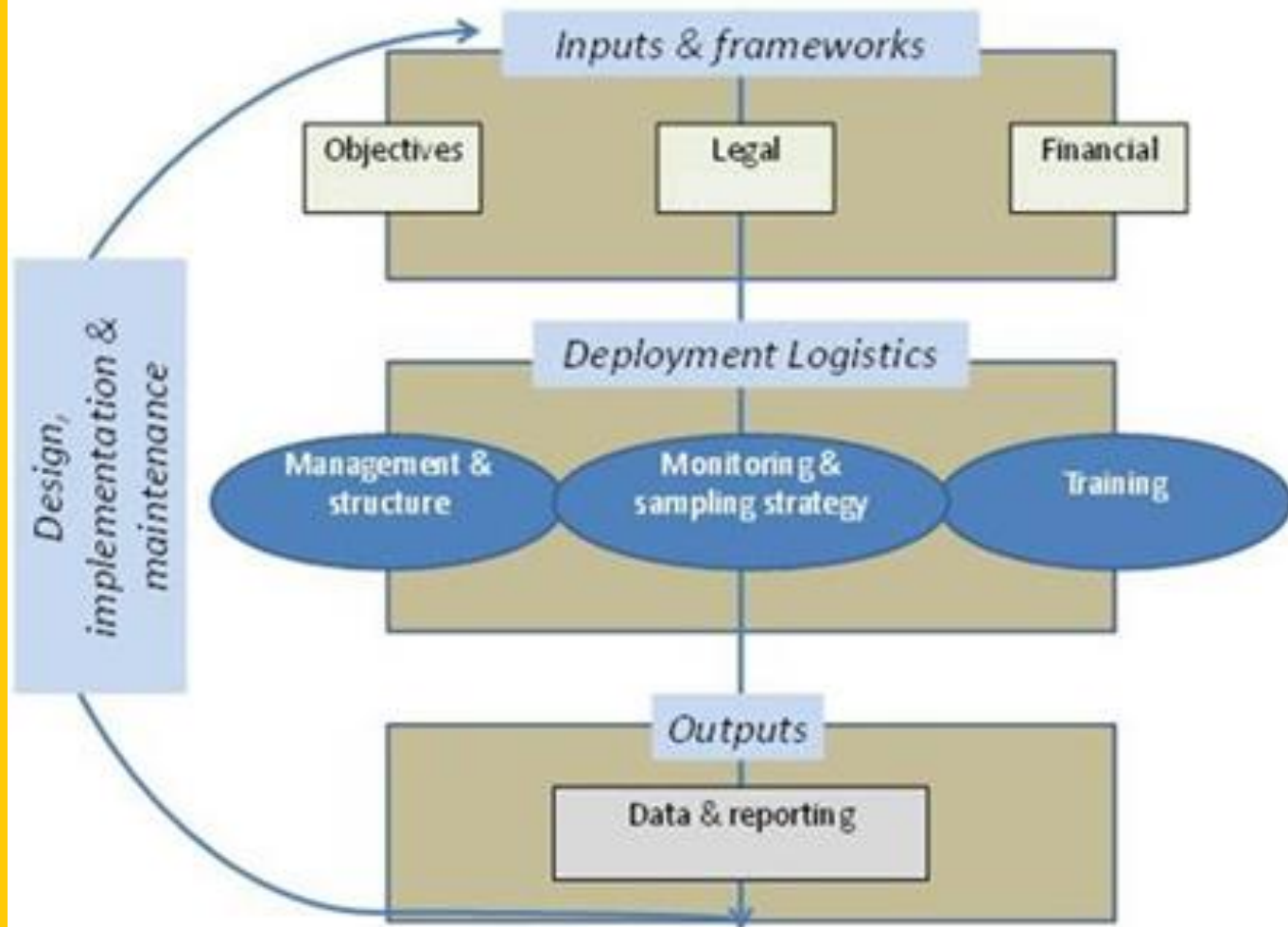


Figure 1: Generic framework for the establishing of a sea-based Observer Program (FAO Guidelines for developing an at-Sea Fishery Observer Program.FAO, 2003).

ELEMENTS

ANALYSED

(of interest here)

- Programs objectives and coverage
- Programs legal framework
- Programs management structure
 - Training
 - Recruitment
- Programs deployment logistics

Programs
objective, %
coverage
and legal
framework



CONTROL & science

100% coverage

Mandatory

- Deployments require high level of legal authority

2 programs
(TAAF-FRA, SA)



SCIENCE & control

5-25% coverage

Mandatory

- Deployments require min. level of legal authority

13 programs
(all countries except MOZ)



SCIENCE

≈ 5% coverage

Voluntary

- Deployments depend of FVs goodwill

4 programs
(FRA, KEN, MOZ)

Program operationalization found to be dependent of the existence and completeness of fisheries-related legislation

Program operat. found dependent of multiple factors

Main questions on programs legal framework

MANDATORY PROGRAMS

- Obligation to take an observer
- Easier planning, larger & higher % of coverage
- Observers can refuse deployment on FVs with low safety conditions
- Clarity on Observer, FV duties and obligations, data usage & confidentiality
- Existence of penalties and procedures to deal with the refusal / lack of conditions to deploy an observer and observer harassment
- Observer effect applies
- Medium level of intimidation

VOLUNTARY PROGRAMS

- FV can opt out at any time on taking observers
- Difficult planning, restricted and lower % of coverage
- Observers 'don't' refuse deployment on FV with low safety conditions
- Lack of clarity on Observer, FV duties and obligations, data usage & confidentiality
- Difficult to impose penalties, or to follow procedures to deal with refusal / lack of conditions to deploy an observer and observer harassment
- Observer effect applies
- Low level of intimidation

Program management

- Type

- Training

- Recruitment conditions

OBSERVER PROVIDER	IN HOUSE COORDINATION	IN HOUSE COORDINATION & OBSERVERS
<p>≈ 1 weeks +at-sea basic safety training</p>	<p>≈ 2 weeks +at-sea basic safety training</p>	<p>≈ 3 weeks +at-sea basic safety training</p>
<p>Independent workers</p> <p>Sea-day rate</p> <p>High level of education</p>	<p>CDD paid on a monthly rate + benefits</p> <p>CDD paid on a sea-day rate + benefits</p>	<p>CID or CDD Salary + low / high sea going allowance</p> <p>Yearly allocation + high sea-going allowance + benefits</p>
<p>3 programs (RUN-FRA, SA)</p>	<p>3 programs (COM, TAAF-FRA, SEY)</p>	<p>9 programs (FRA,KEN, MDG, MLD, MRT, MOZ, URT)</p>

OBSERVER PROVIDER

Low professional recognition, employment stability and progression



High turnover of observers



Low level of investment in training



Demand of high level of academic qualifications
(degree / masters)



Overqualification

IN HOUSE COORDINATION

Medium professional recognition, employment stability and progression



Moderate observer turnover



Medium level of investment in training



Demand of medium level of academic qualifications
(professional training)



FO as a profession

IN HOUSE COORDINATION & OBSERVERS

High professional recognition, employment stability and progression



Low turnover of observers



High level of investment in training



Demand of minimum level of academic qualification
(country dependent)



Fisheries technicians

Programs deployment logistics



CONTROL & science
100% coverage
Mandatory

SCIENCE & control
5-25% coverage
Mandatory

SCIENCE
≈ 5% coverage
Voluntary

Funded and organized by the vessel.

Organized by Obs. Program & funded by the vessel.

Organized and funded by the Obs. Program

Observer allocated to a FV for a period of no more than 3 months
(TAAF-FRA, SA)

Observer allocated to a FV or a Port for a period of no more than 3 months
(all countries except MOZ)

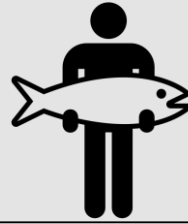
Observer allocated to a Port and requested to find a FV willing to take him / her
(FRA, KEN, MOZ)

Problems that interfere with observer deployment and on-board adequate data collection

MANDATORY



MANDATORY



VOLUNTARY



- Level of intimidation:
 - Very high
 - Very low

Directly dependent of state capacity to react instantly to the situation from a military and legal point of view

- No show up by the FV
- Access restrictions to areas of work
- Access restrictions to fish to conduct biometric sampling
- Low to medium level of intimidation (depends on state legislation and on penalties imposed)

- Refusal to embark an observer
- Access restrictions to areas of work and fish to conduct biometric sampling
- Payment required to collect biological samples (e.g. fish needs to be purchased)

Paradigm shift: Examples from the SWIO

TAAF (France)

Participative decision system based on at-sea collection of scientific data and the verification of the application of fisheries legislation by controllers.



SEYCHELLES

Scientific data used for the management and certification of a fishery as sustainable. Brand development to allow fishery products to be sold at better prices.



MADAGASCAR

No problem – no solution
High level of trust between stakeholders conducts to cooperative work.



TUNA PURSE-SEINE FLEET

Fishery interest to be monitored can conduct to cooperative work between stakeholders.



OBRIGADA THANK YOU

Athayde T.2016. *Proposal for addressing Regional Observers aspects as part of development of protocol for regional Minimum Terms and Conditions in the South West Indian Ocean region.* IOC - SWIOFish1 Consultancy Report.

Maps by IFREMER DIVA GIS

Infographics by OVPOI (www.indianocean-aivp.org)

Icons by Noun Project (<https://thenounproject.com>)

