APPENDIX A

Agenda

- 1. Opening
- 2. Adoption of the Agenda
- 3. Status of the collection of fisheries landings (catch and effort) and of fisheries data
- 4. Data gaps analysis (identification of parameters)
- 5. Metadata reporting
- 6. Fisheries databases
- 7. Fisheries and information technology
- 8. Other matters
- 9. Recommendations of the Working Party
- 10. Closing of the Working Party

APPENDIX B

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APPENDIX C

List of documents

Working documents

- Report of the First Session of the Scientific Committee, Dar es Salaam, United Republic of Tanzania, 31 May-3 June 2006
- Fishery Resources Monitoring System (FIRMS)
- The FISHCODE-STF Project
- Meeting timetable
- Fish catches in the Western Indian Ocean by SWIOFC members
- Statistics on SWIO fish catches over 10 years
- Catch of all SWIOFC members aggregated by species over 10 years

Information documents

- List of SWIOFP National Coordinators
- Report of development of a data management plan framework based on the information and data management workshop held at Reef hotel, Mombasa, Kenya, 8–9 October 2003
- Resolutions of the Second Session of the South West Indian Ocean Fisheries
 Commission, Maputo, Mozambique, 22–25 August 2006
- National Report for Fisheries in Mauritius

APPENDIX D

Speech by Prof. Micheni Ntiba, Chairman of the Scientific and Technical Committee of the Board of Management of the Kenya Marine Fisheries Research Institute

Distinguished guests, participants from SWIOFC member countries, FAO, NGOs, ladies and gentlemen,

I take this exceptional opportunity, on behalf of Kenya Marine and Fisheries Research Institute, to welcome you in Kenya. Indeed **KMFRI** feels very much privileged to be honoured by their international colleagues to host the first working party of the commission. I note with pride that we will also be hosting the new GEF-World Bank project – SWIOFP for the next five years.

I feel greatly honoured to share a few words with you as you get set to deliberate on matters of fisheries management in the Western Indian Ocean region.

Ladies and gentlemen, this gathering here is a very clear indication to me that indeed the ideals of the commission are being fulfilled. This is much more so considering that among us here are representatives of the entire membership of the commission. Therefore we can carry back a message of inspiration and hope back to our national governments on the practical achievements based on an agreed road map. I can be sure that by the end of the workshop, there will be consensus both on common issues as well on how to address them as a region.

Needless to say, fisheries is increasingly becoming a major pre-occupation for our national governments as major source of food and trade commodity, both at regional and global levels. I am sure it is clear to most of us here that fisheries management can only make an impact on the fisheries resource if they it is supported by scientific information that includes, monitoring for sustainable exploitation, fish biology and stock assessments. The region is now looking up to this working party to once again provide a firm basis on which a number of these analyses will inform the management of the fisheries resources.

Ladies and gentlemen, some of the management issues on our fisheries are well known. In many of our countries monitoring, control and surveillance is still hampered by inadequate legislation, resources and, information on the stocks. A move towards holistic management practice need to be more emphasized in fisheries policies to integrate issues dealing with economic, social, biological and environment. Transboundary stocks are still often not well understood and in any case there may be inadequate institutional arrangements for their management, as well, a number of countries are still not taking into consideration the multispecies nature of most fisheries.

Ladies and gentlemen, we may continue to enumerate a few other areas. However I wish to urge you once again to come up with the clearest illustration on the significance of data and relevant statistics that may address the above issues. It is only then that the other issues may be resolved objectively.

Ladies and gentlemen, it is my pleasure to declare the first Working Party on Fisheries data and Statistics also known as 'WPFS' of the South West Indian Ocean Fisheries Commission open.

APPENDIX E

Closing remarks by Mr Kaitira Ibrahim Katonda, Interim Regional Manager of the South West Indian Ocean Fisheries Project

Hon. Chairman,
The SWIOFC Secretary,
Representatives from the Food and Agriculture Organization (FAO) of the United Nations,
Representatives from National Organizations (ORI, IRD, Coast Development Authority);
SWIOFP Regional Component Coordinator for Component 1,
Distinguished Participants from SWIOFC Member States,
Invited Guests,
Ladies and Gentlemen

It gives me great pleasure to officiate the Closing of this very important First Working Party on Fisheries Data and Statistics. I thank the Working Party Organizers for giving me this honour.

Hon. Chairman, during the last three days, the Working Party has discussed various issues, including the status of the collection of fisheries landings and fisheries data management; identification of minimum parameters for effective fisheries management; and various fisheries databases and their requirements on implementing the database systems. I am glad to note that the Working Party had fruitful deliberations on the above issues and have come up with a set of recommendations which will be presented to the SWIOFC Scientific Committee.

Hon. Chairman, you will recall that the South West Indian Ocean Fisheries Project (SWIOFP) has been approved by the Chief Executive Officer of the GEF, which means that funds from the GEF will be availed to the project. The Project documents (PAD & MoU) are now expected to be presented to the World Bank Board of Directors in May 2007 for approval and thereafter the SWIOFP participating countries will be given three months to fulfil the conditions of effectiveness. The project is, therefore, expected to start in September 2007. This First Working Party has been held at a prime time for the outcome of the Party will assist the SWIOFP Component 1 greatly.

Hon. Chairman, Distinguished Participants, Ladies and Gentlemen, allow me to thank the following: First, the South West Indian Ocean Fisheries Commission (SWIOFC) for their financial support; secondly, our hosts, the Kenya Marine & Fisheries Research Institute (KMFRI), for organising this First Working Party at a short notice bearing in mind the number of countries involved; thirdly, you the Participants for finding time in your busy schedules to attend this Working Party; and last but not least, the Hotel Management for their good services.

Hon. Chairman, Distinguished Participants, Ladies and Gentlemen, I now have the pleasure of declaring the First Working Party on Fisheries Data and Statistics officially closed. I wish you all *bon voyage*.

Thank you for your attention.

ASANTE SANA.

APPENDIX F

StatBase - SWIOFP: Preliminary inventory of the data on fisheries

Objective: To lay out a documented list of the quantitative statistical information likely to be included in the national/regional database

DATA ITEM DESCRIPTION	EXAMPLE
Data set: A set of quantitative information which can be considered as homogeneous in terms of origin, nature, type, coverage, etc. It is a pragmatic concept aiming to facilitate the inventory process. As an example, it is perfectly possible to consider as two different data sets for a single series of census, if it is considered that significant changes have taken place in the methods of acquisition, management, treatment. JDD Identifier: Key made up of the country name and a sequential number.	xxxxx123
Data file name: Name allowing clear identification of the dataset.	
Information channels: It is a sentence allowing a coherent identification procedure of data acquisition (example: artisanal fisheries catch and effort, onboard observers).	 Fishing logbook Industrial fishing register Onboard observers Industrial fishing sampling Artisanal fishing sampling Artisanal fishing census Synthesis Modelling Working group Other
Scale: Defines the range of the statistical system.	Local, National, Subregional, Regional, World.
Data file type: Specifies level of compilation and processing of the data.	Raw data, Compiled data, Processed data.
Source: Characterizes the data collected according to a pre-established typology. To be noted, a database can contain several data files; in this case, one will identify here separately the data files which on the other hand will be associated in the database form.	Census, Fleet, Effort, Effort and yield, Catch, Yield, Cpue, Biometry, Biology.
Responsible agency: Institution or legal entity for which data are collected.	
Agency collecting data: Institution responsible for the effective collection of the data.	
Support: Physical medium on which are the data.	Paper, Computerized, Paper and computerized.
Computerized support: Numerical type of medium.	Hard disk, Floppy disk 3p1/2, Floppy disk 5p1/4, cd-rom, disk zip, Magnetic tape, Other.
Temporal coverage: Dates of the beginning and the ending of the data file, with indication of the interruptions if necessary.	
Temporal resolution: Time unit used for the	Hour, Day, Week, Fortnight, Month, Quarter,

DATA ITEM DESCRIPTION	EXAMPLE
statistical data.	Semester, Year, Trip, Specified period.
Spatial coverage: Defines the extension of the area covered by the data file.	EEZ, National coast, FAO area, Ocean.
Spatial resolution: Space units used for the statistical data.	Fishing spot, FAO statistical area, Statistical area, EEZ, Sampling strata, Survey site, Unloading site/Landing site.
Where: Precise localization of the statistical data.	
Computerized format: txt, dbf, xls, access, etc.	Text, Excel, dBase, Access, Binary (to be precised), ASCII.
Operating system: OS used by the processing system managing the statistical data.	Macintosh, PC-DOS, WINDOWS 3.1, WINDOWS FW, WINDOWS 95, WINDOWS 98, WINDOWS 2000, Windows NT, LINUX, UNIX.
Data base software: Software(s) used to manage and process the data.	
Data to be stored in StatBase: yes or no, possibly with comments.	
Quality standard: To classify according to three terms.	Data to be checked.Data checked non published.Data checked and published.
Observations: Any additional information considered to be useful for the definition of the data file.	
Nomenclature: One uses here the concept of nomenclature to define the list of terms allowing to classify the elementary objects of the statistics (example: species, statistical categories, commercial categories, fishing gears, licences). These nomenclatures are significant as they determine the compatibilities between data files.	Nomenclature code: Key made up of the country, N (nomenclature) and a sequential number, Nomenclature label: Name allowing to identify the nomenclature used, Origin: local, FAO, international, FishBase, other? ", Date of validity: (beginning), Date of validity: (ending), Data file concerned: internal code of the data file.
Bibliography: One will note here the references of the documents relating to the information channels or a particular data file.	Author(s), Year, Title, References.

Country availability of minimum data for selected fisheries

- This table reflects the minimum data requirements for distinct fisheries in order to ensure that there can be assessment and management for sustainable use at a regional level. These minimum requirements were generated by working groups and are reflected in Column 1 per fishery.
- The scoring in this table indicates current national ability to deliver these minimum data needs. The rating is as follows:

0 = nil; 1 = very little; 2 = medium; 3 = Excellent

INDUSTRIAL SHRIMP TRAWLING	KENYA	MOZAMBIQUE	TANZANIA	SOUTH AFRICA	MALDIVES	MAURITIUS	YEMEN	SEYCHELLES	MADAGASCAR
Effort - accurate Vessel Registration. (including length, HP and gear).	2	3	3	3		0	2		3
Effort - actual number vessels operational.	2	2	3	3			3		3
Effort – defined, such as number of days, hours trawled, number of sets/trawls. (indicate units).	1	3	3	3			2		3
Location of operations (including GPS, depth)	0	2	2	2			3		3
Catch – total weight	2	3	3	2			3		3
Catch – composition of major species	2	3	1	2			2		2
Catch – weight of bycatch and discards by major groups/species.	2	1	1	2			2		1
Catch – details of standardized sorting categories.	1	3	2	2			3		1
Day/night fishing details	0	3	3	2			1		2
Mechanisms to validate accuracy.	1	3	1	2			0		2
Socio-economic data	1	1	2	2			3		2
Others – specify Biological data		3							

ARTISANAL SHRIMP FISHERY	KENYA	MOZAMBIQUE	TANZANIA	SOUTH AFRICA	MALDIVES	MAURITIUS	YEMEN	SEYCHELLES	MADAGASCAR
Effort – accurate Vessel Registration (including type of vessel, length, HP and gear; DC, Boat, Dhow, etc).	2	1	1			0	1		2
Effort - actual number vessels operational.	2	2	1				0		2
Effort – defined, such as number of days, hours trawled, number of sets/trawls (indicate units).	1	2	Days						1
, , , , , , , , , , , , , , , , , , ,			1				1		2
Effort- seasonal distribution	1	0	1				2		1
Catch – total weight	2	2	1				1		2
Catch – composition of major species	2	3	1				1		2
Catch – weight of bycatch and discards by major groups/species.	1	3	0				1		2
Catch – size composition of main species.	2	3	0						1
Socio-economic data	1	2	2				1		3
Day/night fishing details	1	0	2				2		
Frame survey for structural information.	2	1	2				1		2
Other?		2					0		

TRAP FISHERY	A	MOZAMBIQUE	ANIA	SOUTH AFRICA	IVES	MAURITIUS	Z	SEYCHELLES	MADAGASCAR
	KENYA	MOZA	TANZANIA	SOUT	MALDIVES	MAUF	YEMEN		
Effort: number of operational units (vessels).	2		0				3	2	2
Effort: size of vessel: length, horse power, storage capacity.	1		0					2	1
Effort: number of fishers	2		0				2	2	2
Effort: number of days fished, no of traps set; soak time.	1		0				2	3	0
Description of gear & international standard classification.	1		0				1-2	2	1
Catch: total daily catch	2		0				2	2	0
Catch: total annual catch	2		0					3	2
Catch: species composition – primary species.	1		0				1	1	1
Catch: fish size distribution – primary species.	0		0				0	2	0
Location of operations (including GPS, depth)- Geospatial	0		0				1		0
OTHER:									
Economic issues (fuel consumption).	0						2	2	
Price, US\$/kg and variations between seasons.	1						2	2	1
Biological data such as spawning seasons and spawning grounds.	1						2	2	2
Size at first maturity	0							2	2
Spawning periods/grounds	0								2

DEMERSAL LINEFISH	KENYA	MOZAMBIQUE	TANZANIA	SOUTH AFRICA	MALDIVES	MAURITIUS	YEMEN	SEYCHELLES	MADAGASCAR
Catch: species composition of key transboundary and critical species.	1	1	0	3	3	2	2	2	1
Catch: total annual by species/species group, stratified by sector (industrial, artisanal, subsistence, recreational) and region (bank, atoll group, etc.).	1	3	0	3	3	2	1	2	0
Effort: annual fisher days by sector, year and region.	0	3	0	2	3	2	2	2	0
Effort: periodic (5-year) frame fleet structure survey.	0	0	1	2	2	2		3	1
Fisheries profile: annual profile describing aspects for major linefisheries including changes in management, fishing gear/strategy, socio-economics and trade.	0	1	0	2	2	2	1	1	0
Biological: length frequency (or mean, max, etc).	0	3	0	3	1	2	0	2	1
Biological: mean weight	0	3	0	3	1	2	0	1	1

BEACH SEINES	KENYA	MOZAMBIQUE	TANZANIA	SOUTH AFRICA	MALDIVES	MAURITIUS	YEMEN	SEYCHELLES	MADAGASCAR
Catch: total annual	1	3		3		2		3	0
Effort: number of seines	2	3		3		2		3	2
Effort: description of gear – mesh sizes, swept area, length, etc.	2	3		3		2		1	1
CPUE – for total catch (units).	2	3		2		2		3	0
Effort: Frequency of use of the	1	3		3		2		3	0
seines Indicate units (e.g. number of hauls/day/net, number of days fished/month).	1					2		3	
Catch: composition by size.	1	3		3		2		1	0
Catch: composition by species.	1	3		3		2		1	0
Length weight relationship for key species.	1	0		3		2		3	0
Effort: frequency of use of the seines Indicate units (e.g. number of hauls/day/net, number of days fished/month).	1	3				2		3	1