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SOUTH WEST INDIAN OCEAN FISHERIES COMMISSION

Male, Maldives, 13-16 March 2011

STATUS OF RESOURCES

The Fourth Session of Scientific Committee of the Southwest Indian Ocean Fisheries Commission (SWIOFC) was held in Mahe, Seychelles, 30 November - 2 December 2010 making use of the generous offer of the Government of Seychelles to host the meeting.

The Session was attended by delegates from Comoros, France, Kenya, Madagascar, Maldives, Mauritius, Mozambique, Seychelles, Somalia, South Africa and the United Republic of Tanzania. Representatives of FIRMS/FISHCODE, the Indian Ocean Tuna Commission (IOTC), the EAF-Nansen project, the South West Indian Ocean Fisheries Project (SWIOFP) and the United Kingdom also attended the session as observers.

STATUS OF FISHERIES RESOURCES

Updated status reports were received from: Comoros, France, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Somalia, South Africa and Maldives. A distinction is made in the summary of these reports where the country informed that the status of exploitation was not known (?) and where the country did not return any information on the status (-). **Appendix 1.**

Status of focus groups:

The status of focus groups is presented in **Appendix 2**. Spiny and rock lobsters were mainly fully-fished to depleted. Several countries reported the status of the resources of coastal tunas and related species as underexploited. Caution should be exercised in interpreting this national assessment as it is not necessarily an indication of the status of the stock (for which IOTC makes definitive assessments). Since many of the species of this group form straddling stocks, the evaluation should relate to the stock across its extent of distribution. Rather it would seem that countries were indicating the possibility of a national increase in participation within these fisheries. Penaeid shrimps were mainly fully exploited; sharks ranged from moderately exploited to overexploited; slope-water snappers were moderately exploited; octopus ranged from underexploited to overexploited but mostly overexploited; sea-cucumbers were largely

overexploited with one depleted and one underexploited stock and bivalve molluscs fully to overexploited. In particular the status of the sharks and octopus was often recorded as unknown. Across all groups except lobster there were instances where no information was provided.

Other groups:

Other non-focus groups that were reported included small pelagics, demersal fish and reef fish. Their status is presented in **Appendix 3**. Small pelagics ranged from underexploited to fully exploited. Demersal fish mainly moderately and fully exploited. Reef fish ranged from fully exploited to over exploited.

Status by countries

The status of fisheries resources by countries is presented in **Appendix 4**. Comoros reported its fisheries as under to fully exploited, but mostly in the fully exploited category; France as moderately and overexploited, Kenya as fully and overexploited; Madagascar as moderate to overexploited with several of unknown status; Maldives as underexploited and fully exploited, Mauritius as a broad range from underexploited to recovering and in the main as moderately exploited; Mozambique as moderately to depleted and in the main fully exploited; Seychelles from underexploited to recovering with resources in all the possible status classifications, with the modal position of fully exploited; Somalia ranged from moderately to overexploited. South Africa primarily under exploited to depleted; Tanzania from underexploited to depleted. Depleted resources were reported from: Mozambique (spiny lobster – *Palinurus delagoae*); Mauritius (sea cucumber), Seychelles (inshore sharks, last year vara vara – *Lutjanus bohar* was also included as depleted but this is under reconsideration); South Africa (rockcods and sea bass – *Epinephelus spp*; slinger, roman, englishman – *Chrysoblephus spp*; Kob – *Argyrosomus spp*, carpenter *Argyrozona argyrozona*, geelbek *Atractoscion aequidens*.) and Tanzania (shallow water penaeid shrimp).

Underexploited resources were reported from: Comoros (lobsters, octopus, sea cucumber and bivalve molluscs); Maldives (yellow, little, frigate and dogtooth tunas), Mauritius (deep-water shrimp – *Heterocarpus laevigatus*; horse mackerel on Saya de Malha and Nazareth Banks – *Decapterus spp*); Seychelles (spanner crab on the Mahe Plateau – *Ranina ranina*); South Africa (yellowfin, albacore, big-eye and skipjack tunas; swordfish¹; octopus; Panga – *Pterogymnus lanarius*) and Tanzania (yellowfin, big-eye, albacore and skipjack tunas; swordfish; marlin).

An unknown status was reported for species/groups/complexes mainly from Madagascar, Somalia and South Africa (the latter largely as a result of the high species-level resolution of the information provided).

Regional status of resources

A summary of the regional status of fisheries resources based from the national tables of 11 countries of the Southwest Indian Ocean is presented in **Appendix 5**. Of 107 species/species groups/ species complexes categorised, numerically 36 (33.6 %) were overexploited, depleted or

¹ South Africa informed that large pelagics and the associated by catch species are managed by Regional Fisheries Management Organisations (RFMO's) such as the International Commission for the Conservation of Atlantic Tunas (ICCAT) and the Indian Ocean Tuna Commission (IOTC). South Africa manages its longline fishery locally with advice from these RFMO's. Stock allocations for the different tuna species for the year are recommended by the above-mentioned organisations and South Africa has to report to them annually with the catch statistics, among other things in order to show that it is a responsible fishing nation and so that its stock allocations may be larger for the next year.

recovering; 38 (35.5%) were fully exploited; 14 (13.1%) were moderately exploited; and 19 (17.8%) were underexploited. There were an additional 12 species/species groups/species complexes for which the status was unknown and 18 for which countries did not provide information. The status categories were based on information available whose reliability may vary from one region to another as well as between stocks of groups of the same, or different species, within the same area. For detailed information on individual assessments, refer to the national status tables in the Scientific Committee report.

Management plans

National management plans for species/groups/complexes other than those covered by IOTC were in existence in Kenya (1), Madagascar² (4 management plans), Mauritius³ (2), Mozambique (3) Seychelles⁴ (1), South Africa⁵ (>6) and Tanzania (1). Mozambique was preparing its prawn fishery management plan at the time which has now been completed.

Comparison of the SWIOFC region against global results.

The situation in relation to the changing status of fisheries resources in the SWIOFC region from 2005 to 2009 is presented against the global situation between 2006 and 2008 in **Appendix 6**.

In the SWIOFC region the percentage of: underexploited stocks decreased (from 24% to 18%); moderately exploited stocks decreased (from 21% to 13%); fully-exploited stocks increased (from 29% to 36%); overexploited stocks remained about the same (19%); depleted stocks increased (from 5% to 11%); and recovering stocks increased (from 1% to 4 %). The situation changed noticeably each year largely depending on the numbers of countries providing updated results.

Globally, the percentage of: underexploited stocks remained the same (3%); moderately exploited stocks decreased (from 20% to 12%); fully-exploited stocks remained about the same (53%); over-exploited stocks increased (from 17% to 28%); depleted stocks decreased (from 7% to 3%); and recovering stocks remained the same (1%).

The comparison indicates that the SWIOFC region is improving in the recovery of some of its depleted stocks but that more stocks have become depleted, and that there is still a significant proportion of stocks that are over-exploited and need to be better managed. On the other hand, the region also has a larger proportion of its fisheries resources that are considered as underexploited in comparison with the global situation and these should be better utilized.

Action:

Members of the Commission are invited to note the status of resources and in particular those depleted stocks and refer to the Scientific Committee report on the actions that are being taken by Mozambique, Mauritius, Seychelles, South Africa and Tanzania. They are also invited to note the situation in the SWIOFC region as compared to the global situation

² Recorded six management plans although the status of two of these (octopus and crab) is uncertain.

³ Includes an interim management plan for slope-water snappers

⁴ Previously had management plans for sea-cucumber and mothership fishing. The sea-cucumber management plan remains to be annually operationalised. There has not been a mothership fishery for several years.

⁵ Management plans exist in the rock lobster, penaeid shrimp and linefish fisheries. Management plans also exist for individual linefish species as well as bycatch species.

and advise on how the SWIOFC should address the situation with regard to underexploited, overexploited and depleted fisheries resources.

Appendix 1

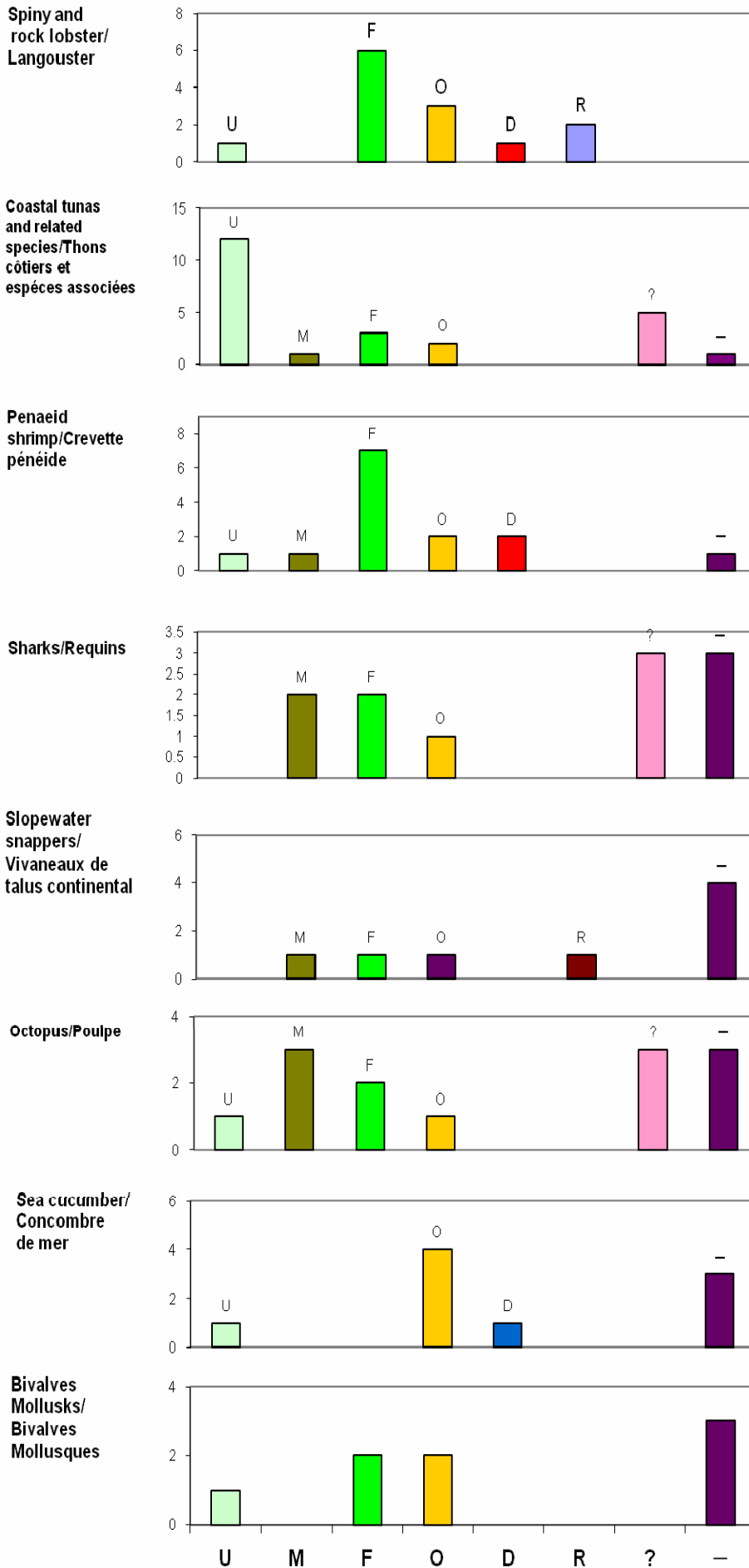
State of exploitation Abbreviations

The abbreviations used for the state of exploitation shown below usually represent the best and most recent estimate of the state of the stock, its potential for increased production or requirements for stock recovery. The estimates are based on the best information available, which may include the results of peer-reviewed published reports, analysis of qualitative data and information whose reliability may vary from one region to another as well as between stocks or groups of the same, or of different, species within the same area.

—	No information provided
?	Unknown
U	Underexploited, undeveloped or new fishery. Believed to have a significant potential for expansion in total production.
M	Moderately exploited, exploited with a low level of fishing effort. Believed to have some limited potential for expansion in total production.
F	Fully exploited. The fishery is operating at or close to an optimal yield level, with no expected room for further expansion.
O	Overexploited. The fishery is being exploited at above a level which is believed to be sustainable in the long term, with no potential room for further expansion and a higher risk of stock depletion/collapse.
D	Depleted. Catches are well below historical levels, irrespective of the amount of fishing effort exerted.
R	Recovering. Catches are again increasing after having been depleted or a collapse from a previous high occurred.

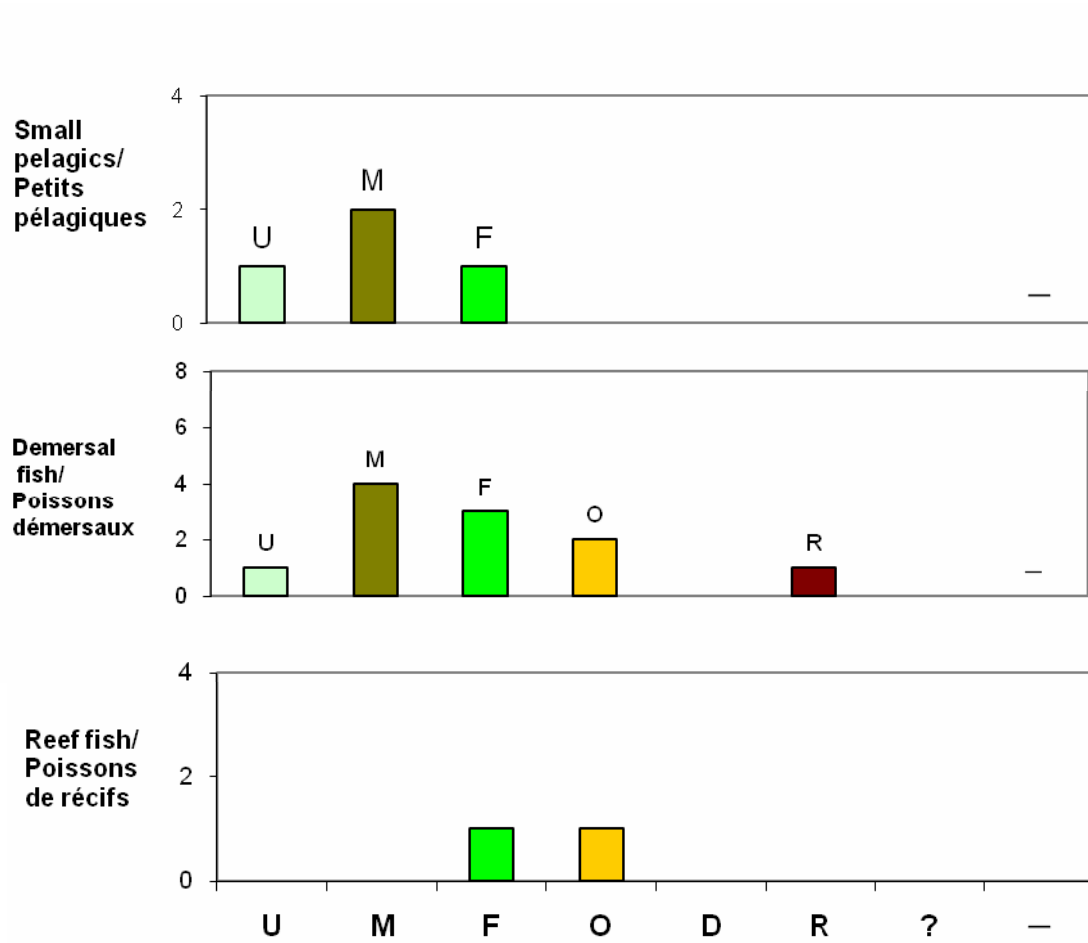
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Appendix 2

The status of focus groups



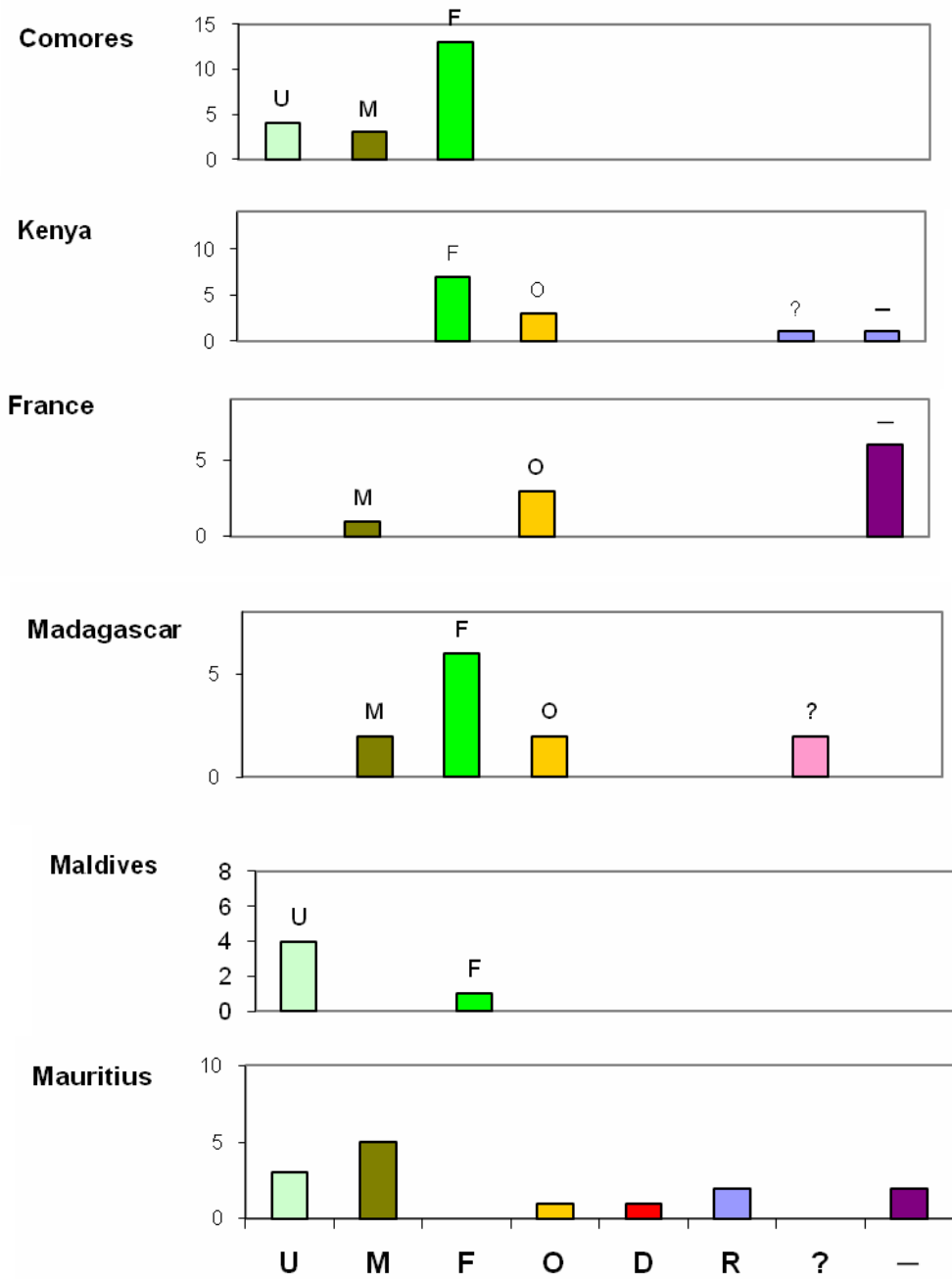
Appendix 3

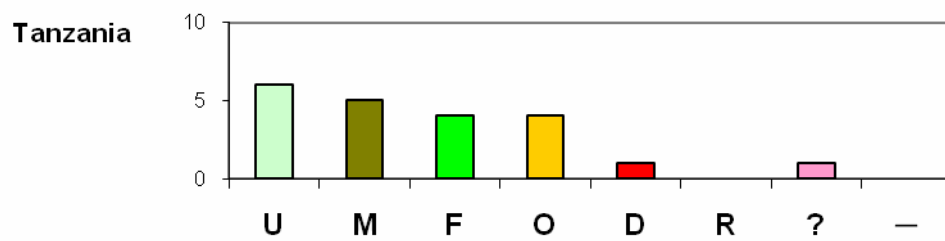
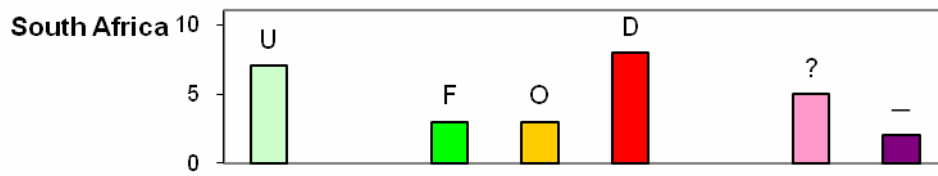
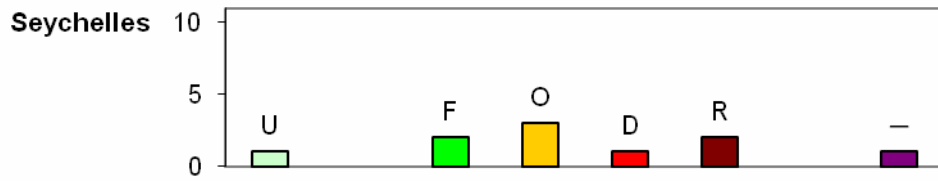
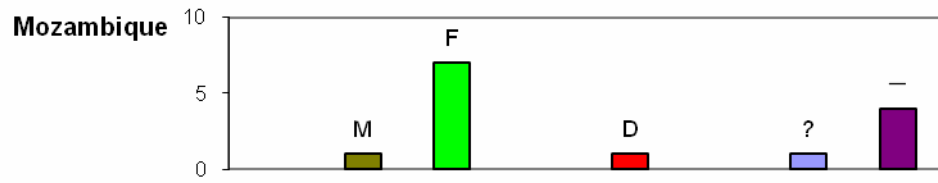
The status of non-focus groups



Appendix 4

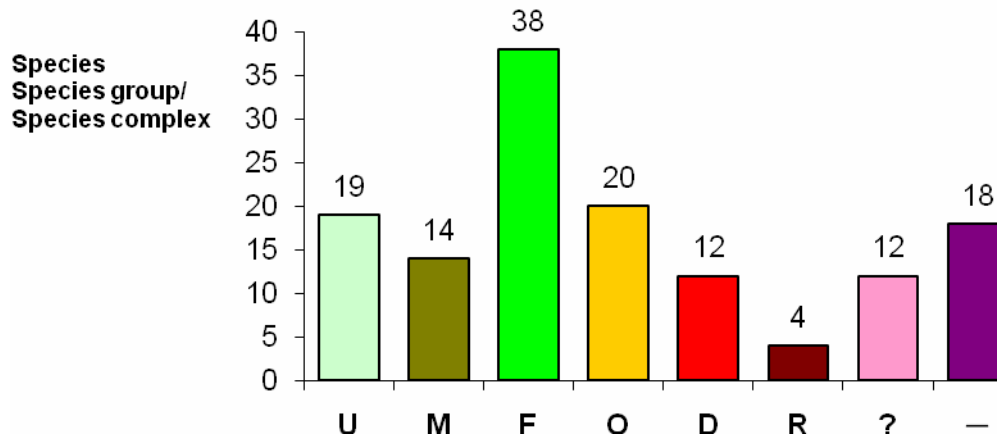
The status of fisheries resources by countries.





Appendix 5.

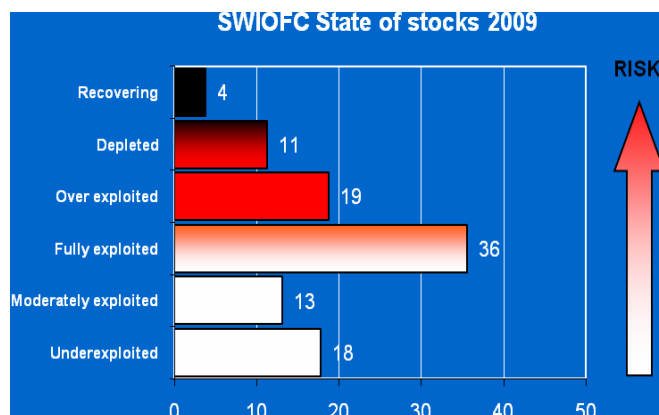
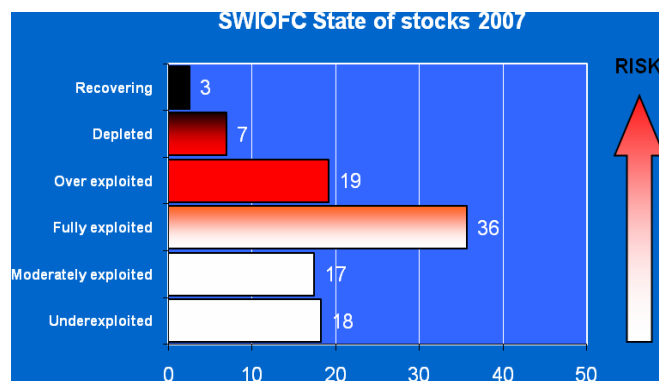
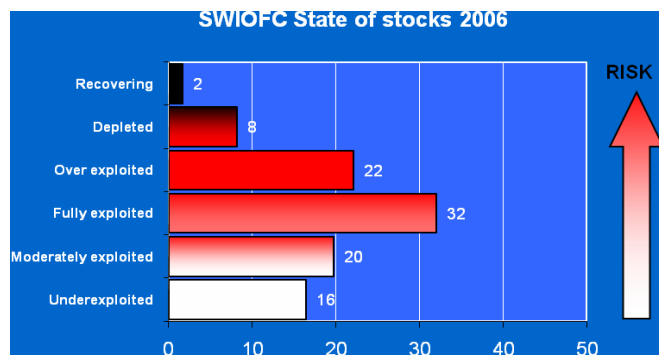
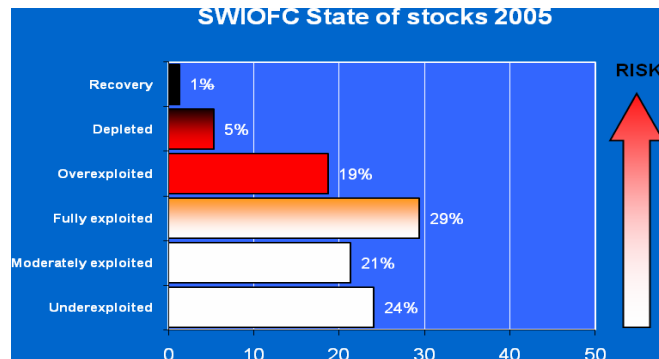
A summary of the regional status of fisheries resources based from the national tables of 11 countries of the southwest Indian Ocean.

Summary

Appendix 6

Comparison of the status of stocks in the SWIOFC 2005 to 2009 as against the global status of fish stocks for 2006 and 2008 (from SOFIA 2011)

SWIOFC



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GLOBAL

