THE ASSOCIATED SCHOOL FISHING TECHNIQUE IN THE KENYA-TANZANIAN COASTLINE AND ITS RELEVANCE TO THE AREA FISHERY MANAGEMENT

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Fisheries Management

Fisheries management is a complex and evolving discipline and much is still being learnt about what it involves, what works and what doesn't

The problem is compounded by the fact that fisheries management as a coherent discipline is still poorly defined and frequently equally poorly understood

Goals in fisheries management

- Biological
- Ecological
- Economic and
- Social

Key Players

Artisanal

Industry

Politicians

Management functions

Estimating potential yield and identifying the biological constrains

Establishing target reference points through data collection and fisheries assessment

Setting realistic goals and objectives

Challenges facing the area managers

- Increase in the artisanal fishers
- Inability to exploit the EEZ due to small vessels
- Tuna CPUE has been on the decline
- Increase in the activities of foreign vessels
- Stock status
- Migratory nature of the fish
- Lack of recent studies in the area
- Lack of baits supply

List of acoustic and midwater trawl surveys undertaken for pelagic fishes by the R/V Fridtjof Nansen in the SWIO region (1975 – 1993) (from Saetersdal et al., 1999).

Country & year	No.	Sample period	Dist. (nm)	Pel. trawl Sta. (no.)	Cruise reports
Kenya, 1980-83	I	Dec 1980	1300	47	Nakken 1981
	II	Aug 1982	2360	47	Iversen 1984
	III	Dec 1982	1040	27	IMR 1982d
	IV	May 1983	810	27	Iversen 1983
Tanzania, 1982-83	I	Jun-Jul 1982	2500	20	Myklevoll 1982b
	II	Nov-Dec 1982	1900	28	IMR 1982c
	III	May 1983	1400	4	IMR 1983a
Mozambique, 1977-90	II	Oct-Nov 1980		34	Brinca et al 1981
	III	Sep 1982		39	Brinca et al 1983
	IV	May-Jun 1983		4	Brinca et al 1984
	V	Apr-May 1990		13	IMR 1990b
	VI	Aug-Sep 1990		1	IMR 1990d
Madagascar, 1983		Jun 1983			IMR 1983b

ARTISANAL VESSELS

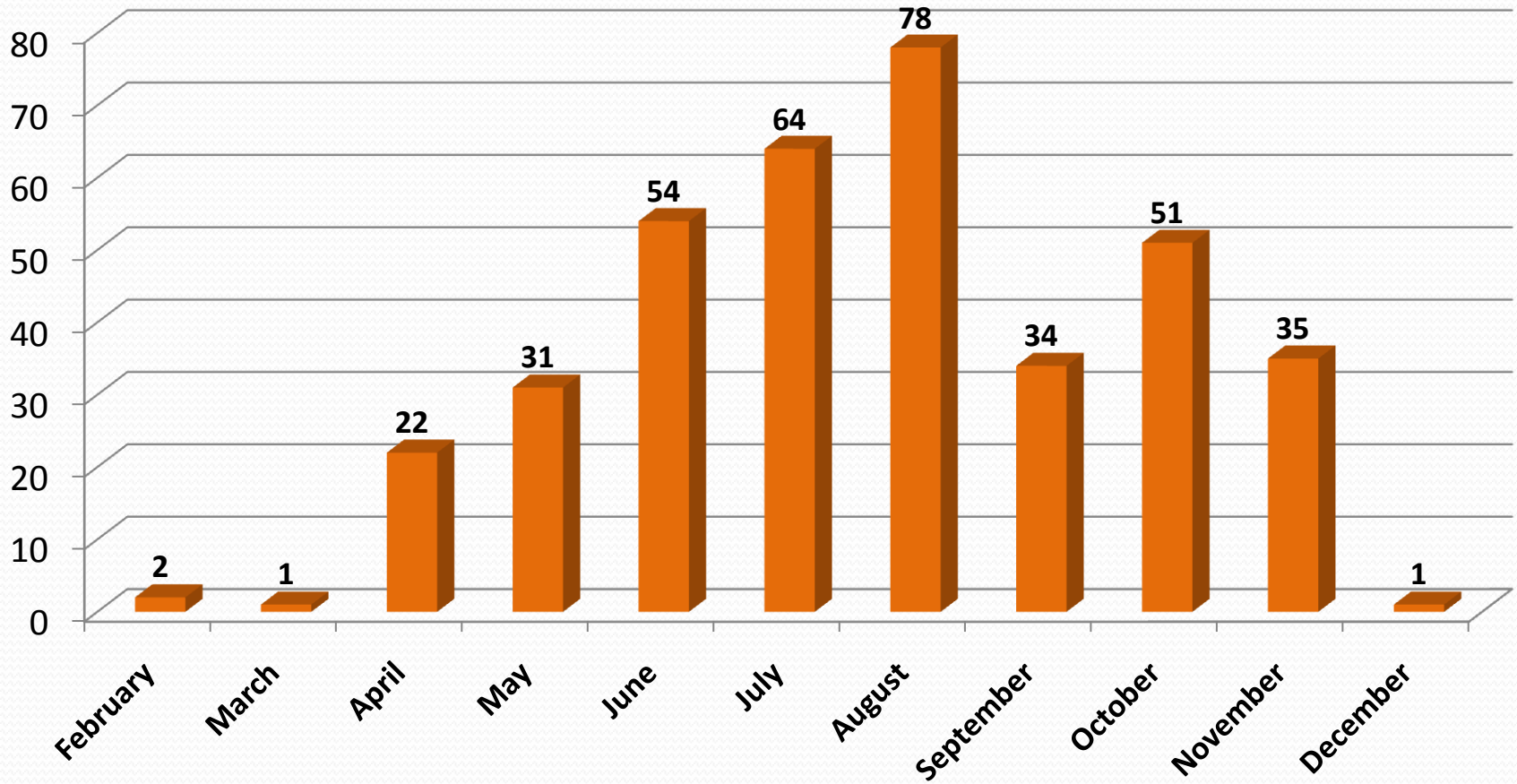
- Small in size

- Looks at the fish caught in Kenya-Tanzanian waters
- Lessons for area management

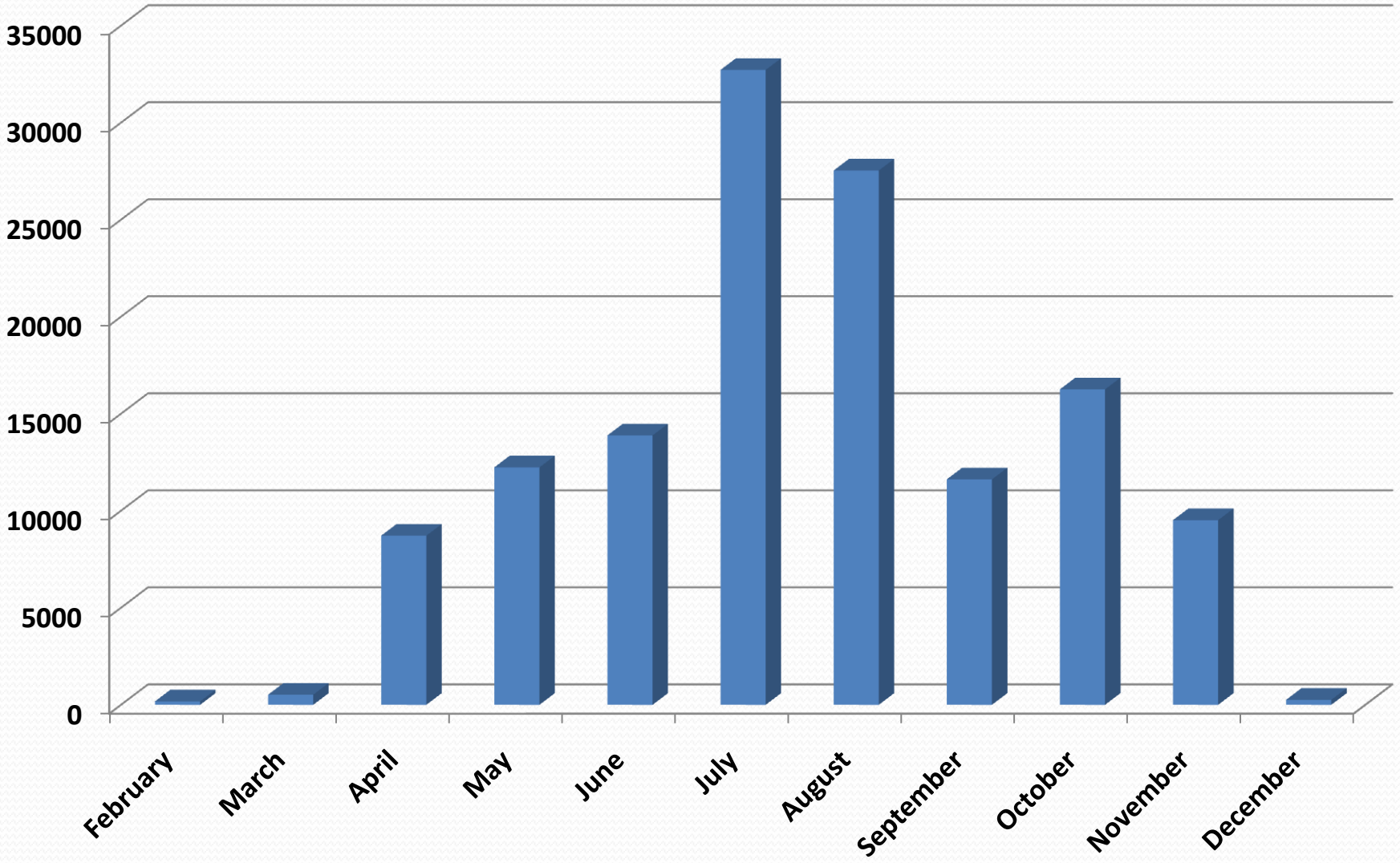
Datasets used

- Size at tagging
- Period of tagging 373 days
- Recoveries by countries
- Composition of tagged species
- School size
- Bait use
- Association

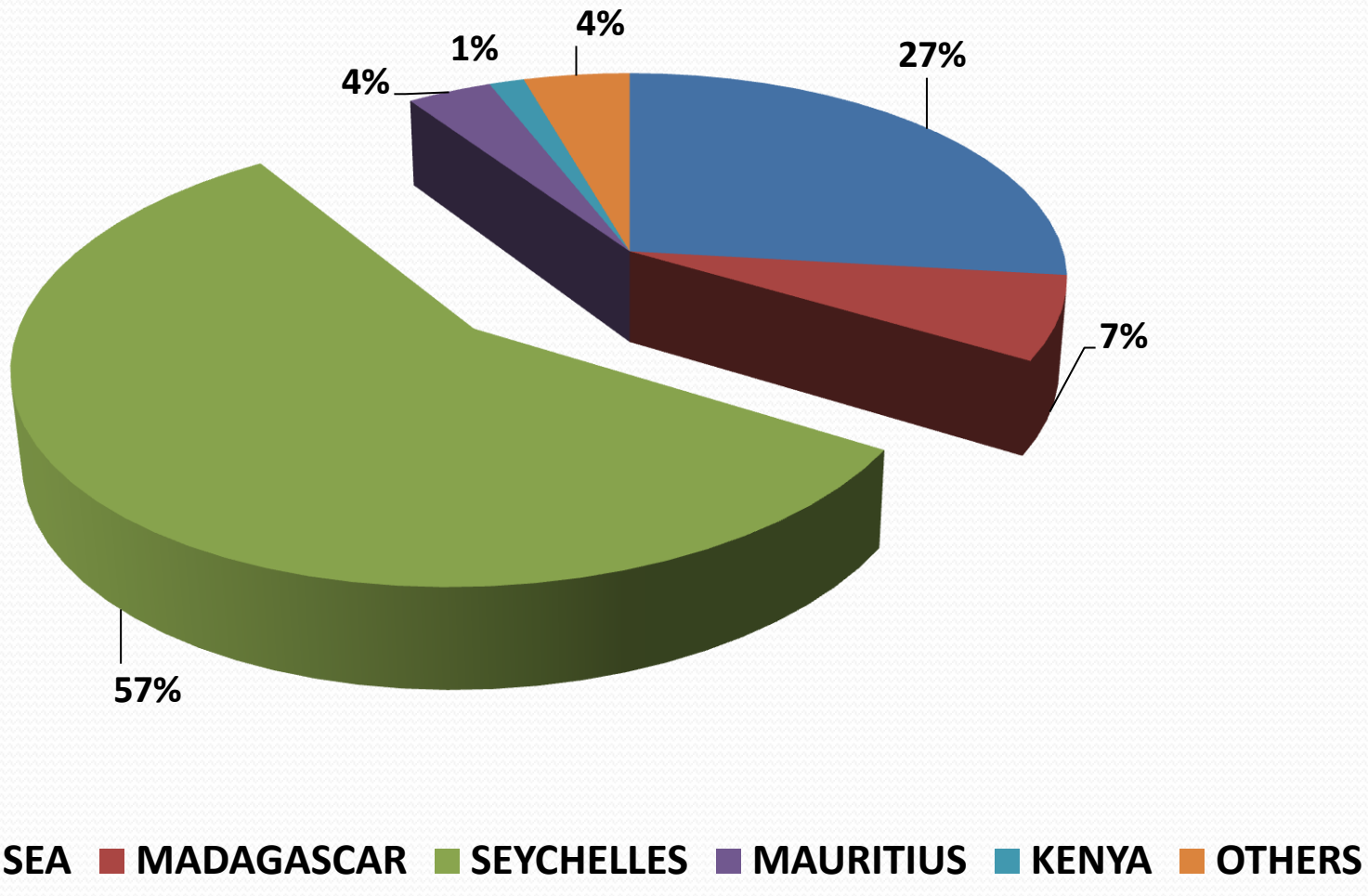
Number of days tagging took place per month



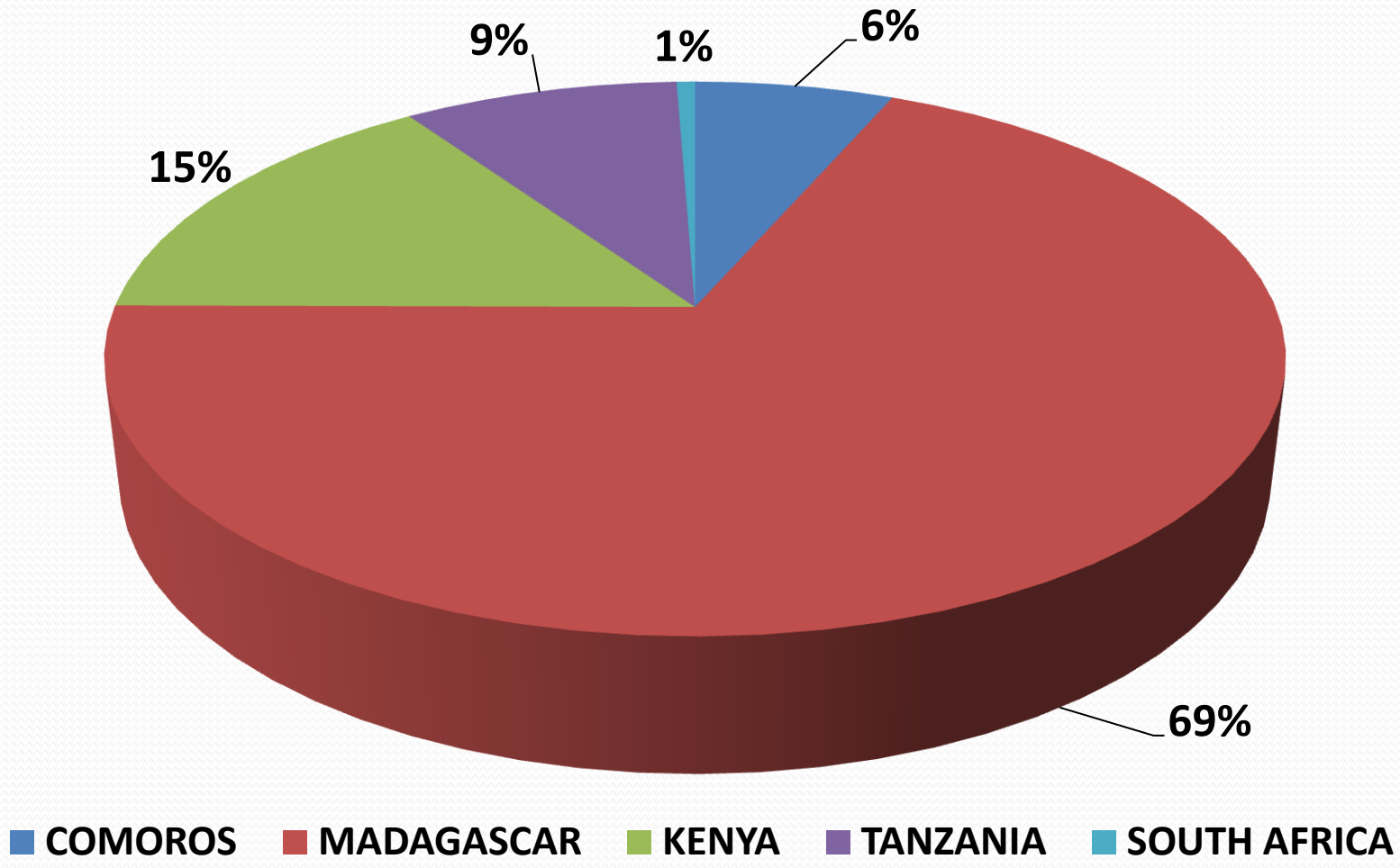
Number of fish tagged per month



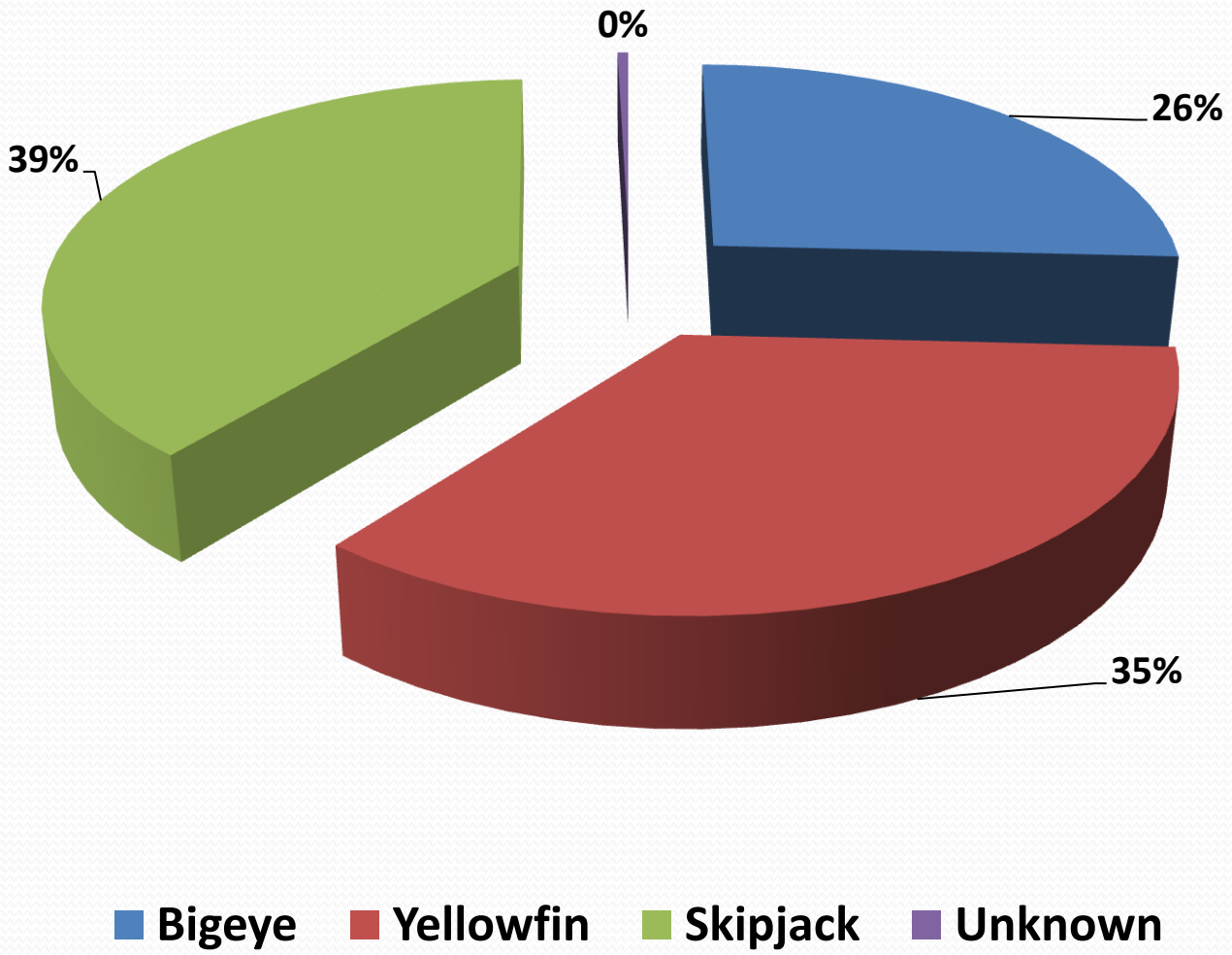
Recoveries by countries



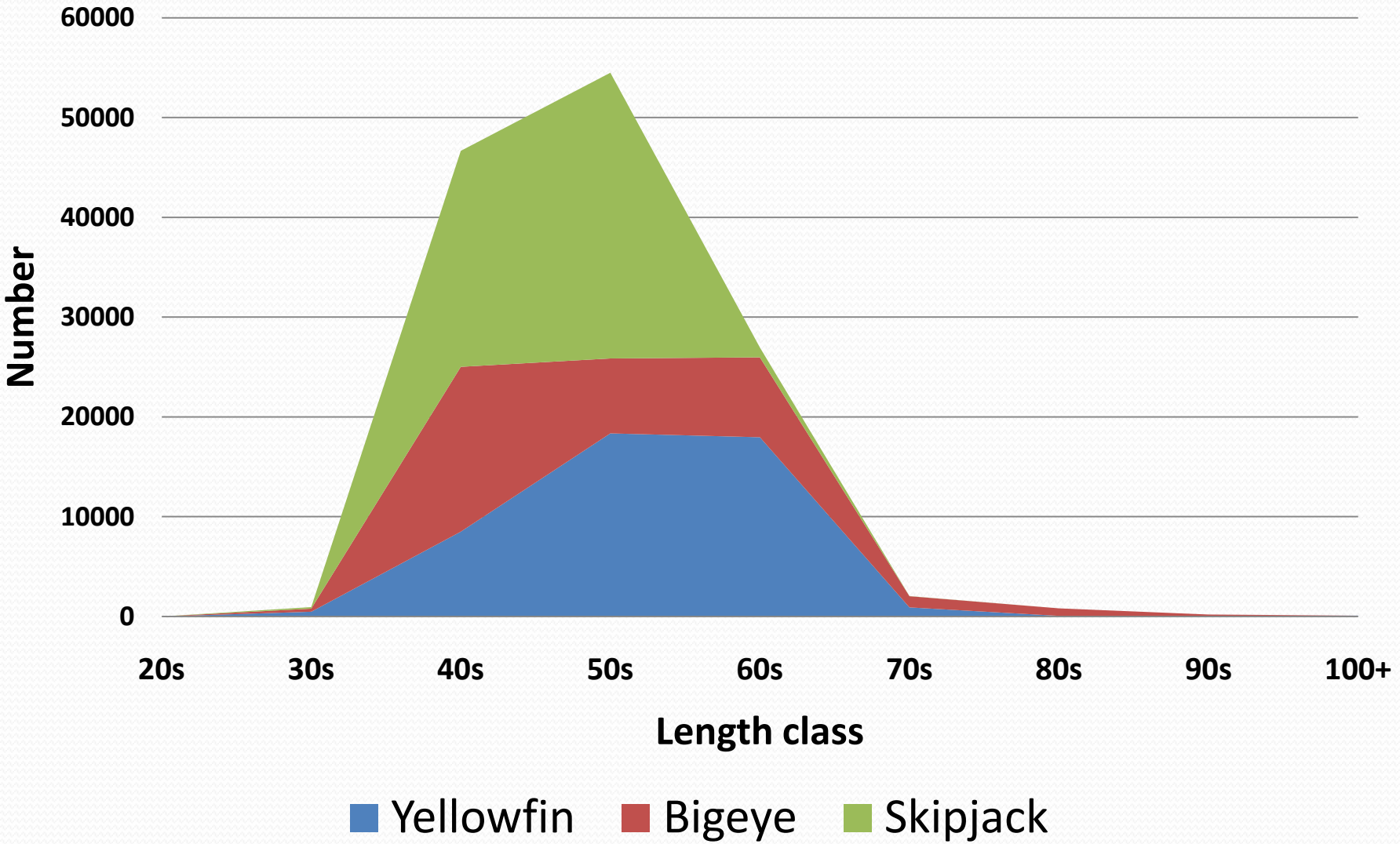
Recoveries from neighbouring countries



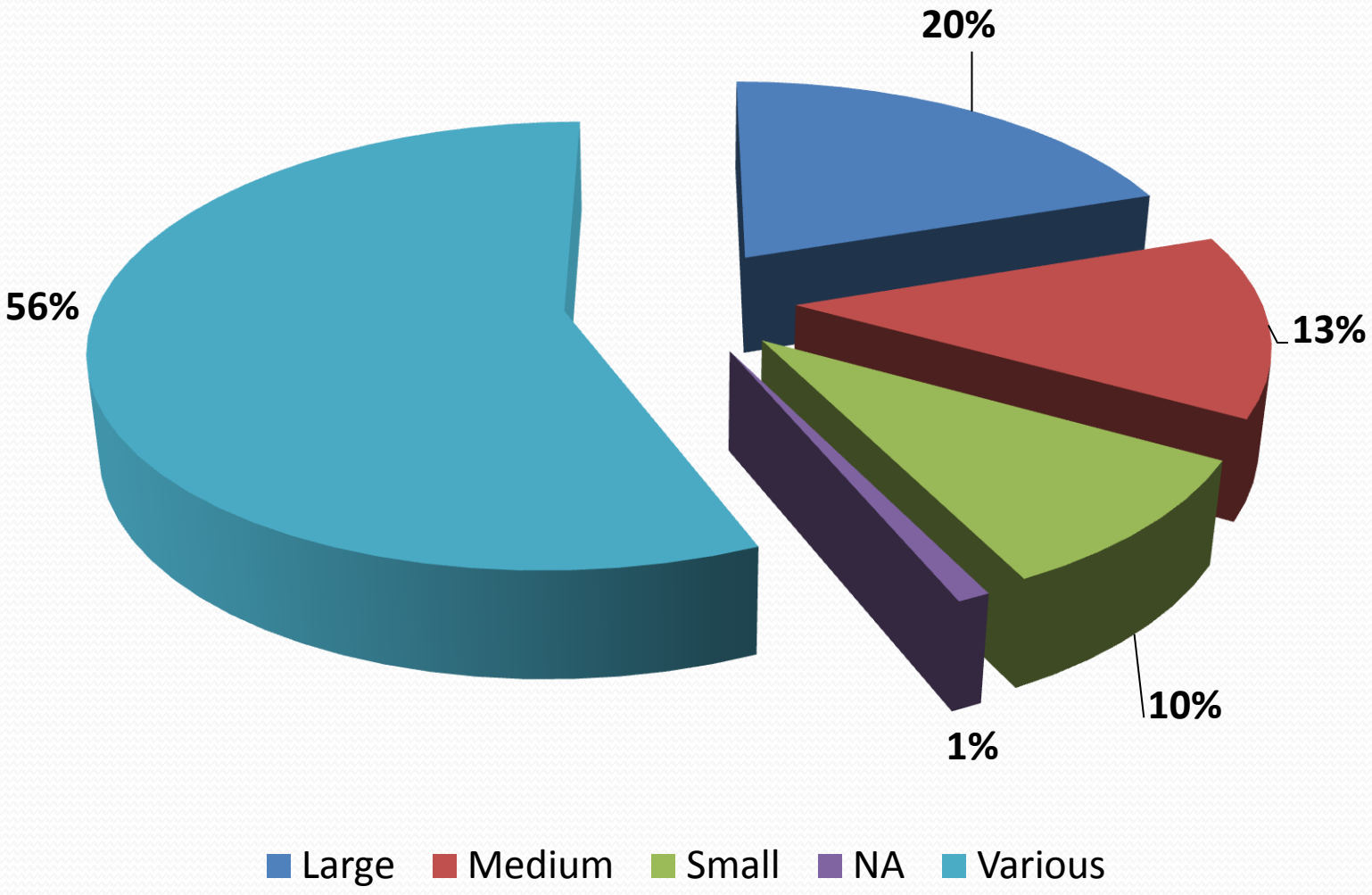
Composition of tagged species



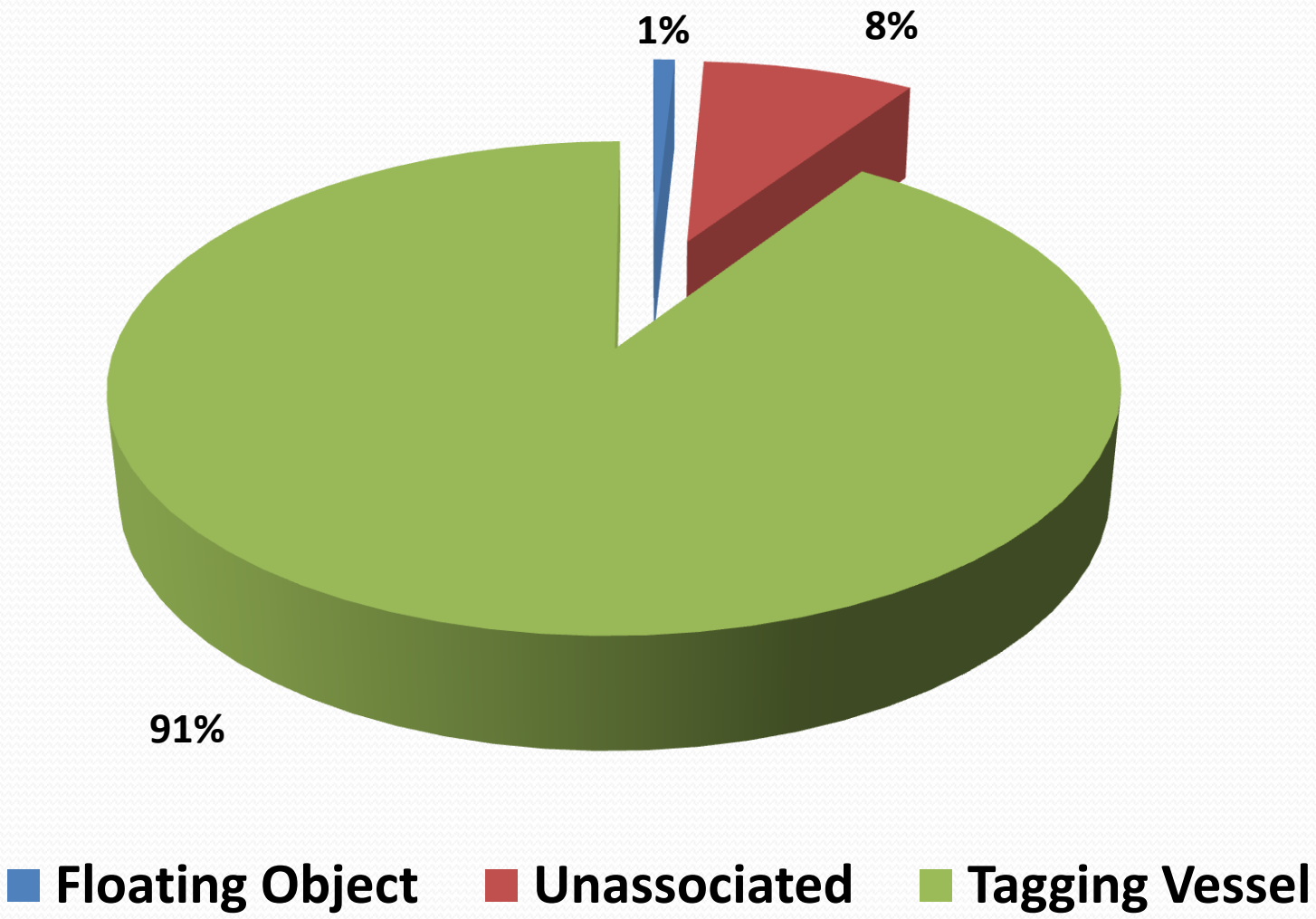
Number of each species tagged per length class



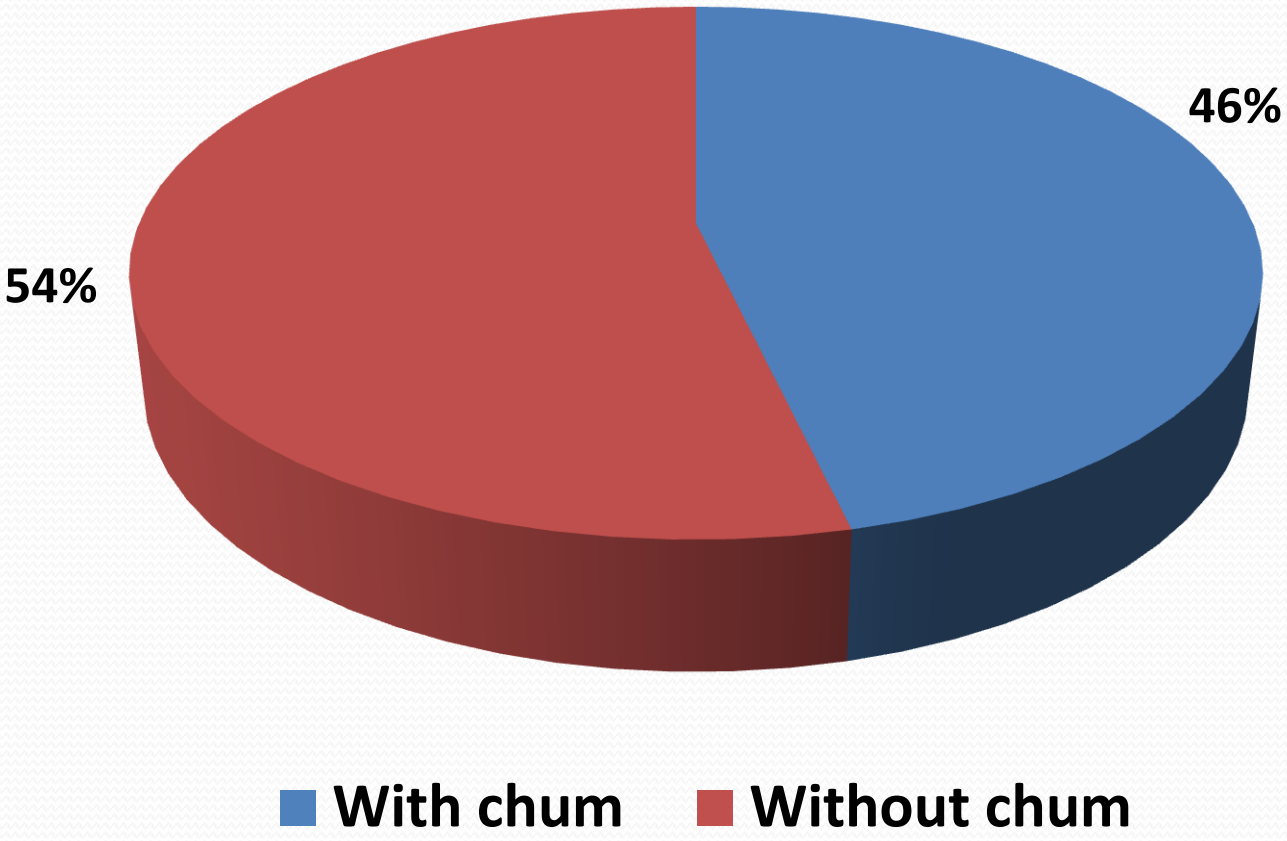
School size



Association



Bait use



Major lessons

- Peak tagging was undertaken between June to August
- Little activities during the December to March period
- Catches can be undertaken even without baits
- Associated school fishing technique is possible
- Lessons from the fishers
- The association is multispecies with the three tuna species represented
- The 50 cm size class was the most prevalent
- Pole and line fishing can be practiced

Issues to address

- Inability of the artisanal fishers to access the fishing grounds during the peak season
- Migratory nature of the tunas. Need for the region fisheries management to consult one another
- Possibility of development of FAD fishery

What can be done

Regional States should take lead in the management of tuna by actively participating in the IOTC meetings

The over-riding goal of fisheries management is the long-term sustainable use of the fisheries resources.

Remember

The future generations need the tuna in their diet

Acknowledgement

RTTP-IO JOB WELL DONE

EU FUNDING

COUNTRIES THAT PARTICIPATED IN TAGGING AND RECOVERY INITIATIVE

MAURITIUS FOR HOSTING

ALL WHO HAVE BEEN PART OF THIS JOURNEY

Thanks