

GOVERNMENT OF THE REPUBLIC OF VANUATU
GOVERNMENT DE LA REPUBLIQUE DE VANUATU



**FISHERIES DEPARTMENT
SERVICE DES PECHES**

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Annual Report to the SPRFMO Science Working Group

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1. Description of Fishery

Vanuatu flagged vessels commenced operations in the jack mackerel fishery in 2003. The number of vessels operating each year is shown in Table 1. The vessels are all 'sister ships' of 105 metres in length with a GRT of 7,805.

Table 1: Number of Vanuatu vessels operating in the Pacific jack mackerel fishery by year

Year	Number of vessels
2003	4
2004	4
2005	4
2006	6
2007	4
2008	4
2009	4

The vessels have a frozen storage capacity of around 3,500 tonnes of product in cartons. The vessels are periodically offloaded to reefer vessels that transport their catch to West African markets. The fishing vessels receive provisions, packaging, fuel and spare parts from the reefer vessels and are, as a result, able to stay on the fishing grounds for the entire season.

As the 2009 season has already finished, aggregated data for this season are also presented.

2. Catches and Fishing Effort

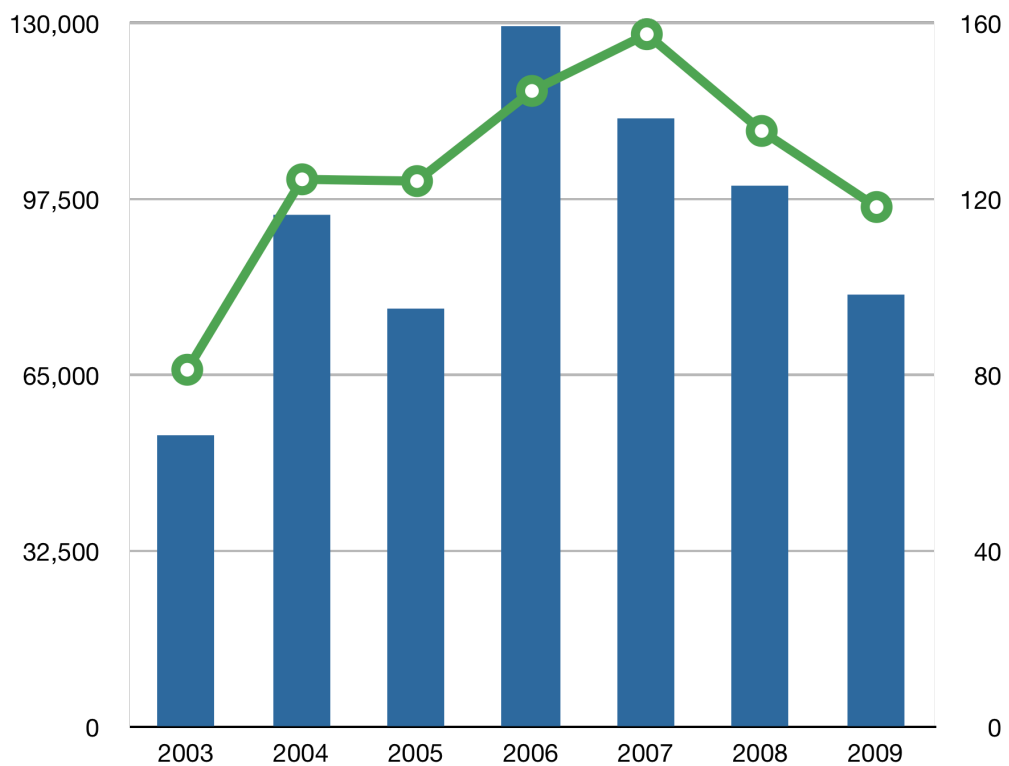
Table 2: Average Catch Rates

Year	Fishing days ¹	'Other' days ²	Catch (t) ³	Catch (t)/fishing day
2003	664	223	53,959	81.3
2004	760	415	94,685	124.6
2005	623	147	77,356	124.2
2006	895	267	129,535	144.7
2007	714	254	112,501	157.6
2008	738	223	100,066	135.6
2009	676	136	79,942	118.3

1. 'Fishing days' includes days spent searching and fishing.
2. 'Other days' includes days spent transshipping, transiting to and from the fishing grounds, bunkering and in port.
3. Catches of jack mackerel only.

Figure 1 shows the catches and catch rates of the vessels over the 2003-2009 period.

Figure 1: Total jack mackerel catches (t) and catch rates (t/day), 2003 -2009



A detailed breakup of the activities of the four fishing vessels in 2008 is shown below in Figure 2. The spatial distribution of catches in 2008 is shown in Figure 3. The seasonality of catches from 2004 to 2009 is shown in Figure 4.

Figure 2: Composition of days spent by the four fishing vessels in the jack mackerel fishery in 2008

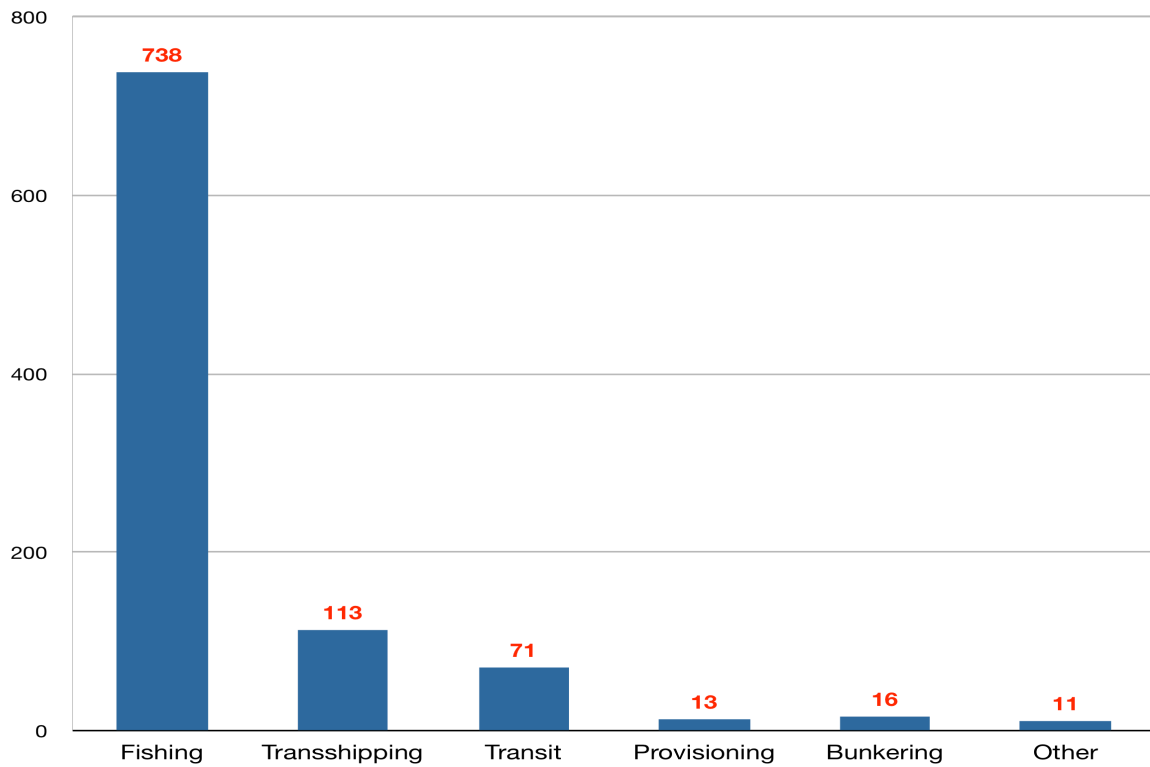


Figure 3: Locations of catches by Vanuatu vessels in 2008

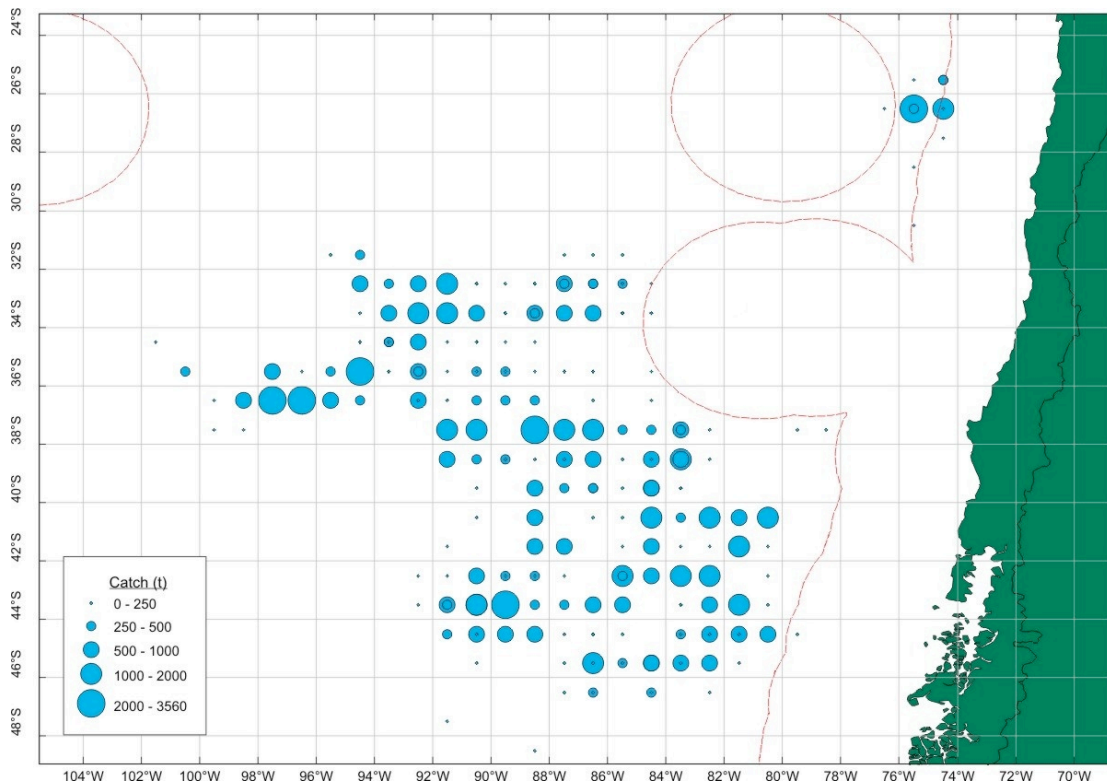
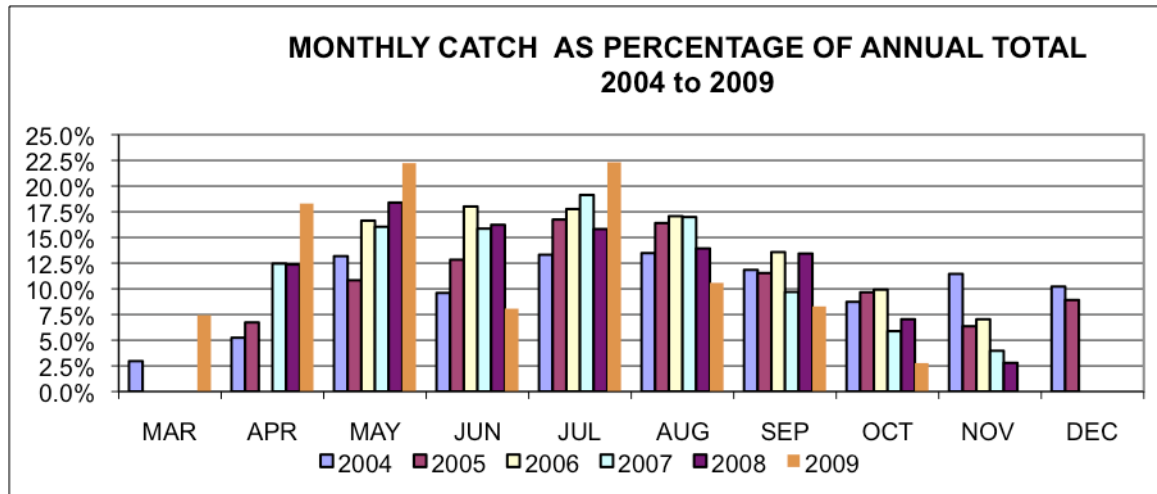


Figure 4: Average monthly catches per vessel as a percentage of annual total catch 2004 -2009

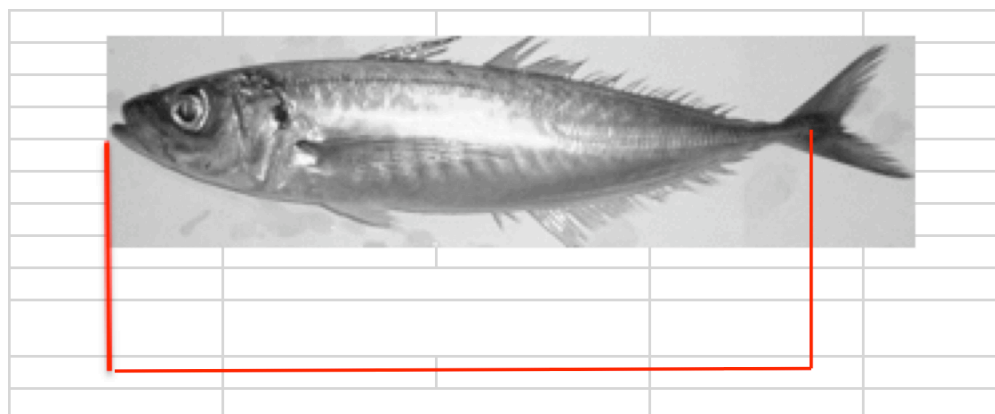


3. Fisheries data collection and research activities

Three types of data are available from the fishery; haul by haul logsheet data filled in by the captains; VMS data on vessel positions; and size composition of the jack mackerel catches which is collected by each vessel’s processing factory manager.

The size composition data is collected for commercial purposes, with the fish size categories and method of fish measurement reflecting sales and marketing requirements rather than scientific needs. However as the data have been collected consistently since 2003, trends in catches of different size classes of fish are clearly evident.

The commercial measurement of the jack mackerel is shown in the photo below.

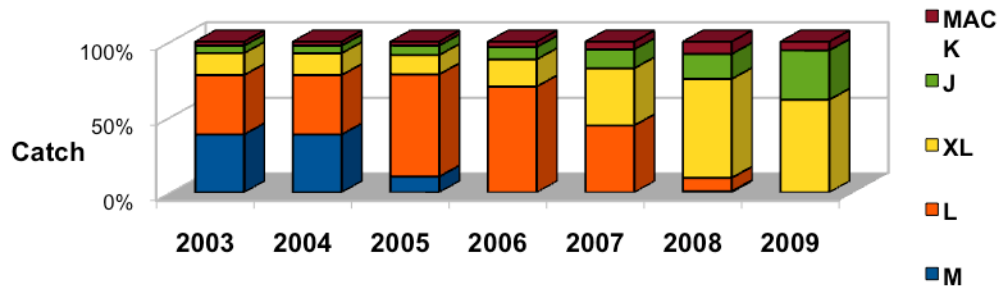


The jack mackerel are sorted and recorded in four length classes:

Medium (M)	20-25cm
Large (L)	25-30cm
Extra large (XL)	30-35cm
Jumbo (J)	+35cm

Chub mackerel (*Scomber japonicus*) are also recorded (MACK).

Figure 5: Commercial size composition of catches 2003 -2009



By-catches were comprised solely of chub mackerel. In 2008, the catches of chub mackerel totalled 8,945 t.