

Nauru 2012/2013 HIES

Fishing & Hunting



Executive Summary

5.43%

of Nauru's total income and receipts comes from fishing and hunting



57%

of households reported income from fishing and hunting activities

AUD1,717

On average, households **spend \$1,717** on fishing and hunting produce per year, consisting of approximately \$1,325 on locally caught fish and seafood



AUD1,359

On average, households **generate \$1,359** in income from fishing and hunting activities per annum

Introduction

This factsheet provides a summary of information addressing the Fishing and Hunting Sector of the Nauruan economy. The information is based on data generated from the 2012/2013 Nauru Household, Income and Expenditure Survey (HIES). A range of information is provided within this factsheet, looking at the participation of workers and households in fishing and hunting, the contribution of fishing and hunting to household income, and value of fishing and hunting expenditure.

The formal fisheries sector in Nauru is small and the formal hunting sector is non-existent – that is, it is totally made up by the informal sector. Nonetheless, the fishing and hunting sector plays an important role in the social and cultural fabric of Nauru. At the household level, it plays an integral role in supporting the food security of households through the consumption of locally-caught fish and noddie bird, and by providing income.

The government of Nauru views the fisheries sector as a vital aspect in improving food security in Nauru by promoting the consumption of nutritious locally caught fish and seafood, and as a means to reduce Nauru's dependence on imported food.

Participation in fishing and hunting activities

Fishing and hunting are minor activities in terms of formal employment in Nauru, but they remain important activities at the household level, particularly for home consumption and communal sharing. 1.57% of the Nauruan labour force¹ is engaged in fishing and hunting activities as their main activity²; however 6.84% of the Nauruan labour force report fishing and hunting as a secondary activities.



F-ECL-1.1: Labour force in subsistence fishing (and hunting)

1.02% (Main activity)

¹ Labour force defined as population 15 years old and above who do not classify themselves as: retirees, full or part time students, and people who conduct home duties (i.e., employees working for wages in the private and public sector, employers, self-employed people producing goods for sale and own/family consumption, unpaid family workers, and voluntary workers).

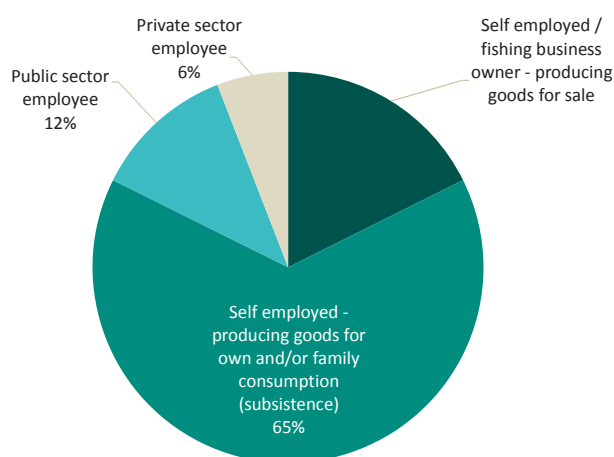
² As classified by their occupation code (2.31% when classified by industry code).



Of the 1.57% of the labour force that is primarily engaged in fishing and hunting activities, the majority (65%) are engaged in fishing and hunting for self and family consumption (Chart 1).



Chart 1: Composition of fishing and hunting employment by sector



Although only a small proportion of the labour force reported formal participation in fishing and hunting activities, a large proportion (57%) of households reported income from fishing and hunting activities (home production consumed and subsistence fishing income). Of the population reporting income from fishing activities, only 26% reported income in the form of cash sales, while the remainder was reported as home production consumed.



This is indicative that fishing and hunting are important in terms of food security and, to a lesser extent, income substitution in Nauru.

In addition to this, 45% of households reported receipt of locally produced fishing and hunting products, indicating that the fishing and hunting sector add to the income and food security of non-fishing and hunting households alike.

Income from fishing and hunting activities

Household income from fishing and hunting includes: salaries of fishing and hunting workers, income from the sale of fishing and hunting produce, the value of own produced fishing and hunting produce that is consumed, and the value of locally produced fishing and hunting produce gifted to the household (Table 1).

Chart 2 demonstrates that ad-hoc locally produced goods received make up the greatest proportion of fishing and hunting income and receipts (38%), followed by home production consumed (23%), subsistence income (21%) and wages and salaries (18%). This provides further support to the inference that fishing and hunting products add to the income and food security of all Nauruan households, even non-fishing and hunting households.

Table 1: : Annual fishing and hunting (F&H) income by category and type and percentage of total national income and receipts³

Category	INCOME TYPE				% of total national income
	Cash	Home produced	In kind	Total F&H	
Wages and salaries (fishing only)	\$428,393	\$0	\$0	\$428,393	1.00%
Subsistence sales	\$487,665	\$0	\$0	\$487,665	1.14%
Home production consumed	\$0	\$527,223	\$0	\$527,223	1.24%
Locally produced F&H goods received	\$0	\$0	\$874,246	\$874,246	2.05%
Total F&H income and receipts	\$916,057	\$527,223	\$874,246	\$2,317,527	5.43%

³ Dollar figures all in AUD.

Overall, fishing and hunting contributes to 5.43% of Nauru's total income and receipts, with fishing accounting for 92% of total fishing and hunting income (Table 1; Chart 3). At the household level, it is estimated that fishing and hunting, on average, generates \$1,359 of income per annum, equating to \$225 per capita.

Chart 2: Composition of fisheries and hunting income by income category

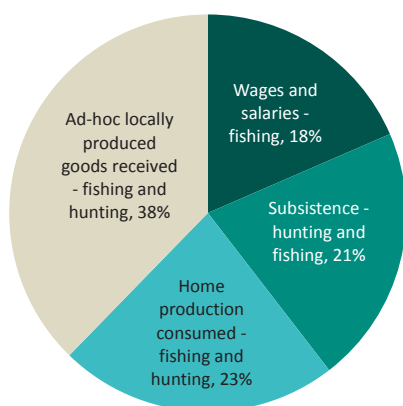
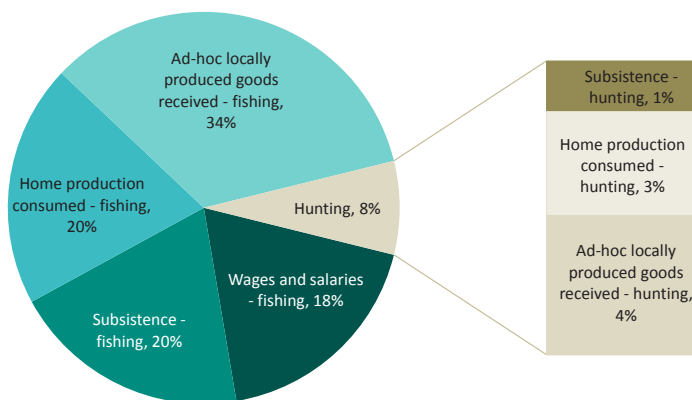
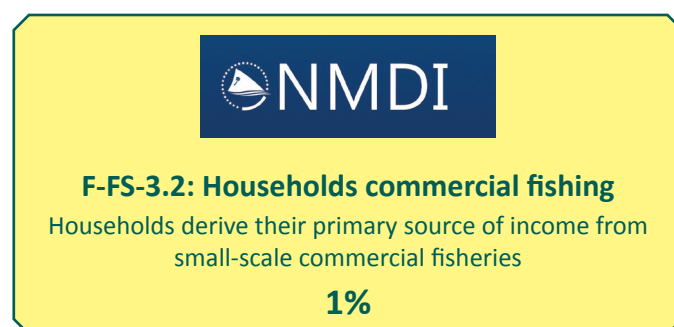


Chart 3: Composition of fishing and hunting income by income category (disaggregated between fishing and hunting)



In terms of species sold, from which income is derived, the data does not allow us to estimate species composition, however of the \$1.89 million of declared net income from ad-hoc locally produced goods received, subsistence income and home production consumed, noddie bird accounted for 9%, and the main species of fish consisted of rainbow runner, skipjack tuna, other tuna (yellowfin, bigeye, other), flying fish and reef fish (mixed).

Non-standardised pricing of fish and seafood produce in Nauru prevents us from making production estimates based on fishing and hunting income data.

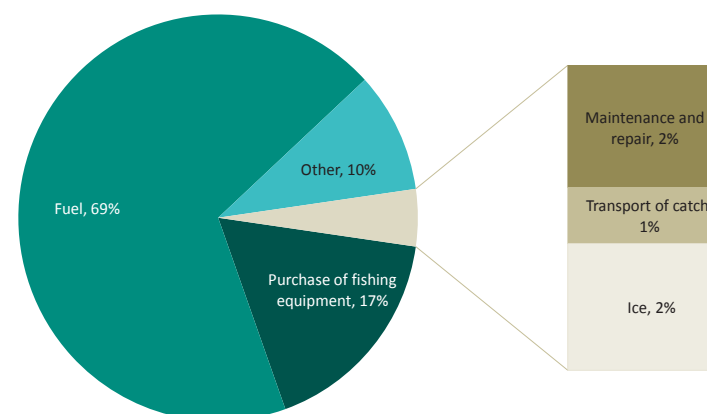


Expenditure

Production expenditure

Chart 4 demonstrates that the main expenditure incurred by the formal fishing sector⁵ consists of fuel (68%).

Chart 4: Commercial fishing sector's expenditure on production activities



In addition to production-based expenditure, recreational and cultural expenditure associated to fishing, amounting to \$55,000, consisted of the purchase of boats (41%), outboard motors (51%), fishing rods and other equipment (5%) and boat trailer (3%). This expenditure amounts to 4% of total consumption expenditure on recreation and culture in Nauru.

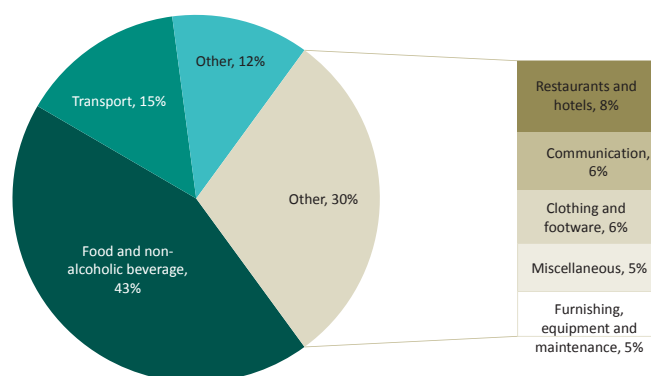
⁴ All domestic fisheries in Nauru are classified as coastal.

⁵ Note that expenditure incurred by fishing and hunting households that do not sell their product is omitted from the aggregated expenditure data.

Consumption expenditure

Chart 5 demonstrates the composition of Nauru's total consumption expenditure of \$32.5 million, of which 9% is attributable to fishing and hunting produce.

Chart 5: Composition of total consumption expenditure in Nauru



Food and non-alcoholic beverage consists of the largest consumption expenditure of \$14 million and fishing and hunting products make up 21% of this expenditure category – this is not expenditure entirely on locally produced fish and hunting products as it consists of imported fish products, such as canned tuna (Charts 6 and 7). However, it is estimated that approximately 85% of expenditure on fishing and hunting products is on locally produced produce.

Chart 6: Composition of fishing and hunting related consumption expenditure

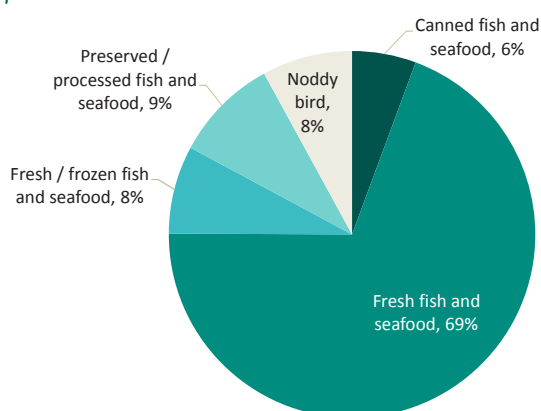
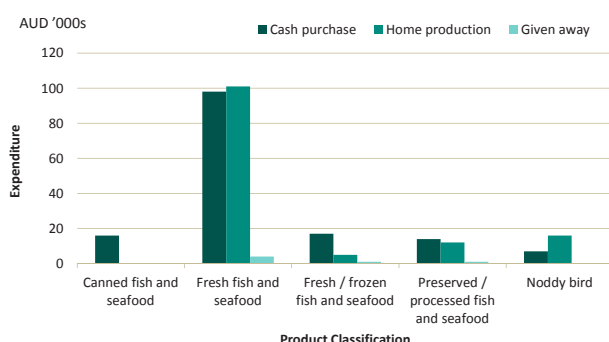


Chart 7: Consumption expenditure on fish and hunting related products by expenditure category

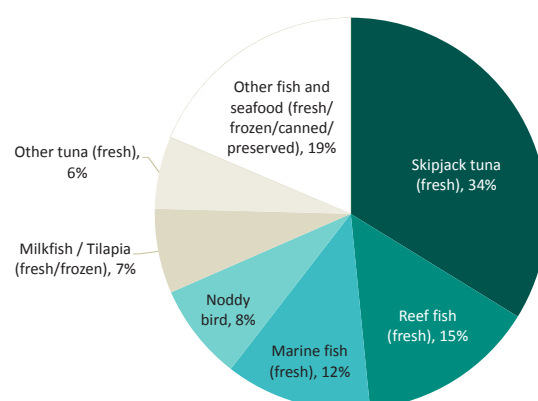


In consideration of the geographic proximity to foreign markets, we can assume that the entire consumption expenditure on fresh fish and seafood (\$2 million) and noddy bird (\$230 thousand) are locally produced. It can also be assumed that a proportion of fresh/frozen fish and seafood (\$230 thousand) and preserved/processed fish and seafood (\$270 thousand) is locally produced (Chart 6) – these figures somewhat correspond to those presented in Table 1 (matching income and expenditure), supporting the significance of the results. The entire consumption expenditure on canned fish and seafood (\$165 thousand) is considered to be imported (Chart 7).

Chart 8 presents the composition of fishing and hunting consumption expenditure by produce category, which somewhat corresponds to reported income by species.

Fresh tuna (skipjack and other tuna) account for 40% of fish and hunting consumption expenditure, while fresh reef fish and non-classified fresh marine fish account for a further 28%.

Chart 8: Composition of consumption expenditure (food and non-alcohol beverages) on fishing and hunting products



Conclusion and recommendation

Fishing and hunting is extremely important in terms of providing income and nutrition to Nauruan households. Fishing and hunting contribute a negligible amount towards formal employment, however household participation for home consumption, communal sharing and sale demonstrates that fishing and hunting is an economically significant sector in Nauru.

Policy should promote sustainable development of the fishing and hunting sector, with the objective of boosting local productivity and household income, providing Nauruan people with a healthy diet and to substitute protein imports.