

Papua New Guinea - Socio-Economic Survey-PROCFish/C 2006

Coastal Fisheries Programme

Report generated on: January 30, 2020

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Overview

Identification

ID NUMBER

PNG_2006_SES-PROCFISH_v01_EN_M_v01_A_OCS

Version

VERSION DESCRIPTION

Version 01: This is the final, clean, labelled and anonymized version of the Master file.

Overview

ABSTRACT

The coastal component of the Pacific Regional Oceanic and Coastal Fisheries Development Programme (PROCFish/C) conducted fieldwork in four locations around Papua New Guinea in June to November 2006. Papua New Guinea is one of 17 Pacific Island countries and territories being surveyed over a 5–6 year period by PROCFish or its associated programme CoFish (Pacific Regional Coastal Fisheries Development Programme).

The aim of the survey work was to provide baseline information on the status of reef fisheries, and to help fill the massive information gap that hinders the effective management of reef fisheries. Other programme outputs include:

- implementation of the first comprehensive multi-country comparative assessment of reef fisheries (finfish, invertebrates and socioeconomics) ever undertaken in the Pacific Islands region using identical methodologies at each site;
- dissemination of country reports that comprise a set of 'reef fisheries profiles' for the sites in each country in order to provide information for coastal fisheries development and management planning;
- development of a set of indicators (or reference points to fishery status) to provide guidance when developing local and national reef fishery management plans and monitoring programmes; and
- development of data and information management systems, including regional and national databases.

Survey work in Papua New Guinea covered three disciplines (finfish, invertebrate and socioeconomic) in each site, with two sites surveyed on each trip by a team of five programme scientists and many local attachments from the National Fisheries Authority, the Nature Conservancy, and the Conservation International. The fieldwork included capacity building for the local counterparts through instruction on survey methodologies in all three disciplines, including the collection of data and inputting the data into the programme's database.

In Papua New Guinea, the four sites selected for the survey were: Andra, Tsoilaunung, Sideia and Panapompom.

KIND OF DATA

Sample survey data [ssd]

UNITS OF ANALYSIS

Households

Scope

NOTES

The description of scope for the survey include:

-HOUSEHOLD:

1. Household size and composition
2. Ranked sources of income and average household expenditure level
3. Average household consumption patterns and sources
4. Average number of fishers and boats per household.

-INDIVIDUAL:

1. Education level of adult members of the household
2. When, how often and during which months of the year fishers go out to particular habitats
3. Average catch size
4. Catch composition
5. Fishing techniques
6. Proportion of the catch targeted for subsistence, gift and sale, and preservation
7. How finfish and invertebrates are preserved
8. Community's fishing grounds
9. Management rules
10. Major problems relating to the use/management of the community's marine resources
11. Quantities by species or groups marketed
12. Quality and processing level of species marketed
13. Price in local currency/USD
14. Client groups
15. Quantitative and qualitative changes in marketing perceived over a period of time.

KEYWORDS

Socio-economic, Fisheries, Finfish, Invertebrates, Consumption, Subsistence, Gift, Sale, Fishing techniques, Habitat

Coverage

GEOGRAPHIC COVERAGE

Four sites: Andra, Tsoilaunung, Sideia and Panapompom.

UNIVERSE

The survey covered de jure household members. All household members responding the "Finfishers" and "Invertebrate fishers" questionnaires must be aged 15 years and over and must be living in the household surveyed.

Producers and Sponsors

PRIMARY INVESTIGATOR(S)

Name	Affiliation
Coastal Fisheries Programme	Pacific Community (SPC)

OTHER PRODUCER(S)

Name	Affiliation	Role
Reef Fisheries Observatory		Technical assistance

FUNDING

Name	Abbreviation	Role
European Development Fund	EDF	Funding

Metadata Production

METADATA PRODUCED BY

Name	Abbreviation	Affiliation	Role
Office of Chief Statistician	OCS	Food and Agriculture Organization	Metadata adapted for FAM
Statistics for Development Division	SDD	Pacific Community	Documentation of the study

DDI DOCUMENT VERSION

PNG_2006_SES-PROCFISH_v01_EN_M_v01_A_OCS_v01

DDI DOCUMENT ID

DDI_PNG_2006_SES-PROCFISH_v01_EN_M_v01_A_OCS_FAO

Sampling

Sampling Procedure

Most of the households included in the survey are chosen by simple random selection, as are the finfish and invertebrate fishers associated with any of these households. In addition, important participants in one or several particular fisheries may be selected for complementary surveying. Random sampling is used to provide an average and representative picture of the fishery situation in each community, including those who do not fish, those engaged in finfish and/or invertebrate fishing for subsistence, and those engaged in fishing activities on a small-scale artisanal basis. This assumption applies provided that selected communities are mostly traditional, relatively small (~100-300 households) and (from a socioeconomic point of view) largely homogenous. Similarly, gender and participation patterns (types of fishers by gender and fishery) revealed through the surveys are assumed to be representative of the entire community. Accordingly, harvest figures reported by male and female fishers participating in a community's various fisheries may be extrapolated to assess the impacts resulting from the entire community, sample size permitting (at least 25-30% of all households).

Questionnaires

Overview

The questionnaires are designed to allow a minimum dataset to be developed for each site, one that allows:

- the community's dependency on marine resources to be characterised;
- assessment of the community's engagement in and the possible impact of finfish and invertebrate harvesting; and
- comparison of socioeconomic information with data collected through PROCFish/C resource surveys.

The questionnaires are divided into 4 main areas:

- Household Survey => incorporating demographics, selected socioeconomic parameters and consumption patterns;
- Survey of fishers (finfish and invertebrate) => incorporating data by habitat and/or specific fishery;
- A general questionnaire targeting key informants => the purpose of which is to assess the overall characteristics of the site's fisheries;
- Finfish and invertebrate marketing questionnaires => that target agents, middlemen or buyers/sellers (shops and markets).

In addition to the questionnaires, two sets of size charts are provided to help assess the weight of fish and invertebrates caught and consumed. This is necessary as most village fishers do not use kilograms but local units of measure (heaps, plastic bags, strings, baskets, etc.), which are difficult to translate into kilogram weights.

Data collection is performed using a standard set of questionnaires developed by PROCFish/C's socioeconomic component, which include a household survey (key socioeconomic parameters and consumption patterns), finfish fisheries survey, invertebrate fisheries survey, marketing of finfish survey, marketing of invertebrates survey, and general information questionnaire (for key informants). In addition, further observations and relevant details are noted and recorded in a non-standardised format.

Questionnaires are fully structured and closed, although open questions may be added on a case-to-case situation.

Data Collection

Data Collection Dates

Start	End	Cycle
2006-06-01	2006-11-30	N/A

Data Collection Mode

Face-to-face paper [f2f]

Data Collection Notes

DATA COLLECTION:

Questionnaires are fully structured and closed, although open questions may be added on a case-to-case situation. If translation is required, each interview is conducted jointly by the leader of the project's socioeconomic team and the local counterpart. In cases where no translation is needed, the project's socioeconomic team may work individually. Selected interviews may be conducted by trainees receiving advanced field training, but trainees are monitored by project staff in case clarification or support is needed.

Most of the data are collected in the context of face-to-face interviews. Names of people interviewed are recorded on each questionnaire to facilitate cross-identification of fishers and households during data collection and to ensure that each fisher interview is complemented by a household interview. Linking data from household and fishery surveys is essential to permit joint data analysis. However, all names are suppressed once the data entry has been finalised, and thus the information provided by respondents remains anonymous.

Team members should be familiar with the objectives of the survey, their role in it, and the survey's contribution to resource management. They will need to understand the relationship, importance and content of the entire set of questionnaires to ensure that data collected are relevant, reliable and accurate. The tasks to be undertaken by each team member should be well defined and agreed on in advance. It is also very important that the survey team members are interested in meeting members of local communities, that they are patient in posing the same questions over and over again, and that they can listen to and engage with local people in an easy and understandable communication process that is free of manipulation.

The project utilises a 'snapshot approach' that provides 5–7 working days per site (with four sites per country). This timeframe generally allows about 25 households (and a corresponding number of associated finfish and invertebrate fishers) to be covered by the survey. The total number of finfish and invertebrate fishers interviewed also depends on the complexity of the fisheries practised by a particular community, the degree to which both sexes are engaged in finfish and invertebrate fisheries, and the size of the total target population. Data from finfish and invertebrate fisher interviews are grouped by habitat and fishery, respectively. Thus, the project's time and budget and the complexity of a particular site's fisheries are what determine the level of data representation: the larger the population and the number of fishers, and the more diversified the finfish and invertebrate fisheries, the lower the level of representation that can be achieved.

The interviews were done jointly by Pacific Community (SPC)'s Coastal Fisheries Programme and the territorial fisheries authority of Papua New Guinea.

NEGOTIATION:

A survey cannot begin or be implemented without the consent and cooperation of the target community(ies). It is advisable to identify in advance how to approach communities, keep them informed, and ensure their ownership of the data. One of the major responsibilities of the team leader is to approach the target communities in the early stages to inform them about the scope and objectives of the survey planned and the reason for selecting the respective community(ies). The team leader must request their agreement to participate and, more importantly, gain their full support for, and engagement in the exercise. The survey team members must also be aware of local customs and cultural protocols and proceed accordingly.

The community needs to be fully informed of:

- the reason for and objectives of the survey;
- the contribution required from the community;
- how the data will be collected;
- how the data will be used;
- who will be responsible for data management; and

-in what form and when results and possible recommendations will be returned to the government authorities and community(ies) concerned.

PILOT TEST:

The proposed methods, approaches and questionnaires are the result of tests carried out and experience gained within the framework of two long-term projects implemented by SPC's Reef Fishery Observatory.

Pilot testing for methods, approach and questionnaires are therefore not obligatory. Pilot testing may, however, be performed so as to familiarise and/or train survey team members, and decide on the most appropriate language, and way of approaching the target community and conducting individual interviews.

It should be borne in mind that the questions provided in the questionnaires are a reminder of what data is needed. The sequence of questions is put into a logical order according to the information requirements prioritised. The sequence and/or way questions are finally formulated and posed may vary according to the situation, the interviewer and the respondent.

Questionnaires

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Data Collectors

Name	Abbreviation	Affiliation
Coastal Fisheries Programme	CFP	Pacific Community (SPC)
National Fisheries Authority		Papua New Guinea Government

Supervision

The team leader should follow up on data gaps identified after filling in the checklist and assign tasks for collecting the missing data accordingly. Most of this missing data should be collected during survey implementation in the respective community(ies).

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Data Processing

Data Editing

A software programme (SEMCoS) has been developed in tandem with the manual to assist in automatically performing all necessary analysis and producing outputs for the data collected.

Data Appraisal

Other forms of Data Appraisal

Data from all questionnaire forms are entered in the Reef Fisheries Integrated Database (RFID) system. All data entered are first verified and 'cleaned' prior to analysis. In the process of data entry, a comprehensive list of vernacular and corresponding scientific names for finfish and invertebrate species is developed.

Database queries have been defined and established that allow automatic retrieval of the descriptive statistics used when summarising results at the site and national levels.