



CoSPSI PROJECT

COMMERCIALISATION of SEAWEED PRODUCTION in SOLOMON ISLANDS

S.I.G & EU STABEX N° ST98/009

DEPARTMENT OF FISHERIES & MARINE RESOURCES

Draft Report on Farmers Survey in Wagina, Rarumana and North Malaita



Strong wind in OTJ washed seaweed ashore in October 2006

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Contents

1. Executive Summary.....	3.
2. Introduction.....	4
3. Methodology.....	4
4. Materials and Personnel.....	4
5. Survey Sites.....	4
6. Analysis.....	5
7. Results.....	5
Role of each member.....	5
How often the money is generated.....	5
How is the money is used.....	6
Hindrance to seaweed farming.....	8
Land/sea tenure.....	9
Other source of income.....	9
General Comments.....	10
8. Conclusions.....	11
9. Recommendations.....	11

1. Executive Summary

The survey of households or farmers was carried out in Wagina from 27th September to 1st of October. This was a team effort by the LPM and Seaweed Development Adviser Mr. Samuela Mario. The main objectives of the survey were to determine:

- If cash income generated from cultivating seaweed was benefiting every household members
- Who involves in generating this income.
- The impact of land/sea tenure on seaweed farming
- How often the money is generated
- What other source of income
- How is the money spent
- What hinders seaweed production

In general, the results of the survey indicated that:

- Regardless of sex, every member of households involve in generating the cash income indicated by all sites surveyed
- Age starting from 8 years involve in seaweed farming
- Cash generated from seaweed is mostly spent on food
- Income generated from seaweed indicated that farmers from North Malaita earned income every month whilst farmers in Wagina and Rarumana earned income fortnightly
- Fishing is another important source of income in Malaita and Rarumana while Wagina indicated that seaweed is an important source of income.
- Wagina and Malaita indicated that drop in price of seaweed hinders production
- Rarumana and Wagina indicated that disease, fish grazing and persistent rain are problems hindering production.
- All sites indicated that there is no problem in sea- tenure as all farmers has easy access to the sites.
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2. Introduction

The survey of farmers came about during the 4th Project Steering Committee meeting in May 2006 and found that information gathered from the database was unclear on information such as how farmers involve in farming activities to generate the income, what age and sex actually took part and what is their respective roles in the farm. Other information such as how is the money used and what might affect farmers to cultivate seaweed are some of the vital information to be gathered

As the above information could not be derived from the database, it was recommended by the PSC that a survey of farmers is required to be carried out to reveal those information. From this recommendation, the LPM designed the survey form and a survey was carried out and farmers or households were interviewed randomly using the designed form.

This report present the analysis of the survey carried out in Wagina and Rarumana from 28th September to 15th October and North Malaita in November 2006. The report presents the results that are preliminary in nature and hope it indicates some findings that are not clearly indicated in the farmers' database.

3. Methodology

Using the excel program, the farmers questionnaire was designed where appropriate questions were outlined and appropriate boxes were provided for answers. The form was designed in such a way that minimal answers can be recorded.

A face - to - face interview was carried out after the farmer was informed if he could spare some time to be interviewed. Most of the farmers requested that we visited them in the night.

The information gathered from the completed forms were entered using the excel program where analysis of the information are carried out.

4. Materials and personnel

The designed survey form (Annex 1) formed the basis material and CoSPSI staffs were voluntarily assisted in carrying out the survey.

5. Survey Sites

The survey was carried out in Wagina during the training of farmers by the SDA. The LPM and SDA were able to carry out the survey in Cookson village, Arariki and Nikumaroro. With the assistance of the SEO in North Malaita, households in Sulufou and Manaoba were also interviewed. Survey could not be undertaken in Reef Islands and Ontong Java as it is extremely difficult to visit.

6. Analysis

The analysis of the survey was carried out following each important topic outlined in the survey form. Thus, it assisted in gathering information and answers pertaining to the questions in the survey form. The following section illustrates the results performed in the analysis.

7. Results

7.1. Role of each member of household in generating the income

The results from the interview of farmer or households at survey sites indicated that generating the income was carried out by every members of the household from an age starting from 8 to the oldest member of the family regardless of sex. However, males specifically carry out specific jobs such as cutting sticks and building the farm. In general, generating cash from cultivating seaweed is a shared activity, which means that every member of the family is involved in one way or another.

7.2. How often the money is generated?

The majority of households interviewed in Wagina and Rarumana indicated that income generated from seaweed is generated every two weeks whilst Malaita farmers indicated that income generated from seaweed is gained every month (Fig 1a to Fig 1c)

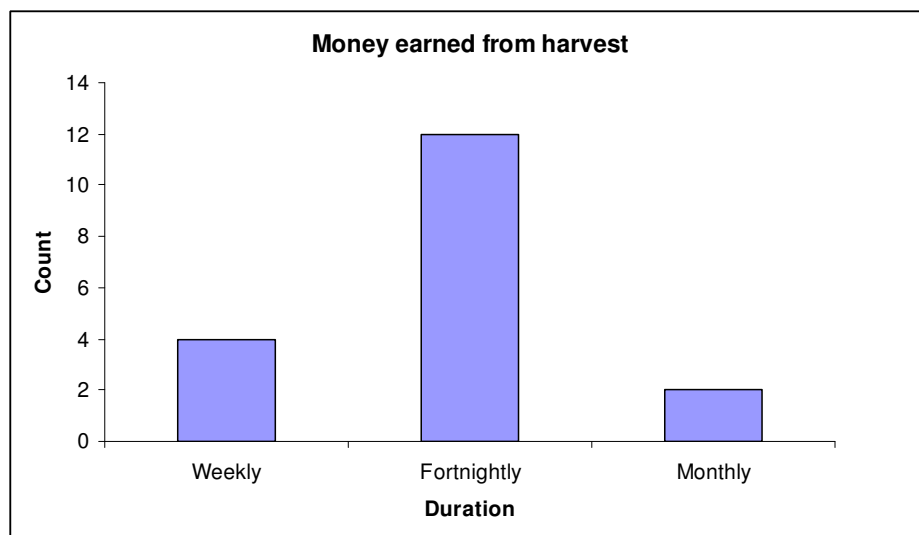


Fig 1a. Duration of money earned from seaweed (Wagina)

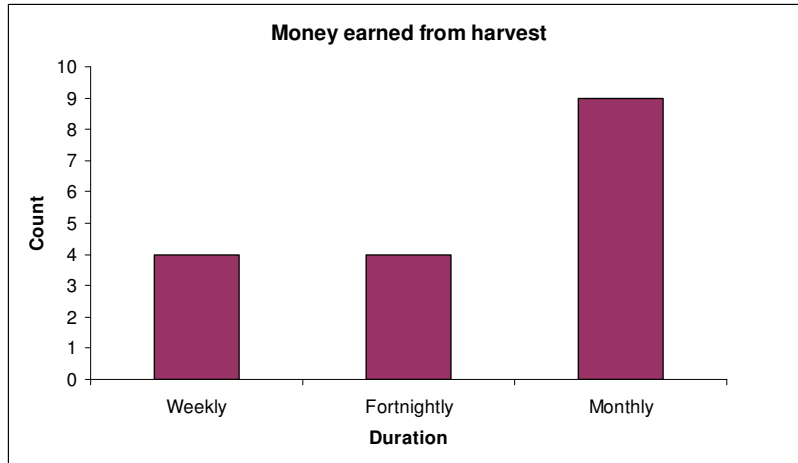


Fig. 1b Duration of money earned from seaweed (Malaita)

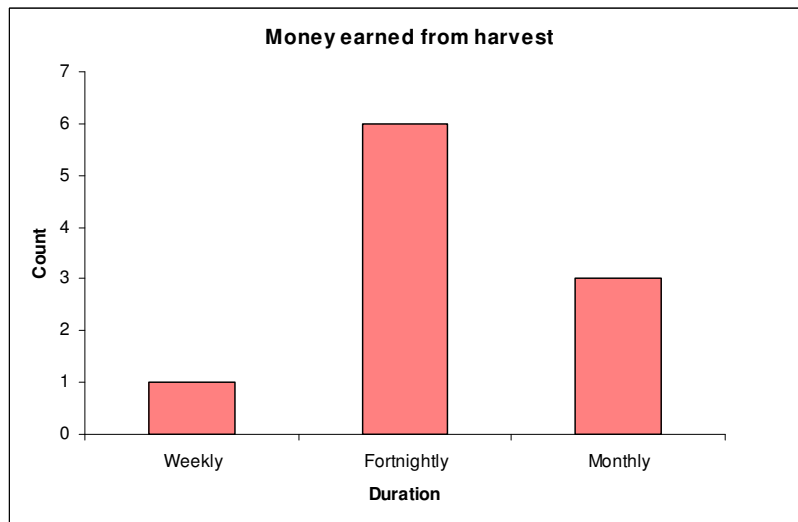


Fig. 1c. Duration of money earned from seaweed (Rarumana)

7.3. How is the money spent?

The majority of households interviewed indicated that money gained from harvest is spent on food showed by all villages. In Wagina the next important item was farm materials. However, Malaita and Rarumana showed that school fees was the next important item. Church contribution (others) was also important in Wagina and Rarumana where a community of United Church congregation normally obligated to pay tithes or 10% of their earnings to the church (Fig. 2a-Fig2c).

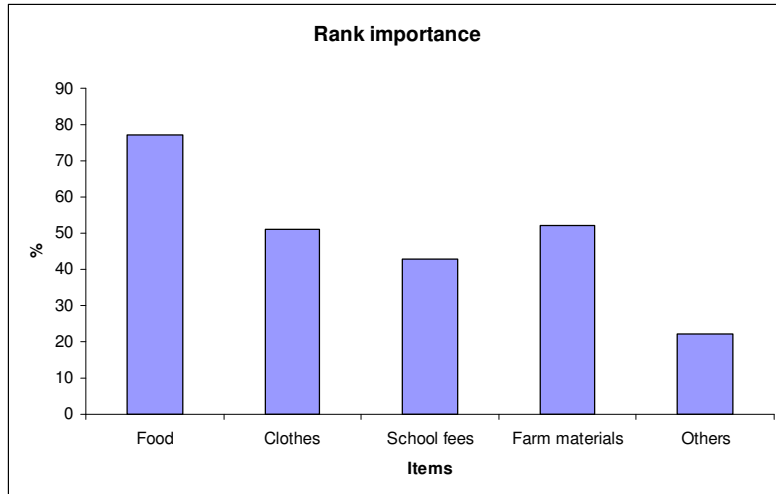


Fig.2a. Important items where money is spent (Wagina)

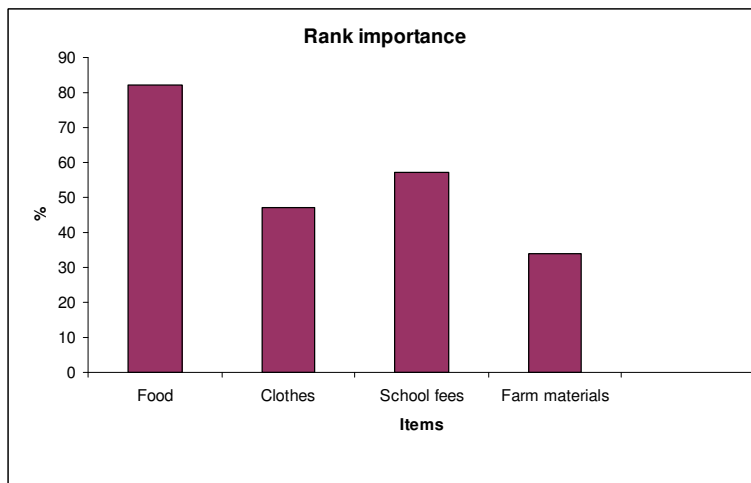


Fig. 2b. Important items where money is spent (Malaita)

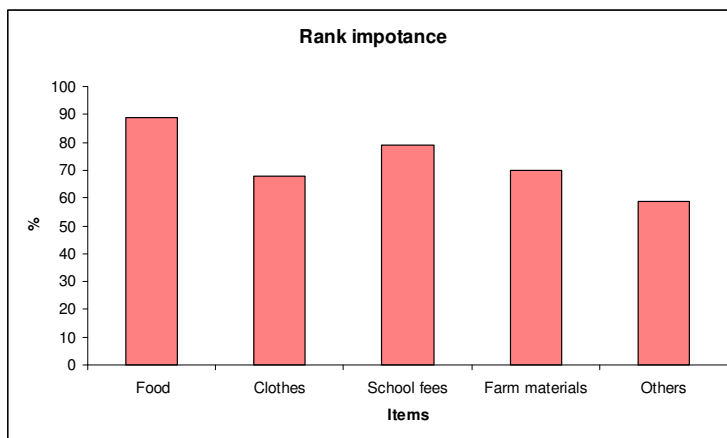


Fig. 2c. Important items where money is spent (Rarumana)

7.4. Hindrance to Seaweed farming

Reduction in farm-gate price of seaweed was an important factor that hindered the production showed by all sites. The high price of farm materials was also an important factor and fish grazing and disease were important in Malaita and Rarumana indicated by “others”. Persistent rain and rough weather was important in Wagina indicated by “others” (Fig.3a to Fig.3c).

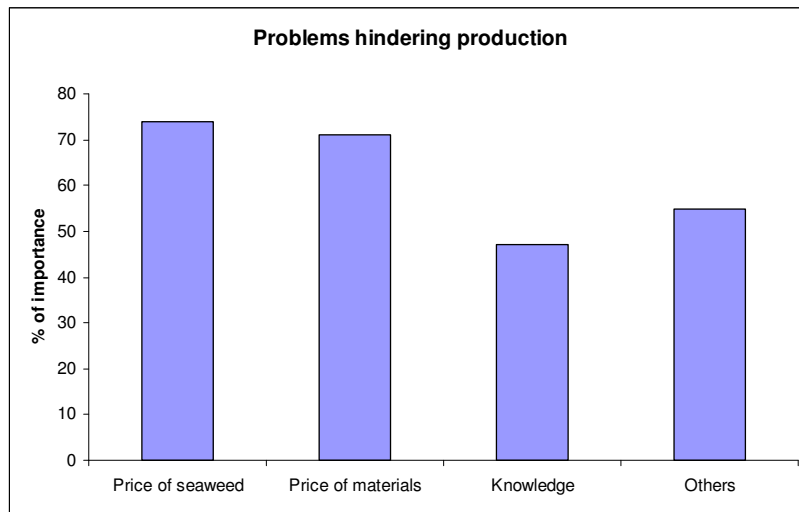


Fig 3a Problems hindering production in Wagina

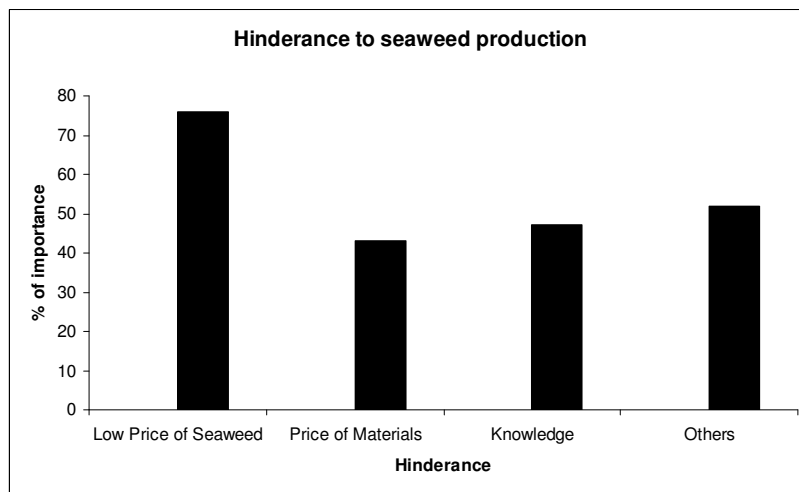


Fig. 3b Problems hindering production in Malaita

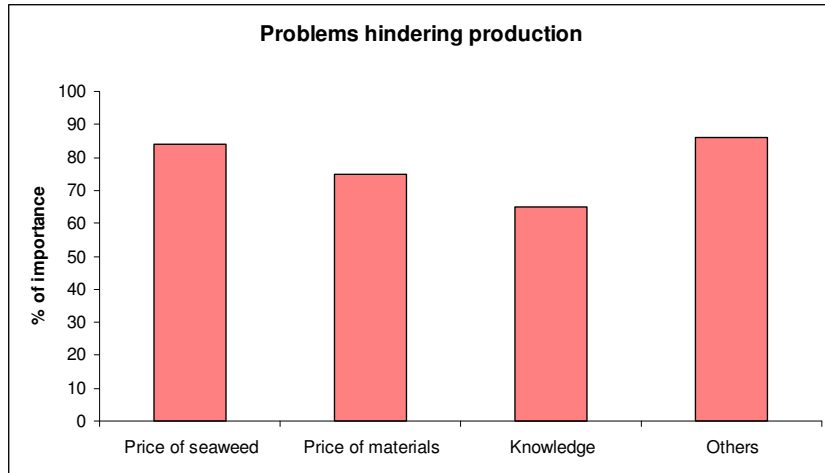


Fig 3c Problems hindering production in Rarumana

7.5. Land/Sea Tenure

The result of the survey indicated that all farmers interviewed in every site indicated that there is no problem on sea tenure as farmers have easy access to farm sites.

7.6. Other income sources

It can be seen that the majority of farmers in Wagina engaged in seaweed farming relied solely on seaweed income to support the family on food (Fig. 4a). However, some farmers although engaged in seaweed farming, also tried to earn money from other sources such as selling crayfish, fish and trochus. However, fishing is an important activity to earn income for both Malaita and Rarumana (Fig. 4b and Fig. 4c).

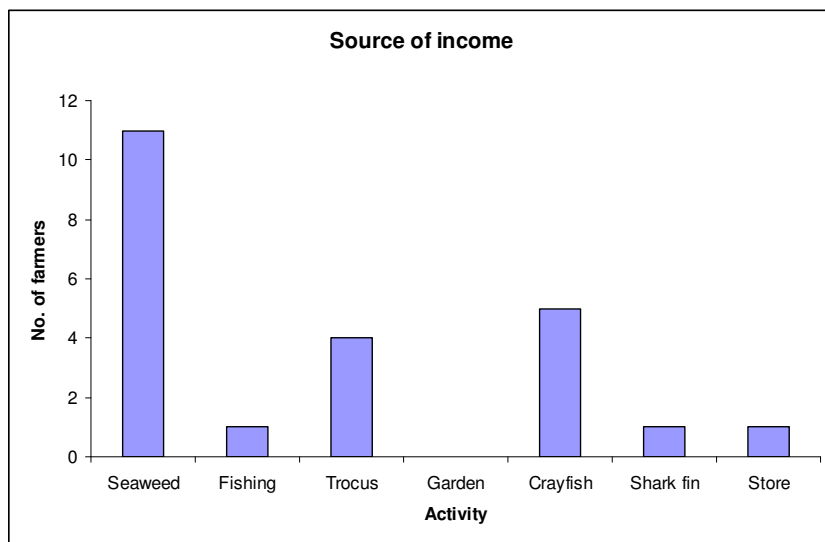


Fig. 4a. Wagina source of income

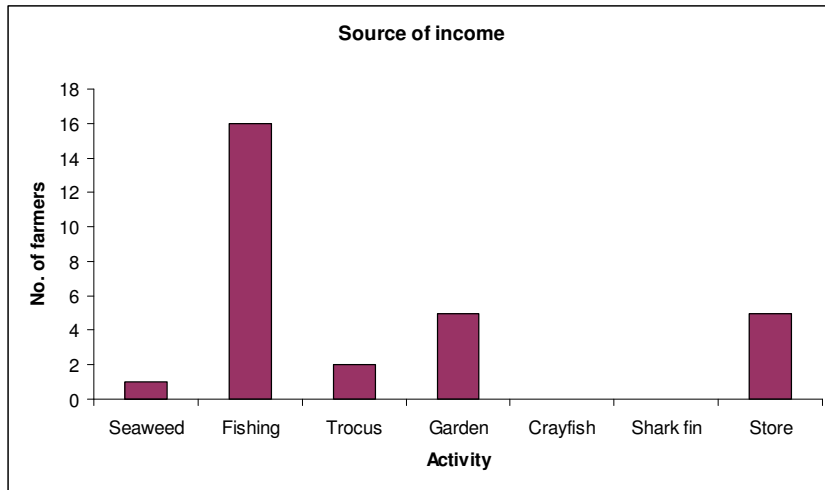


Fig. 4b. Malaita source of income

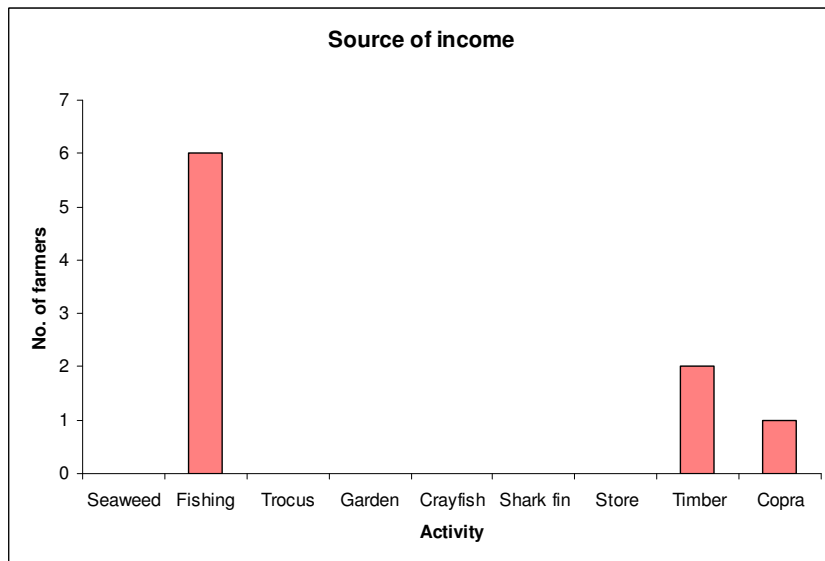


Fig. 4c. Rarumana source of income

7.7. General comments

- Seaweed price not very attractive
- Price of materials very high
- Needs more knowledge on farming techniques to improve production
- Food prices going up
- Provision of cheap/affordable seaweed farm materials will increase production
- Increase price of seaweed will increase production

8. Conclusions

The designed survey form enables the team to carry out the survey in Wagina, Rarumana and Malaita important producing sites for seaweed. The form was consisted of questions to meet the objectives of the survey and other questions were included as they are also important.

The survey form has assisted the LPM in gathering some interesting and important information affecting farmers in cultivating seaweed in Wagina, Rarumana and Malaita. It also revealed problems where the project can develop its capacity to increase quality and production.

Cultivation of Seaweed in all sites impact on the life of the community where money earned was important to support families on food. Wagina community originally comes from Kiribati where gardening is not traditional and people rely very much on fish and coconut for their subsistence living. Most food will be bought from the shop (rice and canned foods) so the money will be spent as indicated. As price of seaweed drops, the farmer will eventually has limited to spend money on other items such as school fees and farm materials, money will be spent on food only for survival.

The general comments made by farmers are interesting and important which pointed out the reality in cultivating seaweed. For example, comments such as decrease in price of seaweed and high price of farm materials are the main important issues pointed out by the farmers. As food is an important avenue where seaweed money is spent, each farmer is easily affected by the reduced cash income generated from seaweed farming.

It can be seen that farmers rely solely on seaweed income for food, it is noted that some farmers shift from gardening to farming seaweed where they rely on cash income to buy food. Currently, the trend is unfavorable as food and farm materials increases and price of seaweed decreases. This will surely redirect the farmer to quit farming and return to his normal village activity where he normally enjoys (Gardening, fishing and holiday). It would not be surprising that some farmers already done this.

9. Recommendations

The following recommendations are important to improve the farmer's income so that they continue to cultivate seaweed:

- 6 weeks cycle harvest need to continually train farmers on this subject so they harvest weekly to maximize their earnings
- Provide cheap and affordable farm materials
- Any bonus made during export should be redirected to farmers, another way to encourage farmers and increase production

- Exporter to negotiate the inter Island freight and provide understanding to the local shipping agents that seaweed is a commodity similar to copra where freight are normally low,
- If negotiable freight are attained, the difference in money gained should be given to farmers
- Increase price of dried seaweed and
- Continue providing the technical support and trainings for farmers

Annex 1. Farmer's Survey Form

Survey Form for Seaweed Farmers

Your Farmer ID Number.: Number _____

Your Farmer ID Name.: _____

Name of your village.: _____

1. List member of your household including yourself and fill in the required information

Name	Age	Gender	What Part does he/she play in the farming of seaweed
			<input type="checkbox"/> Tying propagule <input type="checkbox"/> Set up Farm <input type="checkbox"/> Planting <input type="checkbox"/> Harvesting <input type="checkbox"/> Making Drying Tables <input type="checkbox"/> Cutting Sticks <input type="checkbox"/> Bagging <input type="checkbox"/> Weighing <input type="checkbox"/> Collect money
			<input type="checkbox"/> Tying propagule <input type="checkbox"/> Set up Farm <input type="checkbox"/> Planting <input type="checkbox"/> Harvesting <input type="checkbox"/> Making Drying Tables <input type="checkbox"/> Cutting Sticks <input type="checkbox"/> Bagging <input type="checkbox"/> Weighing <input type="checkbox"/> Collect money
			<input type="checkbox"/> Tying propagule <input type="checkbox"/> Set up Farm <input type="checkbox"/> Planting <input type="checkbox"/> Harvesting <input type="checkbox"/> Making Drying Tables <input type="checkbox"/> Cutting Sticks <input type="checkbox"/> Bagging <input type="checkbox"/> Weighing <input type="checkbox"/> Collect money
			<input type="checkbox"/> Tying propagule <input type="checkbox"/> Set up Farm <input type="checkbox"/> Planting <input type="checkbox"/> Harvesting <input type="checkbox"/> Making Drying Tables <input type="checkbox"/> Cutting Sticks <input type="checkbox"/> Bagging <input type="checkbox"/> Weighing <input type="checkbox"/> Collect money
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			<input type="checkbox"/> Tying propagule <input type="checkbox"/> Set up Farm <input type="checkbox"/> Planting <input type="checkbox"/> Harvesting <input type="checkbox"/> Making Drying Tables <input type="checkbox"/> Cutting Sticks <input type="checkbox"/> Bagging <input type="checkbox"/> Weighing <input type="checkbox"/> Collect money

Please put a tick in the box where appropriate.

2. How often do you earn income from the seaweed you farm?

Weekly
 Fortnightly
 Monthly

3. How is the money earned used? Rank 1-5 (1 is important, 5 is less important)

Food
 Clothes
 School Fees
 Farm materials
 Others (Please specify).....

4 What is stopping you from producing more seaweed? (Please rank)

Price of seaweed

Price Materials

Knowledge on seaweed farming

Others Please specify.....

5 (Sea Tenure) Is farm space usage secure? Yes No

If No please specify.....

6 Does seaweed farming have any impact on your involvement with other marine resources?

Please briefly specify.....

7 Any other source of income?

	Time		Earning	
	Time		Earning	
	Time		Earning	
	Time		Earning	
	Time		Earning	

8 Method of transportation

Dug out canoe

Fibre-glass

Shared

9 General Comments

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