

SUSTAINABLE SEAWEED FARMING PROJECT
(PRE-PROJECT) BASELINE SURVEY
INTERVIEW QUESTIONNAIRE

A.

QUESTIONNAIRE CODE	
INTERVIEWER	
DATE	
VILLAGE / COMMUNE / DISTRICT / PROVINCE	

B. GENERAL INFORMATION

Interviewee name	
Age	
Sex/Gender	
Number of people in HH	
Number of labourers in HH	
Number of people in HH farming seaweed	

C. SUSTAINABLE SEAWEED FARMING PROJECT

Understanding and expectations of the sustainable seaweed farming project

1. To what extent are you aware of the concept of sustainable seaweed farming?
 - i. Very aware
 - ii. Aware
 - iii. Not aware

2. What are your views on the usefulness of sustainable seaweed farming?
 - i. Very useful
 - ii. Useful
 - iii. Not useful

3. How effective are the current seaweed farming practices?
 - i. Very effective
 - ii. Effective
 - iii. Not effective

D. CURRENT SEAWEED FARMING PRACTICES

1. When did you start farming seaweed?

...

2. Which seaweed species do you farm?

- i. Cottonii
- ii. Spinosum
- iii. Gracillaria
- iv. Others (mention...)

3. What seaweed farming technique do you use/practice?

- i. off-bottom
- ii. deep water longlines
- iii. floating
- iv. tube-net
- v. Others (mention...)

4. How many farms do you own?

- i. 1
- ii. 2
- iii. 3
- iv. More (mention ...)

(If more than 1, how far apart are they?)

5. What size is your farm?

...

6. How many people work on your farm?

...

7. What is the length of your cultivation lines?

- i. ≤ 5 m
- ii. 6 – 10 m
- iii. ≥ 10 m

8. What is your average wet production per line? (50 kg rice woven plastic bag)

- i. 1 – 5 bags
- ii. 6 – 10 bags
- iii. 11 – 15 bags
- iv. More (mention...)

9. What is your average dry production per seaweed cultivation cycle?

- i. ≤ 100 kg

- ii. 100-250 kg
- iii. 251-500 kg
- iv. ≥ 500 kg

10. What is your desired dry production in kilogram per production cycle?

- i. ≤ 100 kg
- ii. 100-250 kg
- iii. 251-500 kg
- iv. ≥ 500 kg

11. What other coastal related activities do you engage with apart from seaweed farming?

- i. Fishing
- ii. Intertidal gleaning
- iii. Shellfish/Sea cucumber farms
- iv. Others (mention ...)

TOOLS

12. What farming tools do you use?

- mining bar harvest boat shoes diving goggles stakes flotation devices
 hammer lighter for burning rope fringe knife anchors ropes

13. Where do you get your farming inputs from

- i. Self-purchased
- ii. Self-purchased and Government
- iii. Self-purchased and C-Weed
- iv. Other donors

14. Which tools/ farming inputs are you given by the C-Weed Corporation?

- mining bar harvest boat shoes diving goggles stakes flotation devices
 hammer lighter for burning rope fringe knife anchors ropes

15. What size ropes do you use for a farming circle?

- i. 4mm for main cultivation lines, 1 or 2mm for loops
- ii. 4mm for main cultivation lines, 1 or 2mm for loops, 10mm for farm structure

16. Which ropes tying method do you use / how do you tie them?

- i. CWeed Double Made Loop system, fix 2 loops every 20cm
- ii. Traditional rope tying method

17. What do you do with your rope when it's damaged?

- i. Dispose them offshore
- ii. Dispose them at sea
- iii. provide to CWeed and they replace it for new
- iv. Others (mention...)

18. How do you store your ropes?

- i. Cool ventilated place
- ii. Dry surface
- v. Woven sac bags
- vi. Others (mention...)

19. What do you use as floats for your seaweed lines?

- i. Small buoys
- ii. Plastic bottles
- iii. Styrofoam materials
- iv. None
- v. Others (...)

20. Which stakes/pegs/sticks do you use to anchor the seaweed lines?

- i. Land-based trees
- ii. Mangrove trees
- iii. Both

21. What are your reasons for stake source of choice?

- i. Readily available (not seasonal)
- ii. Close proximity to farm areas
- iii. The only option available
- iv. Not restricted to use
- v. Others

22. How many mangrove stakes do you use for your farm?

- i. ≤ 10 stakes
- ii. ≤ 20 stakes
- iii. ≤ 30 stakes
- iv. More (mention ...)

PRACTICES

23. How much seaweed in grams do you plant per tie-tie and per cultivation rope/line?

- i. ≤ 50 g
- ii. 51 - 100 g

- iii. 101 - 150 g
- iv. 151 - 200 g
- v. $\geq 200\text{g}$

24. How often do you maintain and clean your ropes (clean off organisms and dip in fresh water)?

- i. At regular intervals, each low tide
- ii. At end of each cultivation cycle

25. What is the minimum depth of water during low tide at your farm site?

- i. Ankle height
- ii. Knee height
- iii. Waist height
- iv. Above waist height
- v. Covered on one end & exposed at the other end

26. How is the substrate at your farm site?

- i. Sandy
- ii. Rocky
- iii. Muddy
- iv. Seagrass bed
- v. Corals

27. Where do you get your seaweed seeds from?

- i. Within the farm
- ii. From CWeed
- iii. From other farmers
- iv. Bought from other villages

28. Do you have a community farm where you can get your seedlings from?

- i. Yes
- ii. No

29. Do you have seaweed farming seasonal calendar?

- i. Yes
- ii. No

(if Yes, elaborate)

30. Would it be useful to have seaweed farming seasonal calendar?

- i. Yes
- ii. No

31. How many seaweed production cycles do you cultivate per year?

- i. ≤ 4 times

- ii. ≤ 6 times
- iii. ≤ 8 times
- iv. More (mention ...)

32. Do you farm during rainy seasons?

- i. Yes
- ii. No

33. How many days during rainy season low tides do you attend your farm?

- i. ≤ 2 days
- ii. ≤ 4 days
- iii. ≤ 6 days

34. Do you engage in other activities instead of seaweed farming during the rainy season?

- i. Yes
- ii. No

(if yes, elaborate)

35. Where do you prepare your lines for farming?

- i. At the farm
- ii. On the shore
- iii. At home

36. How long is the production cycle from the planting to the harvesting stage?

- i. ≤ 45 days
- ii. ≤ 60 days
- iii. ≤ 90 days
- iv. ≤ 120 days

37. What sort of diseases have you encountered in your farms?

- i. Ice-ice
- ii. Epiphytes
- iii. Others (mention ...)

38. What do you do when ice-ice or epiphytes happens?

- i. Remove immediately
- ii. Do not use as seedlings
- iii. Relocate farm area
- iv. Keep on farming infected seaweeds

39. Are you aware of tube net farming method?

- i. Yes
- ii. No

40. Have you ever used it before?

- i. Yes
- ii. No

(if yes, do you still use it?)

41. Are you aware of floating raft method?

- i. Yes
- ii. No

42. Have you ever used this method?

- i. Yes
- ii. No

(if yes, do you still use it?)

43. How do you arrange or design your cultivation line parallel to major current?

- i. Yes
- ii. No

44. Are you aware of standardization of farms?

- i. Yes
- ii. No

45. How often do you attend your seaweed farm for maintenance after planting and before harvest?

- i. ≤ 3 days each low tide
- ii. ≤ 4 days each low tide
- iii. ≤ 5 days each low tide
- iv. ≤ 6 days each low tide

46. How do you maintain your farm?

- i. Ensure seaweed is always below water
- ii. Shake ropes to remove sediment and other seaweeds
- iii. Repair damaged/entangled ropes and stakes
- iv. Replace missing seaweed fronds
- v. All the above

47. Do you have any grazers around your farm?

- i. Fish
- ii. Sea urchins
- iii. Turtles
- iv. Others (mention...)

48. What environmental challenges do you face as a seaweed farmer?

- i. Presences of itchy insects, stone fish, sting rays and jelly fish

- ii. Seasonal drifting seagrass and seaweeds
- iii. Others (mention...)

49. Do you have any farm waste management systems?

- i. Yes
- ii. No

(if yes, elaborate)

50. Have you ever encountered theft?

- i. Yes
- ii. No

51. What actions did you take when you encountered theft?

- i. Report to village leaders
- ii. Report to the seaweed committee
- iii. Resolve matters by yourself
- iv. Did nothing

HARVEST AND DRYING

52. Do you own or have access to harvesting boats?

- i. Yes
- ii. No

53. Do you have engines for these boats?

- i. Yes
- ii. No

54. In what weather do you harvest your seaweed?

- i. Dry sunny days
- ii. Rainy days
- iii. Both

55. Where do you store your seaweed after harvest?

- i. Cool and dry surface at home
- ii. Community storage facilities
- iii. Others (explain...)

56. Where do you dry you seaweed?

- i. On drying rack
- ii. On tarp/ sewed together woven sacs
- iii. On rocks
- iv. On short grass
- v. On bare grounds

57. How do you preserve quality during drying
- i. Place 5-10 cm layers of seaweed
 - ii. Regularly flip seaweed
 - iii. Remove impurities (other seaweeds, etc.) from seaweed
 - iv. All the above
58. How do you shelter your seaweed during rainy season?
- i. under tarp
 - ii. in building
 - iii. others (mention...)
59. How many days does it take to dry your seaweed?
- i. ≤ 1 day
 - ii. ≤ 2 days
 - iii. ≤ 3 days
 - iv. More (mention ...)
60. Do you sell your seaweed immediately after drying?
- i. Immediately after drying
 - ii. Accumulate to increase amount

MARKETING AND PROCESSING

61. Do you know what seaweed are used for?
- i. Yes
 - ii. No
- (if Yes, elaborate)
62. Do you have other use of seaweeds apart from selling to earn money?
- i. Just for sell
 - ii. Process value added products (soaps, oils, lotions, etc.)
 - iii. Use in food (salads, juice, stews, etc.)
 - iv. Others (mention...)
63. What is your approximated yearly income from seaweed farming?
- i. ≤ 1 M
 - ii. ≤ 2 M
 - iii. ≤ 3 M
 - iv. ≤ 4 M
 - v. More (mention...)
64. How much do you wish you were earning?

- i. ≤ 1 M
- ii. ≤ 2 M
- iii. ≤ 3 M
- iv. ≤ 4 M
- v. More (mention...)

65. In what position does seaweed farming set you as a woman?

- i. Earns respect and ability to have a say in the community
- ii. Gives ability to be less dependent on husband / parents
- iii. Gives the ability to take care of the family and children
- iv. Others (mention...)

66. Do you have any system for financial management?

- i. VICOBA
- ii. Upatu
- iii. Business investment
- iv. Others (mention...)

ENVIRONMENT

67. Are there seagrass in your farm site?

- i. Yes
- ii. No

68. Do you know what coral reefs are?

- i. Yes
- ii. No

69. Are there coral reefs close to your farm area?

- i. Yes
- ii. No

70. Do you know the importance of coral reefs and seagrasses?

- i. Yes
- ii. No

(If yes, elaborate)

71. What measure do you take to ensure you are not destroying the coral reefs and seagrasses?

- i. Avoid placing farm on corals and seagrasses
- ii. Avoid tying on to corals
- iii. Avoid uprooting seagrass
- iv. Others (mention ...)

CONFLICTS WITH OTHER OCEAN USERS

1. Where is your farm sited in relation to other marine activities?
 - i. Area with just seaweed farming
 - ii. Fishing area
 - iii. River mouth
 - iv. Others (mention...)

2. What are the conflicts present around your working environment?
 - i. Other farmers crossing farm boundaries
 - ii. Fishermen fishing inside the farms
 - iii. Boats passing through farms
 - iv. Others (mention...)

3. What are the conflict management systems in place?
 - i. Village leaders interventions
 - ii. Seaweed committee interventions
 - iii. Resolve by yourselves
 - iv. None

4. How effective are the conflict management system?
 - i. Very effective
 - ii. Effective
 - iii. None effective

5. Do you think there is a need for a local mapping and zoning approach?
 - i. Yes
 - ii. No