

The context of gendered knowledge: A comprehensive minimum dataset on women in coastal communities

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Introduction

Local knowledge forms the basis of many systems of community-based renewable natural resource use and management and has been widely studied around the word. As a result, researchers and others are now familiar with local knowledge systems from societies based on agriculture, animal husbandry, forestry and agroforestry, and to a lesser but increasing extent, on fisheries (Ruddle 2000). As with all local knowledge systems, those in coastal societies are empirically based and practically oriented, and combine information on fish behaviour, marine physical environments, fish habitats, and other topics into comprehensive taxonomies (Ruddle 1994a, 1994b, 2000).

Local knowledge of tropical marine environments and resources has a large potential practical value in the modern world. It can provide an important information base for resource management where conventional data are scarce to non-existent, and can help pinpoint essential research needs.

Two of the principal commonalities of local knowledge systems pertaining to coastal-marine environments and resources identified by Ruddle (1993, 1994a), are that they are:

- based on long-term, empirical, local observation, that it is adapted specifically to local conditions, embraces local variation, and is often extremely detailed; and
- practical and behaviour-oriented, focusing on important resource types and species.

Further, Ruddle emphasised that among the structural and processual characteristics of local knowledge systems found around the world, skill and task training are age and gender specific and are taught by members of the appropriate sex (Ruddle and Chesterfield 1977, 1978; Ruddle 1993).

Gender issues in local knowledge

These characteristics suggest that both local knowledge and local knowledge systems are gender specific. Local knowledge is also "gendered", because men and women usually have different and often complementary economically productive roles, different resource bases, and face different sets of social constraints (Warren 1989).

If this is not taken into account, then any understanding of fisheries management systems will be seriously deficient, with often disastrous consequences for the design of development and assistance projects (Nauen 1989). "Both consideration of logical structures of total systems of local knowledge and an awareness of gender and age roles in rural society makes it self-evident that gender considerations are important in understanding local knowledge in fishing communities" (Ruddle 2000). There are at least four main types of gender differences in local knowledge systems (Norem et al. 1989; Ruddle 2000). Men and women have: 1) different knowledge about similar things; 2) knowledge of different things; 3) different ways of organising knowledge; and 4) different ways of preserving and transmitting knowledge.

But coastal-marine resource use and management is generally perceived of as being the domain of men. As a result, research and development projects have mostly focused on men's activities. Although women play important roles in coastal communities, hitherto their contributions have hardly been recognised because their activities are usually not seen as directly generating income.

As a consequence, in most parts of the world we know almost nothing about women's local knowledge, its usefulness and transmission. But before we can fill that gap we must fill an even larger void. Very simply put, it is the absence of informa-

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tion on what women living in the coastal zone actually do. This lack of comprehensive and internationally comparative data on women, parallel to that available for males, is crippling.

This is now becoming broadly recognised. As Williams (2001), for example, noted, "active networks have an impact on the ground: Networks at national level, with links to mainstream women's and gender programmes, can bring a chance of lasting impact. For additional impact, national networks and their focal points could benefit from regional linkage." She also pointed out the problem of a lack of hard facts on women's roles and contribution in every country and that more rigorous methodological and analytical tools are required.

Specifically, what gender and development in coastal communities urgently requires is an internationally comparable comprehensive instrument to reveal women's activities and contributions within their societies. This should consist of a basic minimal set of essential data such as I outline in this article.

My objective in this article is to present a first attempt at developing such a comprehensive minimum database on women's activities in fishing communities; my specific goal is to understand the background in which my own studies of gendered knowledge will be conducted. A second but equally important objective is to stimulate discussion and contacts to improve my own ideas and the conduct of research. The next step is to field test this instrument under various different social and cultural conditions, and then to revise it based on those exercises, together with comments and suggestions received.

Examples of sets of indicators or checklists

Various sets of indicators or checklists have been devised to measure the core role of women in developing countries. Five examples are given below.

- 1. World Development Indicators 2003, produced by the World Bank, includes a section on "Women in development" (female population percentage, life expectancy at birth, pregnant women receiving prenatal care and literacy gender parity index) and the ratio of female to male enrolments in primary and secondary school, among other topics. (World Bank 2003).
- 2. Human Development Report, produced by the United Nations Development Program (UNDP), includes a gender-related development index (GDI) and gender empowerment

measure (GEM). The GDI is a composite index using the same variables as the human development index. The difference is that the GDI adjusts the average achievement of each country in life expectancy, educational attainment and income in accordance with the disparities in achievement between men and women. The GEM is a composite index using variables constructed explicitly to measure the relative empowerment of women and men in political and economic spheres of activity. There are three indices: economic participation and decision making, political participation and decision making, and power over economic resources (UNDP 2003).

- 3. GenderStats, produced by The World Bank Group, is an online database of gender statistics and indicators based on national statistics, United Nations databases, and World Bankconducted or funded surveys. GenderStats includes indices such as labour force participation, education access and attainment, and health (World Bank Group 2003).
- 4. A Special Targeted Group of Development Projects, Women in Fishing Communities, Guideline, is a checklist prepared by FAO and which includes more specific questions about women in fishing communities. The questions include fishery related activities, household activities, and social activities of women (FAO 1988).
- 5. Meeting Information Needs on Gender Issue in Inland and Small Water Body Fisheries by Seki and Sen (1994) presents a guideline for a crossdisciplinary examination of gender in inland fisheries. This guideline contains sections on: "Information required for at the macro-level (Key questions on gender issues which should be answered during sectoral planning and project formulation)" and "Information required for inland and small water bodies fisheries at the micro-level. (Key questions which should be answered for development interventions in specific areas or communities.)".

These five checklists have weaknesses in terms of understanding the role of women and related gender issues in fishing communities. Checklists 1, 2 and 3 provide national-level data and statistics. As such they are too broad in scale and too generalised to provide information on women's activities at the community level. Communitylevel information is necessary for development programmes. Also, checklists 1 and 2 lack indices to measure women's and men's activities in agriculture, fishery and other industries. Checklist 3 contains some agriculture indices (agricultural inputs, output and productivity) but nothing on fisheries.

Checklist 4 was prepared to measure women's activities in a fishing community; however it is intended for the evaluation of projects aimed at women or women as a part of fishing communities. Thus, this checklist lacks some basic information, such as demographic topics, necessary to implement development projects. Also the questions in each part are too brief to provide a full understanding of women's activities. They should be extended and made more comprehensive.

The aim of checklist 5 is basically the same as that of this article. It recognises gender as a crossdisciplinary issue and attempts to present issues from a gender perspective. So information or data collected based on it would be used in programmes to be implemented at the site surveyed. Although, the guideline encompasses cross-disciplinary questions, some items regarded by many of the other documents mentioned here as being essential are not included in Seki and Sen's list. For example, it does not include items on social services or time use of women. These are both items of major importance in affecting women's activities in a household and a community. Without information on them, a programme would not be well planned and certainly would not be adequate for policymaking on gender issues.

Another major problem with checklist 5 is that none of the questions are suitable for making a comparative study among communities and countries. Since the questions are not defined specifically and lack essential parts, the user must supplement them with more specific questions. This is not a problem if the guideline is used only for a single location, but it is not suitable for regional comparisons within a country or for international comparative studies.

Components of the database

This section is composed of 18 topics with 297 questions. Each question needs to be answered to demonstrate women's actual activities. This instrument places special emphasis on information needed to implement income-generating activities for women. The 18 topics are:

- A. Demographic information
- B. Fisheries activities
- C. Non-fisheries activities
- D. Social services
- E. Decision making procedures
- F. Education
- G. Gender division of labor

- H. Time allocation
- I. Seasonal labour demand and women's time
- J. Access to financial support or loan
- K. Health
- L. Food security
- M. Nutrition status and physical status
- N. Marriage and family planning
- O. Income and expenditure
- P. Property rights and property management system
- Q. Socio-cultural norms and traditional beliefs
- R. Impact of condition changes: technological, economic, ecological, and social change

A. Demographic information

The community demographic situation

- 1. What is the total population of the community?
- 2. What is the sex and age ratio in the total population?
- 3. What is the crude birth rate in the community?
- 4. What is the life expectancy at birth in the community?
 - Men
 - Women
- 5. What is the death rate of the community?
- 6. How many households in the community?
- 7. What is the average household size?
- 8. What is the ratio of male headed to female headed households?

B. Fisheries activities

Fish production

- What are the types of fishing style in the community? (The place of operation, seasonality of main species availability, equipment, targeted species including women only fishing etc.)
- 2. Do women participate any of them?
- 3. What is the role of women in fishing?
- 4. How much do they get (money or the catch) from the job?
- 5. Is the women's share of the catch equitable to the men's?
- 6. How do women use the catch? (sell at a market, processing and sell, or consume at home, etc.)
- 7. Are the fisheries activities a part of women's routine?
- 8. Are the fisheries activities seasonal or year round?
- 9. Do women make fishing gear?
- 10. Are they paid to make fishing gear?
- 11. Do women repair or maintain fishing gear?
- 12. Are they paid for repairing or maintaining fishing gear?
- 13. What percentage of their work time is devoted to fishing activities?

Fish processing

- 14. Are people in the community engaged in fish processing (rate of male and female)?
- 15. How do they process the fish (processing technique)?
- 16. Are there adequate storage facilities for fish?
- 17. What are the causes of post harvest losses?
- 18. What equipment or facilities are used for processing?
- 19. Do women own the equipment or the facilities? If not, whose property is it?
- 20. What kinds of materials are needed (e.g. fuel wood, water, salt, etc.)?
- 21. Are they easily available or do they add time or monetary costs or burdens to women?
- 22. Are the processing activities individual or cooperative?
- 23. Do women control the activity and the income?
- 24. How do they use the processed fish?

Fish marketing

- 25. Is there an available market?
- 26. How big is it (i.e. number of shops or number of people who use it)?
- 27. Who comes to buy fish?
- 28. What other products do the women sell?
- 29. Who is the person responsible for selling fish at the market (man or woman)?
 - All fisheries products
 - Only some
- 30. How much of their fresh and processed fish do they sell at the market to purchase other living necessities?
- 31. Do women sell products as individuals or cooperatively?
- 32. Which species of fish are sold at the market and which are consumed in the household?
- 33. What is the reason for question 31?
- 34. How do women transport products to the mar-
- 35. How much does it cost for the transportation?
- 36. What kind equipment do women need at the
- 37. Who are the other sellers of fish and fish prod-
- 38. Do women face significant competition with other sellers?
 - From large-scale sellers
 - From male small-scale sellers
 - From female small scale sellers
- 39. Is there a government price policy?
- 40. Is the government price policy applicable to small-scale sellers? If not, what is the reason?
- 41. Are there any quality controls at the market?
- 42. To whom do women sell their products?
- 43. Are there market intermediaries ("middlemen") between the sellers and consumers?
- 44. Are the market intermediaries men or women?
- 45. What are their jobs?

- 46. Are they necessary?
- 47. How large is the spread between prices to middlemen and directly to consumers?
- 48. How much do women earn at the market?
- 49. Do women have control over the money earned there?
- 50. Do women have knowledge of marketing and bookkeeping?
- 51. Do women have any difficulties or problems at marketing?

Resource management of fisheries

- 52. Is there a traditional management system of fisheries in the community?
- 53. What are the fisheries common resources of the community area?
- 54. Are they the exclusive property of the community or is there free access to outsiders?
- 55. For each resource (sea, aquaculture pond and lakes, etc.):
 - Who/What is the authority?
 - Who has rights and what are they?
 - What are the rules applied to fisheries? Who performs monitoring, accountability and enforcement?
 - What sanctions are invoked?
- 56. Do women play any role in the traditional management system?

Aquaculture

- 57. Is the community involved in any aquaculture activities?
- 58. Is it industrial or small-scale aquaculture?
- 59. How many groups or individuals run aquaculture in the community?

For each type/location of aquaculture:

- 60. Where is the aquaculture located? How long does it take to get the right to operate?
- 61. Whose property is the pond, water supply and other related facilities?
- 62. Is it an individual or collective enterprise?
- 63. What kinds of species are farmed? (also the value of the species at the region)
- 64. Do women participate in aquaculture activities?
- 65. What is women's status in aquaculture activities (i.e. just a man's helper with no payment or with pay, etc.)?
- 66. What is women's role in aquaculture?
- 67. Is there a women's aquaculture management group? What are the activities of the group?
- 68. Do women control the activities and the income?
- 69. How do they use the products (i.e. consume domestically, processed and sold, sell at market, etc.)?
- 70. What materials do they need for aquaculture?
- 71. How much do the materials cost?

- 72. How much do they earn from aquaculture?
- 73. How much do women get from aquaculture?
- 74. Is the income equal for women and men workers?
- 75. What percentage of total income from fisheries is supplied by aquaculture?
- 76. What are the problems of current aquaculture in general? (technological, financial, environmental, etc.)
- 77. What are the constraints faced by women in aquaculture?
- 78. How much does it cost to run small-scale aquaculture?

C. Non-fisheries activities

Current situation

- 1. Are there any other income generating activities (farming, livestock, poultry, etc.)?
 - For men
 - For women
 - For children

For the women's activities

- 2. What are the products or services (products, unit price, etc.)?
- 3. Are they popular or in demand in the area? Why?
- 4. Who are the targeted people for the products or services?
- 5. Are the non-fisheries activities done by individuals or a cooperative?
- 6. If done by cooperative, how do they organize it and what is the advantage?
- 7. How much money does the activity earn?
- 8. Do women control the money?
- 9. How long do women spend on non-fisheries activities?
- 10. Do women have access to financial support or loans to run their non-fisheries activities?

Future possibility

- 11. Are there resources that are not yet exploited in the community?
 - Natural resources
 - Special valued food
 - Handicrafts
 - Services
 - Other skills
- 12. Is there a possible market or demand for the new resources?
- 13. Do women want to start new businesses? Why or why not?
- 14. Are there social or traditional constraints for women's participation in non-fisheries activities? What are they?
- 15. Is it possible for women to enter the market with their new products? What are the obstacles?

- 16. Is a loan or financial support available for women to start a new business?
- 17. Do women have any constraints to run nonfisheries activities (e.g. working outside of household or inside of the community)?
- 18. Do women work outside of household? If so, what work do they do?
- 19. Are there any customs or other social rules that prevent women from going outside their household to work?

D. Social services

- 1. What social services exist in the community? (Describe them with specific information)
 - Schools
 - Medical care service or public sanitation centre
 - Water
 - Fuel
 - Electricity
 - Market for food and necessities
 - Childcare centre, etc.

For each service

- 2. Is it accessible and responsive to people's needs?
- 3. Are these facilities available equally to both women and men?

E. Decision-making procedure

At the community level

- 1. What kind of organisation exists in the community? Men only, women only or mixed?
- 2. Are there any groups of women?
- 3. What are the aims or activities of the women's groups? Can they decide anything about their community?
- 4. Do women assume a leadership role in the mixed organisation?
- 5. Who comprises the community delegates at community meetings?
- 6. How do people decide the delegates?
- 7. Do women attend community meetings?
 - Yes: What do they do and do they voice their opinions?
 - No: Why they cannot /do not attend?
- 8. Are there any constraints on women expressing their opinions at community meetings?
- 9. Do women play an active part in the community decision-making process?
- 10. What do women see as their contribution in the community? Do men realise or admit it?

At the household level

- 11. Who decides these things in a household?
 - ask this question for each item in this instrument. (Fisheries activities, children's education, financial matters, food security, health care, family planning and property issues.)

F. Education

Enrolment and completion of formal education

- 1. What is the final education level for:
 - Females
 - Males
- 2. What are the reasons for girls and boys not attending school?
- 3. What percentage of women and men attain a level of literacy?
- 4. What percentage of women and men attain a level of functional literacy?
- 5. What are the constraints for each child to attend school (i.e. wanted child and unwanted, boys and girls)?

The quality of the formal education

- 6. What levels of education are available in the community or region?
- 7. What subjects of study does the school pro-
- 8. How much does it cost?
- 9. How long does it take to get to school from the community?
- 10. How many children and how many teachers in the school?
- 11. Are there female teachers at the school?

Informal education

- 12. Are there any types of informal education for females?
- 13. What are they? Describe the purpose, provider, prospective takers, contents, time and place,

G. Gender division of labour

- 1. On what tasks or responsibilities and to what extent are there traditional distinctions between the roles of women and men?
 - Fisheries activities
 - Other productive activities
 - Controlling cash
 - Social, community activities
 - Political, decision making activities
 - Household activities such as making meals, caring for children, fetching water, collecting fuelwood, going to market, and feeding livestock, etc.
- 2. In what activities are women engaged in their own right and responsibility and in which are they supportive?
- 3. Are there traditional written or implicit restraints or taboos on women engaging in particular activities? What are they? And why is it seen as so?
- 4. Does the community allow women to associate with men?

H. Time allocation

- 1. How do people allocate their time in a day? (Describe it from 0-24 hours. Needs to be focused on seasonal changes especially seasonal changes with regards to fishing targeted species or aquaculture procedures)
 - Male (old, middle and young)
 - Female (old, middle and young)
 - Percentage of paid labour time and unpaid work.
 - Percentage of time in domestic activities
- 2. Does the allocation change seasonally? Which
- 3. What are the core tasks and responsibilities of women that must be done either every day or at regular times throughout a year?
- 4. Do men and women have periods when they cannot work or have constraints to working?
- 5. What are the reasons for the period (e.g. religious, physical, social norms, and others)?
- 6. How do they supplement the lack of labour during the term?

I. Seasonal labour demand and women's time

This section needs to be completed monthly throughout at least an entire year. Households to be sampled should be typical of the community. If there are some groups that can be sorted by sets of seasonal activity changes, take samples from each group (e.g. fishing + fish pond, fishing + farming,

1. What is the family structure of the sampled family?

Relationship to HHH*	Age	Full-time occupation	Part-time occupation

*HHH = household head.

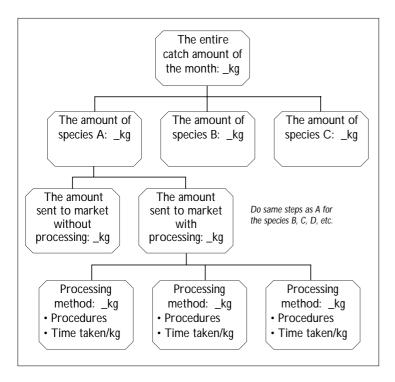
2. What are staple income-generating activities of the household?

(Answer only questions that are applicable to the sampled household's women.)

Fishing seasonal tasks

3. Describe the seasonal schedule of fishing activities (by month, targeted species and gear types).

- 4. Describe the fish catch amount and fish species per month from fishing.
- 5. Sort this using the structure shown immediately below:



- 6. The whole catch amount for the month.
- 7. Sort by species.
- 8. Sort by the distributions: the amount marketed without processing and the amount used for processing procedures in the community.
- 9. Sort by processing methods. Describe every step of the method and the time taken for each step.

Aquaculture seasonal tasks

- 10. Describe the seasonal schedule of aquaculture activities (by month, by species and methods).
- 11. Describe the fish catch amount and fish species and other characteristics per month from aquaculture.

Sort this along the structure above

- 12. The whole catch amount for the month.
- 13. Sort by species.
- 14. Sort by the distribution: the amount marketed without processing and the amount processed in the community.
- 15. Sort by processing method. Describe the each step of the method and the time taken for each.

Marketing tasks

- 16. Do women sell both fresh and processed fish at the market?
- 17. How many times do they go to market? Describe on a monthly basis.
- 18. How long does it take to get there?

Farming seasonal tasks

- 19. Describe seasonal farming tasks by month and crop type.
- 20. Describe women's tasks by month and time taken.

Marketing tasks: describe this part if they go to market only to sell crops.

- 21. Do women go to market to sell crops?
- 22. How many times do they go to market? Describe it on a monthly basis.
- 23. How long does it take to get there?

Other staple income-generating activities of women

- 24. Describe the tasks of each activity on a monthly basis
- 25. Describe women's time use for the activity by month.
- 26. Describe marketing time use of women for this activity.

J. Access to financial support or loan

- 1. What kind of financial support and loans are available in the community?
- 2. For each financial support or loan, who can use them and what is the purpose?
 - Female (married)
 - Male
 - Widow
 - Divorcee
- 3. For each financial support or loan, what kind of status of guarantee is required?
- 4. Can women access it (including widows and divorces)?
- 5. Do they include direct support for women's activities?
 - Fisheries related activities
 - Non-fisheries income-generating activities
 - Domestic activities (purchasing necessities or child care)
 - Savings or investment
- 6. What constraints are there on women accessing financial support or loans?

K. Health

General information

- 1. What kind of medical facilities are available in the community? Are there people who have sanitation or medical knowledge?
- 2. What types of toilet do they use?
- 3. When men fall sick, do they see a doctor?
- 4. When women fall sick, do they see a doctor?
- 5. Where do they obtain basic sanitation knowledge?
- 6. What kind of information do they possess about basic sanitation?

7. How does disease or AIDS infection change women's and families' lives?

AIDS and knowledge of it

- 8. How many people have died from AIDS and how many are infected?
- 9. How much do they know about HIV (how to transmit or risk to children)?
- 10. How do they obtain information about HIV? Are any programmes available?
- 11. Do they know about contraception?
- 12. Where can they obtain contraceptives and information?
- 13. Do men offer to use condom?
- 14. Can women ask their husbands to use a con-
- 15. How much do condoms cost? Are they affordable?
- 16. Do they take counselling (test) for HIV? Can women ask their husbands to take it?
- 17. How do they react if they know their partner is HIV positive?
- 18. How do people react toward people who are infected with HIV: Toward men and women (partner's family, village people, and others)?
- 19. Do men have sexual relationships inside/outside a community and who are the possible partners?
- 20. Is it permitted for a man (married and unmarried) to have sex with a woman who is not his wife?
- 21. Do women have sexual relationships inside/outside a community and who are the possible partners?
- 22. What are the reasons for men and women to have sexual relationship with persons who are not their husbands/wives?

Children's health

- 24. What are the causes of death of children under 5 years of age?
- 25. Do all children receive vaccinations?
- 26. Do mothers know about children's diseases and their causes?
 - Diarrhoea and contaminated water relationship
 - Other local diseases

Reproductive health

- 27. What is the rate of maternal death in a community?
- 28. Where do they give birth?
- 29. Who are the possible people who help women give birth? Are they trained?

Water supply

- 30. Where do they obtain water for drinking?
- 31. Where do they obtain water for household activities?

- 32. Who is responsible for fetching water?
- 32. How long does it take to bring water to the house?
- 33. How much do they bring at one time?
- 34. Is the water or water source safe?
- 35. Do they know that unsafe water causes diarrhoea?

L. Food security

- 1. How do people obtain food (fish, meat, vegetable, dairy products, etc.) (at market, from small agriculture, and fishing)?
- 2. Who is responsible for each basic foodstuff and overall food security in a household?
- 3. Is enough food available through a year? (Chronic shortage, seasonal or transitory short-
- 4. What are the reasons for the shortage (shortage of food amount itself or lack of purchasing
- 5. If they cannot have enough food, do they have a way to supplement?
- 6. Is enough quality and variety of food avail-
- 7. Are people satisfied with the food available?
- 8. Do people eat various kinds of food (dairy products, egg, seafood, meat, beans, vegetables, potato, fruits, grain, sugar, fat, etc.)?
- 9. How much does a household spend on food (ratio to income)?
- 10. How do they use their fish catches?
 - Percentage consumed in the household
 - Percentage sold or processed for sale
- 11. What percentage of the fish catch is consumed by the household and what percentage is sold?
- 12. Is fisheries the main or only source of food for a household?
- 13. What are the other sources of food in the community or the household (farming, gardening, livestock, poultry and fruit trees, etc.)?
- 14. What are the potential food sources?
- 15. What are the potential food sources in the community?

M. Nutrition status and the physical status of women

- 1. How many calories do they take in a day?
 - Men (old, middle and young)
 - Women (old, middle and young)
- 2. What kind of diet do they have?
- 3. Are there any differences in diet between men and women?
- 4. Is their way of using food the best possible way to take full advantage of its nutritional value?
- 5. What is their physical status (measure heights and weights)?

N. Marriage and family planning

Marriage

- 1. How old are women when they first marry?
- 2. How old are men when they marry?
- 3. Why do women and men marry?
- 4. Do they have the custom of bride-price (marriage portion to bride family) or dowry?
- 5. Is it a patriarchal or matrilineal community?
- 6. After marriage, where does a couple live?
 - Wife moves to her husband's house?
 - Husband moves to his wife's house?
 - Both move to another location?
- 7. How does the inheritance system work by marriage formation (Who inherits whose property land, house, livestock, fishing gears and fish pond, etc.)?

Family planning

- 8. Do men and women have a notion of family planning?
- 9. How do they practice it or try to practice it?
- 10. How many children does one household have on average in the community?
- 11. What is the reason for having children?
- 12. How many children are wanted and unwanted?
- 13. Do women know about contraceptive methods?
- 14. Do men know about contraceptive methods?
- 15. Do people use contraceptive methods? Why or why not?
- 16. How many children does a couple want to have?
- 17. How many children do they actually have?
- 18. How often do women give birth? (the interval of child bearing)
- 19. Who controls family planning?
- 20. Is there a place where men and women can obtain family planning information?
- 21. Do people use the place where they can obtain family planning information?

O. Income and the expenditure

- 1. What is the breakdown of all income in a household throughout a year?
- 2. What is the breakdown of all expenditures in a household? For whom is the money used?
- 3. What percentage of income is earned by men and what by women?
- 4. What percentage of total household income is derived from fisheries?
- 5. How much do women and men earn from fisheries related activities?
- 6. What are other sources of income?
- 7. How much do women and men earn from non-fishery related activities?
- 8. How much do they earn for each month or sea-

- son? Are the fishing activities year round or seasonal?
- 9. Who controls the family's cash income?
- 10. How is the income distributed?
- 11. What is per capita income per household (total divided by family size)?
- 12. How does a household use the surplus income?

P. Property rights and property management system

- 1. What are the individual properties in a community? And who owns them?
 - Fishing gear
 - Land
 - House
 - Fish pond
 - Property rights on other resources like forest, river, etc.
- 2. For each of the above, are there written ownership rights?
- 3. According to the written certification or the rule in a community, is it possible for women to own property?
- 4. Are there any community properties (except fishery-related properties)?
- 5. For each of the types of property listed in response to question 4 describe:
 - Authority
 - Rights
 - Rules
 - Monitoring, accountability and enforcement
 - Sanctions
- 6. Do women play any role in imposing the traditional management system on community property/resources?
- 7. When a couple divorces or is broken by death, who inherits the property? (widows)
- 8. Is there any legal support for women to have property rights? And do they understand the system and is it accessible to women? Why or why not?

Q. Socio-cultural norms and traditional beliefs

Women's status

- 1. What is the general image of an ideal man and woman?
 - A male
 - A female
 - A boy
 - A girl
 - A married male
 - A married female
 - A widow
- 2. Ideally, in this society, for every item in this instrument what should only women and girls do or be?

- 3. Ideally, in this society, for every item in this instrument what should only women and girls not do or be (disadvantageous norms on
- 4. Ideally, in this society, for every item in this instrument what can only male and boys do or
- 5. Ideally, in this society, for every item in this instrument what can only women and girls do or be (advantageous or protective norms on women)?
- 6. What do men think about women going outside of household or the community to work?
- 7. What do men think about women having their own income-generating activities inside of household or in the communities?
- 8. What do men think about women working with men?
- 9. What do men think about women obtaining an education or training to have income-generating
- 10. What are other aspects that determine or limit women's activities (e.g. religion, myths, etc.)?

R. Impact of condition changes: technological, economic, ecological and social changes

Technological changes

- 1. Have new technologies been introduced to the community? (If fishery related, go to #11 below). What is it and how does it help people and who is the targeted of the new technology?
- 2. Does it work as it intended to? Does it help the targeted people?
- 3. How has it influenced people's lives and the traditions (income, living condition, women's status [reduction of labour burden], etc.)?
 - Men
 - Women
- 4. How do people evaluate it?
 - Women's point of view
 - Men's point of view

Economic changes:

- 5. Have new economic items been introduced to the community?
- 6. How have they influenced people's life and the traditions (income, living condition, women's status, etc.)?
 - Men
 - Women
- 7. How do people evaluate them?
 - Women's point of view
 - Men's point of view

Social structure:

8. Have new social structures been introduced to the community?

- 9. How have they influenced people's lives and the traditions (income, living condition, women's status, etc.)?
 - Men
 - Women
- 10. How do people evaluate them?
 - Women's point of view
 - Men's point of view

Fishery condition:

- 11. Have new fishing technologies been introduced to the community (including aquaculture)? And who are the targeted people?
- 12. How have they influenced people's life and the traditions (income, living condition, women's status, etc.)?
 - Men
 - Women
- 13. How do people evaluate them?
 - Women's point of view
 - Men's point of view
- 14. How have fishing conditions changed recently?
 - Amount of the catch
 - Species
 - Income (price of the fish)
- 15. What is the reason for the changes in fishing conditions (industrialise fishing impact, failure of resource management, etc.)?
- 16. What impact has the change had on the roles, status, etc. of women?

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Acknowledgements

I am most grateful to Professor Kenneth Ruddle, supervisor of my MA programme and thesis, and friend, who has never failed to encourage me in my study of gender. His almost three decades of writing on gender and age in local knowledge and development issues has helped me greatly in developing my own ideas.

