Module on Documenting Women's Knowledge in Agriculture



PESTICIDE ACTION NETWORK ASIA AND THE PACIFIC

## Module on Documenting Women's Knowledge in Agriculture

PAN AP in collaboration with SIBAT KHOJ RRAFA

#### Module on Documenting Women's Knowledge in Agriculture

#### **Collaborating Groups**

Sibol ng Agham at Teknolohiya (SIBAT, Philippines) Khoj Society for People's Education, Pakistan Foundation of Reclaiming Rural Agriculture and Food Sovereignty Action (RRAFA, Thailand)

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Background

Documenting women's knowledge in agriculture is recognised as important in pursuing the recognition of women's role in agriculture, a core objective of Pesticide Action Network Asia & the Pacific (PAN AP) and its partners.

Women's Wisdom, consisting of several case studies on Asian rural women came out as the breakthrough effort in 2006. It was followed by a second set of case studies that discussed the roles, knowledge and skills of women in Asian agriculture.

The abovementioned case studies have been made as basis to develop this **Module on Documenting Women's Knowledge in Agriculture.** This material is intended to serve as guide for researchers, civil society organisations, community organisers, and development workers -- in documenting the inspiring stories on the roles, knowledge and skills of the women force in Asian agriculture.

The specific modules presented here provide guidance on documentation of women's knowledge in the following fields of their involvement, namely: crop production, post-harvest processing and livestock keeping. The indicators, methodologies and tools – the parameters presented in each module -- are derived from the case experiences of women in the communities written by partners of PAN AP from three countries, namely: RRAFA (Thailand), Khoj (Pakistan) and SIBAT (Philippines). While the effort recognises the peculiarities across countries in the Asian region, as revealed in the diverse pictures of women's roles in the case studies – it is found that the parameters can well be derived as basis to develop systematic guidelines to aid future documentation – that is, retaining in each module the specific frame and context of lives of rural women in each country.

This is an attempt by PAN AP and its network partners to participate in the global campaign to raise consciousness that will translate insights to actions towards empowering women.

Women constitute half of the agricultural force that provide the food and life-giving support to Asian peoples. More than that, women provide the sustaining force and elements to agriculture and rural lives: conservation, management, nurturance, enhancement, sustainability. These are what an empowering documentation process specifically aims to reveal.

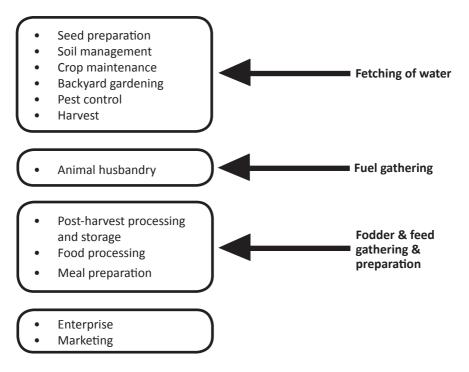
Framework of Module Development

The three modules developed and presented here were based on case studies conducted in three countries of Asia. It involved key areas of women's involvement in agriculture, namely: crop production, livestock keeping and post-harvest processing and marketing.

## 1. Framework of Analysis

In developing the case studies and this Module, the following have been the premises on women's roles, knowledge, skills and practices – invoked to guide the analysis of findings.

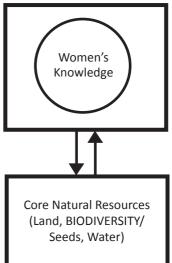
*First, women are farmers and are key food producers in traditional agriculture.* Their roles, and associated with these, women's knowledge and skills are vitally necessary for traditional food production, and for ensuring food security for the household and community. Women's work in traditional agriculture is both wide-ranging and multi-faceted throughout the year. Hence, women's intimate knowledge of seed preparation and soil management, of plants and pest control, post-harvest processing and storage, livestock keeping and animal husbandry as well as food processing and meal preparation – have contributed immeasurably to the survival and sustainability of rural households and communities. The multiple tasks of women in traditional agriculture are shown in the diagram.



Second, women are designated custodians of traditional seeds who have knowledge and practice on their selection and conservation. They have the capacity to determine good harvest, and are able to select and combine seeds that bring about sustainability in traditional agriculture. Women hold most closely the principle of 'seeds as life' for the community.

Third, women promote crop diversity in traditional farming because of their reliance upon the diverse agro-environment. Women are managers of the environment and play a central role in sustaining the use of biological resources and enhancement of genetic resources. The stability and sustainability of the intrinsically interwoven ecosystem of forest, crops and livestock depended on the practices and knowledge systems of the local women. Their collection of fodder, fuel and other forest material was vital to the continued flow of resources that maintained the local economy in a sustainable way<sup>1</sup>. In traditional agriculture, women have control and access over genetic resources.

Fourth, women's knowledge and perspective of knowledge creation are different from those of men's, and take birth from their roles as farmers and livestock keepers, food managers, pro-creators, healers and caregivers. What is important is to understand the purpose and logic behind the creation of knowledge by rural women, and to understand the construction, history and politics of gender relationships so that the factors behind that knowledge by women could be well understood.



Fifth, rural women have remained invisible farmers as they were subordinated and discriminated through patriarchy, class, caste and ethnicity within traditional agriculture. Though women played an active role in the creation of knowledge, neither in tradition nor in the present day knowledge systems that their critical role has been acknowledged. Thus, there is little or lack of recognition of their significant role and contribution to agricultural development. The social, cultural and religious norms that entrench women's role as secondary and subordinate to men impinge on their basic rights and impede their potential to decide and participate in developing traditional agriculture where they play a key role.

<sup>&</sup>lt;sup>1</sup> Shiva, Vandana. (1994) 'The seed and the earth: Biotechnology and the colonisation of regeneration' pp. 128-143 in V. Shiva (ed.) Close to home: Women reconnect ecology, health and development. London: Earthscan Publications.

Sixth, changes in agricultural setting (i.e., the transformation of agriculture from traditional to corporate-led primarily driven by Green Revolution) have resulted in the erosion of women's roles and further erosion of society's regard for women. Hence, women's role in agriculture has never been static; it changed with the changing realities and contexts. After the Green Revolution, women are further marginalised and have been thrown out of what had been their sphere of activity all along. The rapidly changing roles have serious repercussions on their contribution in the creation of knowledge. The introduction of modern and corporateled agricultural technologies had resulted in women losing their roles and associated control over genetic resources and in areas they used to have considerable control in production. Global mechanisms such as the World Trade Organisation (WTO), Trade-Related Aspecst of Intellectual Property Rights (TRIPS) and Free Trade Agreements (FTAs) serve to complete the removal from women their roles and control over genetic resources.

The loss of traditional seeds meant the loss of this central role in traditional agriculture; and *vice-versa, the loss or decline of this role signifies the decline of the traditional agricultural system.* 

Seventh, corporate-led agriculture found rural women displaced, marginalised and their voices further unheard. Land, seeds, genetic resources, and water became commodities to be traded for profit. This commodification was legalised for corporations to own and trade seeds and genetic resources. This aggression in agriculture trampled and violated the inherent rights of rural women and agricultural communities.

Eighth, rural women together with the peasant and indigenous communities resisted and continue to resist against the instrumentalities that drove their displacement, further loss of seeds and erosion of traditional agriculture. The areas of struggle have steadily widened - from protesting against the incursion of transnational corporations to resisting the use of agrochemicals; from opposing the entry of genetically engineered (GE) seeds to documenting indigenous and traditional knowledge systems; from initiating seed exchanges and developing seed

banks to lobbying existing international conventions and treaties that serve as tools for advocacy and platforms of resistance.

Ninth, biodiversity-based ecological agriculture, in the context of the *global resistance against corporate agriculture, find important the efforts* to recover and reinstate the role of women in sustainable agriculture. The struggle to regain resources requires the relocation and reinstitution of women's role and value in agricultural production. There is a strong need to shift from the current chemical-based industrial agriculture systems to other alternative models known as sustainable, ecological, organic or biodiverse, depending on the specific methods used. What is crucial is that it allows communities to decide their own farming systems, crop varieties and inputs. It gives emphasis on community participation and innovation. It provides space for communities to define their own food and agricultural policies and reclaim community control over seeds and productive resources, in the framework of people's food sovereignty. Pushing for biodiversity-based ecological agriculture is a process of empowerment for women farmers and indigenous women. Being key food producers in agricultural communities, it is the women's assertion of rights to land, seeds, water and other productive resources; a crucial step towards reclaiming their knowledge and skills; and a process of recognising their roles and contribution in agricultural production.

## 2. Country Research Teams

The study recognises the need of a researcher who is gender sensitive, understands the power dynamics that define gender roles and responsibilities, is sensitive to the cultural and social niceties, and is trained in conceptual analysis and qualitative research. Researchers are required not only to have an understanding of the research methodology but must have a sympathetic awareness and sensitivity to issues and situations. A belief in woman's ability to participate in community development activities and planning is of vital importance. These are the qualities required of all lead researchers of the project.

## 3. Methodology

Documenting women's knowledge requires a methodology that is participatory, inclusive and leads to a process of learning and exchange of ideas. It cannot be a mechanical and isolated study of purely technical points. The researcher has to be free of the narrowness of the so-called modern scientific method.

It is agreed on that doing research with women or about women especially in the field of agriculture is a challenging task because their work is largely different from research of other sectors; their contribution is not recognised, their roles are invisible and they are hidden behind a malecentered ideology of the division of labour and power relations.

In this project, it was crucial to document the process of research (process documentation). This involves the steps, methods and techniques used in doing the documentation; what are the methodologies used and how these were used; the difficulties and gaps in doing the research; and how useful were the tools to the actual documentation.

*Pakistan* indicated that its process was not divided into mutually exclusive compartments of data collection, data compilation, data analysis and report writing. Instead a holistic and participatory approach was adopted. The researcher actively participated in all the processes herself.

**Community immersion or integration** is a methodology employed by all. Given the complex and layered nature of the socio-cultural dynamics influencing women's lives in rural societies, it was thought imperative to take necessary steps to prepare the grounds for reaching the minds and hearts of women involved in the research. Staying with the community helps build relationship and rapport, enables to win mutual trust and have insights into the socio-cultural conditions, issues and the internal gender

dynamics. The integration process leads to establishing a real dialogue between the researcher and the respondent participants.

A **questionnaire** was developed for each country team to ensure that each participant answers exactly the same questions. As the nature of the research with women demanded more of qualitative data, the questions were decided to be open-ended. Open-ended questions lead to semistructured interviews. The questionnaire was designed for free flowing interviews. It was not planned to be a mechanical question-answer exercise. Instead of taking notes on the paper, a sound recorder that was less threatening for the respondents was used and in the absence of a third strong element in between was a free flow of ideas and a real dialogue. The strong rapport between the researcher and the respondents further reinforced the dialogue. Listening to the recordings is time consuming but it was found worth the effort. Free flowing interviews offer much more than planned originally.

*Thailand* employed qualitative research employing the method of indepth interview and focused group discussion. The objective is to study the role of women in the development of alternative agriculture in production, processing and marketing with consideration of the gender dimension in the development. It employed a questionnaire to gather general information from respondents that includes questions on age, educational background, religion, duration of marriage, family members, main and supplementary occupations and economic status. In-depth interviews include questions on the following areas: (1) Reasons on adopting or not adopting alternative agriculture; (2) Details of alternative agricultural activities; (3) Women's role in alternative agriculture (production, processing and marketing); and (4) Roles of women and men in alternative agriculture (time use, division of labour, access to resources with opportunity to get training or join exposure visit, household financial management and participation in decision-making). **Observation** helps in gathering information, especially when one is staying with the community. The *Philippine Team* required community immersion for the entire research work. For *Pakistan*, the following may be known through observation: Who makes decisions in daily household matters? For instance, food of whose choice is cooked and why? Who decides about match making? Who is the real decision maker in case of joint families? What are the relationships amongst different members of the family? What are the contributions of various family members in housework? Are there any limitations on women's movement? What are the religious beliefs and their impact on women's lives? For *Pakistan*, direct observation was also critical in cross-checking data obtained through interviews. A direct observation checklist was prepared that included a section on perceived relationships among family members which was important in analyzing male-female dynamics in the household.

Focused group discussion or FGD is a methodology used by all three country teams. Thailand used open-ended questions for its FGD to share ideas on the challenges and direction of women's participation in the development process. During the focused group discussion, the research team took notes and recorded all details of the interview and discussion. After the interview and FGD, the research team transcribed the records. When the team found that the information was not clear, or still insufficient, the team had additional interview or sought additional information to make it clear and complete. For Pakistan, FGDs helped cross-check the data collected so far. More importantly, they allowed for example, the expression of controversial issues, power struggles and collective concerns. For instance, a row between a landless and a landed woman on their respective income levels raised a number of issues around landless women, their struggles, their contribution in agriculture and their knowledge. FGDs also brought to the fore persons known for their unusual contribution in the socio-political or technical sphere of the community life. These discussions thus paved way for case studies on various facets of village life, skills, knowledge and contributions.

The *Philippine* research team used FGDs to document indigenous knowledge within the changing contexts (showing political and socioeconomic conditions) and the barriers of modern agriculture, biodiversity erosion and patriarchy. Through FGDs, the team was able to delve into the status of women in the communities. Women's knowledge and skills, perspectives and decision-making processes were also discussed. The FGDs also revealed how women were able to develop their skills and knowledge in agriculture, and the theory and philosophy behind the knowledge and skills; their oral tradition of songs, spiritual and cultural practice; and the various community dynamics and practices particularly where women played significant roles.

Key Informant Interview or KII is another methodology used by all.

*Thailand* employed **Participatory Rural Appraisal (PRA)** to gather information on community reality with the participation of community members. It covered the following aspects with corresponding objectives, thus, leading to a mutual analysis of findings:

- Physical: to understand the natural environment and setting of the area.
- Biological: to understand the production system of sustainable agriculture in the area.
- Socio-cultural: to understand social and cultural context, economic and management systems in the area.

*Pakistan* used **Rapid Appraisal Techniques** to help gather information and insights in a very short span of time and support focused group discussions on both technical and social issues.

- Seasonal calendar to see labour patterns according to seasons
- A woman's life cycle diagram
- Mobility mapping

- Daily routine diagram to assess the typical daily pattern of women's lives. It was useful in determining the burden of household responsibilities and the appropriate schedule for future community activities. It was also useful in cross-checking women's information about their time use.
- Decision-making matrix
- Historical diagramming
- Preference ranking

The *Philippine* research team used the following as tools for the research: timelines; mapping; matrix ranking; calendars; diagrams; records; transects.

**Secondary Literature** with reference to the documentation of indigenous knowledge, especially women's knowledge was also reviewed. The *Thai* research team studied information from documents written by other people, such as books, research, dissertations and other related documents.

For *Pakistan*, field validation of the traditional knowledge and skills was not deemed necessary as a lot of the knowledge is still in practice, in scattered unorganised form in the communities. Instead, observation method was used to document their knowledge and practices. For the *Philippine* team, validation process was not limited to data collection; it involved the community in the research processes as well as giving back to the community what information was obtained. This ensured that there is community ownership in the documentation process and served as a good tool for empowerment.

The *Thai* research team needed to check accuracy of the information by visiting some families to gain understanding of the situation of households. They used the tool of observation for behaviours and household environment; and interviewed other family members and personnel concerned with alternative agriculture. They also used triangulation techniques obtaining information from several sources to get the most accurate information.

## 4. Limitations

## Pakistan

While researching with rural women, *Pakistan* found the following limitations in the questionnaire-based semi-structured interviews:

- The depth of answers gathered is limited.
- By designing a "list of questions", a researcher decides in advance what is important and what is not important.
- It is difficult to win the trust of women. The distance between the researcher and women remains wide.
- It is more of extraction of information than anything else.
- Though a lot of ice is broken, a lot of personal, social, cultural and political information is held back.

For instance, they do not talk about the restrictions imposed upon them to visit their paternal family, if there are any. They do not give the real picture of the discrimination against girls and women in terms of the quality and quantity of food. They do not talk at all about honour killing. In agriculture, they want to give a "cleaner" picture of themselves and generally deny their role and contribution in agriculture. Secondly, they see agriculture in terms of ploughing and irrigation, the jobs which are not traditionally done by women. They deny, therefore, that they also are farmers.

For a researcher, sometimes it becomes difficult to understand the cultural expressions of land ownership in terms of size, women's ownership of land and the number of children they have.

The above shows that rural women and the researcher may have different contexts and perspectives about different things. Many times they may make the same statement but with different meanings because they may represent two different realities. The said limitations make a very strong case for participant observation method.

### Thailand

The language problem was met in the Thailand research because the respondents spoke the native Phu Tai dialect. This posed some communication problem between the researchers and respondents and the difficulty of understanding some responses.

The volunteer lacked adequate skill which resulted in longer time spent or some delay in data collection.

## Philippines

*Philippines* experienced several limitations in doing the research. First, there was the language barrier met because the respondents and researchers spoke different dialects. The danger of losing information or incurring misinformation through translation was seen early. The team revalidated the understanding of the questions by the respondents and the information gathered from them. Second, written historical documentation available for the research is recognised to be very limited as community history is passed on mostly through oral tradition, songs and dances. Third, the farms where most IKS (indigenous knowledge systems) are practiced are very remote which took hours for researchers to reach. Lastly, the researchers, being not familiar with the local conditions, were required to be familiar with such, to understand the culture and be sensitive of community processes and behaviour. The researchers have to earn the trust of the people before they are able to draw out information.

Lessons Learned

#### Pakistan

The experience of Pakistan in documentation work highlighted the need for innovative ways to get information. Getting the information cannot be straightforward and often, schedules cannot be met due to the varied situations of women in their daily rounds of house and farm work. Informal interview while in the community is one effective method found.

#### Philippines

Community immersion is necessary to get information. One cannot get the information simply through short visits, especially unscheduled ones, from women who have multifarious and heavy tasks in the household, field and community. The research team needs ample time to observe their activities and the relationships with men/husbands to get the picture of gender roles.

There is also a need for social and community preparation in all cases; the community has to be informed beforehand on the purpose of the visit.

#### Thailand

In the in-depth interview, the researcher should interview the wife separately or when the husband is not around. In the presence of the husband, it is often that the wife will not answer. It is found that interviews with and without the husband present sometimes yield different responses from the wife. In the family dynamics, it is rendered important to keep confidential the information gathered from the women. Finally, the interview process should not create a problem between the husband and wife.

It is necessary for the researcher to get acquainted with the women's group. Building the trust will establish good relationship and will enable the researcher to gain more substantive data.

The research process ascertained that women possess knowledge in all daily productive activities, which the women did not at first realise as local wisdom. After joining the research, the women gained and showed more confidence, and were able to share their knowledge with the public.

The researcher also realised the important roles of women, and that the data gathered can be used for developing work among women.

Documentation Modules on Women's Knowledge in Agriculture

## DOCUMENTING WOMEN'S ROLES AND RESPONSIBILITIES IN THE COMMUNITY AND IN AGRICULTURE

Rural women in the Philippines, Thailand and Pakistan – wives, mothers and daughters -- are the main food producers and participants in agricultural food production. Their roles span in nearly all the stages of main crop production, and embrace the most critical task of seed conservation. They take charge of all other food production activities that include: vegetable growing, livestock raising, food collection and gathering and food preservation and preparation. In most cases, they bring and sell their farm produce in the nearby market for cash contribution to food and household needs. As main keepers of the household, in-charge of child care and rearing, rural women also create household remedies from plants and farm products.

These food production roles extend to the activities of importance to some rural communities. For instance, women's role in food production and preparation are portrayed in traditional community gatherings and festivities (such as in Thailand). Their voice in decision-making however, is often not recognised and counted in the lives of many rural societies.

Within these range of women's roles are gleaned the areas of control and access by rural women in traditional agriculture despite the persistence

of patriarchal relations in the household and community. However, these areas are weakened with the obliteration of traditional agriculture by profit-motivated incursion of modern agriculture, mounting on the feudal and patriarchal relations in rural agricultural societies.

The documentation of their roles, knowledge, skills and practices in agriculture and in the community, requires a grasp of the changing context of the times.

	PURPOSE	METHODOLOGY & TOOLS	EXAMPLES
1	To identify the overall ROLES and RESPONSIBILITIES of women in AGRICULTURE	Semi-structured interviews with women using questionnaire Semi-structured interviews with men Focused Group Discussion Gender disaggregated data or checklist on farm responsibilities	The Blaan indigenous women in southern Philippines contribute to nearly all stages of the production of the main crop. They are also the principal vegetable and rootcrop producers and thus take care of the survival food in critical times. In the Punjab plains of Pakistan, women play an active role in almost all non-mechanised farm operations except irrigation. The food they prepare, process and preserve does not restrict their activity to the confines of the house but they have to work side by side with men in the agricultural fields to produce and harvest that food. They are responsible to store the seeds, to transplant the pady, to grow vegetables for domestic consumption and commercial use and to root out the weeds in the fields. Livestock keeping is the mainstay of the agricultural activity in rural Pakistan, where women play a direct role. In Thailand, vegetable growing is a task of women in Phu Tai agriculture. Women collect and prepare vegetable seeds for cultivation, and takes care of seed sowing and plot management up to harvest of the crops. They know the kinds of vegetables to be grown in the dry season after rice harvest. Before growing, women sort out the good seeds that have high rate of germination.

	PURPOSE	METHODOLOGY & TOOLS	EXAMPLES
2	To identify the overall ROLES AND RESPONSIBILITIES of women in the COMMUNITY	Observation of and FGDs on local traditions expressed in local festivals, weddings, mournings etc. Focused Group Discussion Review of literature including folk songs, local proverbs and sayings that tell of the women and their roles in the lives of the community	The Phu Tai women of northeast Thailand are key participants in traditional community festivities particularly related to agriculture. Food and food preparation are central to the community that are mainly held and cared for by the women.



Philippines

#### DOCUMENTING WOMEN'S KNOWLEDGE IN CROP PRODUCTION

In Philippine traditional agricultural system, women are primary food producers, being crucial to genetic selection and good harvest of the rice and corn staple crops, and in-charge of vegetable and rootcrop production in the home gardens and swidden farms. Household food security is thus a function of women.

Traditional agriculture or its elements thereof are yet sustained in many indigenous communities working their small farms as subsistence producers. Vestiges of traditional farming in these areas still see the varied roles of women in **farm planning and management**, **planting**, **crop care and management**, **up to harvesting**. Women perform these tasks alongside their roles in the care of home and family within usually patriarchal or male-dominated relations.

And in these areas, **indigenous women farmers remain as the collectors**, **keepers and propagators of seeds**, and thus have a central role to play in ensuring good harvest. They have a special knowledge of the properties, value and uses of diverse plants for nutrition, health and income. Women's specialised knowledge of domesticated crop species and varieties extend to wild plants that are used as food in times of need or as medicines and sources of income. This indigenous knowledge is highly sophisticated and is traditionally shared and handed down to generations. Through experience, innovation and experimentation, sustainable practices are developed to protect soil, water, natural vegetation, including biological diversity.

Women are thus regarded by the community as experts, holders and preservers of indigenous knowledge on farming and plant genetic resources management, conservation and development.

The role of women in agriculture has been widely weakened by the incursion of modern agriculture in the Philippine rural areas, launched through the wide transformation of rice farms through the International Rice Research Institute and the profit motives of agro-chemical corporations. Women's role in farm maintenance had been displaced by machines and chemical inputs. Their knowledge in diversity had been weakened with the replacement of domesticated crops by cash mono-crop as well as the destruction of the environment that support crops and wild plants. And with the loss of the traditional seed resources, women's role in conservation, and many traditional practices of conservation and cooperation, are correspondingly lost.

Only in few indigenous communities that have kept elements of traditional farming intact and traditional seeds largely conserved, do we still find the role of women respected and nurtured.

Documenting women's knowledge in crop production requires a good grasp of the above framework.

PURPOSE	METHODOLOGY & TOOLS	EXAMPLES
Focus Area 1: FARM PLANNIN	IG AND MANAGEMENT	
1-a PLANNING PROCESS		
To identify the ROLE of women in farm management e.g., - assessment - planning - evaluation - selection of components - budgeting	field immersion during the cropping season (staying in the areas, doing observation and sharing); tools that may be used include: video camera, recorders, journals and field notes focused group discussions (FGDs); tools that may be used include: questionnaires, matrices key informant interview (KII) with selected individuals; tool: KII interview form gender role disaggregation; tool: gender role disaggregation matrix	The Blaan family is strongly paternal. The women's position is almost always secondary except when it comes to food production. Blaan women play a decisive role in in-situ conservation, management and improvement of genetic resources for food and agriculture.
To document the KNOWLEDGE of women in the farming system e.g., - varieties in season - inputs needed -farming system or crop pattern -oral traditions	field immersion during the cropping season; tools: cameras, video cameras, recorders; journals and field notes FGDs; tools: questionnaires, matrices interview with the farmers; tool: KII interview form seasonal graphs and calendars	Blaan women are experts in plant genetic resources. Blaan women's specialized knowledge of the value and diverse use of domesticated crop species and varieties extend to wild plants that are used in times of need or as medicines and sources of income.
To document the SKILLS AND PRACTICES of women in farm management e.g., - planting methods - rituals and ceremonies	field immersion during the cropping season; tools: cameras, video cameras, recorders; journals and field notes FGDs; tools: questionnaires, matrices interview with the farmers; tools: KII interview form farm lay-out	The decision of what to produce and conserve depends on the know-how and perception of what is most useful to the household and local community.

PURP	OSE	METHODOLOGY & TOOLS	EXAMPLES
INNOVATI MECHANI	y and document ONS/ COPING ISM of women anagement	field immersion during the cropping season; tools: cameras, video cameras, recorders; journals and field notes FGDs; tools: questionnaires, matrices interview with the farmers; tool: KII interview form	The Blaan women attend to survival crops during drought and calamity periods.
Facus Area 2. F		timelines	
Focus Area 2: P	IG PRACTICES		
	y the ROLES of planting paration	field immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and field notes FGDs; tools: questionnaires, matrices interview with the farmers; tool: KII interview form	Among the Blaans, after the flalok or prayer song is recited, the landowner digs around the botni (or altar) using a wooden pole, whereupon the wife first plants the glutinous rice mlikat <sup>2</sup> lagfisan. Everyone else plants ordinary rice varieties soon after (kasbakas or cooperative work) one variety at a time.
To docum KNOWLEL in planting e.g., - seed pre - sowing -oral trad	DGE of women g paration	field immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and field notes FGDs; tools: questionnaires, matrices interview with the farmers; tool: KII interview form	The Blaan wife prepares the seeds to be planted based on the season's climatic characteristics and the stored population of seeds. Planting is accompanied with chanting. The chant is a joined chorus of men and women.
AND PRAC women in e.g., - seed pre - sowing	planting	field immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and field notes FGDs; tools: questionnaires, matrices interview with the farmers; tool: KII interview form	Blaan women prepare the food to be offered to the deities of agriculture. Planting is accompanied with chanting. The husband carries a stick to put holes in the soil. The wife follows the husband and plants the seeds. Other women will fall in line behind the wife either to plant in the other holes. The last woman in the line will cover the seeds with soil.

<sup>2</sup> mlikat - literally means glutinous in Blaan language.

	PURPOSE	METHODOLOGY & TOOLS	EXAMPLES
Focus	Area 3: SEED CONSERV	ATION	
3-a	SEED UTILISATION		
	To identify and evaluate the ROLE of women in the utilisation of seeds e.g., - crop production	field immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and field notes FGDs; tools: questionnaires, matrices	Blaan women are responsible for providing for and classifying seeds/ crops for household consumption and for seed stocks. In the kitchen, women provide food
	- crop production - food consumption	interview with the farmers; tool: KII interview form matrix ranking	on the table. As seed selectors, Blaan women are knowledgeable of the properties and qualities of seeds.
	To document the KNOWLEDGE and SKILLS and PRACTICES of women in seed utilisation	field immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and field notes	For household consumption, Blaan women do the daily pounding and winnowing. They do this 3 times daily except during lean months.
	e.g., - varieties and physiological characters - quality - uses - availability - oral traditions	FGDs; tools: questionnaires, matrices interview with the farmers; tool: KII interview form	During meal times, women will wait until everyone in her family has finished eating and what remains will be her portion of the meal.
	e.g., rituals and ceremonies food preparations		
	To identify and document INNOVATIONS / COPING MECHANISM of women in seed utilisation	field immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and field notes FGDs; tools: questionnaires, matrices interview with the farmers; tool: KII interview form	During lean months women are responsible for harvesting root crops as alternative to their grain staple.
3-b	SEED COLLECTION, SEL	ECTION AND MAINTENANCE	

#### TION, SELECTION AND WAINTENAN

To identify the ROLE of women in seed collection, selection and maintenance	field immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and field notes	Towards the end of July to September (5 months after planting), rice is ripe for kamto (harvesting). Although this is another collective undertaking for
e.g., - collection - classification of seeds, varieties, etc. - use, importance	FGDs; tools: questionnaires, matrices interview with the farmers; tool: KII interview form	everyone, the women play a pivotal role in rice seed selection.

PURPOSE	METHODOLOGY & TOOLS	EXAMPLES
To document the KNOWLEDGE of women in seed collection, selection and maintenance e.g., - collection and selection criteria - maintenance of seeds - breeding	field immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and field notes FGDs; tools: questionnaires, matrices interview with the farmers; tool: KII interview form	Among the Blaans, the women (as designated seed selector) move ahead of the harvesting party, selecting at random the upper panicles of the rice plant exhibiting the following characteristics: full bodied or fully-matured and sturdier grains. Immediately before harvest, Phu Tai women select rice seeds from good yielding plot, from rich full ears with abundant seeds and less lean seeds. Then, they sort these out with mixed grains to observe varietal differences. Women are able to identify the varieties based on shape and colour of grain, sorting out ears with mixed grain and selecting grains with even coloured husk. For vegetables, Phu Tai women select good pods and dry them to prevent fungi infestation.
To document the SKILLS AND PRACTICES of women in seed collection, selection and maintenance e.g., - sampling - seed technology	field immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and field notes FGDs; tools: questionnaires, matrices interview with the farmers; tool: KII interview form	Among the Blaans, seed selection and collection is done by women during harvest with their bare hands. The panicles collected are then put in the bakog (storage in native basket container).
To identify, document and evaluate INNOVATIONS / COPING MECHANISM done by women in the collection, selection and maintenance of seeds	field immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and field notes FGDs; tools: questionnaires, matrices interview with the farmers; tool: KII interview form timeline	

	PURPOSE	METHODOLOGY & TOOLS	EXAMPLES
3-с	SEED STORAGE		
	To identify the ROLE of women in seed storage e.g., - seed storage activities - drying - cleaning - pest management in storage	field immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and field notes FGDs; tools: questionnaires, matrices interview with the farmers; tool: KII interview form	Blaan women manage the stored seeds in the fol (seed storage) and see to it that all seeds are viable and freed from pest infestation. They innovate with various means to conserve the seeds.
	To document the KNOWLEDGE of women in seed storage e.g., - seed longevity - seed characteristics and classifications - common seed storage problems and remedies - oral traditions	field immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and field notes FGDs; tools: questionnaires, matrices interview with the farmers; tool: KII interview form	Harvested seeds by the Blaans will be stored and planted in the next planting season. The seeds stored the last season will be planted the following alnigo (land preparation), this is so since seeds maintain the highest quality for a whole year. The sets of rice varieties planted in the farm are different from the set of varieties stored. So that, each family can have in their keeping a minimum of ten varieties.
	To document the SKILLS AND PRACTICES of women in seed collection, selection and maintenance e.g., - seed cleaning and drying - seed storage practices - seed technologies	field immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and field notes FGDs; tools: questionnaires, matrices interview with the farmers; tools: KII interview form	Within 5-7 days, the rice bundles are taken by the Blaan women from the sigang (haystack) and threshed manually by foot. These are then dried using a bamboo mat called amakan and later stored inside the fol or seedbank. After selecting, Phu Tai women dry and thresh the seeds using a bamboo pan; then, they keep the good grain in a sack and store these in rice barn or granary to safeguard from rodent infestation.

PURPOSE	METHODOLOGY & TOOLS	EXAMPLES
		Method of storing vegetable seeds by Phu Tai women depends on the varieties. Vegetables that keep seeds with the whole fruit (such as corn, gourd, bottle gourd) are hanged to dry in a good ventilated place or over a fireplace to better protect from insect damage. Seeds of certain ripened vegetables that keep seeds (such as celery, cabbage, beans, pumpkin, eggplant) are taken off and wrapped with cloth, dried and kept in a ventilated container, and mixed with cotton seeds to protect from pests.
To identify and document INNOVATIONS/COPING MECHANISM done by women in seed storage e.g., - storage practices	field immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and field notes FGDs; tools: questionnaires, matrices interview with the farmers; tools: KII	At present, fol (seed storage) as an adaptation still exists and is called lawig.
	interview with the farmers; tools: KII interview form	

#### Focus Area 4: CROP CARE AND MANAGEMENT

#### 4-a SOIL MANAGEMENT

To identify and evaluate the ROLE of women in soil management	field immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and	Even if land preparation is traditionally the work of men, the women take part especially in the
-	field notes	hillside swiddens.
- land preparation,		
tillage and fertilisation	FGDs; tools: questionnaires, matrices	
	interview with the farmers; tool: KII interview form	

4-b

METHODOLOGY & TOOLS	EXAMPLES
<ul> <li>field immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and field notes</li> <li>FGDs; tools: questionnaires, matrices interview with the farmers; tool: KII interview form</li> </ul>	Phu Tai women of Thailand play an important role in preparing the soil for cultivation together with the men farmers, during the ritual held for soil preparation to portend good harvest. The rice field is prepared in February, and traditionally celebrated by women spreading dust (droppings of pigs and buffaloes) over the rice field, a traditional practice to augur a good yield from rice culture.
<ul> <li>field immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and field notes, checklists</li> <li>FGDs; tools: questionnaires, matrices interview with the farmers; tool: KII interview form</li> <li>papers and marker pens</li> </ul>	In Thailand, vegetable growing starts with soil preparation. It is left under the sun for 7 days to kill all germs and weeds, and to ensure porous soil with good drainage . Seeds are then sown followed by manure and covered by straw to maintain humidity. The seed and seedling plots are covered with rice straw to maintain humidity of the soil. Vegetables are learned to be better tasting when applied with a mix of pig droppings and cassava. Apart from vegetable grown after rice harvest, farmer also collects vegetable from perennial tree to sell, such as neem.
field immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and field notes, checkilists FGDs; tools: questionnaires, matrices interview with the farmers; tool: KII interview form	Women (mothers and their daughters) are responsible in the maintenance of the crops in the field.
	& TOOLSfield immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and field notesFGDs; tools: questionnaires, matricesinterview with the farmers; tool: KII interview formfield immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and field notesfield immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and field notes, checklistsFGDs; tools: questionnaires, matrices interview formpapers and marker pensfield immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and field notes, checklistsFGDs; tools: questionnaires, matricesfield immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and field notes, checklistsFGDs; tools: questionnaires, matricesfield interview with the farmers; tool: KII prise season; tools: cameras, video cameras, recorders; journals and field notes, checklistsFGDs; tools: questionnaires, matrices interview with the farmers; tool: KII

	PURPOSE	METHODOLOGY & TOOLS	EXAMPLES
ocus	To document the KNOWLEDGE, SKILLS AND PRACTICES of women in pest management e.g., - identification of pests and damages, control measures - rituals and ceremonies Area 5: HARVESTING	field immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and field notes, checklists FGDs; tools: questionnaires, matrices interview with the farmers; tool: KII interview form	From planting until harvest, women regularly tend to their crops cleaning and weeding.
i-a	HARVESTING PRACTICES		
	To identify the ROLE of women in harvesting	field immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and field notes, checklists FGDs; tools: questionnaires, matrices interview with the farmers; tool: KII interview form	Women's responsibility in the farming system is primarily the conservation and selection of seeds.
	To document the KNOWLEDGE of women in harvesting e.g.,	field immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and field notes, checklists	Selected seeds for planting are kept in their respective storage containers to secure stocks for the next planting season, while the grains for food consumption are

FGDs; tools: questionnaires, matrices

interview with the farmers; tools: KII

interview form

-classificationinterview with the farmers; tool: KII<br/>interview formTo document the SKILLSfield immersion during the planting<br/>phase season; tools: cameras, video<br/>cameras, recorders; journals and<br/>field notes, checklistse.g.,<br/>- seed harvesting forFGDs; tools: questionnaires, matrices

- maturity

seeds and for food

- rituals and ceremonies

- seed drying

- drying

F

The damsu or ritual for harvest is performed between August and September, depending on the month of the harvest. The wives harvest first before the rest of the family and the other members of the community.

placed on the floor or around the

open space of the fol.

PURPOSE	METHODOLOGY & TOOLS	EXAMPLES		
		To harvest rice (for consumption), they use a locally manufactured knife called lang gaman to harvest the panicles. Rice bundles called lagom are then formed then brought and piled together on a designated haystack or sigang.		
FOCUS AREA 6: CROP PRODUCTION IN THE CHANGING CONTEXT brought about by: Green				

# Focus Area 6: CROP PRODUCTION IN THE CHANGING CONTEXT brought about by: Green Revolution, genetic engineering incursion, developement aggression, agricultural modernisation and socio-cultural-political changes

	To study the status of women's ACCESS TO RESOURCES (land, seeds and related inputs)	field immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and field notes FGDs; tools: questionnaires, matrices interview with the farmers; tools: KII interview form	In the Philippines, areas of indigenous peoples called ancestral domains delineated by law and political declarations – do not provide the people with land security. They are now restricted to small portions of land and are not protected from conflicting government policies (such as conservation policies and development aggression by corporations).
	To know the status of women in crop production in the CHANGING CONTEXT and how it affect them	field immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and field notes FGDs; tools: questionnaires, matrices interview with the farmers; tool: KII interview form	In seed conservation practices, Blaan women still hold the domain of seed conservation in the community.
	To study how DECISION- MAKING is done by women with regards to crop production within the changing context	field immersion during the planting phase season; tools: cameras, video cameras, recorders; journals and field notes FGDs; tools: questionnaires, matrices interview with the farmers; tool: KII interview form	In seed conservation practices, women still hold the decision- making and responsibility of transferring their knowledge to their daughters.

Thailand

## DOCUMENTING WOMEN'S KNOWLEDGE IN POST-HARVEST PROCESSING AND MARKETING

In the midst of current changes in agricultural policy development in Thailand, women continue to play the traditional key role in food crop production. They take care of food security of the household and community, ensuring that there is sufficient food for household consumption. Linked to their care of the household, women take care of the health of family members through medicinal plants. The significant role of women in farming community includes: crop cultivation and maintenance, compost production for soil improvement, animal-raising, all other work on the farm and gathering food from the wild, fishing, wage earning in agricultural sector, and care and selection of rice and vegetable seeds.

Women perform most of the processing of agricultural products. And in many places, women are responsible for food storage, transport and marketing.

In the capitalist globalisation system, the old mode of production and way of life with high degree of inter-dependence and reciprocity with natural resources, has been changed to one based on commercial cropping system. This change has transformed the traditional roles of women in agricultural production, by making them work harder and expend more labour hours to feed the family. The modern system of resource ownership also downplayed the women's traditional roles. For example, the replacement of seeds by agri-business corporations led to a decline in traditional women's role in selecting and keeping seeds. Also weakened or lost are women's roles in selecting and dividing harvest, food processing and preservation, ensuring food security for household and community, marketing, and so forth. The modern way is one that depends on external factors, driving millions of farmers in the country to live under risks and lack of security in the production process, and to fall into the vicious cycle of indebtedness.

Women have lost their power in local food resource management, since the business sector (with the support of the large consumer sector) has implemented projects and introduced policies on ownership and use of natural resources. Women's participation in decision-making and their access to various natural, economic and political resources have been lessened as a result. Although women find increased opportunity to represent their communities in the public sector and in various projects, their role and participation in decision-making and the development process in the sustainable management of natural resources is ignored or is not truly supported. Many limitations still exist, such as structural limitation, positions, number, and so on. The value of women's household work continues to decrease, since this kind of work is seen as having no economic value in the capitalist system.

The documentation process aims to discover values and significance of **women's participation** during post-harvest and post-production period as well as their local knowledge and practices in agricultural product preservation, processing and marketing.

#### PURPOSE

#### METHODOLOGY & TOOLS

#### EXAMPLES

#### Focus Area 1: FOOD PRESERVATION AND PROCESSING

#### 1-a FOOD PROCESSING

To identify the ROLE of women in food preservation and processing	In depth interview with women tools: checklist, guide questionnaires, matrices Process observation; tools: cameras, video cams, MP3, journals and field notes, pens FGDs; tools: checklist, guide questionnaires, matrices	Phu Tai women of Thailand play key roles on preservation and processing techniques for use in household consumption and marketing. They produce the native food and dessert to serve for households, and for cultural ceremonies (ie, Heet12 <sup>3</sup> ). They also produce the desserts and other agriculture products for income generation. Women in Punjab in Pakistan want to make optimum use of the limited land resources at hand and prefer to grow themselves what they need in the kitchen. The usual practice is to grow long life vegetables in small plots of land. Garlic, onions and chilies are grown in relatively surplus quantities so that the food could be exchanged with other households. Vegetables like mustard greens and turnips are grown as fodder and are harvested throughout the season from the same fields for human consumption. A number of other local seasonal vegetables are grown by women on tiny pieces of land. This family food is grown on the principles of organic farming that has always remained an integral part of traditional agriculture in Punjab.
To document the KNOWLEDGE, SKILLS AND PRACTICES of women in food processing	Review of documents In depth interview with women tools: checklist, guide questionnaires, matrices Process observation; tools: cameras, video cams, MP3, journals and field notes, pens FGDs; tools: checklist, guide questionnaires, matrices	Phu Tai women of Thailand possess the varied knowledge in food processing: fermenting, grilling, steaming, sun-drying, frying in deep or without fat, and pickling. Phu Tai women ferment fish, preserve young bamboo shoot, grill fish, prepare Koa Pong, Kanom Ki Mah, Kanom Jean (rice noodles). Bamboo shoot abounds in the northeast Thailand and hence is a popular plant to preserve for food. The main preserved food of local Northeast people is Plalar (fermented fish and salty bamboo shoot), pickled bamboo shoot and dried fish.

<sup>3</sup> Heet 12 is the monthly counting (Lunar calendar) and customs of Thai local Northeast people. The women and men will prepare their food to feed monks in Buddhist temple. The women play major role in processing food and desserts made from rice and agricultural products.

	PURPOSE	METHODOLOGY & TOOLS	EXAMPLES
Focus	Area 2: FOOD COLL	ECTION	
	To identify the ROLE of women in food production through food collection	In depth interview with women tools: checklist, guide questionnaires, matrices Process observation; tools: cameras, video cams, MP3, journals and field notes, pens FGDs; tools: checklist, guide questionnaires, matrices	Women farmers take charge of collecting food to augment food grown in the fields. They gather food from ponds and streams, and from the nearby forest.
	To identify the KNOWLEDGE, SKILLS AND PRACTICES of women in food production through food collection	In depth interview with women tools: checklist, guide questionnaires, matrices Process observation; tools: cameras, video cams, MP3, journals and field notes, pens FGDs; tools: checklist, guide questionnaires, matrices	Food is usually scarce during the dry season after harvest among the Phu Tai tribe of Thailand. With indigenous wisdom inherited from their ancestors, women collect food from natural sources to help provide food for the household. They collect crab and shell from the ricefield; shrimps and fish from ponds and streams; gather wild plants and indigenous food (such as ant eggs) from the forest.

# Focus Area 3: PROCESSING OF AGRICULTURAL PRODUCTS FOR HANDICRAFTS AND OTHER USES

RC in pre	o identify the DLE of women postharvest rocessing for crafts ad other uses	In depth interview with women tools: checklist, guide questionnaires, matrices Process observation; tools: cameras, video cams, MP3, journals and field notes, pens FGDs; tools: checklist, guide questionnaires, matrices	The Phu Tai women of Thailand play the principal role in the production of textil and dyes for traditional clothing. This r is closely tied to many Thai rituals and practices. They also take care of proces herbal plant materials for medicine and household uses such as soap.
	5, ,	cameras, video cams, MP3, journals and field notes, pens FGDs; tools: checklist, guide questionnaires,	practices. They also take care of proherbal plant materials for medicine

PURPOSE	METHODOLOGY & TOOLS	EXAMPLES
To document the KNOWLEDGE, SKILLS AND PRACTICES of women in postharvest processing for crafts	Review of documents In depth interview with women tools: checklist, guide questionnaires, matrices Process observation; tools: cameras, video cams, MP3, journals and field notes, pens FGDs; tools: checklist, guide questionnaires, matrices	Weaving is a task of Phu Tai women after the rice harvest in the northeast region of Thailand. Nearly every house prepares cotton and silk for weaving. Women dry and pin cotton and make thread usually before rice transplanting. Traditional cotton varieties (called kok yai) have been collected through generations. The seeds (which can be kept for 3 years) are sown and the cotton plants grow without fertiliser or tending and are pruned yearly until the plant dies. Weaving is a unique traditional knowledge of Phu Tai ethnic women practiced up to the present, after the harvest season. The woven cloth remains a valuable asset of Phu Tai economy as well as an important part of the ethnic society's traditional rituals practiced in their lifetime. A Phu Tai woman is expected to be able to prepare a cloth dye solution made from kram (indigo), ash and fermented water (called gor mor yom kram that is used to wash sticky rice from clay pot). She would then be qualified to use it to dye cloth, indicating that she could prepare clothing for family members important for their daily needs and tradition. A household that could dye good cloth with good deep indigo colour (called si kak in Phu Tai) gets recognised for

# Focus Area 4: FOOD AND HERBAL PREPARATION

## 4-a FOOD AND HERBAL PREPARATION

To identify the ROLE of women in food and herbal preparation	Review of documents In depth interview with women tools: checklist, guide questionnaires, matrices	In Thailand, Phu Tai women prepare snacks usually made after harvest. The traditional snacks that remain popular include Khanom Khee Ma, Khao Pong and Khanom Jeen. Some households make snacks from rice, such as steamed sticky rice (Khao Tom) and Khanom Tian (mungbeans in banana leaf).
	Process observation; tools: cameras, video cams, MP3, journals and field notes, pens FGDs; tools: checklist, guide questionnaires, matrices	The Punjab women of Pakistan possess profound knowledge on cooking, nutritional properties of various foods, their combinations, cooking and preserving techniques. Every woman is a nutritionist in her own right; what are the ingredients of proper diet; what was required for the sick and the elderly; what should be the diet of the children and what diet was needed by the pregnant woman and the lactating mother.

PURPOSE	METHODOLOGY & TOOLS	EXAMPLES
To document the KNOWLEDGE, SKILLS and PRACTICES of women in food preparation	Review of documents In depth interview with women tools: checklist, guide questionnaires, matrices Process observation; tools: cameras, video cams, MP3, journals and field notes, pens FGDs; tools: checklist, guide questionnaires, matrices	In Thailand, Phu Tai women grow herbal plants like Plai (zingiberaceae), lemon grass and turmeric for their children's needs. Mothers apply turmeric on their bellies for the relief from flatulence. Turmeric (for aroma therapy) is also placed by the older women beside the mother and the new-born by the warming fire. Warn Fai (fire herb) is used to cure pain on hands and feet. Warn Pid Pit (anti-poison herb) is given to a mother after delivery as cure from poisonous food. Phu Tai women recommend all households to grow at least 5 herbal varieties and eat native rice varieties as medicine. A women's group makes medicinal herbal bag to cure bruises and relieve muscle pain, using herbs grown in their backyard, for domestic use and income. In the Punjab, women go for growing long life vegetables like garlic, onions and chillies in order to ensure food security for the family, which are the most basic ingredients of the Punjabi cooking. It has been a Punjab woman's domain to make arrangements to protect the families from the harshness of the weather. It requires great knowledge to prepare a variety of drinks meant for summers and winters. The sattu drink is made from roasted and pounded oats, mixed with one glass of cold water and locally made shakr or brown sugar. The refreshing raw mango drink is made from cooked and softened raw mango, and then added to cold water with sugar. Butter milk is made from churned milk with butter removed. It is added to cold water with a pinch a salt. Kacchi lassi is made from a quarter of glass of milk, added to fill a glass of cold water and a pinch of salt.

	PURPOSE	METHODOLOGY & TOOLS	EXAMPLES
Focus	Area 5: MARKETIN	G AND MANAGEMENT O	F ENTERPRISE INITIATIVES
5-a	MARKETING AND	ENTERPRISE INITIATIVE	S
	To identify the ROLE of women in marketing	Review of documents In depth interview with women and key persons; tools: checklist, guide questionnaires, matrices	Women sell the farm produce that they grow in the market. Selling vegetables for instance, is the contribution of rural women in the Philippines and Thailand to household income (while the men go to paid labor outside the community).
		Process observation; tools: cameras, video cams, MP3, journals and field notes, pens FGDs; tools: checklist, guide questionnaires, matrices	In the study of Phu Tai women, the collective project also saw the women members being able to assume the responsibility of product development. It is the women who do quality control of products for marketing. They also perform financial management and promote their products in the market place. In the Punjab, sustainability of the household economy is always a primary concern for
			women. In fact, the local culture expects from a "wise and mature" woman to save for the rainy days and for special occasions no matter how meagre the resources are.
	To document the KNOWLEDGE of women in marketing	field immersion during the cropping season; tools: cameras, video cams, recorders, journals and field notes FGDs; tools: checklist, guide questionnaires,	Phu Tai women in Thailand study set the criteria for selection and development of processed farm produce (such as non-oily dessert) to ensure product quality for the market. Women have set the standard of quality on rice selection and cleaning before packaging.
		matrices In depth interview with women and key persons; tools: checklist, guide questionnaires, matrices	Knowledge of financial management

PURPOSE	METHODOLOGY & TOOLS	EXAMPLES
To document the SKILLS AND PRACTICES of women in marketing	field immersion during the cropping season; tools: cameras, video cams, recorders, journals and field notes FGDs; tools: checklist, guide questionnaires, matrices In depth interview with women and key persons; tools: checklist, guide questionnaires, matrices interview with the farmers; key persons	Phu Tai women in the Thailand study perform marketing and promotion of hand woven products by using the product in their daily life such as cotton weaving, natural dye, indigo dye and silk weaving. They do quality testing before selling i.e., food tasting, etc. Women grow food crops also for income. They are the ones who commonly transport and sell vegetables in the market. Phu Tai women's group do mushroom culture to produce food for their village and neighbouring communities, and to earn income (for women who do not have weaving skills).



Pakistan

# DOCUMENTING WOMEN'S KNOWLEDGE IN LIVESTOCK KEEPING

The history of agriculture in Pakistan goes back to ten thousand years that has in its bosom knowledge and experience validated over generations. The traditional knowledge systems had reached a very high level of sophistication much before the advent of the modern scientific method. Traditional agriculture in Pakistan setting was organic and sustainable; it gave birth to life sustaining cultures.

Women's knowledge in traditional agriculture takes birth, therefore, from their roles as farmers and livestock keepers, food managers, procreators, healers and care givers.

The villages were not only self supporting but were able to pay a range of taxes to the government. In order to achieve sustainability and selfreliance, an organic integration was established on crop farming and livestock keeping. It was learnt from experience that viable farming was not possible without the interface with livestock rearing; the term agriculture hence included both. Studies show that the better part of rearing of domesticated milk animals is taken care of by women.

Pakistan has been one of the countries where Green Revolution systematically eroded the local practices in agriculture and that traditional knowledge was downgraded as backward and unscientific. State machinery aggressively promoted new technologies and later, the private sector in collaboration with the state apparatus took the miracles of chemical fertilisers, pesticides and the new hybrid seeds to their logical conclusion. Monoculture replaced the bio-diverse base of traditional agriculture. The fertile planes of the Punjab were the hardest hit.

Despite the onslaught, Pakistan offers a huge treasure of traditional knowledge that is still intact and is in practice. The world famous canalirrigated villages of the Punjab have two parallel strains of farming, veterinary care, human health and nutrition. Commercial mono-crops are grown using green revolution technologies while household knowledge still enjoys a high status in veterinary care, human health, nutrition and home gardening.

The contradiction between the two agricultures lies in the difference in their focus and purpose. For thousands of years agriculture concentrated on sustaining life without commercialising food while the sole objective of modern agriculture is maximising profits for a tiny minority of people in the world being totally oblivious of the safety and security issues. Agriculture has been turned into agri-business. Food that was seen as the most inalienable right of the people has been turned into a weapon of political power.

Families survive on women's knowledge on common health problems up to reproductive health and child care – where almost all remedies are rooted in the understanding by women of the nutritional and medicinal properties of cultivated and uncultivated plants. The profound knowledge of women in cooking, nutritional properties of various foods, their combinations, cooking and preserving techniques – makes every woman a nutritionist in theory and practice.

Women are not only the knowledge carriers but also the practitioners of that knowledge. Their experimentation is ongoing and they are fully cognizant of the variations which are required by different human beings.

Rural women's multiple roles take place not in isolation and are not mutually exclusive but their responsibilities lead them to multi-tasking most of the times. The food they prepare, process and preserve does not restrict their activity to the confines of the house but they have to work side by side with men in the agricultural fields to produce and harvest that food. They are responsible to store the seeds, to transplant the paddy, to grow vegetables for domestic consumption and commercial use and to root out the weeds in the fields.

Milk and milk animals are an integral part of the rural Punjab especially and rural Pakistan generally. As a general rule, about 70-80% of the milk animal keeping work is taken care of by women in the Punjab, including activities ranging from animal feed, to disease management, to management of housing environment.

Documentation of women's knowledge in livestock keeping requires a grasp of the multi-faceted roles of women: ensuring subsistence of the families, providing healthy and nutritious meals, offering disease management, and rearing the milk and draught animals. The work of women demands knowledge that is broad-based and rooted in a perspective that sees different aspects of life as interrelated and mutually dependent.

Through documentation of women's knowledge and practices, they can get recognition for their critical contribution and improvements can be instituted in the policy, planning and programming through giving a realistic changing context.

PURPOS	SE	METHODOLOGY & TOOLS	EXAMPLES		
Focus Area 1: L	IVESTOCK	KEEPING AND FEED PREPARA	TION		
cleaning	ANIMAL HOUSING AND MANAGEMENT: cleaning and storing of animal dung, feed preparation and feeding practices (bringing fodder, feed preparation, feeding and watering of animals)				
ofwomen	y the ROLE in livestock and feed on	Staying with the community for direct observation Questionnaire for semi- structured interviews Focused group discussions Rapid Appraisal technique: seasonal calendar and women's labour patterns	Women are the main livestock keepers in the Punjab. The activities ranging from animal feed, to disease management, to management of housing environment have direct involvement of women. With the advent of mechanised farming, fodder is generally not cultivated but bringing fodder, offering feed and water, preparing home based medicines, keeping the shed clean and taking care of the young and sick animals are all seen as women's work. According to the Punjab Livestock Department web site, livestock contributes more than half (50%) of agriculture value added, much more than the contribution of all other crops, major and minor combined (48%). Its contribution to national GDP is almost 11 percent, which is higher than the contribution made by the entire crop sector		
To docum KNOWLEL AND PRAC women in keeping a preparatio	DGE, SKILLS CTICES of livestock nd feed	Staying with the community for direct observation Questionnaire for semi- structured interviews Focused group discussions Rapid Appraisal technique: daily routine diagram, mobility mapping	(49.6% in agriculture and 10.4% in GDP). In the Punjab, weather is considered in preparing feed for milk animals. In winter, boiled oilseed cake is given to the animal while in summer; oilseed cake is soaked in water in the morning and offered in the afternoon. In summer too, coarsely pounded oat soaked in water, as well as brown sugar, water and oat flour drink are given to the animal.		

PURPOSE	METHODOLOGY & TOOLS	EXAMPLES
1-b MANAGING HEALT	'H AND HYGIENE OF ANIMALS/	LIVESTOCK
To identify the ROLE of women in managing health and hygiene of animals and livestock	Staying with the community for direct observation Questionnaire for semi- structured interviews Focused group discussions Rapid Appraisal technique: seasonal calendar and women's labour patterns	It is the women's role to manage the health and hygiene of animals and livestock that include bathing and disease remedies.
To document the KNOWLEDGE, SKILLS AND PRACTICES of women in managing health and hygiene of animals and livestock		For the treatment of foot and mouth disease, Punjab women soak oat flour in water and offer to the animal for three to four days (for the mouth). The animal's feet are then washed with boiled mix of keekar peel and peepal. For the treatment of khurrak (this disease is caused when milk animals are kept in the same housing with the donkey or when they sit in a place with donkey urine or excreta), a mixture of certain herbs (neem leaves, ajwain, ghee and trnmeric) are burnt until black, the oil is extracted and applied on the animal's body at night and in the morning. For gastritis, saltish butter milk is given to the animal. For the treatment of prolapsed uterus, wheat liquor is poured on the prolapsed area.
1-c CARE OF PREGNA	NT, NEWLY BORN AND YOUNG	ANIMALS
To identify the ROLE of women in caring for newly born and young animals	Semi structured interviews with women; tool: questionnaire, tape recorder, checklist of responsibilities Participant observation Rapid Appraisal technique: seasonal calendar and women's labour patterns	It is the task of Punjab women to take care of the newly born and young animals and livestock, including the production and application of natural remedies.

PURPOSE		METHODOLOGY & TOOLS	EXAMPLES
To document KNOWLEDGE AND PRACTIC women in ca for newly bol young anima	r, SKILLS wor CES of tapo ring resp in and Is Para Rap dail	ni structured interviews with men; tool: questionnaire, e recorder, checklist of ponsibilities ticipant observation nid Appraisal technique: ly routine diagram, mobility pping	
1-d MILK PROD	UCTION ANI	D PROCESSING	
To identify th of women in production a processing	milk wor nd tapo resp Part Rap sea:	ni structured interviews with men; tool: questionnaire, e recorder, checklist of ponsibilities ticipant observation bid Appraisal technique: sonal calendar and women's pur patterns	Milk and milk animals are an integral part of rural Punjab especially and rural Pakistan generally. Milk, butter milk, curd, butter, ghee are necessary accompaniments with the staple food (primarily wheat and secondly rice). About 70-80% of the milk animal keeping work is taken care of by women in the Punjab.
To document KNOWLEDGE AND PRACTIO of women in production a processing oj by-products	, SKILLS wor CES tapo milk resp nd animal Para Rap dail	ni structured interviews with men; tool: questionnaire, e recorder, checklist of ponsibilities ticipant observation hid Appraisal technique: ly routine diagram, mobility pping	For increasing milk production, Punjab women add cotton seed to the feed. Or, the animal is fed with animal's milk added with sugar.

PURPOSE	
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#### METHODOLOGY & TOOLS

#### EXAMPLES

# Focus Area 2: LIVESTOCK KEEPING IN THE CHANGING CONTEXT brought about by: Green Revolution, development aggression, agricultural modernisation and socio-cultural-political changes

To document and evaluate the status of women and their ACCESS TO RESOURCES	Semi structured interviews with women; tool: questionnaire, tape recorder, checklist of responsibilities Participant observation Rapid Appraisal technique: historical diagram	After the Green Revolution and mechanisation of agriculture in the Punjab, women have been totally displaced of the decision-making domain as regards selection of crops, agricultural inputs, disposal of the produce or the use of income earned. The only platform of asserting themselves is the platform of growing food for domestic consumption. Home gardening is the only sphere where they have total freedom to prepare select varieties and in their choice to use inputs. The extremely restricted space for independent decision-making, that is home gardening, corresponds with their limited final say in the family and other social affairs.
To study how DECISION MAKING is done by women with regards to livestock keeping	Semi structured interviews with women; tool: questionnaire, tape recorder, checklist of responsibilities Participant observation Rapid Appraisal technique: decision-making matrix	

Documentation Tools

#### SAMPLE

# Gender-role Disaggregation in Farming

**Note:** The sample table assesses and examines gender-disaggregated data on gender roles, participation and decision-making in an indigenous farming community in Mindanao, Philippines.

	ELDERS	MEN	WOMEN	CHILDREN	
FARM ACTIVITIES				9	03
Maba (ritual accompanied by land clearing)	۲	۲	•		
Alnigo (land preparation)	•	۲		•	•
Damsu (ritual for thanksgiving) for planting	•	•	•	•	۲
Amlah (planting) - prepare the seeds - plant the seeds - dig the holes		۲	۲	θ	•
Weeding and tending			Θ	•	
Pest management	•	۲	•	•	•
Damsu for harvest	Θ	•	•	Θ	•
Kamto (harvesting) - for seeds - grains			•	•	
Storage			8		

I plays lead role

# **GENDER ANALYSIS FORM**

The gender analysis form is a useful tool in analysing the cultural, economic, social, legal and political relations between women and men. A gender analysis recognises that women and men have different social roles, responsibilities, opportunities and needs.

#### PART 1: Activity Profile

	MEN	WOMEN
a. reproductive activities:		
child rearing		
house-keeping		
family health care		
water collecting		
firewood collecting		
b. productive activities:		
clearing		
sowing		
weeding		
trade		
crafts		
harvesting		
storage		
c. community activities:		
ceremonies		
local politics		
school activities		
church activities		

# **PART 2: Access and Control Profile**

	ACCESS		CONTROL	
1. resources	Men	Women	Men	Women
a. economic resources				
land				
seed				
water				
tools/implements				
draft animals				
b. politcal resources				
leadership				
information				
education				
contacts with outsiders				
2. benefits				
income				
ownership of assets				
food				
prestige				
education				

# **PART 3: Influencing Factors**

	IMPACT	OPPORTUNITIES	CONSTRAINTS	REMARKS
drought				
floods				
migration				
lean months				
marriage customs				
education				
religion				
policies				

#### SAMPLE

# Semi-Structured Interview Questionnaire

(Respondents 50 years and above)

**Note:** This sample questionnaire is designed for free flowing interviews, to avoid a mechanical question-and-answer exercise. Instead of taking notes on the paper, the use of a sound recorder is recommended to nurture a free flow of ideas and real dialogue. The strong rapport between the researcher and the respondents will further reinforce the dialogue.

# 1 Respondent's Profile

Village:
Name of Respondent:
Gender:
Age:
Occupation:
Marital Status:

2 Daily work: (Enlist major activities, involving substantial time span)

# 3 Farming

What is the difference between the agricultural practices of your childhood and the agricultural practices of today? How do you compare the two systems of agriculture?

What did you practice for the following:

- Soil fertility management
- Plant health (diseases, insects, fungus etc.)
- Increasing crop productivity-crop wise
- Marketing the produce
- Storage of seeds and food grains and other food items

# 4 Livestock Keeping

What is the difference between the livestock practices of your childhood and the livestock practices of today? What were the problems faced in dealing with animal health?

# 5 <u>Health</u>

What were the health problems people faced in your village? What home remedies were used in your family and the village? What did you know and what did you do about the following?

- Problems women face during and after pregnancy
- Problems in raising children
- Common diseases like headache, stomach problems, blood pressure, diabetes, etc.

Do you know the health problems caused by improper drainage and sanitation system in the village? What are possible problems? What do you know on how to treat food-poisoning, snake bite, poisonous plants, insects, animals?

Do you have access to clean drinking water?

# 6 Nutrition

Do you know the properties of various food items like vegetables, fruits, milk, cereals and grains?

Do you know what diet is required for small babies?

Are you aware of the diet required by pregnant women?

Do you know the food that can keep people healthy?

Are you aware of the presence of pesticides in your food?

How much do you know about human body and its food requirements?

# 7 Cultural Practices

What kind of food did you typically had in olden days?What is the difference in eating habits?Is there any difference in the clothes?Is there any difference in consumption patterns? Do people spend more or less now?How was wedding ceremony and the festivities like? What was the wedding feast like?Was harvesting celebrated and how?

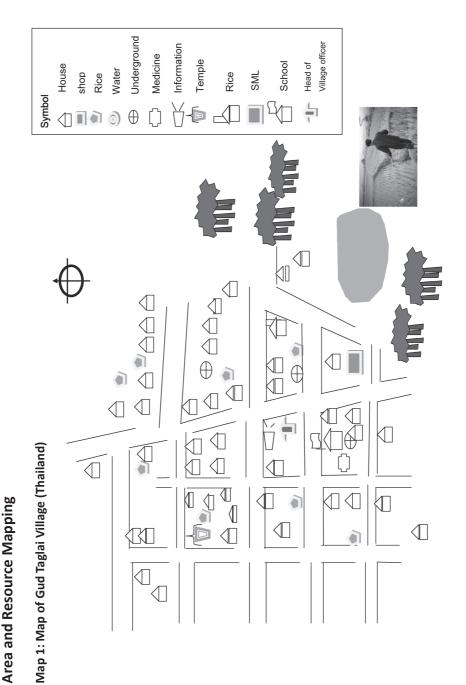
# 8 Knowledge around Cooking-Properties of Foods and Recipes

What were the every day dishes? How did you cook those dishes? What were the vegetable combinations you cooked? Did you know the reason behind the combinations?

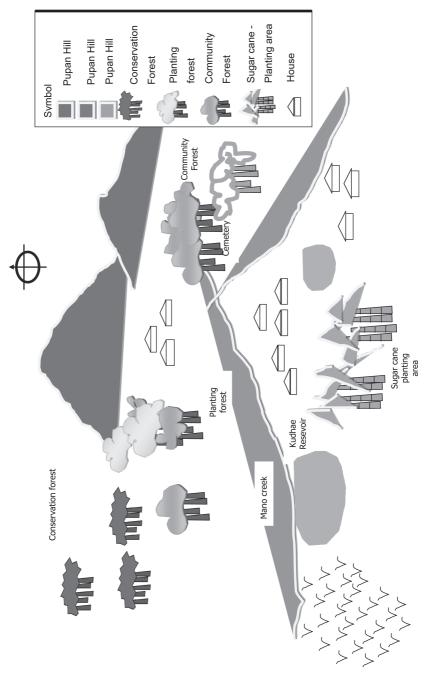
# 9 Gender Relationships

What are women's responsibilities, decision-making and work areas? Are there gender differences in the work and rituals and ceremonies affecting all of above areas?

# 10 What are the major problems in our present-day agriculture?



SAMPLE



Map 2: Map of surrounding area of Gud Taglai Village

Collaborating Groups

# <u>Philippines</u> Sibol ng Agham at Teknolohiya (SIBAT) or Well-spring of Science and Technology

SIBAT is a Philippine network of organisations in appropriate technology for rural development. Community-based sustainable agriculture is its core area of work, that includes the promotion of conservation of genetic resources. SIBAT recognises, upholds and promotes the important role of rural women in agriculture.

# <u>Thailand</u> Foundation of Reclaiming Rural Agriculture and Food Sovereignty Action (RRAFA )

RRAFA is an organisation dedicated to strengthening rural communities. RRAFA promotes participation of communities including academicians, activists and civil society organisations to take part in decision-making processes favourable to sustainable society and initiating alternative solutions. RRAFA pays attention to organisational development, learning processes, participatory action research, human resource development, policy study and campaign as well as networking with NGOs and farmers' organisations.

RRAFA is committed to strengthening farmers and NGO workers' potentials in developing the local genetic resources use and management, alongside with the articulation and development of sustainable agriculture systems. RRAFA works with farmers and communities to achieve food sovereignty.

# Pakistan KHOJ Research and Publication Centre

Khoj started its educational work in 1995 and works for adult and children's education through an alternative approach and methodology inspired by the principles of relevance and gender equity. Its mission is to work with the "underserved communities, with a special focus on women achieve major improvements in their lives." Khoj works using innovative methodologies directly with the communities, and with local and international partners who share its vision "to create just and peaceful societies where the disadvantaged people, especially women, can exercise their fundamental rights." To achieve this mission, Khoj engages in long-term development work through education for development, health and livelihoods.

# PAN AP

**Pesticide Action Network Asia and the Pacific (PAN AP)** is one of the five regional centres of PAN, a global network dedicated to eliminating the harm caused to humans and the environment by pesticides and promoting biodiversity-based ecological agriculture.

PAN AP's vision is a society that is truly democratic, equal, just, and culturally diverse; based on the principles of food sovereignty, gender justice and environmental sustainability. It has developed strong partnerships with peasants, agricultural workers and rural women movements in the Asia Pacific region and guided by the strong leadership of these grassroots groups, has grown into a reputable advocacy network with a firm Asian perspective.

PAN AP's mission lies in strengthening people's movements to advance and assert food sovereignty, biodiversity-based ecological agriculture, and the empowerment of rural women; protect people and the environment from highly hazardous pesticides; defend the rice heritage of Asia; and resist the threats of corporate agriculture and neo-liberal globalisation.

Currently, PAN AP comprises 108 network partner organisations in the Asia Pacific region and links with about 400 other CSOs and grassroots organisations regionally and globally.

This module on Women's Knowledge in Agriculture serves as guide in documenting women's indigenous and traditional knowledge, roles and practices in crop production, post-harvest processing and livestock keeping. It seeks to give recognition to women farmers, as key food producers, who have made tremendous contribution in ensuring food security for the community, protecting the traditional knowledge and sustaining our biodiversity.



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