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Consultant's Report

INTEGRATING WOMEN INTO THE PROGRAMS AND PROJECTS OF THE
PHILIPPINES MINISTRY OF AGRICULTURE AND FOOD

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to:

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INTRODUCTION

The Ministry of Agriculture and Food (MAF) of the Republic of the Philippines, in recognition of the critical role which women play within agricultural production systems, has initiated a program to systematically address the needs and constraints of women within the context of agricultural development. As part of this initiative the MAF requested technical assistance from the United States Agency for International Development's Office of Women in Development (AID/WID). In response, AID/WID has provided a consultant to the MAF through the South-East Consortium for International Development (SECID) to assist the Ministry to create a program for women in agricultural production and to establish a pilot project activity designed to integrate women within the context of the ongoing USAID/MAF Rainfed Resource Development Project (RRDP). This report is a result of this consultancy.

The specific objectives of this report are to provide 1) a general overview of the multifaceted roles of women in agricultural production and farming systems research; 2) a review of existing data on women in agricultural production systems in the Philippines; and 3) recommendations for specific actions which should be taken to integrate women into the ongoing RRDP farming systems component being implemented in the Bicol Region. Although this document is designed to assist the RRDP project, much of what is argued in this report is applicable to other agricul-

tural development projects and specific project initiatives which are recommended, may be easily replicated in other regions in the Philippines.

In order to prepare this report, Christine Roach, the author (1) conducted a review of existing literature on Filipino women in agricultural production; (2) met with numerous individuals from the Ministry of Agriculture and Food, the Bureau of Agricultural Extension, USAID, the University of the Philippines, the Institute of Philippine Culture, the Asian Development Bank, the International Rice Research Institute, the Ministry of Local Governments and Community Development, and RRD project staff in the Bicol Region; and (3) worked closely with RRD project management and implementation staff to develop appropriate and effective recommendations to successfully integrate women into project activities.

WOMEN IN AGRICULTURAL PRODUCTION SYSTEMS

Over the past decade it has become increasingly apparent to many development planners and practitioners that women are extremely critical actors in most agricultural production systems. This fact, rather than constituting just a point of academic interest, has led many authors (Tinker, Boserep, Staudt, Cloud). For example, to point out that failure to integrate women into agricultural development initiatives will undermine the progress of economic development and may, in some cases, actually lead directly to the failure of projects and programs.

Successful project design and implementation requires that planners are careful to "identify the key economic actors involved and to understand both the incentives and constraints affecting their activities" (Cloud, 1983:3) and their participation in agricultural systems. Most agricultural development projects (until the advent of the farming systems approach) have simply failed to account for all the "key actors" by consistently ignoring women's participation while designing project components.

Agricultural development strategies have tended to stress a "top-down" approach that is designed to introduce a "package" of modern agricultural technologies and inputs which are selected with "efficiency and productivity as the sole criteria" (Safilios-Rothschild, 1980:1). The "top-down" approach to agricultural development has almost exclusively tended to benefit the larger more well-to-do farmers and "can lead to economies of scale and resultant land allocation effects

which can exacerbate socio-economic inequalities that lead to consumption shortfalls for small farmers and landless laborers" (Frankenberger, 1985:3).

Although the poor, small-scale farmers and the landless have tended not to benefit substantially from these "top-down" production-oriented development strategies, men almost always possess considerably more access than women to agricultural training and innovations, regardless of the degree to which women participate in the agricultural sector. Furthermore, agricultural innovations may in fact tend to increase unemployment among women and decrease women's access to wage labor. "The fact that among the poor, men benefit and women lose disproportionately from many modern agricultural inputs and innovations has serious implications for agricultural productivity, income availability for food at the household level, labor absorption and unemployment, increased landlessness and a widening of rural income differences" (Safilios-Rothschild, 1980:3). These results may occur for a variety of reasons. In many regions approximately one-fourth to one-half of rural households may be temporarily or permanently managed by women (through out-migration of males, divorce, death, desertion and so forth). Because women almost always have less access to land, agricultural information and training, farmers credit programs, and technological innovation than men, these rural households cannot attempt to modernize nor increase their agricultural productivity. This has the effect of not only limiting the growth potential of farms managed by women, but actually decreases the agricultural productivity and modernization of the entire region. (See Boserop, Tinker and Safilios-Rothschild).

Mechanization and the modernization of agricultural technology may also have unintended but devastating effects on women and their rural households since many poor families, landless or near landless households depend upon adult females to contribute a significant proportion of the family income. In the Philippines, for

example, rural women contribute approximately 44 percent of the total household income (Ancheta, 1982) through wage labor, primarily in the agricultural sector. When agricultural labor-saving or labor-substitution devices are introduced, poor women and their families may be the first to suffer because employment opportunities in the agricultural sector are substantially decreased.

It has also been recognized that the introduction of labor intensive technologies (such as cash crop production) frequently increases the agricultural labor demands placed on both women and children while limiting their participation in other economic spheres (Boserep, Tinker). Thus, when women's labor is concentrated on farming endeavors, women may simply have less time to devote to child care, family nutrition and wage employment.

The introduction of improved agricultural technology or an increase of production of farm commodities does not, therefore, ensure an equitable distribution of income or increased food availability among the rural poor. Moreover, the delivery of agricultural innovations to the poor does not necessarily guarantee that both men and women will benefit equally or that the nutritional status of poor families will be improved (Safilios-Rothschild, 1980).

Many authors have criticized development planners and practitioners for creating and introducing development strategies which are both inequitable and discriminatory towards women in developing countries. More recently, however, experts stress the economic inefficiency of such an approach and warn that failure to consider women's contribution to agricultural production systems will often result in decreased project benefits and success. The United States Agency for International Development (AID) "Women in Development Policy Paper" suggests that there is equal proof that women are often farming without benefit of improved in-

puts and services required for more productive and remunerative agricultural activities since these females are rarely systematically targeted for training, extension, research, technology, or improved inputs. It is predictable, then, that efforts to improve access to resources and thereby to increase productivity in the agricultural sector will need to be better directed to the female population if goals for growth are to be achieved" (1982:3).

Similarly, Lewis cautions that a failure to recognize women's extensive agricultural activities has even more far-reaching consequences. "When agricultural planners overlook women's labor inputs, they necessarily fail to anticipate crucial inelasticities in the existing agricultural labor force and to build crucial incentives for project participants. Thus, the projects success is endangered. But where women are implicitly relegated to production of food for domestic consumption, the costs, while not immediately manifest in project results, are more devastating. The wide spread crisis in food production for domestic consumption - causing grave nutritional disorders, increasing short falls in domestic food supplies, spiralling food imports in agricultural economies, foreign trade deficits and fiscal disorders - blocks development and threatens survival in many Third World Nations" (1981:2).

WOMEN AND THE FARMING SYSTEMS APPROACH

The farming systems research strategy to agricultural development is an approach that attempts to correct the inequalities and inefficiencies of the "top-down" approach by developing appropriate technologies for small farmers within the context of their own environment. Shaner, et. al., define it "as... an approach to agricultural research and development that views the whole farm as a system and focuses on 1) the interdependencies between the components under the control of members of the household and 2) how these components interact with the physical, biological and socio-economic factors not under the household's control. Farming systems are defined by their physical, biological and socio-economic setting and by the farm family's goals and other attributes, access to resources, choice of production activities (enterprises) and management practices (1982:13).

While the farming systems approach still strives to increase agricultural productivity and efficiency, as in the earlier "top-down" approaches to development, this more holistic strategy attempts also to enhance the general welfare and nutrition of the entire farm household. Furthermore, because the farm and the farm household are so integrally connected and since there is an inescapable relationship between the unit of production and the unit of consumption, the household and its members rather than the farm in isolation becomes the main focus of the research (Norman 1982:1). The farming systems research approach has gained acceptance and popularity because it proposes a more humanistic strategy for development, whereby projects and research are designed to assist the poorer majority rather than a minority of well-to-do farmers. Furthermore, farming systems research

contains a very important socio-cultural component based on the "recognition that adoption and adaptation of technology requires attention to the "human element" and the need to view technology from the client's viewpoint" (McKee, 1983).

As Laufer (1985) points out, however, the concept of the client is frequently misunderstood. Farming systems research practitioners often fail to understand that the term "client" must be defined to encompass not only male farmers but all members of the farm household including women and children. In the case of extended family household, the clients may include grandparents, aunts, uncles and so forth. Although farming systems research stresses the importance of addressing an entire farm household, the role of women within a farming system is rarely considered or understood. Much of the confusion arises because women are engaged simultaneously in a variety of economic occupations that frequently combine the domestic and the agricultural sectors. The multiple roles of women in an agricultural household may include family laborers, entrepreneurs, market women, bookkeepers, agricultural processors, wage laborers in addition to housekeeper, mother and wife (Cloud 1983:7).

Women are, in fact, the only actors in "the farming system" who actually participate extensively with and in both the domestic and agricultural economic sphere. Longhurst describes the multifaceted roles of women by explaining "in rural economies, women are the pivot between production and consumption" (1983:44).

The major point being stressed by these authors is the fact that a male farmer (or a female farmer) cannot and doesn't function in isolation. The household and the farm compete for scarce resources such as labor and cash and the decision regarding the disposition and allocation of these resources will almost always be

made by both the male and female members of the household. The implications of these facts for farming systems researchers is explained by Laufer.

"When a new technology is introduced, it is the household that must decide whether and how to adopt the innovation. Depending on the nature of the proposed changes in practices or inputs, the household members - men, women and children must together juggle the scarce resources, including their own labor.

"To understand the rationale of the household decision, the opportunity costs of the household member's time, as well as other resources, must be assessed. Prerequisite is defining the farming system to encompass all productive uses of the household member's time, including household production and reproduction, self-employment and wage labor, as well as agricultural production. Labor and decision-making profiles of all household members will demonstrate the extent and variety of their roles and responsibilities in all areas of household production" (1985:4).

Frequently, farming systems research projects fail to pay adequate attention to the human element. Agricultural development experts often do not possess a thorough understanding of socio-cultural components of the farming systems approach and, thus, tend to rely on production-oriented approaches delivered exclusively to male farmers. For example, the Project Paper for the Farming Systems Development Project - Eastern Visayas, being currently implemented by USAID and the Government of the Philippines, neither mentions the farming household nor considers the role of women. It states, "the criteria for the selection of the farmer-cooperator must include his experience in growing the primary crop that

provides the focus for farming system development, his current active involvement in growing that crop or crops, and his interest and ability (including his own and his family labor availability) to take on likely farming systems modifications, including perhaps new crops and enterprises... It is also suggested that availability of suitable land and availability and willingness to provide any additional labor and manage more time input that might be required to participate in farming systems experiments is more important than capability to finance the trial enterprises" (emphasis added).

Those responsible for the design of this farming systems project simply failed to take into account that the potential cooperator would not be a "him" but an entire family. Furthermore, as Laufer pointed out, the allocation of family resources such as labor is not under the control of "the benevolent dictator", but is distributed according to the opportunity cost of each member, and the rationality and profitability of the trade-offs each member makes in allocating their time and other productive resources among household and farm activities (Cloud, 1983, Laufer 1985).

Therefore, individuals who are responsible for designing and implementing farming systems projects may not separate real or potential agricultural activities from other production behavior since all such behavior is interrelated. Furthermore, it must be understood that the household/farm decision making processes will reflect the interrelationship and conflicts that exist between the production activities and are likely to be the result of complex negotiation and bargaining among the members of the household. Although male and female household members have a shared interest to ensure the subsistence and survival of the family, it is probable that these individuals also have quite distinct and occasionally conflicting interests in the allocation and distribution of household resources.

In sum, a failure to account for the dependency and complementary relationship that exists between the consumption and production systems, and a failure to integrate the concerns of women into project design may have serious economic and nutritional implications.

As Frankenberger (1985) has pointed out, development projects which include women as participants and concentrate on crops primarily grown or preferred by women are most likely to have positive implications for household nutrition and consumption patterns. The inter-relationships between women's economic activities and household consumption patterns include the following facts.

- 1) Women are twice as likely as men to use their income to improve the nutritional status of their families.
- 2) Increasing the demand for women's labor in the agricultural sector through interventions which stress cash-cropping and labor intensive technologies can significantly alter existing consumption and nutrition practices such as: a) changes in cooking habits where fewer and or quicker, less nutritious meals are prepared; b) the introduction of consumption crops which are less labor intensive and less nutritious (i.e., cassava instead of yams); and c) a decrease in the time available to devote to child care and breast feeding.
- 3) Because agricultural extension services often tend to neglect or ignore women farmers, it has been noted that there is a significant increase in male control over capital resources while family food production decreases.

- 4) Finally, in many countries such as the Philippines, females are much less likely than males to attend school or complete their education because their labor is required in the home or on the farm (Ancheta, 1983). Thus, women often are not able to find well paying jobs to support their families. Furthermore, women with less education more frequently have larger families which are more likely to be malnourished.

THE ROLE OF FILIPINO WOMEN IN AGRICULTURAL PRODUCTION SYSTEMS

Agricultural production in the Philippines has typically been regarded as a male dominated occupation. Simply put: farmers in the Philippines are men, women are the "farmer's wives". In recent years, however, numerous authors have pointed out that Filipino women make enormous contributions to production in the agricultural sector (Illo 1985, 1977, Castillo 1976, Santiago 1978, Res 1983, Dey 1985).

The 1975 National Sample Survey of Households found one third of rural women in the labor force, 54% of whom were employed in the agricultural sector. Women's participation in agricultural tasks was divided among the following occupations: farm workers (59.13%); farm managers (18.44%); workers on coconut farms (8%); and in other crops, and poultry and livestock (6.8%). As Dixon has (1982) pointed out, national census data and economic statistics rarely reflect the total participation of women within the agricultural sector because they do not include unremunerated family labor. Using the 1975 Philippines agricultural statistics, Ancheta (1985) concludes that women's contribution to agricultural labor is quite substantial. She estimates that of the 43.9% of rural women who work as unpaid family labor, 89% provide some labor to the agricultural sector. Therefore, according to Ancheta, women's contribution to agriculture is likely to be considerably higher than reflected in the national demographic survey.

Women's tasks in agricultural production takes a variety of forms, all of which are essentially determined by the survival needs of their families (Illo 1984:2). Within lower income rural families, for example, women are more likely

to provide labor in farm activities because these farms tend to be less mechanized and rarely can afford to hire labor (Res 1983). Additionally, women from lower income families tend to engage in diverse patterns of agricultural activities such as vegetable and fruit production, marketing and in raising small livestock which may be consumed within the household or marketed later for cash. Women may also tend to provide more labor on the family farm after their children have matured. "Women increase their contribution to rice production because they are freed from housework and child care and because of the necessity to meet family needs" (Castillo, 1985:8). Women from higher income families are least likely to be part of the agricultural labor force and, if engaged in agricultural and livestock production or income generation activities, they work shorter hours than other women (Illo, 1983a, Res, 1983; Castillo, 1976, 1985).

When it is not possible for a family to meet its own subsistence requirements, "either because of the family farm's suboptimal production or because the family has not land to till, married women are wont to hire out their services for the harvesting of rice crops; sharing in the harvested paddy provides the main attraction in this activity" (Illo, 1983:18). Similarly, women contribute approximately one half of the family income through wage employment, income generating activities undertaken at the home, marketing and so forth (Ancheta, 1982; Miralao 1980). These women often ensure the maintenance and viability of the family farm by providing the family with sufficient cash resources to continue as farmers.

There is much social, economic, ecological, and cultural variability within the Philippines and, as such, the labor organization patterns for males and females may vary considerably by region. Furthermore, it would appear that there is a certain amount of flexibility between male and female labor roles in agriculture (Dey, 1985). In Iloilo, Res (1983) found that women contributed approximately 11%

of total family labor for rice production and almost 23% of hired labor. In irrigation farms in Central Luzon women contributed little to family farm labor (7%) but accounted for 28% of the total hired labor and 48% of wage labor hired to pull and transplant rice seedlings (Gonzales and Quino, 1981). Within rainfed farms in Central and Southern Luzon, women's contribution was found to be considerably higher than in irrigated rice farming in the same regions (Santiago, 1980).

While most studies on women in agriculture have focused on rice farming systems, several authors have shown that women often provide more labor for crops other than rice and participate significantly in livestock production and post harvest processing activities (Illo, 1983a; Res, 1983; Santiago, 1980). In a study conducted by IRRI, it was reported that Filipino women contribute 50% or more of the labor required for livestock management and production (Markanday, 1985).

Within rice farming systems women are found to participate to some degree in almost all farm tasks, with the exception of plowing and other land preparation activities. Women are engaged in seed bed preparation, transplanting, weeding, harvesting, winnowing, threshing, drying, storing and milling in addition to transporting and marketing produce (Dey, 1985, Atienza-Salvana, 1984; Ancheta, 1983). Ancheta concludes that "their contribution to agricultural production, in particular, is at least equal to, if not greater than that of men since they share in the pre- and post-harvest operations" (1983:6).

Of course, both female and male labor in agriculture varies according to the farming season. During the peak seasons of planting and harvesting, women are likely to be occupied in the field during all daylight hours. At other times the agricultural labor requirements are not as severe and women may participate only

as needed. One may also assume, however, that male labor also decreases when planting and harvesting are completed.

Women are, of course, also engaged in a variety of domestic and non-domestic economic activities. A survey conducted in three farming Barangays in Batangas (Baex, 1981) describes women's work as follows:

- 1) Home Production Activities: food preparation/cooking, marketing, laundry work, cleaning the house, child care, fetching water, gathering firewood, repairing old clothes and so forth;
- 2) Market and Production Activities: wage earning (cottage industries), farm activities, kitchen gardening, livestock production, transporting and marketing produce and livestock; and
- 3) Personal Consumption Activities: personal care, sleeping/resting, relaxation and socialization.

The amount of time devoted to some of these tasks will vary according to household need and agricultural production seasons. The majority of these activities, however, are critical to the welfare and subsistence of the family and as such must be performed regardless of seasonal labor demands. More specifically, during peak agricultural seasons women may well spend all day in the fields, and work evenings and nights to complete domestic tasks and important cash income generating activities.

Summary

Women's participation in agricultural production systems will vary considerably by geographic and ecological region, socio-economic status, age, composition of the family and, most importantly, the survival and subsistence requirements of the family. When women do not actually provide labor in farming, they are inevitably contributing domestic labor, cash, and marketing expertise which complements, supports and sustains the family's farming endeavors. Without the labor and capital resources derived from women's economic (including the domestic) activities, it is likely that efficiency and productivity and sometimes even the survival of many family farms would be threatened.

Agricultural Decision-Making

Women's role in agricultural decision-making in the Philippines has been investigated by numerous authors. Chua (1973), for example, contends that the husband, as head of the household, is ultimately responsible for making decisions regarding the allocation of family finances. He adds, however, that approximately 18% of his respondents claimed that women alone are responsible for making decisions while 27% stated that the husband and wife arrive at decisions jointly.

Ancheta suggests that both husbands and wives together make important farm business decisions. She claims "the husband usually consulted the wife more than half the time on the following matters: buying fertilizers, where to sell agricultural products, engaging in a new enterprise, buying a carabao (water buffalo), buying farm tools and equipment, buying farm chemicals, where to borrow money, adopting new rice varieties, and changing rice cultivation practices" (1983:4).

Castillo (1985) maintains that married women most likely possess some degree of influence over resource allocation and management decisions as they inevitably act as the family treasurer, record-keeper and household manager. Typically, men will turn over all their earnings to their wives, who are in charge of managing cash resources. Further, women are often the contributing source for one third to one half of the household income. Thus, women are likely to play a major role in allocating household/farm resources.

Bascue points out, moreover, that women are involved generally in making most farm decisions. Specifically, Bascue found that women play a very influential role concerning the allocation of money for farm activities such as the hiring of laborers, purchase of seeds, inputs and equipment and costs incurred in land preparation. Approximately one third of Bascue's respondents suggested that women alone make these decisions while another third claimed that they made decisions with their husbands. Bascue also found that approximately one half of her respondents stated that women actively participate in making technical farming decisions such as the use and applications of fertilizers and other inputs; the selection and purchase of planting materials, when and how to weed the farm, and when and how to harvest, transport and market farm produce.

Lastly, Bascue notes that when farm families avail themselves of agricultural credit programs, both husbands and wives are responsible for making the decision to borrow money.

Summary

Although males exert considerable influence within the farm and family as the head of household, women are also important in their role as family treasurer,

manager, bookkeeper, and wage earner. Furthermore, it is clear that women from farming households are involved very frequently in making important decisions regarding the selection and use of agricultural inputs, purchases of farm equipment and machinery, the allocation and hire of household and agricultural labor, transportation and marketing of produce. While males in some households may take responsibility for making decisions themselves, not infrequently women alone also make decisions for their households on farming matters. In most cases, males and females consult on important agricultural decisions. In fact, it appears that women make minor day-to-day household decisions and participate fully with their husbands in making very critical decisions on increasing farm productivity, introducing new crops and livestock, participating in agricultural development and in the allocation of farm resources to achieve productivity.

The Access of Filipino Women to Development Resources,
Information and Training

The delivery of development resources, information and training within the Philippines is almost exclusively segregated by gender. Males and females belong to different community organizations, are visited by different extension services and receive differentiated information and training from development agencies.

Women typically are visited by home management technicians who instruct them in domestic skills such as nutrition, food processing, kitchen gardening, handicraft production and other income-generating skills. The home management technicians also assist in the creation and organization of Rural Improvement Clubs (RICs) which strive to involve women in community development and income-generating activities.

Males are generally targeted for assistance and training from the agricultural extension personnel. Furthermore, males most frequently participate in the Barangay associations, or the "Samahang Nayon", and represent their families in other community organizations which are targeted for agricultural training, development assistance, irrigation construction, and so forth. While the Rural Improvement Clubs, the Samahang Nayon, or organizations created for agricultural projects (such as an irrigation association), do not exclude either men or women, membership is almost always divided by gender. Although the RICs and the training provided by the home management technicians are of value to rural families and the community as a whole, women rarely receive information and training in those areas where they are already active economic participants. "The teaching of modern agricultural methods, provision of facilities and the like have so far been directed to men only or geared towards the men, thus, creating a big drawback to the development of rural women's economic participation. Through training in appropriate modern scientific agricultural skills and home management, women will improve their productivity" (Ancheta, 1983:10). Illo attributes the sexual segregation of development resources, information, and training to the misconceptions of development planners rather than local practices or preferences: she states that women are usually passed over in development projects because of:

"the assumptions which project planners and implementators have about women's roles in non-household enterprises, and the view that project beneficiaries hold as to what constitutes acceptable female participation. By design or by accident, non-female-oriented programs and projects in the Philippines, as elsewhere, tend to discriminate against women's involvement. Such pro-male bias originates partly from the assumptions which government and other development agencies make concerning the roles women play in the community and concerns which dominate their lives. In the conception of government

planners, women are generally relegated to the domestic or household production sphere. Female participation in agriculture is assumed to be but secondary to home and family management. Moreover, although in some cases the women might be earning as much as their spouses, they continue to be regarded as auxiliary income earners. Finally, women are assumed to lack interest in the 'affairs of the world'. As a consequence of these role stereotypes, nutrition and family planning programs have women as 'clients' while men are usually the "targets" of production and related programs, including the irrigation development efforts" (1984:33).

In Illo's (1984) study of women's involvement in two irrigation projects it is demonstrated that women are not only interested in development projects which may impact on the economy of their family, but frequently become active participants when they receive adequate information and are invited to join. Furthermore, this study shows that when women are allowed or encouraged to join project activities they often have considerable impact. "They served as leaders, improved attendance during meetings and other activities, helped to finalize the location of irrigation facilities, and lent firmer support to the contributions which their respective households had to make to the irrigators associations. Female leaders assisted in the negotiations for rights of way, record keeping, and management of association finances" (1984:38). In addition, Illo notes that women joined the project at the encouragement of male farmers. In fact, these male farmers not only recommended that women join the project but were also instrumental in women attaining leadership positions.

Summary

The delivery of development resources, information and training within the Philippines is almost exclusively segregated by gender. Males generally receive most of the training in modern agricultural methods, while women are visited by home management technicians who instruct them in domestic skills, nutrition, kitchen gardening, and income-generation activities. Although improved domestic management skills will be of value to rural families, women rarely receive training and assistance in many areas, such as agriculture, where they are already active participants. Similarly, men are almost never the recipients of training in nutrition, even though they are very influential in selecting the types of crops to be grown within the family farm.

This segregated delivery of development resources will tend to decrease the potentials for agricultural productivity and development and may well impact upon the nutritional well-being of the family.

INTEGRATING WOMEN INTO THE PROGRAMS AND PROJECTS OF THE
MINISTRY OF AGRICULTURE AND FOOD

The Ministry of Agriculture and Food (MAF), in recognition of the critical role which women play within agricultural production systems, has initiated a program to systematically address the needs and constraints of women within the context of new and ongoing projects. It has been determined that an initial effort to integrate women in MAF programs and projects should be implemented as a pilot activity through the ongoing Rainfed Resource Development Project within the Rural Farming Systems component. MAF and USAID have identified this project for women in agriculture activities because the project is at a stage of implementation where new project activities may be introduced successfully and because it contains a variety of components and activities which will facilitate a women in agriculture perspective within the project. A description of the project follows.

The Rainfed Resource Development Project

The Rainfed Resource Development Project (RRDP) represents the Agency for International Development's major project initiative within the comprehensive Rainfed Resource Development Assistance Program. This program is designed to assist the Government of the Republic of the Philippines (GRP) in developing and strengthening the institutional and policy framework required to support a community-based approach to the management of land and water resources in rainfed areas. In addition, the RRDP is also intended to produce and sustain a variety of new and

adapted technologies which are both appropriate to the needs of smallscale producers and compatible with the objectives of sustaining and ensuring the productive use of natural resources.

The RRD project is designed to assist the GRP to initiate a series of activities through the Ministries of Agriculture and Food and Natural Resources that will focus on the resource management needs of the rainfed areas. Specifically, the RRD project is currently addressing the resource management needs within three resource zones: settled forest land; rainfed agricultural lands; and costal areas. Both AID and the GRP have targeted these areas because it has become apparent that past agricultural projects have directed relatively little attention to the needs and constraints of poor farmers who dwell in the upland and low-lying rainfed areas. These farmers must contend with very complex and less productive farming systems and typically must rely on a more fragile resource base. Project activities are currently being implemented in three regions: the Bicol (Region V); Western Visayas (Region VI); and the Eastern Visayas (Region VIII); all of which USAID and the GRP have identified for priority attention.

The project consists of three distinct but complementary project components:

1) Component 1: Resource Monitoring and Policy Analysis

This component is designed to: (a) identify and monitor the extent, condition and productivity of existing renewable natural resources; (b) assess both present and future demands on existing resources from local populations and markets and the requirements of the national market; (c) undertake research on important natural resource policy issues; and, (d) establish effec-

tive systems to utilize research from policy studies to develop responsive national policies.

2) Component 2: Biotechnical Research

Project funds will be provided to support basic and applied research which addresses the needs of small producers in the target resource zones. Research is expected to focus on the economic and social determinants of improved resource conservation and land utilization practices. This research will be managed by the Philippines Council for Agriculture and Resources Research and Development.

3) Component 3: Community-Based Resource Management Programs

The RRDP supports both the Ministry of Agriculture and Food (MAF) and the Ministry of Natural Resources (MNR) in project activities to develop and test new approaches to natural resource management and institution strengthening. As part of this effort the project is implementing a participatory management system which draws on a number of private sector academic and research institutions for their expertise. This process utilizes a national level committee or "working group" which is charged with developing participatory management systems, upgrading the skills and knowledge of agency personnel and introducing required adjustments in agency management procedures.

In addition, the working group will focus on field activities in the Agroforestation Program Development, Rainfed Farming Systems Program Development, and Coastal Zone Management Program Development projects. The working group is expected to assist national, regional and provincial staff to: as-

sess program priorities; select specific pilot sites appropriate to these priorities; identify local research institutions; assist in the formation of pilot project development teams; undertake initial sociotechnical assessments of selected project sites; assist in the development of effective community involvement processes. The working groups are also expected to assist regional personnel to develop procedures for regular monitoring and evaluation of project activities, including process documentation and periodic workshops.

Farming System Development Bicol

This portion of the RRD project is being implemented within six areas of the Bicol which have been selected to represent the rainfed farming conditions in the Region V. Six Site Research Management Units (SRMU) have been fielded by the MAF and are currently operating in the Provinces of Camarines Sur, Camarines Norte, Sorsogon, Masbate Catanduanes and Alby. The SRMUs are working with selected farmer-cooperators to develop improvements in existing farming practices which will increase farm family income while maintaining or improving the productivity of the land. These on-farm trials are supported by on-station research being conducted through the Bicol Agricultural and Resources Research Consortium (BARRC). The project is being administered through the Regional Extension Sections and the Provincial Agricultural Officers.

The RRD farming systems development program in the Bicol has been designed to facilitate farmer involvement through the following project initiatives.

1. Each SRMU is designed to include a home management technician in addition to an agronomist, a livestock specialist, an agricultural economist and an extension specialist.
2. Extension specialists have been designated as SRMU leaders within each site area in order to strengthen the emphasis on farmer involvement.
3. A group of technical specialists have been created to advise and assist on technical matters on an as needed basis and to serve as contact point between on-station research and the SRMUs.
4. Farmer advisory committees are to be elected by farmer cooperators to review proposed on-farm research and to participate in project review and evaluation.
5. In-service training is being provided to members of SRMUs to strengthen their technical skills in areas such as farm budgeting and to assist in building team cooperation and cohesiveness.

Integrating Women into the Rainfed Resources Development Project - Bicol Farming System Development Component

To date, the RRD project has not addressed the roles and constraints of women in farming systems within the Bicol nor has it attempted to integrate women into project activities as direct participants. Rather than simply ignoring women, this project has systematically excluded the participation of women in all project related activities except as peripheral beneficiaries. Women's roles in farming systems in the Bicol are typically perceived to be secondary to their role in the domestic sphere. Furthermore, although women may be contributing up to half of the family income, they are usually regarded as secondary wage-earners. The exclusion of women from most RRD project activities has occurred for several reasons which are summarized below.

1) The SRMU's generally seem unaware that women participate at all within the agricultural sector. Females are perceived as "housewives" and mothers, not as critical actors within the economic system. Thus, the RRD project cannot provide a farming systems approach which considers the farm and the household as an integrated system. The male farmer is seen as both the client and the primary beneficiary and the rest of the farm family is assumed to act primarily as consumers, or at best auxiliary sources of labor.

There has been little chance until recently for the project to conduct appropriate socio-economic research on both men and women or to incorporate a viable socio-cultural component into project activities. It is assumed that the Bicol "working group" and the process documentation activities will be able to

provide advice and recommendations for the development of an effective and integrative socio-economic, community approach to farming systems in the future. Currently, however, on-farm demonstrations are being implemented without benefit of this information. In addition, it should be recognized that the working group has been unable to act precipitously and has not to date considered the role of women in the context of the RRD project at all.

2) The orientation of this project towards male "heads of household" has occurred consistently throughout RRD project activities in the Bicol Region, as illustrated below.

(a) Reconnaissance surveys conducted to provide site descriptions and to select project sites for on-farm research, relied exclusively on information provided by male farmers and male "key-informants". In addition, respondents were not questioned on the division and distribution of farm/household labor and resources in agricultural and domestic activities. Thus, it is unlikely that the site descriptions and the SRMUs assigned to these sites, possess accurate information on both men and women's roles and management responsibilities in farm and household production, their access to factors of production (land, credit, information, agricultural technology), and food consumption patterns and practices of the households. In other words, RRDP staff has not identified key constraints in the farming system because they have not obtained data on how project beneficiaries allocate and distribute scarce capital, labor and production resources.

Without incorporating this critical information into project intervention strategies, it is quite likely that "recommendation domains" and

specific project activities such as on-farm demonstrations, training, and the selection of an appropriate crop and livestock mix are based on false, misleading and/or inaccurate assumptions.

(b) Barangay meetings, which were held to inform local residents about the RRD project were almost exclusively attended by male farmers. While this is not unusual, it does exclude women from understanding and effectively participating in RRD project activities.

(c) The RRD project has selected only male farmers as cooperators and project beneficiaries. It has been estimated that approximately 10% of rural women in the Philippines function as farm managers (Ancheta, 1982). This being the case, it would be beneficial to project success to select at least several women farmers as cooperators in the RRD project in the Bicol region. In addition to contributing to a more equitable distribution of project resources, utilizing both men and women farmers as cooperators will increase the spread effects of the project since women will become more involved.

(d) Training projects and programs designed for project beneficiaries have been directed toward male farmers rather than the farm household. Programs in farm budgeting, recordkeeping, livestock management and nutrition, the proper application and use of project inputs, and so forth, have almost exclusively been directed to male farmers or the male "head of household," despite the fact that women and other household members frequently take charge of these activities. As stated above, numerous studies have shown that women almost always act as the family treasurer, bookkeeper and household manager. In addition, women tend to be very in-

fluent when decisions are made regarding household/farm resource allocation and distribution.

Studies on Philippines agricultural systems have also demonstrated that Filipino women tend to contribute at least 50% of the labor required for livestock management and production. It seems likely, therefore, that directing training only to male cooperators is both inappropriate and inefficient. The fact that training has been misdirected may be traced once again to a lack of knowledge and understanding of household/farm resources and survival strategies. Furthermore, it should be recognized that if training programs for project cooperators are provided solely for male "heads of household" certain human resources within the household will not be utilized to their maximum capacity.

(e) As previously stated, the working group on developing community management systems for the Bicol portion of the project has not, as yet, addressed the question of women within the farm or in the community. As women play an important role within both areas, it may be assumed that any model or approach developed by this group will be faulty until this issue is addressed.

(f) Project documentation, field manuals, baseline survey forms and guidelines for project implementation all tend to have a strong bias toward male farmers. Rarely is it suggested that project personnel should confer with women or attempt to incorporate women into project activities.

3) The delivery of extension assistance is currently segregated by gender rather than providing an integrated package for farm families. For example, males receive assistance and recommendations on the adaptation of appropriate farming systems technology (crop-livestock mix) while females receive information and assistance from the home management technicians (HMTs) on nutrition, kitchen garden cultivation, food processing and marketing and income generation activities. Thus, the project and the extension services are addressing the domestic (consumption) sector and the agricultural (production) sector as though they were separate rather than complementary economic activities. As the RRD project is attempting to secure adequate nutrition and food supplies for cooperator households, in addition to increasing agricultural productivity, it is imperative that the project focus on the important relationship between the production and consumption systems of the households.

4) Lastly, it often appears that many government agencies and individuals working in agricultural development in the Philippines do not believe that women should be given serious consideration within overall agricultural development strategies. Women are targeted for smaller, separate development activities and it is assumed that women and their families will benefit from the RRD and other projects because project resources will "trickle over" from the male participant and will enhance the welfare and socio-economic conditions of the entire farm household. The validity and effectiveness of the "top-down" or "trickle-down or over" approach to development has been consistently challenged and criticized by development specialists and inevitably has been found to be inappropriate, inefficient and generally unsuccessful. Similarly, there is little reason to assume that RRD project resources will "trickle over" to benefit all members of farming households. This assumption will inevitably lead to sexual discrimination in

project activities and will ensure that project and human resources are underutilized and ineffective.

RECOMMENDATIONS

It is strongly recommended that the USAID and the Ministry of Agriculture and Food RRD Project, Farming System Development Program in the Bicol adopt a series of research, training and implementation activities which are designed to strengthen the socio-economic component within the project sites and to facilitate the integration of women into all project activities within Region V.

1. The RRD project must adopt a more integrated approach to farming systems which incorporates not only all members of the farm family as project clients, but also focuses on the interrelationship between the consumption and production systems of the household. Thus, the identification of recommendations domains and selection of an appropriate crop/livestock mix for project cooperator families should be made only after conferring with both male and female members of the household.

As part of this initiative, the SMRUs and other project staff must redefine project procedures and the delivery of extension assistance and training to provide a more integrated approach to agricultural extension. The farm household does not separate or isolate the production from the consumption system and neither should project personnel. Furthermore, because interventions in one area (either farm or domestic) will impact upon other economic behavior and/or activities in the household, it is recommended that training and interventions are delivered as an integrated package of domestic and agricultural innovations. Thus, the home management technicians must work closely with agricultural personnel to

plan and implement project strategies, and all SMRUs must work extensively with all adult members of the farm household (recommendation for facilitating an integrated approach appear below).

2. Project personnel should begin to discuss local farming practices and constraints with both men and women from the site areas. Males and females will possess very different views on local farming practices, and this contrasting information should assist SMRU to compile a more accurate picture on agriculture in site areas. Additionally, it is recommended that local farmers are asked if they are aware of women in their area who are responsible for managing family farms. If women farm managers are identified, they should be visited to acquire information on their agricultural practices and constraints and to assess the possibility of incorporating these farmers and their families into the project as cooperators.

3. Training programs designed for project cooperators should be provided for both male and female clients or directed toward the household members who are primarily responsible for the related agricultural or management task. For example, training programs in recordkeeping and household farm budget should probably be designed for women in cooperator households, as she is most likely to possess the expertise in this area. Similarly, both males and females should have the benefit or training in livestock management and production because care of livestock is likely to be a shared task in many households. Cooperators must be questioned and observed to determine which family member is responsible for what task and how training programs should be organized and delivered so that they will be both appropriate and responsible to the total farm and household strategy.

4. The working group for community management systems must begin to address the role of women in the agricultural systems and in the community. It is further recommended that the Bicol working group actually speak with local women when visiting project sites so that they may obtain accurate information on local farming systems. To date interviews have been conducted only with males. In addition, women should not be interviewed within large groups, and if at all possible, should be consulted at their homes by women team members.

5. While the Ministry of Agriculture and Food (MAF) is in the process of implementing a women in agriculture program, it must be recognized that existing program guidelines, project reports (such as RRDP) and baseline survey instruments and so forth tend to reflect a very strong bias towards male farmers. MAF project personnel continue to rely on these documents for guidance and direction in the design, implementation and evaluation of MAF programs and projects. Therefore, it is likely that women will be continuously excluded from project activities and benefits unless these documents are revised to reflect the role of women in agricultural production systems. Specifically, revisions such as the following should be made.

a) Rapid rural appraisals and site identification activities should be conducted in a manner that reflects the economic behavior of both genders. Thus, interviews must be undertaken with both males and females and not be restricted to community leaders and "key informants". When interviews are restricted to key informants, it is quite likely that the sample will be biased toward more prosperous and advantaged males of the community. It would be advantageous, therefore, to select a more random sample of male and female farmers to obtain a more accurate and diverse picture of local farming systems and the community.

- b) Baseline surveys conducted to obtain data on farm families should be revised to collect information on farming practices which is disaggregated by gender. For specific recommendation see research questions provided in the Household Resource Allocation and Distribution Research section of this report.
- c) Site description documents should reflect not only what local farming practices are but also which family member is primarily responsible for the various agricultural tasks, marketing activities, decision-making in the farm household and resource allocation and distribution.
- d) Training manuals and documents used to instruct farmers should be designed to assist both male and female participants and to enable the project and the MAF to provide training to the most appropriate and qualified member of the farm household.

IMPLEMENTATION OF RECOMMENDATIONS

In recognition of the fact that SRMUs and other project staff do not currently possess the resources, time, knowledge or capabilities to implement many of the aforementioned recommendations it is suggested that the Ministry of Agriculture and Food and /or the USAID Mission to the Philippines, contract with a local firm or research institution to assist in implementing the activities described below to integrate women into the RRD project in the Bicol region.

Household Resource Allocations and Distribution Research

At present very little is actually known about the dynamics and interrelationships that exist between household consumption and production systems in the Bicol agricultural sector. Furthermore, it is clear that agricultural projects such as RRDP continue to operate within the Bicol region without adequate knowledge or understanding of rural household/farm labor and resource allocation and utilization patterns. Many assumptions are made concerning labor distribution patterns and resource management strategies but these assumptions are primarily based on guess work and almost always neglect the role of women in agricultural production. Moreover, although some research has been conducted on women in farming in the Bicol region (see Illo, 1984, for example) as elsewhere, existing knowledge on women in farming systems is neither comprehensive nor sufficient for use in the design and implementation of projects.

It is recommended, therefore, that the RRDP obtain the services of a Philippine based firm or research institution who has the staff and expertise to conduct socio-economic research within the projects sites to obtain critical information that may be integrated in project design and implementation activities.

In addition to contributing to the existing knowledge and understanding of farming systems in the Philippines, this research will enhance the efficiency and effectiveness on project activities by enabling the RRDP staff to fully utilize and motivate available human resources in the agricultural sector. Specifically, research should be conducted in the RRDP Bicol project sites on household farm labor and resource distribution and utilization strategies. It is recommended that the

research be designed to obtain information and a better understanding in the following areas.

Division of Labor

1. How are the human resources in the household allocated? What is the rate of participation of men, women and children in farm, domestic and off-farm work during the yearly production cycles? For farm, domestic and off farm work, who does what task? Is labor derived from the nuclear or extended household?
2. What are the tasks that only women do and the tasks that only men or children accomplish? Is the division of labor rigid or flexibly divided?
3. How would project interventions alter the division of domestic and agricultural labor? Would men, women or children be expected to take on more work or would their workload be decreased? If project demonstrations require a more intensive labor input, what effects will occur during peak seasonal workload?
4. Will proposed technical package increase labor requirements in the areas that men or women specialize in? How will proposed change affect seasonal and off-farm labor requirements of men and women?
5. Have all adult household members been asked how this change will affect their schedules? Do men or women anticipate that they will have difficulty taking on additional responsibilities? Are all household members willing to participate in this new activity?

6. Is there a different division of household labor for different parcels of land? Who has responsibility for labor on each parcel?
7. Is there a different division of labor for specific crops grown on the farm? Who is responsible for each crop or each type of crop?
8. How does women's participation in the agricultural sector differ among women within the community (i.e., socio-economic status, marital status, age participation in wage employment market, ethnic affiliation, and so forth)?

Access and Control Over Resources

9. Do husband and wives jointly purchase land? Are both legally recognized as full co-owners? May husband or wife dispose of land or purchase new land without consent of their spouse?
10. What is the percentage of female owned or female managed farms? Who performs the labor on these farms? What kind of agricultural technology is utilized on these farms? How does this differ from technologies used on male headed or managed farms? Does production differ between these farms?
11. Do both women and men have equal access to credit programs? Can men or women obtain credit from lending institutions (including government sponsored credit programs) without the consent of their spouse? Does access to credit differ?

Access to Information

12. Do both men and women have access to agricultural extension information and assistance? How does this access differ? Does information differ according to specific crops or agricultural activities (i.e., livestock, vegetable production rice and corn production)?

Decision-Making

13. Who makes decisions regarding farm and agricultural work within households (what to plant, when to plant, purchase of inputs, marketing, division of labor and so forth)? Are the different individuals within the household responsible for different decisions?

14. Who makes decisions regarding domestic work and expenditure or income for domestic consumption?

15. Does control over decision-making by gender differ by type of household (i.e., socioeconomic status, household composition, age of adult household members and so forth)?

Marketing

16. What is the rate of participation of men and women in marketing? Is marketing primarily a women's occupation? What types of items do men and women specialize in selling?

17. How would planned change affect men's and women's marketing activities? Would men and women have less access to marketing opportunities?

Community Development and Leadership

18. Are women and men both involved in local community planning? How does their involvement and influence differ?
19. Are women and men both involved in local planning in agricultural and livestock projects? How does their participation differ?
20. Are women and men both involved in local planning for income generation, processing and marketing projects? How does their involvement and influence differ?

Farm Management

21. Do men or women take responsibility for managing and budgeting household and farm income? Do financial management activities differ between farm and the household? Will planned change alter this arrangement?
22. During an agricultural season, what are the specific household/farm strategies for crop and livestock production, marketing, and investment of income? Are these strategies dependent on gender?

(Research questions are derived from the work of Cloud, Overholt and the WID workbook developed by the Bureau of Applied Anthropology, University of Arizona).

This list of research question is not meant to be exhaustive but merely suggestive of the type of questions which should be addressed at the household/farm level.

There are many research institutions in the Philippines which are probably very qualified and capable of carrying out this research. The Ministry of Agriculture and Food and the USAID mission are currently in possession of a proposal from the Institute on Philippine Culture requesting funding to conduct a research project in the Bicol which is very similar to the program recommended above.

Training

It is further recommended that the Ministry of Agriculture and Food conduct a training program for RRDP field and core staff in the Bicol to provide information and instruction on the following.

- o The importance of focusing on the entire farm family as the "clients";
- o The importance of the role of women and other household members in farming systems research; and
- o Processes and procedures for using the farming systems approach on both the production and consumption systems of the farm household.

In addition, it is strongly recommended that the Ministry of Agriculture and Food consolidate the proposed research and training activities. The benefits of integrating these project activities are many. Specifically:

- o The training can make use of site specific information so field staff will receive both relevant and timely information; and

- o The MAF will receive an integrated and coordinated "package" on technical assistance for their work in farming systems and community organization and management.

- o The field staff will be able to work with the research and training staff to obtain socio-cultural information and analyze the results of the research so that they are particularly appropriate to the needs of the staff and the cooperators. In addition, project staff, by working closely with the researchers, will become familiar with the applicability of a socio-economic component in farming systems and should be more sensitive to the roles, needs and constraints of women in the agricultural sector.

Off Shore Training for Home Management Technicians

Increasingly, development experts and extension training programs have recommended a more consolidated and integrated approach to the delivery of extension. Thus, many universities in the United States have designed, or are in the process of designing, B.A. and M.A. programs which instruct students in both home economics and agricultural extension/education programs. More often than not, small-scale farms, in the U.S. and elsewhere must rely on family resources and labor. Typically family members must perform a variety of economic and management tasks which crosscut the domestic and agricultural sectors. These programs are designed to train extension personnel to view farms as integrated and to enable extension personnel to assist the entire farm family more effectively. It is suggested that several of the home management technicians from the RRDP team are selected to receive this type of training. The AID Office of Women in Development has already forwarded information on some of these university programs to the Ministry of

Agriculture and Food. More information will be attached to this report. Training in integrated extension should enable the home management staff to assist in the design and delivery of a more integrated approach to extension and project activities and should serve to meet project objectives.

SECID Technical Assistants

As agreed to in the SECID/AID/WID contract, SECID will provide three technical assistants to the RRD project to assist them in better integrating women into project activities. It is recommended that the technical assistants be assigned to work with the proposed household farm research and training programs. Specifically, their scope of work might include:

1. Collection of data on household resource allocation and utilization strategies with particular emphasis of women's roles in agricultural production systems, in conjunction with research proposed above;
2. To assist RRDP staff to integrate information on women and household/community resources into project activities;
3. To assist in the development of the aforementioned training program to instruct RRDP staff on the socio-cultural components of farming systems with particular reference to the role of women;
4. To assist in the development of an integrated approach for the delivery of extension services to cooperators; and

5. Assist in the preparation of case studies and documentation of cooperators/farm household farming systems with particular reference to women. These materials may be used within the Bicol but should be applicable to other regions as well.

The MAF and USAID, of course, will have final approval on the scopes of work to be performed by the technical assistants.

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