



Vegetable-Agroforestry Systems in Indonesia

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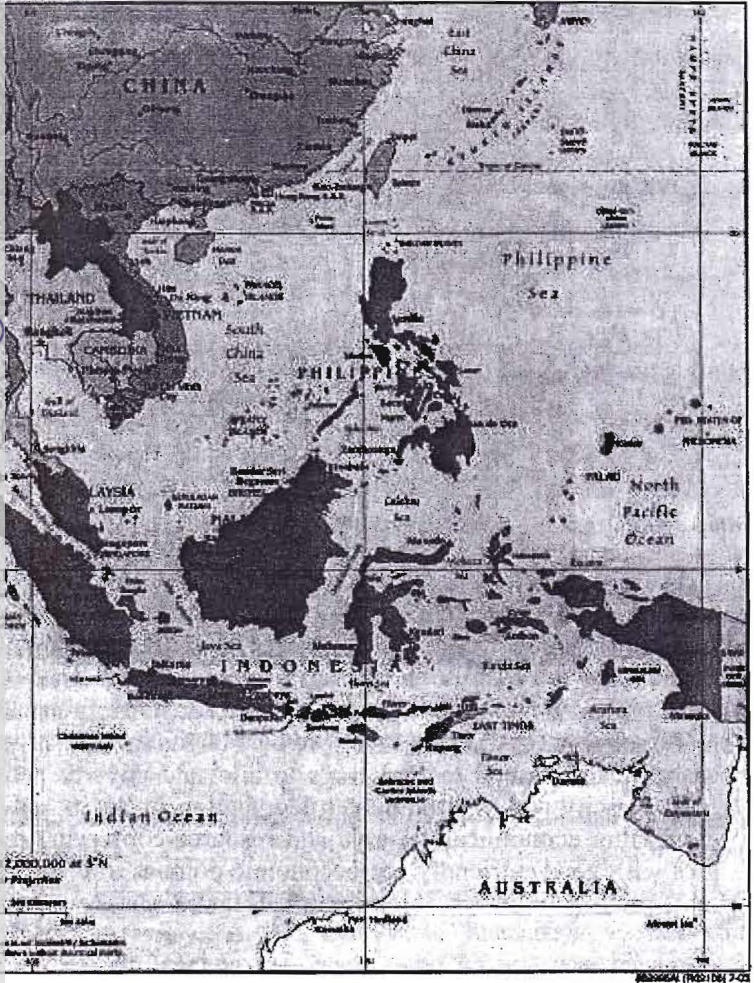


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A typical scene of the village landscape at Nanggung Subdistrict of Bogor District in West Java Province of Indonesia where the research team studied to find ways to alleviate poverty and reduce food scarcity and environmental degradation in Southeast Asia by combining economically viable and resource-conserving technologies with gender-friendly socioeconomic policies to integrate vegetable production in agroforests on small farms

Location of the Research Area—Nanggung Subdistrict of Bogor



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Gender Roles of Farmer Families in Vegetable-Agroforestry System: A Case Study at Nanggung Subdistrict, Bogor, West Java, Indonesia

Fri Koesoemaningtyas¹, Herien Puspitawati² and Tin Herawati³

Abstract

The objectives of the study were to examine women's involvement in decision making to ensure their participation in Vegetable Agroforestry (VAF) production and marketing training, and to increase the involvement of women farmers or marketing associations. The study was done at Hambaro, Parakar, Muncang and Sukaluyu Villages, Subdistrict of Nanggung, District of Nanggung, West Java Province in June-July 2006. A total of 185 households and respondents were selected randomly. Results showed that men dominated gender roles in farming system practices such as land preparation, nursery planting, maintaining plants, fertilizing and harvesting. Moreover, there were gender differences in access and control over farm production inputs. Men dominated access to and control over credit, production technology and labor. A fair number of women had access to and control over marketing of agricultural products and had access to price information of agricultural products. Women had insignificant roles in decision making on farming, farm financial planning and activities, but were dominant as decision-makers in domestic family planning including evaluating the actions of family members, and controlling their family financial activities. Men acted as dominant decision-makers with regard to farming financial planning, and some of domestic responsibility especially on choosing children's education.

Keywords: Gender roles, gender values, access and control

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1. Introduction

1.1 Underlying background

The Vegetable Agroforestry (VAF) System developed through the SANRE Project in Indonesia is expected to alleviate poverty, food scarcity and reduce environmental degradation in Indonesian watersheds. The project on vegetable agroforestry in Indonesia was undertaken in Kecamatan Nanggung, a sub-district located in the western part of West Java province.

This project recognizes the importance of women in vegetable production in small-scale farms. The participation of women in this project, however, was impeded by many constraints against women's participation and women's relative lack of time and mobility caused by their workload and multiple roles. If this project is to benefit from women's contribution and collective views and improve the socioeconomic wellbeing of women engaged in vegetable production and agroforestry enterprises, a range of strategic and practical measures must be taken to overcome these barriers.

The first step in formulating specific gender strategies is to conduct a gender analysis, which helps identify constraints and helps structure the initiative. The results of a gender analysis are incorporated into planning to ensure that development benefits and resources are effectively and equitably targeted to both women and men, and to successfully anticipate and avoid negative impacts development may have on women or on gender relations.

2. Objectives of the study

The objectives of the study were:

1. To describe the gender values among farmer families.
2. To examine gender roles in access and control over resources.
3. To examine gender roles in decision making in farm households and coping strategy, and also domestic and agricultural activities.

Literature Studies

Gender Mainstreaming was defined by the Unescap in 1997 as a strategy for making women's as well as men's concerns and experiences an integral dimension of the policies and programs. The Government of Indonesia's increased efforts to include Gender Mainstreaming into its national development process is an affirmation of the commitment to gender equality and the rights of both women and men (KPP-UNDP, 2007).

As a strategy, Gender Mainstreaming aims at promoting a fair distribution of resources, opportunities and benefits of development processes and

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ation programs. As Indonesia is now implementing a decentralized de-
 ment approach, the need to mainstream gender concerns in local govern-
 ment's programs and policies has become more important (KPP-BKKBN-
 UNFPA, 2004).

The meaning of gender is different from the meaning of the type of
 sex. However, both gender and the type of sex involve both men and women.
 The type of sex in general is applied to identify the natural difference between
 men and women in terms of biological anatomy. Meanwhile, gender dis-
 cusses the differences of role distribution and function between men and
 women that are decided by the community and culture since they were born
 and this is unnatural. At this point, gender does not discuss women only, but
 also men in relation to cooperation and partnership, and the role distribution
 between men and women to achieve the same goal. Therefore, gender dis-
 cusses the problems of both men and women in society. Thus, gender refers
 to the community perspectives toward roles, functions and responsibilities
 among men and women which are a result of social and cultural constructions
 that can be changed along with the dynamics of time and community aspira-
 tions (KPP-BKKBN-UNFPA, 2004).

The application of gender roles in the households is shown by the
 power of men and women, with women typically being the less powerful
 partner. The differences in power between men and women are directly re-
 lated to differences in their income and other resources. The work of women
 at home is unremunerated, and therefore not regarded as 'real' work, and of-
 ten constrains women's opportunities to earn outside income. Thus, the public
 world of work is a man's domain, but the private world of home is a woman's
 domain (Renzetti and Curran, 1995).

Gender roles in agricultural activities are influenced by the gender di-
 vision of labor. In some countries women are virtually full-time farmers,
 while in other countries women do little work in fields. In some places,
 women are active farmers and work side-by-side with the men in the fields
 and in other places women work separately from men in the fields
 (Ostergaard, 1992).

3. Research Methodology

3.1 Location of the study

The study was conducted in three villages of the Nanggung Subdistrict, Bo-
 gor District, West Java province. The study was done at Hambaro, Parakan
 Muncung and Sukaluyu villages, Subdistrict of Nanggung, West Java
 Province during June-July 2006. A total of 185 household respondents were
 selected randomly from the 2,940 households with landholdings. The

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respondents consisted of 62 farmers' families from Hambaro Village, 63 farmers' families from Parakan Muncang Village, and 60 farmers' families from Sukaluyu Village.

3.2 Types of information required and their sources

Baseline data for the socioeconomic characteristics were gathered in a survey. To provide gender-disaggregated information, the wives or adult women of the households were interviewed to gather information on: socio economic characteristics of the respondents, gender values among farmer families (men and women), identification of gender needs (practical and strategic needs), gender roles in farming system practices, gender roles in control of the agricultural inputs expenditures, gender roles in access and control profiles, gender roles in decision making profile, and domestic and agricultural activity profile.

3.3 Methods of analysis

The information collected will be analyzed by using the gender analysis approach (using Harvard and Moser Gender Analysis Techniques). Gender analysis is a process that analyzes data and information systematically about men and women to identify and indicate the status, function, role and the responsibility of men and women and the affected factors (KPP-BKKBN-UNIPA, 2004).

4. Findings

4.1 Socioeconomic characteristics of the respondents

Findings show that around 50 percent of the respondents had 5-8 family members, with household size ranging from 1 to 12 persons and the average family size at 5 persons (Table 1). The proportion of labor force was around 66 percent with the average labor force per household at 3.4. The dependency ratio of the respondents was around 51 percent. About 6 percent of the respondents were illiterate which is lower than the national data (9.07%).

Based on the family daily expenses, the expenditures on food were around Rp20,075. The daily expenses for rice range from Rp533 to Rp6,135 and the daily average expenses for cigarette was Rp3,434.

Most families in Nanggung district were engaged in agriculture (63%) although off-farm income contributed the most to the total household income. Total household income was Rp1,226,000/month or Rp236,000/capita/month. The socioeconomic survey showed that 52% of the surveyed households were living below the poverty line (income lower than Rp1,000,000/capita/month), with Hambaro with the higher proportion (67.7%)



Parakan Muncang the lowest (38.1%). Based on income-expenditure 15% of the surveyed households had negative income with expenditures higher than income.

Table 1. Socioeconomic characteristics of respondents

| No. | DESCRIPTION | Hambaro | Parakan Muncang | Sukaluyu | Total |
|-----|---|---------|-----------------|----------|---------|
| | | n = 62 | n = 63 | n = 60 | n = 185 |
| 1 | Household size | | | | |
| | 1-4 | 33.90% | 33.30% | 48.30% | 38.40% |
| | 5-8 | 51.60% | 63.50% | 43.30% | 53.00% |
| | 9 | 14.50% | 3.20% | 8.30% | 8.60% |
| 2 | Range household size (persons/ household) | 2-11 | 1-12 | 2-10 | 1-12 |
| 3 | Average family size | 5.5 | 5.2 | 4.8 | 5.2 |
| 4 | Age structure | | | | |
| | 15 | 35.30% | 24.10% | 33.60% | 30.90% |
| | 15-65 | 63.00% | 72.30% | 63.00% | 66.10% |
| | >65 | 1.70% | 3.70% | 3.50% | 2.90% |
| 5 | Labor force | | | | |
| | Proportion of labor force | 63.00% | 72.30% | 63.00% | 66.10% |
| | Average labor force per household | 3.5 | 3.8 | 2.9 | 3.4 |
| 6 | Dependency ratio | 58.80% | 38.40% | 58.80% | 51.20% |

4.2 Gender values among farmer families

Nanggung subdistrict is an agricultural community dominated by rural traditional life. In general the society's norm is patriarchal, with women's constraint, in general, being the limitation of education and mobility. This means, women's accessibility of women to access economic activities, financial credit and training opportunities were limited. However, most women were aware that changes were occurring, with the increase of women's roles in all aspects of life in their village.

The division of roles in their daily family activities had been implemented respectively both in economic and domestic activities. The community in the three villages had been getting used to implementing the gender distribution of roles starting from the family level and continuing to the community level, though it was still at the traditional stage. The value of the division of gender roles had been practiced in daily family management activities starting from collaboration between husband and wife in their domestic activities, to the economic and community social activities.

Table 2 shows the similarities of gender values for men and women, such as being a good woman or man, being religious women or men, had to

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be patient, had to take care of herself/himself, had to be honest, educate, obey parents, reading Koran (Al Qur'an) and had to be full of love. The gender values for men were to be responsible, responsible, hard working, and to behave, whereas the gender values for women included being able to perform their household chores, politeness, simplicity and humility, and to get married quickly.

Table 3 shows the gender roles in farming system practices which revealed that males dominated the implementation of all farming system activities, such as land preparation, nursery, planting, maintaining plants, fertilizing and harvesting.

Table 2. Gender values for women and men

| No. | Values | Women | | Men | |
|-----|-------------------------------------|-------|------|-----|------|
| | | n | % | n | % |
| | Obedying husband | 67 | 36.6 | - | - |
| | Has to be responsible | - | - | 31 | 16.9 |
| | Being a good woman/man | 22 | 12.0 | 9 | 4.9 |
| | Has to work | - | - | 74 | 40.4 |
| | Being religious women/men | 17 | 9.3 | 13 | 7.1 |
| | Doing household chores | 27 | 14.8 | - | - |
| | Reading Koran (Al Qur'an) | 12 | 6.6 | - | - |
| | Has to be patience | 11 | 6.0 | 4 | 2.2 |
| | Has to take care of herself/himself | 9 | 4.9 | 7 | 3.8 |
| 10 | Has to be honest | 3 | 1.6 | 8 | 4.4 |
| 11 | Has to be educated | 2 | 1.1 | 8 | 4.4 |
| 12 | Has to be polite | 2 | 1.1 | - | - |
| 13 | Has to obey parents | 4 | 2.2 | 5 | 2.7 |
| 14 | Has to be full of love | 2 | 1.1 | 12 | 6.6 |
| 15 | Being simple and humble | 3 | 1.6 | - | - |
| 16 | Has to married soon | 2 | 1.1 | - | - |
| 17 | Behave | - | - | 12 | 6.6 |

3 Gender roles in access and control profiles

Productive, reproductive and community roles of women require the use of resources. In general, women and men had different levels of both access and control over resources. Access is the opportunity to make use of the resources needed for their work, and control is the ability to define its use and impose that definition on others over those resources. Resources can be economic (such as land or equipment); political (such as representation, leadership and



Gender roles in farming system practices

| | Irrigated Paddyfield | Rainfed Paddyfield | Dry Land | Monoculture Garden | Simple Agroforest | Total |
|------------------------------|----------------------|--------------------|----------|--------------------|-------------------|-------|
| Land Preparation | | | | | | |
| Male (%) | 99.70 | 99.20 | 99.20 | 100 | 99.60 | 99.40 |
| Female (%) | 0.30 | 0.80 | 0.80 | 0 | 0.40 | 0.60 |
| Nursery | | | | | | |
| Male (%) | 73.40 | 92.70 | 100 | 100 | 100 | 82.40 |
| Female (%) | 26.60 | 7.30 | 0 | 0 | 0 | 17.60 |
| Planting | | | | | | |
| Male (%) | 59.60 | 54.70 | 83.30 | 84.90 | 94.10 | 71.10 |
| Female (%) | 40.40 | 45.30 | 16.70 | 15.10 | 5.90 | 28.90 |
| Maintaining | | | | | | |
| Male (%) | 56.10 | 52.10 | 78.20 | 78.70 | 88.30 | 67.90 |
| Female (%) | 43.90 | 47.90 | 21.80 | 21.30 | 11.70 | 32.10 |
| Fertilizing | | | | | | |
| Male (%) | 75.10 | 98.00 | 89.80 | 70.50 | 99.50 | 87.10 |
| Female (%) | 24.90 | 2.00 | 10.20 | 29.50 | 0.50 | 12.90 |
| Harvesting | | | | | | |
| Male (%) | 66.50 | 70.40 | 78.90 | 88.30 | 98.30 | 72.50 |
| Female (%) | 33.50 | 29.60 | 21.10 | 11.70 | 1.70 | 27.50 |
| Total Labor Practices | | | | | | |
| Male (%) | 76.00 | 77.90 | 87.90 | 90.40 | 95.90 | 82.40 |
| Female (%) | 24.00 | 22.10 | 12.10 | 9.60 | 4.10 | 17.60 |

legal structures); social (such as childcare, family planning, education). The access and control profile identify resources individuals could use to carry out activities and the benefits they get from them.

Land is an important resource for an agricultural community; however, access and control over land indicates the relative power of members of a society in an economy. Average landholding per household in Nanggung Sub district is 0.42 ha, ranging from 0.33 ha to 0.49 ha per household. Of the households surveyed, 11% did not have any control over landholdings. There was unequal distribution of landholdings in the study area, with 20% of the households controlling 62% of the total land.

Differences in gender access to land are universal, and can be found in Nanggung Subdistrict. Only 13.8% of women had access to land whether as owner or tenant (Table 6). Landownership was also dominated by men and only 13.8% of women had control over landownership (Table 4).

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Table 4. Gender roles on access over resources

| No. | Access over resources | Wife | Husband | Wife + Husband |
|-----|--|------|-------------|----------------|
| | | % | % | % |
| 1. | Credits (n=171) | 12.9 | 83.6 | 3.5 |
| 2. | Production input (n=121) | 3.3 | 93.4 | 3.3 |
| 3. | Production technology (n=123) | 3.3 | 92.7 | 4.1 |
| 4. | Post harvest technology (n=61) | 1.6 | 98.4 | 0.0 |
| 5. | Trainings (n=165) | 14.5 | 81.8 | 3.6 |
| 6. | Price of agricultural products (n=156) | 12.2 | 84.0 | 3.8 |
| 7. | Marketing of agric. products (n=127) | 12.6 | 84.3 | 3.1 |
| 8. | Marketing organization (n=154) | 9.1 | 87.7 | 3.2 |
| 9. | Landownership (n=167) | 13.8 | 76.6 | 9.6 |
| 10. | Farm labor (n=161) | 6.2 | 83.9 | 9.9 |

The study also showed gender differences in access to and control over farm production inputs. Men dominated access to and control over credit, production technology and labor. Only 12.9% of women had access to credit, which was limited because women did not have collateral, usually land titles. Without any control over landownership, women were disadvantaged over access to credit. In addition, socio-cultural constraints and stereotypes of non-creditworthiness tended to preclude women from obtaining access to many formal sources of credit, like banks, cooperatives and credit unions.

Very few women (3.3%) had access to production inputs and technology. Generally women had greater access to and control over post-harvest technology and processing than other production processes. However, the survey showed that in Nanggung, only 1.6% of women had access to and control over post-harvest technology and processing.

Although still dominated by men, a fair number of women had access to (12.6%) and control (12.6%) over marketing of agricultural products and 12.2% of women had access to price information of agricultural products (Table 5). The socioeconomic survey showed that gender roles in selling agricultural products depended on the quantity of the products. Women were only involved in retail marketing of farm products when the quantity was small.

There was a gender difference in access to farmers' organization and training. Only 9.1% of women had access to an organization compared to 87.7% of men who had access to and control over organization. Access and control over training were also dominated by men. However, the percentage of women with access to training was higher (14.5%) compared to access to organizations. Access and control of women over organization and training, although still low, provided the entry point for training of women in a VAF

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5. Gender roles on the control over and benefit from resources

| | Control over and benefits from resources | Wife | Husband | Wife + Husband |
|-----|--|------|-------------|----------------|
| | | % | % | % |
| 1. | Farming activity (n=161) | 5.5 | 83.2 | 10.6 |
| 2. | Production inputs (n=119) | 4.2 | 84.9 | 10.9 |
| 3. | Production technology (n=123) | 4.1 | 85.4 | 10.5 |
| 4. | Post harvest technology (n=61) | 1.6 | 95.1 | 3.3 |
| 5. | Trainings (n=165) | 12.1 | 83.6 | 4.2 |
| 6. | Agric. price information (n=161) | 11.8 | 80.1 | 7.1 |
| 7. | Marketing of agric. products (n=143) | 12.6 | 80.4 | 7.0 |
| 8. | Marketing organization (n=154) | 4.5 | 83.8 | 11.7 |
| 9. | Land ownership (n=168) | 13.1 | 78.6 | 8.3 |
| 10. | Farm labors (n=168) | 13.1 | 78.6 | 8.3 |

The access and control profile showed the extent to which women were impeded from participating equitably in the project. If women had limited access to income or land, they may be unable to join groups, which provide production inputs and commercial opportunities, or to become independent commercial vegetable producers.

4.4 Gender roles in decision-making profile

Women frequently perform a variety of functions in the farm household. They act as food producers, wage earners, caretakers of the family looking after nutrition, and post-harvest managers. Several studies have shown that gender affects the decision-making process in agricultural production and household expenditures, as well as the management of food consumption within the farm households (Balaguru, 1992).

The survey results showed that in the three villages of Nanggung, women had insignificant roles in decision making regarding farming financial planning and activities (Table 6). The decision on farm financial planning and expenditures were dominated by men, including making routine farm financial planning (55.1%), and planning for purchase of production inputs (54.3%).

Women were more involved in family financial planning (31.3%). A larger proportion of women were motivated to learn about family financial planning (40.2%) compared to the percentage of women (11.2%) who were interested in learning about farm financial planning. The decision to plan for the type of commodity to plant and the utilization of home gardens for food crops was dominated by men (34.4%) but in some households women participation was in cooperation with male partners, usually their husbands (26.1%).

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Table 6. Gender decision-making in farm households

| No. | Decision | Decision Makers | | | | |
|-----|---|-----------------|------|------|------|------|
| | | IS | ID | I=A | AD | AS |
| 1 | Routine family financial planning (n=119) | 26.9 | 10.1 | 30.3 | 10.1 | 22.7 |
| 2 | Routine farm financial planning (n=118) | 10.2 | 3.4 | 23.7 | 7.6 | 55.1 |
| 3 | Prediction on family cost of living (n=131) | 31.3 | 11.5 | 30.5 | 3.8 | 22.9 |
| 4 | Financial planning before purchasing inputs (n=129) | 9.3 | 6.2 | 24.8 | 5.4 | 54.3 |
| 5 | Recording expenditure (n=51) | 15.7 | 2.0 | 23.5 | 2.0 | 56.9 |
| 6 | Learn to manage farm finance (n=129) | 11.2 | 5.2 | 25.0 | 3.4 | 55.2 |
| 7 | Learn to manage family finance (n=117) | 40.2 | 6.8 | 28.2 | 8.5 | 16.2 |
| 8 | Farm expenditure according to plan (n=150) | 14.0 | 12.0 | 24.0 | 6.0 | 44.0 |
| 9 | Self evaluation on financial management (n=132) | 9.8 | 4.5 | 31.1 | 7.6 | 47.0 |
| 10 | Planning types of commodity (n=163) | 6.1 | 7.4 | 34.4 | 6.1 | 46.0 |
| 11 | Utilizatilizing home garden for food crops (n=114) | 11.4 | 4.4 | 28.1 | 8.8 | 47.4 |

Note: IS = Wife only; AS = Husband only; ID = Wife dominant; AD = Husband dominant; I=A = Wife-Husband

Table 7 shows that women were dominant as decision makers in financial planning, evaluating the actions taken by family members, controlling financial activities of family members, controlling family expenses, managing family finances, prioritizing family needs, managing daily food needs, managing family menus, making decisions on food expenses, and generating ideas on reducing food expenses. They were also the decision makers on health expenses, the place for medical care or postponing medical care for family members, and managing education expenses. Meanwhile, there are some responsibilities of domestic chores distributed equally through men and women as decision makers, especially in child education planning and eating out.

Table 8 shows that the female roles in family coping strategy consisted of adding resources from outside (through asking the wife to work or borrowing money), saving resources (through deciding on a savings account or deciding on withdrawals from savings), cutting back on expenses (through reducing food consumption, transportation costs, health expenses, and education spending). While the roles of the male and female consisted of asking children to help in household chores, and selling assets, the men had the role of finding extra jobs, selling furniture and selling utensils.

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Gender decision-making in family finance, food, education and health aspects

| No. | Decision | Decision Makers | | | | |
|-----------|--|-----------------|------|-------------|-------------|------|
| | | IS | ID | I=A | AD | AS |
| | | % | | | | |
| A. | Finance | | | | | |
| 1. | Financial planning (n=119) | 40.3 | 10.9 | 26.1 | 19.3 | 3.4 |
| 2. | Evaluating family members for the action they take (n=133) | 34.6 | 9.8 | 27.8 | 20.3 | 7.5 |
| 3. | Controlling financial activities of family member (n=131) | 43.5 | 9.9 | 21.4 | 19.1 | 6.1 |
| 4. | Controlling family expenses (n=176) | 63.1 | 11.9 | 11.4 | 12.5 | 1.1 |
| 5. | Managing family finance (n=183) | 69.4 | 12.0 | 8.7 | 8.2 | 1.6 |
| 6. | Making priority of family needs (n=159) | | | | | |
| B. | Food | | | | | |
| 7. | Managing daily food needs (n=183) | 87.9 | 8.2 | 1.6 | 2.2 | 0.0 |
| 8. | Managing family menus (n=183) | 87.9 | 8.2 | 1.6 | 2.2 | 0.0 |
| 9. | Making decision for food expenses (n=181) | 88.9 | 7.2 | 1.7 | 2.2 | 0.0 |
| 10. | Making ideas for reducing food expenses (n=152) | 83.6 | 9.9 | 2.0 | 3.9 | 0.7 |
| 11. | Eating out (n=20) | 35.0 | 10.0 | 35.0 | 5.0 | 15.0 |
| C. | Education | | | | | |
| 12. | Decision for sending children to school (n=166) | 25.3 | 8.4 | 29.5 | 24.7 | 12.0 |
| 13. | Choosing children education (n=166) | 23.5 | 10.8 | 25.3 | 26.5 | 13.8 |
| 14. | Managing education expenses (n=166) | 37.3 | 18.1 | 15.1 | 19.9 | 9.6 |
| D. | Health | | | | | |
| 15. | Making decision for health expenses (n=175) | 36.0 | 17.1 | 14.9 | 19.4 | 12.6 |
| 16. | Making decision on place for medical care (n=175) | 36.0 | 16.0 | 14.9 | 20.6 | 12.6 |
| 17. | Making decision to postpone medical care for family member (n=156) | 36.5 | 9.6 | 21.8 | 20.5 | 11.5 |

Notes: IS = Husband only; ID = Wife dominant; I=A = Wife=Husband; AD = Husband dominant; AS = Wife only

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Table 8. Gender roles in family coping strategy

| No. | Decision on Coping Strategy | Decision Makers | | | | |
|-----|---|-----------------|------|-------------|-------------|-------------|
| | | IS | ID | I=A | AD | AS |
| | | % | | | | |
| | Adding resources from outside | | | | | |
| 1 | Finding extra jobs (n=116) | 7.8 | 9.4 | 29.3 | 44.0 | 9.5 |
| 2 | Asking children to help with household chores (n=57) | 28.1 | 8.8 | 50.9 | 12.3 | 0.0 |
| 3 | Asking wife to work (n=33) | 33.3 | 3.0 | 27.3 | 5.5 | 11.1 |
| 4 | Borrow money (n=130) | 40.8 | 36.2 | 10.8 | 8.5 | 3.8 |
| | Saving resources | | | | | |
| | Deciding on a savings account (n=19) | 42.1 | 10.5 | 15.8 | 31.6 | 0.0 |
| | Selling Resources | | | | | |
| | Selling furniture (n=6) | 0.0 | 16.7 | 33.3 | 50.0 | 0.0 |
| | Selling utensils (n=47) | 31.9 | 5.2 | 14.9 | 42.6 | 6.4 |
| | Selling assets (n=16) | 25.0 | 18.8 | 31.3 | 18.8 | 6.3 |
| | Deciding on withdrawal from savings (n=19) | 36.8 | 15.8 | 15.8 | 31.6 | 0.0 |
| | Cutting Back Expenses | | | | | |
| | Reducing food consumption (n=97) | 79.4 | 17.5 | 2.1 | 1.0 | 0.0 |
| | Reducing transportation costs by riding bikes etc. (n=42) | 40.5 | 4.8 | 28.6 | 4.8 | 21.4 |
| | Reducing health expenses (n=71) | 42.2 | 15.5 | 12.7 | 16.9 | 12.7 |
| | Reducing education spending (n=57) | 36.9 | 15.8 | 8.8 | 19.3 | 19.3 |

Notes: IS = Wife only; ID = Wife dominant; I=A = Wife=Husband, AD = Husband dominant; AS = Husband only

4.5 Domestic and agricultural activity profile

The household can be defined as a (nuclear) family or kinship unit; those who share a common residence; or those who share a joint function such as consumption, production, investment or ownership. Gender is one of the causes of intra-household difference. Within the household a socially-constructed gender division of labor exists that generally places greater time and energy demands on women than on men. Women typically have to play multiple roles which are comprised of: reproductive, productive and overseeing the managerial activities of community.

The productive role of rural women is mainly in the agricultural sector. In many parts of Indonesia, women constituted almost half of the work force

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ed in agriculture. Rural women participated in a broad range of agricultural activities starting from the selection of seeds, planting, weeding, harvesting, threshing, drying, stacking and storing to feeding the family from the harvested produce.

In the subdistrict of Nanggung, the socioeconomic study showed the limited role of women in agriculture (17.6%). The involvement was more prominent in the irrigated and rainfed paddy fields, where women played an important role in planting (40.4-45.3%) and crop maintenance (43.9-47.9%). Women's participation in other types of agriculture was minimal such as in upland agriculture (12.1%) and monoculture garden (9.6%).

Consistent with the socioeconomic study, the survey showed that women allocated most of their time (5-10 hours/day) to domestic activities. This included domestic tasks done by women required to guarantee the maintenance of the household, such as fuel and water collection, food preparation, child care, education and health care. Women allocated less time towards production activities including agriculture activities (0.67-4.03 hours/day). Women who worked in rice fields or rainfed rice fields allocated more time outside their home than those who worked in the home garden or other agricultural activities (Table 9).

Table 9. Activity profile of women in Nanggung Subdistrict

| NO | ACTIVITY | Time allocation |
|-----------------------|--|-----------------|
| a. Domestic | | |
| 1 | House cleaning (n=131) | 0.93 ± 0.68 |
| 2 | Fetching water (n=88) | 0.61 ± 0.45 |
| 3 | Laundry (n=140) | 0.90 ± 0.22 |
| 4 | Washing dishes (n=143) | 0.45 ± 0.29 |
| 5 | Shopping for foods (n=158) | 0.56 ± 0.67 |
| | Cooking (n=167) | 1.51 ± 0.68 |
| | Child care (n=35) | 10.0 ± 33.8 |
| b. Agriculture | | |
| | Working in the rice field (n=123) | 4.03 ± 1.47 |
| | Working in monoculture garden (n=52) | 3.74 ± 1.48 |
| | Working in home garden (n=11) | 2.91 ± 1.30 |
| | Animal husbandry (n=10) | 0.67 ± 0.50 |
| | Selling farm products to market (n=10) | 0.67 ± 0.50 |

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Figure 1. Women working in land preparation



Figure 2. Women conducting crop management participation

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10. Women's participation in community and social activities

| No. | Activity | No of Participants | |
|-----|---------------------------------------|--------------------|------|
| | | n | % |
| 1 | Women group (arisan) | 33 | 18.0 |
| 2 | Religious group/ <i>Majlis Taklim</i> | 174 | 95.1 |
| 3 | Farmers' group | 1 | 0.5 |
| 4 | Community group | 4 | 2.2 |
| 5 | Volunteer works | 62 | 33.9 |

Some women also may have held community management roles which may include activities undertaken primarily by women at the community level such as volunteer work in health care and education. Most of the respondents (95%) participated in women's religious groups (*Majlis Taklim*), but only a few respondents belonged to farmer groups (Table 10).

5. Conclusions

5.1 The findings are as follows:

1. The gender values among farmer families showed similarities in regards to expectations for men and women, such as being a good woman/man, being religious women/men, patience, had to take care of herself/himself, had to be honest, educated, obey parents, read the Koran (Al Qur'an), and had to be full of love. The gender values for men were to be responsible, work and behave, whereas the gender values for women were to complete household chores, maintain politeness, simplicity and humility, and value marriage.

2. Gender roles in access to and control of resources:

- Gender roles in farming system practices were dominated by men, such as land preparation, nursery, planting, maintaining plants, fertilizing, and harvesting.

- There were gender differences in access to and control of farm production inputs. Men dominated access and control over credits, production technology and laborers.

- Although still dominated by men, a fair number of women had access and control over marketing of agricultural products and access to information on the price of agricultural products. The gender role in selling agricultural products depended on the quantity of the product, with women only involved in retail marketing of farm products when the quantity was small.

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Figure 3. Women in post-harvest handling

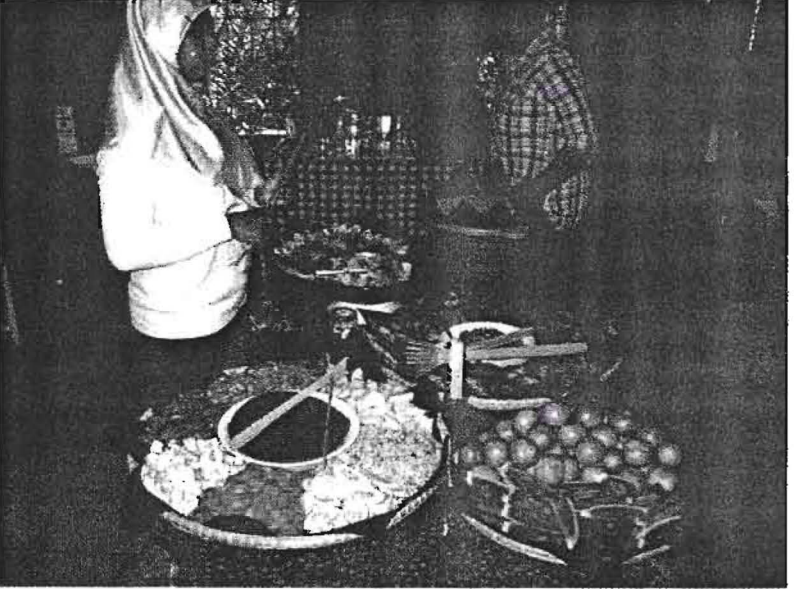


Figure 4. Women's important role in the kitchen has never been challenged.



3. Gender roles in decision making in farm households and coping strategy, and also domestic and agricultural activities.

- Women had minimal roles in decision making regarding farming financial planning and activities. The decisions on farm financial planning and expenditures were dominated by men, including making routine farm financial planning decisions, and planning for the purchase of production inputs.

- Women were dominant as decision makers in financial planning, evaluating the actions of family members, controlling financial activities of family members and family expenses, managing family finance, prioritizing family needs, managing daily food needs and family menus, making decisions on food expenses and reducing food expenses, making decisions on health expenses, medical care including postponing medical care for family members and managing education expenses. While men and women acted together as decision makers in child education planning, and social activities such as eating out, men acted as decision makers in matters related to child education.

- The female roles in family coping strategy consisted of adding resources from outside (through the wife's taking outside work, borrowing money), saving resources (through deciding on a savings account, deciding on whether to withdrawal from saving), cutting back expenses (through reducing food consumption, transportation costs, health expenses, and education spending). The roles of males and females consisted of asking children to help in household chores, and selling assets. The men had the role of finding extra jobs, selling furniture and selling utensils.

- Consistent with the socioeconomic study, the survey showed that women allocated most of their time (5-10 hours/day) doing domestic activities. This included domestic tasks done by women to guarantee the maintenance of the household, such as fuel and water collection, food preparation, child care, education and health care. Women allocated less time on productive activities including agriculture activities (0.67-4.03 hours/day). Women working in rice fields or rainfed rice fields allocated more time outside their home than those who worked in the home garden or other agricultural activities.

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