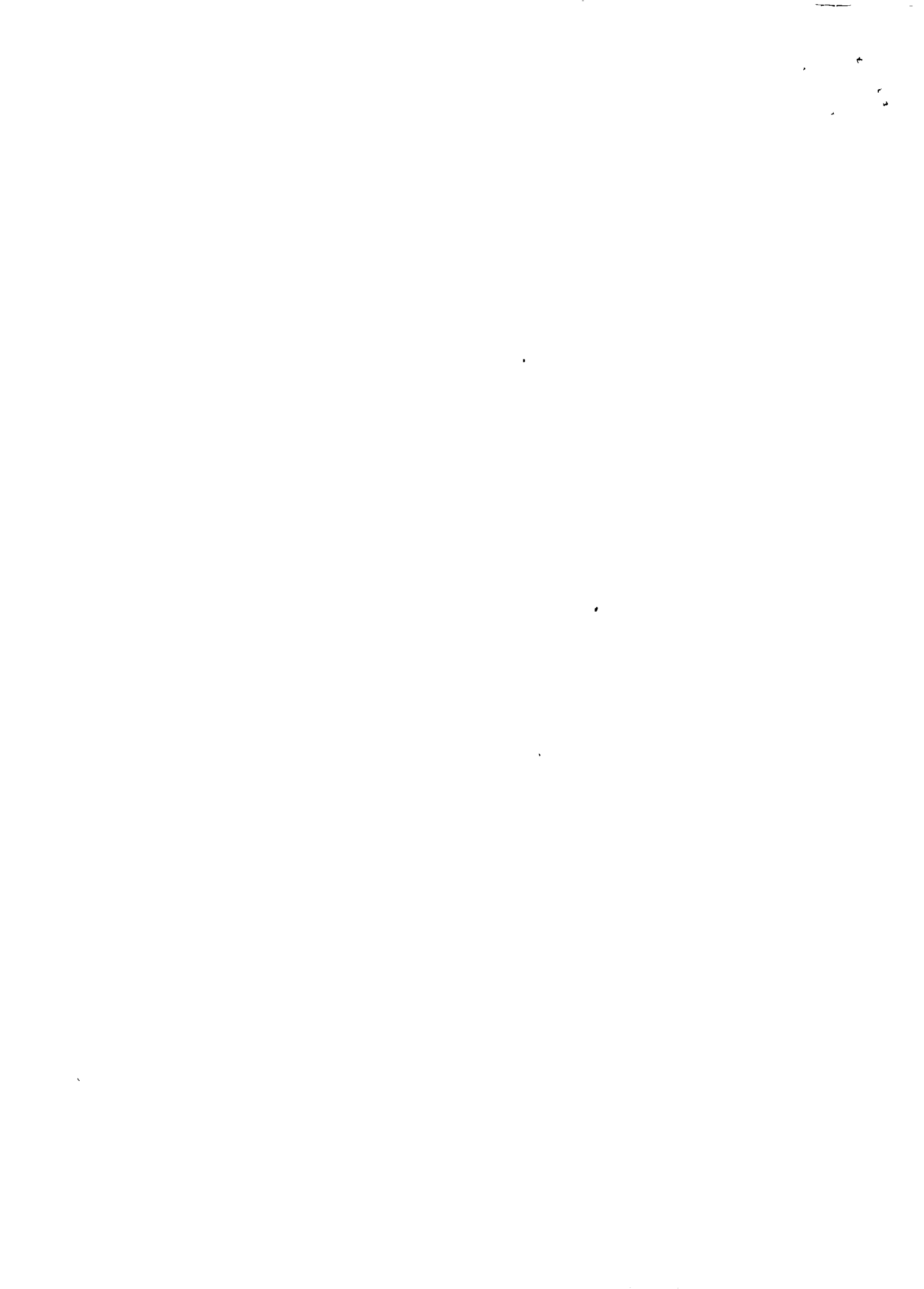


## A FRAMEWORK FOR ENHANCING WOMEN'S ROLE IN WATER SUPPLY AND SANITATION IN INDONESIA

Discussion Paper by Mary Judd, 20 October 1992

### TABLE OF CONTENTS

	Page
ABSTRACT	1
INTRODUCTION	2
FINDINGS	2
Women As Users of Domestic Water Supply and Sanitation Facilities	2
Women's Role in Hygiene and Sanitation	4
Women and Water Management	5
Women as Partners in Household Development/Management	6
DISCUSSION	7
Do Not Burden Women	8
Women are Not a Homogeneous Group	8
Time Savings	9
Implications for WSSPLIC	10
RECOMMENDATIONS	11
Participation of Women in Community Management of Water and Sanitation Systems	11
Promotion of Women's Role in Operation and Maintenance	11
Implementation of a Hygiene Education Targeted to Women and School-aged Children	12
Income Generation for Women	13
Action Research to Develop an Effective Program for Women	14
Training for Project Staff on Gender Issues and Monitoring a Women's Component	15
Links With Other World Bank Projects	15
BRIDGING PERIOD AND FIRST YEAR PROGRAM	16
RESOURCES	16
LIST OF TABLES	
TABLE 1: Water Carriers in NTT	2
TABLE 2: Household Activities by Women and Men in Rural Areas	3
TABLE 3: Productive Activities by Women and Men in Rural Areas	6
TABLE 4: Decision Making on Expenditure by Women and Men	7
TABLE 5: Rural Labor Allocation Behavior by Economic Class and Sex	9
TABLE 6: Time Savings in NTT	9
ATTACHMENTS	
A. Efforts to Involve Women in Water and Sanitation Programs	18
B. A Checklist to Ensure Women are Included in Water and Sanitation Programs	19
C. WSSPLIC Household Survey Data on Women's and Men's Activities	21



**A FRAMEWORK FOR ENHANCING WOMEN'S ROLE  
IN WATER SUPPLY AND SANITATION IN INDONESIA**

**ABSTRACT**

The goal of Indonesia's Water Supply and Sanitation Project for Low Income Communities is to increase the access of the rural poor to improved water supply and sanitation facilities in order to enhance their health so that they are in a better condition to improve their economic situation. This working paper presents some key findings and outlines the proposed framework for the involvement of women in the water supply and sanitation program.

Women in Indonesia have an important role in the water supply and sanitation sector. Women and young children are the primary users of water and sanitation facilities in the home. Women spend more time than any other household member in collecting and managing domestic water use. Women's prominent role within the private domain of the household makes them responsible for water, sanitation and family health as well as the principal caretakers, educators and socializers of children.

The findings point to the indispensable role of women in the project, particularly in the enhancement of sustainability of completed systems and their proper use. Women will have to be included in every facet of a water supply and sanitation program. The component for women in the project will concentrate on the following six key areas: 1) participation of women in community management of water and sanitation systems; 2) promotion of women's role in operation and maintenance, particularly in resource management; 3) implementation of a hygiene education targeted to women and school-aged children; 4) income generation for women; 5) action research to develop an effective program for women; and 6) gender training for project staff. The proposed women's component will be operationalized and integrated within the overall framework of the project.

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## INTRODUCTION

1. The goal of Indonesia's Water Supply and Sanitation Project for Low Income Communities (WSSPLIC) is to increase the access of the rural poor to improved water supply and sanitation facilities in order to enhance their health so that they are in a better condition to improve their economic situation. WSSPLIC is proposed for six provinces: Central Java, North Sulawesi, Central Sulawesi, Southeast Sulawesi, Maluku and Nusa Tenggara Timur (NTT). This working paper presents some key findings and outlines the proposed framework for the involvement of women in the water supply and sanitation program.

2. The proposed framework is in line with the World Bank's Asia region Women in Development (WID) strategy which "emphasizes that WID recommendations need to be operational and integrated within the framework of the project. They should not be a collection of miscellaneous, poorly defined intentions but concrete activities that are designed, budgeted, planned, implemented and monitored as part of the overall program."<sup>1</sup>

## FINDINGS

### Women As Users of Domestic Water Supply and Sanitation Facilities

3. Women in Indonesia, as in many parts of the developing world have an important role in the water supply and sanitation (WSS) sector. Women and young children are the primary users of WSS facilities in the home. Women spend more time than any other household member in collecting and managing domestic water use. For example, figures from NTT show that adult women and young girls were responsible for over 75% of water journeys observed in 1985 and in 1987 (see Table 1 below).

TABLE 1: WATER CARRIERS IN NTT  
(N = Number of Water Journeys)

YEAR	WOMEN		MEN		TOTAL
	5-16 Years	17+ Years	5-16 Years	17+ Years	
1985	20% (N=296)	55% (N=812)	12% (N=171)	13% (N=195)	100% (N=1477)
1987	19% (N=505)	59% (N=1577)	11% (N=313)	11% (N=300)	100% (N=2695)

Source: Case Study on Women's Involvement in Community Water Systems: The PKK Experience, NTT Province, Indonesia. By Deepa Narayan-Parker, 1988:75.

<sup>1</sup> Rekha Dayal, A Framework for Enhancing Efficiency by Promoting Women's Participation (in the proposed Ground Water Development Project for Indonesia, World Bank, 23 May 1992).



4. Data from WSSPLIC focus group discussions with women as well as village household surveys support the above finding. An analysis of gender activities of 40 starter villages in five WSSPLIC provinces also indicates that women are mainly responsible for activities related to domestic water—such as, collecting water, cooking, washing clothes, bathing young children—as well as other household work (see Table 2).

(NOTE: The following household survey data are from 40 starter villages in Central Java, Maluku, North Sulawesi, Central Sulawesi and Southeast Sulawesi. Data was not available for NTT. The column titled 'Not Applicable' indicates that the survey questions were not applicable to the respondents, e.g., they did not have young children or that they were not farmers, etc.)

TABLE 2: HOUSEHOLD ACTIVITIES BY WOMEN AND MEN IN RURAL AREAS  
(Percentage)

HOUSEHOLD ACTIVITIES	WSSPLIC PROVINCES (Number of Responses = 2152)			
	MAINLY BY WOMEN	MAINLY BY MEN	WOMEN & MEN EQUALLY	NOT APPLIC- ABLE
Cooking	95	2	1	2
Washing Clothes	91	2	2	5
Cleaning House/Yard	82	4	9	5
Collecting Water	66	18	14	2
Market (to buy food)	86	7	4	3
Collecting for fuel	30	54	7	9
Child Rearing	58	3	3	36
Bathing Child	59	2	5	34
Looking After Sick Child	53	2	17	28
Taking Child to Health Provider	42	9	25	24

Source: WSSPLIC Household Survey from Six Provinces, June/July 1992.





## **Women's Role in Hygiene and Sanitation**

5. Women's prominent role within the private domain of the household makes them responsible for water, sanitation and family health as well as the principal caretakers, educators and socializers of children. Realizing this the Government of Indonesia has established the nationwide POSYANDU (Integrated Health Posts) system for children under five and "staffed" them with volunteer health cadres from PKK (Family Welfare Movement).

6. The PKK (Pembinaan Kesejahteraan Keluarga) is a national movement which began among the village women of Java and has, over the years, spread throughout Indonesia with the support of the Government. At the village level, PKK is the main vehicle for motivating, organizing and managing development efforts by women. Though not a Government agency, it is an integral part of the national social and development system and has a place in the formal management of village affairs as one of the working committees--Section 10--in the village development council (LKMD). PKK is not a membership organization but rather an open, development movement in which all women may be active.

7. The main activities of PKK are:

- a. Health, including water supply and sanitation, nutrition and family planning; activities are carried out primarily through the POSYANDU.
- b. Education, with emphasis on basic literacy training and skill training for economic activity.
- c. Income generation.

8. The quality of PKK volunteers and the quality of POSYANDU services vary widely over the country. PKK groups in the eastern part of Indonesia are less well developed than the groups in Java due to their later start. There are also variations among the groups in eastern Indonesia; for example, PKK in NTT is more advanced than other PKK groups due to its involvement in several externally funded development programs. In some parts of the country, PKK may exist in name and not in activities.

9. WSSPLIC village survey data also indicates the importance of women's role in family hygiene and sanitation in the six provinces. Women are mainly responsible for childcare, nursing sick children and keeping the house and yard clean (see Table 2).



## Women and Water Management

10. There is very little published information on women's role in water management in Indonesia. The currently available information pertains to women's programs in irrigation<sup>2</sup> and a women's project in water supply<sup>3</sup>.

11. The recent women's programs in irrigation projects reveal that though water management has long been regarded as an exclusive male domain women play a substantial role in its management, namely:

- a. Water regulation: Female farmers control the water level of their rice fields; female heads of households are known to actively look for water in case of shortages; if necessary, they repair damaged quarterly canals and water outlets.
- b. Reporting: Women inform their husbands and/or sons to contact the water master when action is needed.
- c. Water management fees: Women contribute to the water user's association fees either as household member or as head of the household.
- d. Maintenance: Female farmers do not contribute directly. They are usually represented in communal activities by their husbands, sons or tenants. If not, they provide food and cigarettes for those on duty or they pay a certain amount of money.

12. The WAS (Wanita, Air dan Sanitasi) Project in NTT funded by UNDP (1985-1988) is the only project in Indonesia thus far specially designed to be implemented for, by and with women. The project was implemented by the PKK of NTT. Findings from the project indicate the potential role of women in WSS project implementation and management. The conclusion from a 1988 case study stated that WAS had "been extremely successful in demonstrating that community based strategy focusing on women can have a positive impact on water systems, on women, men and communities and ... in strengthening the institutional capabilities of the implementing organization."

13. Weaknesses noted in the WAS Project were attributed to primarily "people's inability or unwillingness to work together (over 50% of the reasons given). Other reasons related to lack of suitable water resources, lack of cooperation from village leaders and broken down water resources, boreholes, that were beyond the capacity of the community to repair.

14. The above lessons indicate that women's role in water management should be actively encouraged. At the same time, support from Government agencies should be available when needed, particularly for technical assistance in difficult circumstances, e.g., isolated regions, difficulty in obtaining spare parts.

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<sup>2</sup> Wilma Wentholt, Female Farmers: From Invisible Workers to Active Participants (Royal Netherlands Embassy, Jakarta, September 1991).

<sup>3</sup> Narayan-Parker, Case Study on Women's Involvement in Community Water Systems: The PKK Experience, NTT Province, Indonesia (WHO, Southeast Asia Regional Office, New Delhi, 1988).



## Women as Partners in Household Development/Management

15. The division of labor between women and men in the WSSPLIC provinces appeared to be one where women work mainly at home and men in the fields. Productive activities closer to the home were mainly undertaken by women, such as poultry raising and cottage industries (see Table 3).

TABLE 3: PRODUCTIVE ACTIVITIES BY WOMEN AND MEN IN RURAL AREAS  
(Percentage)

PRODUCTIVE ACTIVITIES	WSSPLIC PROVINCE (Number of Responses = 2152)			
	MAINLY BY WOMEN	MAINLY BY MEN	WOMEN & MEN EQUALLY	NOT APPLIC- ABLE
Land Preparation (for planting)	9	54	20	17
Seeding	11	48	21	20
Planting	13	35	34	16
Weeding	9	36	32	23
Harvesting	12	28	38	22
Post Harvest	14	27	30	29
Selling Agricultural Yields	24	31	17	28
Livestock Rearing	11	35	15	39
Poultry Rearing	22	20	12	45
Farm Labor (for wages)	10	30	14	46
Handicraft Making	18	15	8	59
Selling Handicrafts	18	17	8	62

Source: WSSPLIC Household Survey from Six Provinces, June/July 1992.

16. The WSSPLIC data presented in the paper is in aggregate form and does not attempt to differentiate people by income or economic activity. Other studies with such differentiation indicate that women and men from lower income households work longer hours in productive activities and that poor women work the longest hours when both household and productive activities are added up (see Table 5). Refer to Attachment C for aggregate WSSPLIC gender analysis survey data by province.



17. The WSSPLIC data on decision making of several key activities in the households confirms the important role of Indonesia women in the management of the household. In fact, the survey data show that most women are partners with their husbands in household management; decisions are jointly made in many more aspects regarding the household than one would assume. For Maluku, women appeared to be the major decision makers for household needs, children's education and family health; in a large portion of the households, women and men made joint decisions on spending for social obligations; and men predominated in agricultural and village development decisions (see Table 4).

**TABLE 4: DECISION MAKING ON EXPENDITURE BY WOMEN AND MEN  
IN RURAL AREAS  
(Percentage)**

ACTIVITIES	WSSPLIC PROVINCE - MALUKU (Number of Responses = 480)			
	MAINLY BY WOMEN	MAINLY BY MEN	WOMEN & MEN EQUALLY	NOT APPLIC- ABLE
Household Needs	60	10	29	1
Children's Education	41	13	34	12
Agriculture	17	36	35	12
Family Health	33	17	46	4
Village Development	17	41	39	4
Social Obligations	19	32	43	6

Source: WSSPLIC Household Survey from Six Provinces, June/July 1992.

## DISCUSSION

18. The findings above point to the indispensable role of women in WSSPLIC. They play an equally important role with men in the improvement of WSS facilities as well as their operation, maintenance and sustainability. As generally recognized, women will have to be included in every facet of a WSS program.

19. Any recommendation made for women's involvement in WSSPLIC should take into account three important considerations:

- Not to add to a woman's burden thus causing more hardship than benefit.
- Women, as similar with many other groups, cannot be viewed as one homogeneous group; they play multiple roles and are influenced by many factors, among which are





kinship, culture, religion, social and economic structure.

- The participation of women should not be for window dressing but for genuine assistance to women themselves.

### **Do Not Burden Women**

20. Adding to a woman's burden is not only from the project recipient's side but also from the provider's side. Discussions with PKK Jakarta indicate that the members feel overloaded with work and appealed for some respite.<sup>4</sup> They also suggested involving NGOs in implementing programs at the village level. PKK is currently implementing four national programs in the villages: 1) POSYANDU; 2) Usaha Peningkatkan Pendapatan Keluarga - UP2K (income generating program for families; 3) Bina Keluarga Balita - BKB (guidance for families with children under five; and 4) Dasa Wisma (guidance of ten families). On top of these four programs it is involved in many other projects because of the current emphasis on the participation of women. The involvement of PKK in WSSPLIC is still viable. However, the nature and degree of involvement will have to be judged from a province by province case as implementation of PKK activities is by the Provincial PKK.

### **Women are Not a Homogeneous Group**

21. The homogeneity of women cannot and should not be assumed. Of particular relevance to WSSPLIC as a project targeting low income groups is the study on labor allocation behavior in Lombok, Nusa Tenggara Barat (NTB).<sup>5</sup> Even though NTB is not one of the provinces of WSSPLIC the research findings may provide valuable insights for the direction of women's involvement. Moreover, Lombok shares many similar characteristics with the WSSPLIC provinces, e.g., its location is in eastern Indonesia, it is a predominantly agricultural society and the level of economic development in the rural area is still relatively low.

22. The rural labor allocation behavior in the Lombok study shows marked differences among women and men in the different economic groups or classes. Table 5 indicates that women and men from low income households worked longer hours and devoted more time to income earning activities than any other group. The data also shows that poor women worked the longest hours (i.e., about 7 hours a day during the peak agricultural month as compared to 5.4 and 5.3 hours respectively for women from high and medium income groups). The jump in the number of hours spent on housework for poor women during the slack agricultural month was due to the lack of income earning opportunities during that period; the women thus used their time for household activities that they had neglected during the busy months. Unlike Lombok, where alternative income earning opportunities were scarcer, a study on labor allocation behavior in Java finds that villagers worked long hours a day in productive activities during both busy and slack agricultural seasons.<sup>6</sup>

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<sup>4</sup> I had a meeting with Ny. Iman Sudjahri, Coordinator for PKK Working Group 4 (water supply and sanitation) and Dra. Ny. Soebijanto, Coordinator for Working Group 2 (training) on July 31, 1992. Maja Suhud of UNICEF accompanied me to the meeting.

<sup>5</sup> Mary Judd, Men, Women and Work in a Lombok Village (University of California, Berkeley, 1984).

<sup>6</sup> Benjamin White, Population, Involution, and Employment in Rural Java (Development and Change 7:267-290, 1976).



TABLE 5: RURAL LABOR ALLOCATION BEHAVIOR BY ECONOMIC CLASS AND SEX  
(Hours Per Month)

ACTIVITIES	WOMEN			MEN		
	I	II	III	I	II	III
PEAK AGRIC. MONTH Income Earning	64	81	132	93	150	153
Household Work	99	78	78	49	20	41
Total Hours/Month	163	159	210	142	170	194
SLACK AGRIC MONTH Income Earning	46	79	84	97	65	118
Household Work	97	55	112	13	35	22
Total Hours/Month	143	134	196	110	100	140

Source: Judd 1984:39

I - High income group  
II - Medium income group  
III - Low income group

### Time Savings

23. An important topic related to women's time and work is time savings from improved water supply facilities. It is often argued and assumed that if water was brought closer to the home, women would have more time to engage in productive activities or have more free time. Data from the NTT study indicate the contrary. Table 6 shows that the presence of closer water sources resulted in a decrease in time taken per water collection journey, an increase in the total number of water collection trips per day, an increase in water consumption per capita and almost no time saved by adult women in water collection.

TABLE 6: TIME SAVINGS IN NTT

YEAR	ADULT WOMEN		
	Minutes/Trip	No. of Trips/Day	Total Time/Day
1985	41.2	1.38	56.9
1987	21.1	2.5	52.8

Source: Narayan-Parker 1988:87-88.



24. A survey in NTB finds that the average time saving per family from the installation of a new rural water supply facility was about 30 minutes a day.<sup>7</sup> The survey does not differentiate the time saved by different members of the family. If it is assumed, as in the NTT case study (see Table 1), that adult women were responsible for 59% of the water collection journeys then the time saved per adult women would be 17.7 minutes per day.

25. Another study on time savings finds that women in Sindh, Pakistan saved about 90 minutes per day from improved water supply.<sup>8</sup> Much more information than provided in the article needs to be known before any comparison can be made between the two projects, e.g., type of systems, closeness to the home and water collection behavior. Of greater relevance to WSSPLIC, however, is the finding from the Sindh study that time savings of itself does not necessarily mean more productive activities for women. These time savings will not have an opportunity to be channeled into productive activities unless women possess appropriate skills to satisfy a specific economic demand.

26. Experience from Indonesia would indicate that the amount of time saved from improved water supply sources would be small at best or negligible unless the improvement related to house connections. However, since poor women already spend much time in productive activities, skills improvement could help to enhance their productivity gains through higher returns to labor and thus to increase cost recovery for operation and maintenance of improved systems.

### **Implications for WSSPLIC**

27. Based on the above discussion, several implications for women's involvement in WSSPLIC need to be considered. Needless to say, the project should be tailored as much as is possible to the realities of the area and that information and/or opinions should be shared with and obtained from potential women and men users from all levels of the community. Women who are expected to play an active role in managing the project in their own communities will most likely not be from the low income group because of the need for free time and some basic education in order to participate in the project. Remuneration from the community could solve part of the problem. Any kind of hygiene education focused on the poor will have to access women in their homes, traditional gathering places, markets and their working places. Skills improvement programs need to target poor women and consider the payment of some stipend for attendance at training sessions, particularly for those who may lose out on a day's wage. The most appropriate and effective women's groups based on the community's decision will be invited to participate in the project, whether they be the PKK, religious groups, teachers' groups, etc.

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<sup>7</sup> Dwyer Leslie, Final Report on the Baseline Survey for RWSS Project Phase II (AIDAB, 1989).

<sup>8</sup> Geoffrey Read and Ayse Kudat, Why a Women in Development Component Should be Part of a Rural Water Project and What Such a Component Should Comprise: The Case of Sindh, Pakistan (Infrastructure Notes, World Bank, February 1992).



## **RECOMMENDATIONS**

28. Women will be the major beneficiaries of WSSPLIC. They will also be equal actors with men in the community management of improved WSS facilities. The proposed framework for women's involvement in WSSPLIC is developed around the following objectives:

- Increase the community's access to improved WSS facilities.
- Promote and improve community management of improved facilities.
- Improve hygiene practices of water users.
- Ensure the sustainability of constructed WSS systems through:
  - proper operation and maintenance (O&M)
  - increase cost recovery for O&M
  - environmental protection of water sources
- Enhance women's role and capability in community management of projects as well as their health, social and economic welfare.

29. The component for women will concentrate on the following six key areas: 1) participation of women in community management of WSS systems; 2) promotion of women's role in O&M, particularly in resource management; 3) implementation of a hygiene education targeted to women and school-aged children; 4) income generation for women; 5) action research to develop an effective program for women; and 6) training for project staff on gender issues and monitoring the women's component. A brief description of each area follows.

### **Participation of Women in Community Management of Water and Sanitation Systems**

30. Women will be involved in every stage of the project which will have a compulsory step with the heading "Role of Women." They will participate in needs assessment, in the selection of technical options and in design decisions at both community and household levels. More active roles will be developed for women on village committees, especially in the areas of management and resource mobilization. Additional training designed specifically for women will be conducted. These sessions will also be given at times and location suited to women. Support and assistance of the village head, LKMD, PKK, religious and other informal leaders should be obtained to ensure that women are actively involved. Refer to Attachments A and B for checklists to ensure that women are included in the project. Detailed information on the process of community management of the project is provided in another section of the main report.

### **Promotion of Women's Role in Operation and Maintenance**

31. Emphasis will be given in promoting women's role in O&M. Indications, thus far, are positive that women's involvement enhances sustainability of water and sanitation systems. Women will be provided training in technical areas so that they know how to check the systems, make simple repairs and/or become pump attendants.

32. Cost recovery for O&M is a key area where women should have a major role. It is generally accepted (and confirmed in the WSSPLIC household survey, see Table 4) that most village women are in charge of managing household resources. This experience can be put to use in controlling and managing the finances and resources for O&M. A woman can either be the head or a co-head of a





water user group and assume specific responsibility for resource management. This same arrangement can be repeated at the higher level of the village committee. It should be ensured that women and men doing similar work or having similar level responsibilities should receive the same conditions and remunerations. Extra support, training and monitoring should be provided by the project for women in the O&M stage.

### **Implementation of a Hygiene Education Targeted to Women and School-aged Children**

33. Hygiene education may be defined as "all activities aimed to change attitudes and behavior in order to break the chain of disease transmission associated with inadequate hygiene and sanitation."<sup>9</sup> The focus of hygiene education is to establish links between improved water and sanitation facilities on the one hand and improved human practices on the other hand, especially regarding the use, care and maintenance of the facilities; the guarding of water safety and its use in sufficient quantities; and the safe disposal of wastewater, human and other solid waste.

34. Most hygiene education programs which were focused and worked directly with target groups met with better results than more general programs.<sup>10</sup> WSSPLIC's hygiene education program will focus on two target groups: 1) on women because they have the main responsibility for the family and for water management and sanitation; and 2) on school-aged children (6 to 11 years old) because they are the generation of the future. Steps used to gain access to women will include the recruitment and training of female project staff; development of appropriate hygiene messages and media; making home visits; reaching women in the traditional gathering places, markets and work places; ensuring that improved facilities are convenient and accessible to women; and reducing their work load.

35. The approach to be used will be as participatory as possible for sustained impact. Different ways will be tried to find the most effective ones. One possible way is to use the existing arrangement of POSYANDU cadres (primarily women) who are supposed to be providing health guidance and education to a group of ten families each (dasawisma). If these cadres are too busy or do not exist, alternative groupings can be used, e.g., arisan groups, prayer groups, etc. If they exist but are not active, they can be reactivated. A trained staff will have to work with the cadres to provide them with the skill to undertake a participatory hygiene education where objectives, contents and methods are determined as far as possible by the target group through dialogue, community self-surveys and evaluation. The dasawisma unit can either work independently or join with several other units to work on common and/or larger issues. The cadres or hygiene motivators will be supervised by the project staff who may either be a Kecamatan sanitarian or a member of an NGO. The hygiene motivators will come under the umbrella of the village project committee.

36. The involvement of men is equally important in the hygiene education program because women's programs require their support, and improvements at home and at the water source are often the men's responsibility. Men also have a personal interest in the welfare of their families as husbands, fathers and brothers.

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<sup>9</sup> L. Burgers, M. Boot and C V Wijk-Sijbesma, Hygiene Education in Water Supply and Sanitation Programmes (IRC International Water and Sanitation Centre, The Hague, The Netherlands, 1988).

<sup>10</sup> Ibid.



## **Income Generation for Women**

37. An income generation component is one way to promote the sustainability of water and sanitation systems in low income communities with full responsibility for O&M. Poor families also have little time for hygiene education as they have to devote as much time as possible to earning a living. It would be appropriate, therefore, for WSS and hygiene education programs directed to the poor to be linked to productive activities and income generation for poor women.

38. The component would include several aspects: 1) skills training (including technical training, basic accounting and management, and problem solving); 2) small enterprise development; 3) provision of credit through the development of village level savings and loan groups; and 4) coordinating with and strengthening existing income generation programs in the village. In the beginning, the number of activities should be small to take into account the limited absorptive capacity of the target group as well as of the project staff. In time and when appropriate, new activities can be initiated.<sup>11</sup>

39. Currently, the PKK in each village allocates about Rp. 500,000 (from the Rp. 900,000 it receives annually from the Government) to an income generating program (UP2K). Discussions with PKK staff in Jakarta as well as Bangdes staff in Jakarta and the provinces indicate that the results of the program thus far are mixed. Instead of establishing a competing group, WSSPLIC should consider the feasibility of strengthening the existing UP2K program and work through it to provide skills training and small enterprise development activities. The latter two should be related to high value products and/or activities with a ready market. Many women are already involved in poultry rearing, cottage industry and other small enterprise activities (refer Table 3). The program should help to increase their productivity and assist with marketing information.

40. The availability of credit for small borrowers and those without collateral has always been a problem especially for poor people. Improved skills will not have much impact if they are not utilized profitably which, very often, is due to a lack of capital. There are many ways of helping poor women get access to credit. One of the ways is through the UPK2 program (see above paragraph). Another way is to develop a credit program from O&M funds in the following manner:

- Have the potential water users begin collecting routine water user fee for O&M as close to the beginning of the project as possible.
- After an agreed amount has been collected (and this could be after 6 to 12 months), the village committee and the water users can decide to use a portion of incoming water user fees for the credit program. This portion is considered a loan from the O&M funds and will have to be repaid at a stated period or when the need arises, e.g., for major repairs and/or replacement of parts. Loans from the O&M fund can

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<sup>11</sup> In villages, particularly isolated ones and in the upland areas of eastern Indonesia, a program of dryland farming can be initiated. This would bring economic benefits to the women and their families while helping to conserve soil and water. Dryland farming focuses on promoting improved dryland farming practices through the establishment of leguminous contour hedgerows for soil and water conservation. Well established contour hedgerows are the foundation for other agricultural activities such as improved food cropping systems, livestock management and cash crops.



be made periodically to the credit fund. There should be careful reporting and bookkeeping of accounts for both the credit program and the O&M funds.

- The credit fund will be for women in the water user groups and managed by women members of the village water committee. Meanwhile, the routine water user fee collection continues.
- Initially, women can borrow up to 50% of the amount they and their households have paid up for the water user fee. There should be loan ceilings, loan periods, interest rates, rules and regulations for the program. These can be decided and established by the water users under the guidance of the village committee.
- It is recommended that there be a savings component to the credit program in order to help it grow and to instill the habit of saving among the women borrowers. Introduction of a group savings component has proven to be a crucial factor for the sustainability of women's groups. In many cases, the presence of a "simpan pinjam" system more than any other group activity, encourages women to stay involved in the women's group and has a positive impact on the social cohesion.<sup>12</sup>
- Group loan is also recommended so that members of the group can monitor and encourage repayment through peer pressure if needed. Individuals can use their share of the loan for individual enterprises. Infact, it is the experience that individual enterprise is more successful than group enterprise. (Refer to the Grameen Banks's experience for lessons learned.)
- O&M funds should be kept in an interest bearing account (e.g., Simpedes) at the local bank when at all possible. A portion of the interest earned from the O&M funds and from the credit program can be used for hygiene education activities once WSSPLIC pulls out.
- The credit program should be closely coordinated with the UP2K program. It is possible that those who are managing the UP2K program can also manage the credit program. Women borrowers will receive guidance from the UP2K program regarding their productive activities.

A report on income generation program for WSSPLIC will be available in the final report.

#### **Action Research to Develop an Effective Program for Women**

41. Undertaking a pilot/demonstration program on a small scale before large scale implementation can prove to be beneficial and effective. The freedom to develop, test and systematize appropriate activities and use more participatory approaches in a "learning by doing" manner can be a good way to begin. The most feasible options can then be further developed and applied in more and more communities. Regular monitoring and periodic evaluations will help to further improve the learning process.

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12

Wilma Wentholt, 1991.



42. The proposed action research/demonstration program can be undertaken during the first year of WSSPLIC. It can be implemented in three provinces to take into account the diversity of the regions. Discussions with the Ministry of Home Affairs (Bangdes) staff resulted in the proposed selection of the following provinces and districts:

- Central Java - Tegal and Rembang or Wonogiri (two urban and two rural locations)
- Central Sulawesi<sup>13</sup> - Donggala (two locations)
- Maluku - Seram (two locations)

43. The women's component need to be well coordinated and integrated into the larger project. It is recommended that Bangdes be the overall coordinator for the component. It is highly recommended that an NGO be contracted to implement both the action research as well as the implementation of the component over the life of the project. The PKK, particularly from the provincial level down, will be a key counterpart in the women's component. The State Ministry for the Role of Women and the Women's Study Centers (established in many of the provinces) could assist with policy issues and conducting basic research on the socio-economic aspects of women's role and status in each of the six provinces.

#### **Training for Project Staff on Gender Issues and Monitoring a Women's Component**

44. WSSPLIC should make the recruitment of women for project and field staff positions a priority. Attention needs to be paid to the type of training provided. Training should include gender analysis, particularly as it relates to Indonesia, and how to develop activities which would enhance the participation of women.<sup>14</sup> Other key training topics include: the basic organizational principles of self-help groups; principles of adult learning; training methodology; working with groups possessing little or no formal education; problem solving; management; and technical skills (e.g., credit, accounting, and marketing). Staff would also need to be familiar with simple but effective ways of monitoring the program and taking corrective measures when necessary. They should also be provided with supporting material such as appropriate training material and visual aids.

#### **Links With Other World Bank Projects**

45. One of the first activities of the women's component would be to identify coordination and operational linkages with other on-going World Bank projects involving women. Projects with particular relevance are: 1) Non-Formal Education III for informal sector support, income generating activities, and access to skills training and credit facilities; 2) Community Health and Nutrition Project III for sharing of health information, campaign and educational material as well as participation in orientation and training programs for staff; and 3) Ground Water Development Project.

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<sup>13</sup> Central Sulawesi is also one of the provinces designated for the proposed Ground Water Development Project funded by World Bank. WSSPLIC staff should consult with the GWDP staff regarding the women's program before launching into any activity in the women's component.

<sup>14</sup> The State Ministry for the Role of Women (UPW) has training programs in gender analysis and other gender related topics.





## **BRIDGING PERIOD AND FIRST YEAR PROGRAM**

46. It is recommended that preliminary activities begin during the bridging period (December 1992 to March 1993 ??) in the following three areas:

- Recruit a national consultant with strong qualifications and experience in Women In Development field.
- Contract the Women's Study Centers in the three provinces selected for pilot activities to conduct basic research on the socio-economic aspects of women's role and status in the eight villages.
- Develop a detailed plan for action research/pilot program for the women's component in the eight villages.

A tentative schedule of activities for the bridging period and the first year are presented in the time line below.

## **RESOURCES**

47. Allocation of specific resources, apart from community preparation and hygiene education, will be required for the women's component. These funds could be channeled through Bangdes for activities at the village level. If available, grant funding could be obtained for the bridging period and action research/pilot program phase of the first year. An approximate budget for the bridging and first year activities is US\$\_\_\_\_\_. It is recommended that an international WID specialist be assigned to the women's component for the first two years of the project. It is also recommended that the international Community Management Advisor for the project be a person with expertise in WID and health matters. A Community Management Advisor with these additional roles would contribute significantly to the desired integration of women's activities in the overall framework of WSSPLIC.



## **ATTACHMENTS**

- A. Efforts to Involve Women in Water and Sanitation Programs**
- B. A Checklist to Ensure Women are Included in Water and Sanitation Programs**
- C. WSSPLIC Household Survey Data on Women's and Men's Activities**



**ATTACHMENT A**  
**Efforts Made to Involve Women in Water and Sanitation Programmes**

Project Phases	Previous Conventional Approaches to Involving Women	Possible Future Approaches
Initiation and Preparation	<p>Information collected on women (sometimes collected from themselves) - usually late in the process</p> <p>Women present at meetings when they know about them and have time</p> <p>Sometimes women present on Village Water Committees (usually through a quota system) - but participation very passive</p>	<p>Information collected from women on women, and from men on men - as part of baseline data from the beginning of the project</p> <p>Information directly to women and stimulation of more active roles at village meetings (support mechanisms)</p> <p>Development of more active roles for women on Village Water Committees especially in the area of management (support mechanisms)</p>
Human Resources Development	<p>Women trained as: Village Health Workers (quoto); Caretakers; and in some cases more qualified maintenance officers (pump or well attendants)</p> <p>Many competent interested women do not participate because of timing, location, etc.</p>	<p>Efforts to involve more women alongside men in all these areas, but especially in the more "technical" area and in management (support mechanisms)</p> <p>Adapt training to realities of women in terms of timing, location, qualification requirements, etc.</p>
Implementation	<p>Labour inputs are expected of women and women contribute with supplies of local materials</p>	<p>Required labour inputs of men and women are assessed according to the total work situation in given seasonal contexts. Women may already be overworked at that time. Contributions should be on the same terms as men, especially with regard to payment.</p>
Operation and Maintenance	<p>In many cases, women's involvement is limited to an extension of their reproductive roles-in a "caretaker" capacity.</p> <p>Fewer women are involved in technical areas as pump attendants to carry out simple repairs</p> <p>Women sometimes involved with different conditions from those of men, even when doing the same work; e.g. men are paid and women expected to work as volunteers.</p> <p>Women involved on Village Water Committees play a passive role and have few real responsibilities</p>	<p>Efforts to involve more women as pump attendants on the same conditions as men (support mechanisms)</p> <p>Ensure that women and men doing the same work get the same conditions.</p> <p>Promote the inclusion of women in areas of responsibility such as financial control, store-keeping, etc.</p>
Monitoring and Evaluation	<p>Women are not involved in monitoring and evaluation exercises and do not get access to information from such exercises (same situation for men)</p>	<p>Efforts to develop participatory methodology and train communities (men and women) to utilize them</p>

Source: The Challenge of Measuring Gender Issues in Water and Sanitation. By C. Hannan-Andersson Year ?



## ATTACHMENT B

### **A Checklist to Ensure Women are Included in Water and Sanitation Programmes**

#### *Assessing Needs and Priorities*

1. Is data collected regarding the use and needs for water and sanitation services differentiated by sex?
  - Are illness and death rates for target diseases given according to sex ?
  - Is the social and economic information about the target population sex-specific (e.g. women's employment, women's literacy, women-headed households, etc.)?
2. Do women participate in setting priorities? Do men and women identify needs and priorities differently?
3. Are women specifically mentioned in the objectives? Are targets sex-specific?

#### *Accessibility and Acceptance of Water/Sanitation Facilities*

1. Are women's work patterns or time-use taken into account in:
  - placement of water systems?
  - placement of latrines?
  - timing of water operations?
  - health education sessions?
  - training activities?
2. Are technologies used suitable for women? Is the engineering design appropriate for women's use? Do latrine structures ensure privacy and conform to cultural rules? Can women repair the facilities? Can women afford to maintain them?
3. Are women's attitudes and beliefs taken into account in devising health education? Are health activities geared toward "mothers" only? Are fathers and other women taking care of children also included?

#### *Project Personnel*

1. What is the proportion of women staff in the programme?
2. Is there special recruitment of women as programme managers, water and sanitation engineers, extension workers and programme promoters?
3. Are women represented in decision-making positions?





### *Programme Training*

1. Do programme training activities give equal opportunity to women?
2. What is the proportion of women in training activities? What special efforts are being made to involve more women?
3. Do educational and promotional materials show women as sanitation engineers, as programme workers? Are men shown using the facilities?

### *Community Involvement*

1. Have women's organizations been identified, notified and involved in the programme?
2. Do work plans exist for the involvement of women's organizations?
3. What kind of support is being given directly to women's organizations?

### *Programme Effects, Monitoring and Evaluation*

1. How will the programme affect women's health and nutritional status?  
Will the programme monitor and collect indicators of effects on women?
2. How will the programme affect women's access to water and use of water?  
How will it affect women's work in cleaning house, clothes, children, food preparation and cooking?
3. What changes are expected or have occurred in women's use of time (e.g. number of hours worked) and what were the hours saved used for?
4. How will the programme affect women's income? Do changes cost women more or less money than before? Do women use time saved to make money?

Source: *The Tribune*, A Women and Development Quarterly Newsletter 43, September 1989, pp 22-23.



ATTACHMENT C

TABLE 1: HOUSEHOLD ACTIVITIES BY WOMEN AND MEN IN RURAL AREAS  
(Percentage)

HOUSEHOLD ACTIVITIES	WSSPLIC PROVINCES (Number of Responses = 2152)																	
	MAINLY BY WOMEN						MAINLY BY MEN						EQUALLY BY WOMEN & MEN					
	MAL	NTT	SUT	STH	STR	JAT	MAL	NTT	SUT	STH	STR	JAT	MAL	NTT	SUA	STH	STR	JAT
Cooking	96		94	98	91	98	4		3	1	1		0		2	1	0	0
Washing Clothes	98		97	93	81	91	2		4	1	1		0		3	3	1	5
Cleaning House/Yard	96		87	84	67	74	4		5	1	7		0		7	13	2	21
Collecting Water	77			60		62	23			17			0			21		21
Market (to buy food)	96		84	85	72	93	4		6	7	15		0		9	5	2	2
Collecting for fuel	53		14	28	21	34	47		65	56	54		0		16	9	1	9
Child Rearing	96		33	65	51	44	4		1	3	2		0		3	6	1	4
Bathing Child	96		40	65	50	45	4		1	1	2		0		4	10	2	9
Looking After Sick Child	96		39	61	34	36	4		2	1	3		0		31	18	5	33
Taking Child to Health Provider	72		33	51	21	31	28		4	3	5		0		50	30	6	38

Source: WSSPLIC Household Survey from Six Provinces, June/July 1992.

MAL - Maluku  
SUT - Sulawesi Utara  
STR - Sulawesi Tenggara

NTT - Nusa Tenggara Timur  
STH - Sulawesi Tengah  
JAT - Jawa Tengah



TABLE 2: PRODUCTIVE ACTIVITIES BY WOMEN AND MEN IN RURAL AREAS  
(Percentage)

PRODUCTIVE ACTIVITIES	WSSPLIC PROVINCES (Number of Responses = 2152)																	
	MAINLY BY WOMEN						MAINLY BY MEN						EQUALLY BY WOMEN & MEN					
	MAL	NTT	SUT	STH	STR	JAT	MAL	NTT	SUT	STH	STR	JAT	MAL	NTT	SUA	STH	STR	JAT
Land Preparation	14		6	5	9	9	86		65	44	41	36	0		24	37	21	19
Seeding	11		6	6	10	22	89		63	36	31	23	0		22	41	29	16
Planting	29		5	7	9	13	71		53	20	17	12	0		30	57	43	38
Weeding	20		5	5	8	8	80		47	19	24	12	0		31	59	32	39
Harvesting	28		5	7	7	12	72		36	15	11	9	0		37	61	49	41
Post Harvest	30		9	8	8	15	70		31	14	13	6	0		34	54	31	33
Selling Agric. Yields	29		16	18	18	31	71		31	15	27	9	0		23	37	12	14
Livestock Rearing	20		9	10	10	11	80		28	34	17	15	0		21	27	7	22
Poultry Rearing Child	70		10	5	5	12	30		24	37	13	8	0		15	25	5	15
Farm Labor (for wage)	21		5	5	5	10	79		13	27	9	22	0		9	38	3	19
Handicraft Making	62		6	4	4	8	38		6	19	5	8	0		7	31	2	2
Selling Handicrafts	72		3	5	5	5	28		4	19	4	5	0		5	31	2	0

Source: WSSPLIC Household Survey from Six Provinces, June/July 1992.

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TABLE 3: DECISION MAKING ON EXPENDITURE BY WOMEN AND MEN IN RURAL AREAS  
(Percentage)

ACTIVITIES	WSSPLIC PROVINCES (Number of Responses = 2152)																	
	MAINLY BY WOMEN						MAINLY BY MEN						EQUALLY BY WOMEN & MEN					
	MAL	NTT	SUT	STH	STR	JAT	MAL	NTT	SUT	STH	STR	JAT	MAL	NTT	SUA	STH	STR	JAT
Household Needs	76		34	76	61	55	24		8	3	10	5	0		58	19	27	39
Children's Education	81		16	55	19	34	19		7	8	28	5	0		66	27	41	38
Agriculture	39		8	14	13	13	61		24	33	43	20	0		63	45	28	39
Family Health	70		13	27	20	36	30		8	25	15	7	0		75	45	59	52
Village Development	39		7	13	10	18	61		18	43	54	31	0		73	39	32	47
Social Obligations	48		9	10	10	20	52		12	31	37	26	0		76	44	44	51

Source: WSSPLIC Household Survey from Six Provinces, June/July 1992.

MAL - Maluku  
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10

11