PART THREE:
CHANGING ROLES OF MEN AND WOMEN

MEN, WOMEN, AND WORK IN A LOMBOK VILLAGE

Mary Judd

INTRODUCTION

In the last few years, the study of labor allocation among rural households has been of growing interest to social scientists (see White 1976; Stoler 1977; Nag et al. 1978; Farouk 1980; Hart 1980; Judd 1980). This interest has been generated by several developments, including the unforeseen negative impact of the Green Revolution on small farmers and landless villagers; the search for better information and criteria for development policies; and the tremendous growth of research on women's roles and their contribution to the economy.

In the past, the study of labor was the domain of economists, who focused not only on industrialized nations but also at the macro level. Later, concepts from these studies were used as models for development of nonindustrialized countries but with limited success. In recent years, other social scientists have taken an interest in examining labor force behavior. Their focus, however, has been on nonindustrialized countries and at the micro level of households. These studies, which effectively combine the quantitative aspects of economics with the qualitative nature of anthropology, provide us with an important glimpse of not only the internal workings of a rural household but also the external dynamics affecting labor utilization behavior.

This present study gives us a more in-depth look at labor allocation behavior in a village in Lombok, Indonesia. It presents some preliminary data on labor expenditure from a sample of twenty households that represent a cross-section of economic classes in the village. Labor allocation behavior is examined in relation to class, sex, and seasons (agricultural and nonagricultural). The study provides valuable comparative data with studies carried out in Java and other parts of Indonesia and offers helpful insights for future development policies and objectives in the rural area.

VILLAGE STRUCTURE AND ECONOMY

The village under study will be referred to as Iaq Iqu (a pseudonym). It is a fairly large Sasak village located in the center of the eastern Indonesian island of Lombok, and it is the administrative center for one of the nine districts which constitute the Regency of Central Lombok. The land area of Iaq Iqu is less than 10 square kilometers, of which 70 % (669 hectares) is irrigated rice land, 21% (206 hectares) dry fields, and 9% (87 hectares) residential and garden land. The population of Iaq Iqu in 1979 was 8,648, distributed among 2,098 households, with a population density of 900 persons per square kilometer, which was much higher than the Lombok average of 394 persons per square kilometer. Household sizes in the village ranged from one to thirteen people. Orthodox Islam is the primary religious belief in the area.

Iaq Iqu is a typical Sasak village in terms of its system of social stratification, which is based on ascribed social status. Somewhat similar to the Balinese "caste" system are the Sasak divisions into three major status groups: gentry, commoners, and descendants of slaves. Traditionally, the three groups had a very close feudal relationship. Higher gentry were served by

lower gentry, who were the courtiers, and by serfs, who were the slaves. Commoners provided agricultural labor for the communally owned land. Today, much of the traditional socioeconomic relationship still survives, but much of it too has been undermined through changes brought about by private ownership of land, the impact of Dutch colonial rule, and significant inroads made by the Indonesian government, particularly through its programs of health and education. Cutting across this horizontal set of status groups is the vertical one of economic class which is defined in terms of ownership and income. In Iaq Iqu, however, economic class often corresponds with status group; the gentry, as a rule, have more land and higher incomes than the commoners.

The primary economic activity in Iaq Iqu is the cultivation of irrigated rice fields. Farmers normally cultivate these fields twice a year, growing wet rice during the rainy season and cash crops like peanuts, soybeans, and cassava during the dry season. Some farmers grow two rice crops a year. Preparation of the field for cultivation and removal of seedlings from the nurseries are men's work. Women are primarily involved in planting and weeding. Everyone takes part in harvesting with women as the predominant group. The organization of labor in agricultural production still follows traditional lines. Villagers first work in the fields of landlords with whom they have kinship, labor exchange, or traditional ties. Then they sell their labor to whoever needs it, either within or outside the village.

The intensification of rice agriculture in the 1970s led initially to a greater demand for labor in the area, but, taken as a whole, agricultural employment has decreased because the larger farmers have begun to mechanize their farms (see Collier et al. 1974). The new labor-saving production techniques have generally been adopted in areas where the new rice varieties are grown, which usually means areas that are well irrigated and are characterized by high population pressure and underemployment.

Changes in the structure of employment and labor relations in Iaq Iqu have become much more evident since 1976. More and more farmers are using small organized groups of laborers, each group with a leader who is contacted by the farmer and who discusses labor rates, time, and place of work. Some of the wealthier farmers are beginning to contract out the preparation of fields for cultivation as well as the harvesting of the rice crop. Changes in the structure of employment are gradually replacing the traditional "open labor market" and undermining patron-client relationships.

The laborers most affected by these recent developments are women. Women from the landless households, through their participation in agricultural work, contribute significantly to family income. Harvesting, their main agricultural employment, is being threatened by the use of contract work groups, which consist mainly of men. The new high-yielding, insect-resistant varieties of rice discourage the use of female labor. Where before women cut each ear with the aid of a small knife, the *ani-ani*, the shorter stalks of the new varieties are more efficiently harvested by men using sickles. According to a study of a Javanese village, where previously 200 women could harvest one hectare a day, now an average of 25 men suffice (Hüsken 1979:146). In Iaq Iqu, however, women are still the main harvesters.

Apart from farming and agricultural wage labor, there are very few employment alternatives in the village. Men welcome any kind of construction work in the village because it pays better than most nonagricultural work. Some engage in small home industries like brickmaking, basket weaving, and rope manufacture. Among the men and boys from poorer households, two of the more frequent economic activities are fishing in the rivers and rice fields and herding for wealthier households. Women are often involved in cottage industries like mat and cloth weaving, coconut oil manufacture, and food processing. Those from the class of medium landowners engage in small-scale trading within the village and its vicinity. Among poorer women and girls, a common form of economic activity is gathering edible plants and roots which grow wild in the rice fields and around the village; these are either consumed at home or sold in the marketplace.

As a local administrative center, the village offers some additional employment opportunities in the administrative office, a health center, two schools, and a village cooperative. These government jobs, however, are available only to those with some years of formal education, a requirement that limits the opportunities to the gentry group in a largely illiterate society. Wage labor outside the village is scarce. Labor migration, when it occurs, is usually related to agricultural production. Villagers with social and kin ties go south for two or three weeks a year for harvesting.

In general, the labor market situation in the village is similar to the overall agricultural pattern typical of Indonesia. Demand for labor is at its peak during the growing seasons and is at its lowest between seasons. For most landless and poor households, therefore, the main source of livelihood is work related to agricultural production within the village.

DISTRIBUTION OF RICE FIELDS

Over the years the landholding pattern of Iaq Iqu has changed considerably. Except for slave households, which traditionally never owned land, older villagers still remember the time when nearly every household had some land to cultivate, whether as owners, renters, or sharecroppers. Today, 56% of the households in the survey sample of the village are landless; 11% own less than 0.2 hectare of rice land, which is not sufficient to support a household of five; 15% hold between 0.2 and 0.5 hectare; 9% have between 0.5 and 1 hectare; and 9% own more than 1 hectare (see Table 1). The unequal distribution of land means that most of the households have to obtain a substantial part of their income from sources other than the ownership, cultivation, or sharecropping of rice fields. Essentially, therefore, 67% of the households depend mainly on agricultural labor for subsistence.

Table 1
Land Ownership Pattern in Iaq Iqu

Landholding (hectare)	Households[a] (%)
0	56
<0.2	11
0.2-0.5	15
0.51-1.0	9
1.1-2.0	6
2.1-3.0	2
>3	1
Total	100

[a] Based on a survey sample of 340 households. All data for this and subsequent tables are for 1978/79.

The economic division of the sample households is best viewed in terms of landownership and the commonly accepted measure of *cukupan*, a Javanese concept. "The Javanese peasantry, both its rich and its poor has long had a concept of what constitutes 'enough.' The word they use is *cukupan*. It is applied to what they see as being the reasonable needs of the ordinary peasantry" (Penny and Singarimbum 1973:2). Cukupan per person per year has been established for rural Indonesia at 240 kilograms of hulled rice, of which 120 kilograms meet an individual's rice needs and the other 120 kilograms can be sold or bartered to buy the accompanying foods, such as meat, beans, and vegetables, that provide the necessary nutrients. Two hundred and forty kilograms of hulled rice per person per year is the minimum subsistence level and does not allow for other expenditures, such as for shelter, clothing, and life cycle

ceremonies. Anything below 240 kilograms is considered below the poverty line.

Based on average rice yields in the 1975/76 wet season agricultural cycle, it is estimated that a household of five people must control a minimum of 0.5 hectare of rice fields, producing two crops per year, in order to obtain an adequate level of subsistence (Hart 1980). Thus, the wealthiest group (Class I) is commonly defined as households which own and cultivate at least 0.5 hectare of rice fields (see Table 2). The middle group (Class II) is comprised of households which own 0.2 to 0.5 hectare; they are able to meet their rice needs from their land but must supplement their income from wage labor or other forms of employment. Households in the poorest group (Class III) control less than 0.2 hectare of land or have no productive assets at all. They depend entirely or almost entirely on wage labor for subsistence.

Table 2
Economic Classes in Iaq Iqu

Class	Landholding (hectare)	Households (N)	(%)
I	0.5 or above	60	18
II	0.2-0.5	52	15
III	0.2 or below	228	67
Total		340	100

DISTRIBUTION OF LABOR TIME

From the total survey sample of 340 households, thirty households, which represented a socioeconomic cross-section of the village, were selected for an intensive follow-up study of daily allocation of labor time. I with two local research assistants visited the thirty households every other day for one year. We recorded the amount of time spent daily on each activity by the head of household and spouse, as well as the household's income and expenditures. Because of lack of time and resources, we did not record the labor contribution of unmarried children under the age of 15 years. Two previous studies carried out on household labor allocation in rural Java provide much information on the significant economic role of children (Nag et al. 1978; Hart 1980).[1]

Although we visited thirty households, the data presented below refer to twenty households which yielded the most complete set of records. Collection of data from the other six households was intermittently disrupted during the year by one or another of the following factors: death of a family member; long visits to relatives outside the village; temporary separation of a married couple; frequent unavailability of an informant for interviews; and a late request to be excluded from the sample.

In the following tables the various work activities have been divided into fifteen categories and grouped into two main components: housework and income-earning activities (for categories see Table 7). For comparative purposes all tables except table 7 show the amount of labor expended for two significant months in an agricultural cycle: peak and slack. During the agricultural year of 1978/79, November was the peak month and February the slack.

Household Labor Allocation by Class

Household labor allocation figures reveal significant class differences in the amount of time allocated to income-earning and household activities, in the absolute number of working hours, and in the changes that occur between the peak and slack months. The picture that emerges from Table 3 indicates that Class III (low-income) households work more hours than Class II (medium-income) or Class I (high-income) households. In the peak month Class III households allocate more time (285 hours) to income-earning activities than do Class II (231 hours) or Class I (157 hours) households. Housework activities show a reverse trend for the same month; Class I households devote more hours to this set of activities than any other class. Labor allocation for the slack month shows a similar pattern but with fewer hours for all classes. The one exception is housework activities for Class III households, which show an increase in the slack month (134 hours) over the peak month (119 hours). This increase is a result of having more time to spend on general household repairs, food processing, and caring for the sick. The decrease in the number of hours of housework for the other two classes, particularly for Class I, is due to the relegation of work to members of poorer households, who receive a small remuneration for their services.

Table 3
Household Labor Allocation of Head of Household and Spouse by Class (N=36)

	Hours per household per month		
Class	Activities	Income-Earning Housework	Total
Peak Month			
I	157 (51%)	148 (49%)	305 (100%)
II	231 (70%)	98 (30%)	305 (100%)
III	285 (71%)	119 (29%)	404 (100%)
Slack Month			
I	143 (57%)	110 (43%)	253 (100%)
II	144 (62%)	90 (38%)	234 (100%)
III	202 (60%)	134 (40%)	336 (100%)

On the whole, the pattern of household labor allocation in Iaq Iqu shows a significantly higher rate of participation in income-earning activities for both months by households in Class III than by those in Class I or II. This higher involvement is easily explained by the fact that the households in Class III have little or no productive assets other than their labor for earning a living. The higher number of hours in income-earning activities does not mean higher income for Class III households. On the contrary, for the village as a whole, the higher the participation, the lower the returns to labor; the lower the participation, the higher the returns. This inverse relationship is also found in village studies in other parts of Indonesia (White 1976; Hart 1980) and will be discussed later.

Labor Allocation by Individuals According to Class and Sex

In Table 4 the breakdown of labor time among the various income-earning activities shows significant concentrations of labor among the different classes and between men and women. During the peak month, men in Class I and Class II households expend most of their labor in cultivating their own fields and in livestock rearing, whereas men in Class III households spend most of their labor time as agricultural paid workers and in nonagricultural wage

work. Men in Class II households also participate in agricultural wage work, as they find it necessary to supplement their small farm income with earnings from other sources.

Table 4
Labor Allocation of Individuals by Class and Sex, in Hours per Month (N=36)

Class	Sex	Own Production	Trading	Agricultural Wage Labor	Nonagricultural Wage Labor	Other[a]	Income-Earning Activities	Housework	Total
Peak Month									
I	Male	59	0	0	2	32	93 (59%)	49 (33%)	142
	Female	7	27	4	2	24	64 (41%)	99 (67%)	163
II	Male	78	1	49	6	16	150 (65%)	20 (20%)	170
	Female	7	30	8	18	18	81 (35%)	78 (80%)	159
III	Male	0	4	80	45	24	153 (54%)	41 (34%)	194
	Female	1	6	81	27	17	132 (46%)	78 (66%)	210
Slack Month									
I	Male	38	1	0	26	32	97 (68%)	13 (12%)	110
	Female	10	1	0	0	35	46 (32%)	97 (88%)	143
II	Male	45	0	2	3	15	65 (45%)	35 (39%)	100
	Female	3	59	0	0	17	79 (59%)	55 (61%)	134
III	Male	0	0	31	75	12	118 (58%)	22 (16%)	140
	Female	1	0	13	47	23	84 (42%)	112 (84%)	196

[a]Includes mainly labor exchange at ritual and ceremonial *(pesta)* occasions.

Among the women, those in Class III households participate heavily in agricultural wage work during the peak month, surpassing the men in the number of hours spent in that activity. Trading, which includes processing food for sale, is an important economic activity among women in Class I and Class II households.

During the slack month, men in Class I and Class II households continue to tend their fields and also cultivate dry-season crops. The relatively small difference in the number of hours expended for their own production between the peak and slack months for men in Class I households is explained by their hiring of labor for agricultural work. Men in Class II households, with smaller parcels of land and little working capital, have to provide much of their own labor or engage in the system of labor exchange for cultivation of their fields. For men and women in Class III households, the emphasis during the slack month is in nonagricultural wage labor, particularly in construction work for men and domestic odd jobs for women. Trading—small-scale buying and selling—continues to be the main economic activity for women in Class II households, but drops off precipitously for Class I women during this time.

Tables 5 and 6 show pattern of labor allocation between income-earning activities and housework by class and sex. As is to be expected, men in all classes spend a higher percentage of their time in income-earning activities than in housework. The same is true for the slack month as for the peak month.

Women, on the other hand, show significant differences. In both peak and slack months, women in Class I households allocate over 60% of their labor time to housework; women from other classes spend a smaller percentage of their time in similar activities.[2] Wealthier women, as a rule, devote a higher percentage of their labor time to housework activities in both seasons, but the poorest women contribute more hours to that set of activities in the slack month. They spend the increased number of hours not so much in cooking as in manually processing (drying, winnowing, and pounding) rice for household consumption. In addition, partially as a

Table 5
Labor Allocation by Class and Sex (N=36)

	Hours per Month					
	Class I		Class II		Class III	
Activities	Male	Female	Male	Female	Male	Female
Peak Month						
Income-earning	93 (65%)	64 (39%)	150 (88%)	81 (51%)	153 (79%)	132 (63%)
Housework	49 (35%)	99 (61%)	20 (12%)	78 (49%)	41 (21%)	78 (37%)
Total	142	163	170	159	194	210
Slack Month						
Income-earning	97 (88%)	46 (32%)	65 (65%)	79 (59%)	118 (84%)	84 (43%)
Housework	13 (12%)	97 (68%)	35 (35%)	55 (41%)	22 (16%)	112 (57%)
Total	110	143	100	134	140	196

Table 6
Daily Working Hours of Individuals by Class and Sex (N=36)

		Hours per Day		
Class	Sex	Income-Earning Activities	Housework	Total
Peak month				
I	Male	3.1	1.6	4.7
	Female	2.1	3.3	5.4
II	Male	5.0	0.7	5.7
	Female	2.7	2.6	5.3
III	Male	5.1	1.4	6.5
	Female	4.4	2.6	7.0
Slack Month				
I	Male	3.2	0.4	3.6
	Female	1.6	3.2	4.8
II	Male	2.2	1.2	3.4
	Female	2.6	1.8	4.4
III	Male	3.9	0.8	4.7
	Female	2.8	3.7	6.5

result of the high incidence of malnutrition during the slack month, children from the poorest households are more susceptible to illness and have to be tended by their mothers.

Among women in Class II households, the amount of labor time is fairly evenly distributed between income-earning activities and housework for both peak and slack months. During the peak month, the involvement of women in Class III households is significantly higher in income-earning activities than it is for women in the other classes; they spend over 60% of their labor time in earning activities. In the slack month, their participation decreases because there are very few jobs available.

In comparing the labor contributions of men and women, Tables 5 and 6 indicate that women in Class III households not only provide the highest total number of labor hours for both peak and slack months but that their labor contribution for the slack month (196 hours) amounts to more than the labor contribution of the Class III men in the peak month (194 hours). In general, women contribute more labor time than men within their own class.

Average Working Hours per Day by Class and Sex

Previous tables dealt with the allocation of labor in a peak month and in a slack month. Table 7 shows the average daily working hours of an adult for the period from April 1978 to April 1979. On the average, men spend 76 to 83% of their daily working hours in income-earning activities while women spend 40% to 48% of their time in similar activities. Men in Class I and Class II households devote half the time they spend in income-earning activities to cultivating their own fields. Even though Class I households own more agricultural land than Class II households, Class I men spend considerably less time working their fields than do those of Class II (see also Table 4). Many of the men in Class I households spend their time in the fields mainly supervising hired agricultural laborers. Men in Class III households, on the average, spend more time (43%) on nonagricultural wage work than on agricultural employment (26%).

Table 7
Percentage of Working Hours per Person per Day in Different Work Activities According to Class and Sex, April 1978-April 1979 (N=36)

	Class I		Class II		Class III	
Activies[a]	Male	Female	Male	Female	Male	Female
1. Childcare	9.5	11	2.5	17.5	5.5	14.5
2. Household maintenance	9.5	17	12	10	3.5	11
3. Cooking	2.5	28	2.5	23.5	3.5	20.5
4. Firewood collecting	2.5	0	0	0	3.5	1.5
5. Marketing	0	4	0	2	2	3
6. Food gathering	0	0	0	0	0	1.5
7. Handicrafts	9.5	8.5	5	12	2	5
8. Food preparation	0	0	0	8	0	0
9. Livestock rearing	12	0	12	2	3.5	0
10. Trading	0	10.5	0	17	2	3
11. Own framework	33	8.5	41	2	0	1.5
12. Community projects	2.5	0	3	0	2	0
13. Labor exchange (rituals)	7	10.5	5	2	3.5	5
14. Agricultural wage work	2.5	0	12	2	26	17.5
15. Nonagricultural wage work	9.5	2	5	2	43	16
Total housework (nos. 1-6)						
%	24	60	17	53	18	52
Hours	1.0	2.8	0.7	2.7	1.0	3.3
Total income earning (nos. 7-15)						
%	76	40	83	47	82	48
Hours	3.2	1.9	3.4	2.4	4.4	3.0
Total work						
%	100	100	100	100	100	100
Hours	4.2	4.7	4.1	5.1	5.4	6.3

[a] Time devoted to recreational activities is not included.

Women in all classes allocate over 50% of their daily working time to housework, with women in Class I households leading the way. The absolute number of hours devoted to housework activities for Class I households would be higher if the time spent by hired help were included. Women from landed households invite poorer women to help them with domestic chores like cooking, washing, winnowing, and hand pounding rice, baby sitting, and sewing. In return for their services, they pay these poor women a small sum of money or,

more often, give them extra food to take home to the rest of the family. During the nonagricultural season, income from these odd jobs around landed households prevents many poor households from experiencing outright starvation (see Judd 1980).

Men and women in Class I households allocate considerably more time to reciprocal labor exchange for ritual and festive occasions than do other households. Not only do they have more time for festivities but they also have more resources for and greater obligations to hold such ritual feasts.

Labor Allocation by Seasons

The findings from Iaq Iqu regarding labor allocation point out a very important difference between the village in Lombok and those in Java. White (1976) and Hart (1980) found that villagers in their research areas in Java work long hours a day and as many hours in the slack season as in the peak agricultural months; the only difference is in the type of employment. White concludes that, contrary to popular opinion, his research village is not characterized by seasonal unemployment but rather "by involuntary changes in the allocation of working time between agricultural and nonagricultural occupations" (1976:281). The pattern of labor allocation in Iaq Iqu does not show the same perennial activity as in Java. There is a definite season of underemployment during the slack agricultural months in the village in Lombok. The main factor accounting for the differences found in Lombok and in Java is one of economic environment. The two Javanese villages studied are located close to several businesses and agro-industries, for example, local weaving factories, government-financed construction projects, sugarcane fields, and ocean fishing.

Iaq Iqu, like many of the villages in Lombok, is primarily an agricultural community. There are hardly any agro-industries in the area other than three rice mills, and very few businesses. There are also far fewer government-sponsored community projects in Lombok than in Java. Villagers in Iaq Iqu are usually busy during the agricultural months, but during the slack months they are unable to find sufficient alternative employment. According to Table 4, an adult male from a Class III household who depends on wage labor for a living engages in 153 hours of income-earning activities during the peak month but only 118 hours during the slack month. An adult female from the same class of household spends 132 hours in income-earning activities during the peak month and only 84 hours during the slack month. Men from Class II households who supplement their own small farm income with agricultural wage work find that their work activity decreases from 150 hours in the peak month to 65 hours in the slack month. There is only a minor seasonal difference in the number of income-earning hours for women in Class II households, as their trading activities continue through the slack season.

Returns to Labor

Returns to labor in agricultural and nonagricultural work are highly unequal. This is true for most agricultural communities in Indonesia, where agricultural labor receives comparatively higher returns than nonagricultural labor. Table 8 shows the estimated returns to labor in rural Java (1973) and rural Lombok (1978). During the period from 1973 to 1978, the price of 1 kilogram of hulled rice rose from 60 to 110 rupees (415 Indonesian rupees equaled U.S. $1.00 in 1978). The wage rates for selected occupations in Java and Lombok are comparable in terms of purchasing power, with slightly higher returns for plowing in Java and for harvesting in Lombok.

Table 8
Estimated Returns to Labor in Selected Occupations in Java and Lombok

Occupations	Returns to Labor (Rp./hour)[a] Java, 1973	Lombok, 1978
1. Agricultural wage labor		
a) Plowing (own animals)	70-90	85-100
b) Hoeing	9-11	17
c) Transplanting	6-7	13
d) Weeding	9-11	17
e) Harvesting	16-20	40-50
f) Hand-pounding rice	no data	10.5
2. Nonagricultural wage labor		
a) Construction (low-grade)	10	20
b) Housebuilding	no data	40
c) Carpentry	15	25-37
d) Domestic odd jobs	no data	5-8
3. Animal Husbandry		
a) Cattle (own)	4-6	no data
b) Cattle (sharecropping basis)	2-3	4-6
4. Handicrafts		
a) Straw mat	1.5	3-5
b) Cloth	3	5-8

[a] Data for Java are from White 1976:279. Estimates for Lombok wage rates are from data in Judd 1980, appendix. In 1973, 1 kilogram of hulled rice in Java cost Rp. 60; in 1978 it cost Rp. 110 in Lombok. In 1978, Rp. 415=U.S. $1.00.

Much has also been written about the low returns to labor in rice cultivation (Sajogyo 1974; White 1976). It should be noted, however, that returns to nonagricultural work are even lower. Except for occupations like housebuilding and carpentry, which require skill and the necessary tools to ply the trade, nonagricultural employment in rural areas does not bring in sufficient income to support a household. In 1978, a household of five required a minimum of 1.5 kilograms (Rp. 165) of rice a day to survive. Iaq Iqu women weaving cloth for eight hours a day earned only Rp. 40-65, an amount far below household needs. Similarly, women working at domestic odd jobs did not make enough to feed their families. Men too faced the same critical problem. Tending cattle for a full day brought in only enough to feed one mouth. Even if they were fortunate enough to get a low-grade construction job the most they earned a day was Rp. 160, barely sufficient to meet daily household needs.

The low returns for labor make it necessary for every able-bodied household member, man, woman, and child, to work. Each household is characterized by—to use White's (1976) term—"occupational multiplicity," in which household members work at a great variety of jobs, if available, to survive from day to day. This is particularly true for Class III households. Men and women from Class I and Class II households have the option to withdraw from wage work when the average wage rates decline; villagers from Class III households have no option but to work long hours at low wages. Moreover, villagers from the higher economic classes have better access to better-paying jobs. They work fewer hours but receive considerably higher wages than those from the lower economic class. Meanwhile, the poor face not only seasonal unemployment but also seasonal starvation during the slack agricultural months.

IMPLICATIONS FOR DEVELOPMENT POLICIES

In summary, the foregoing microanalysis of labor allocation behavior brings out several salient points. First, men and women in Class III households work longer hours, particularly in income-earning activities, than any other group. Second, women from Class III households spend more time in agricultural wage labor than men in the same households during the peak months. Third, men and women in Class I households work shorter hours, which are fairly evenly distributed between the peak and slack months. Fourth, seasonal unemployment affects men and women from Class III households more than others. Fifth, the ownership of productive assets gives Class I households the economic power and Class II households the economic edge over Class III households. Class I households produce enough for their own consumption, and many have surplus for sale. Class II households produce sufficient rice for household consumption; they do not have surplus for sale, but they do have some option to withdraw from wage work when wage rates decline. Meanwhile, Class III households, with little or no productive assets, are totally dependent on wage labor for their survival.

The development policies of the Indonesian government to improve the economic welfare of the rural poor have thus far not proved successful. The widespread failures of the Green Revolution and other programs such as the centralized agricultural cooperatives (Badan Usaha Unit Desa) have been well documented (Palmer 1977; Hüsken 1979; Kauz and Maurer 1979). Other planned social services programs (see United Nations Development Programme 1980) will have minimal if any impact at all in improving the welfare of the poor.

In considering the problem of increasing poverty and deprivation, many policymakers and development specialists have tended to focus on rice cultivation as the main source of income and to neglect the complexities and differentiations in social organization within as well as between villages. This present study on labor allocation behavior in rural Lombok helps illustrate some of the complexities involved and pinpoints certain areas for improvement if there is to be an effective agricultural and rural development program.

Any effective policy has to take into consideration the three main issues of class differences, sex, and seasonality (agricultural and nonagricultural). The focus of policymakers should first of all be directed to the plight of the increasing number of landless poor. Too many past agricultural programs have benefited only the landed class. Policies and programs have to be planned and implemented with the landless and poor in mind. Otherwise, the gap between the landed and landless, between the rich and poor, will only widen.

Similarly, development programs for women have to be well formulated and well implemented. As Papenek notes, "development planning for women requires technical skills in the collection and analysis of information on a wide variety of issues, rather than a process of limited advocacy for specific changes" (1979:31). Women's economic role is vitally important, particularly in the lower income group. Among the poorer households women's earnings are more essential to survival than among the better-off families. Development measures that displace women from existing jobs without providing alternative earning opportunities are most detrimental to the poor. Policies that favor men over women are equally harmful to the poor in that they widen the income gap between the rich and poor.

Of equal importance is generating employment and earning opportunities for both men and women during the nonagricultural months. So far, the focus of rural development has been on rice cultivation, which in rural Lombok occupies only six months out of the year. For the other six months villagers, particularly the poor, have to seek other types of employment in order to make ends meet. It is imperative for development policies to include programs for these slack agricultural months.

Last, but not least, there is a dire need for rural wages to be increased. As this and other studies have indicated, economic returns to labor are pathetically low in the rural areas. Rural wages have not kept pace with the higher yields in crop production; in fact, the purchasing power of these wages has drastically decreased. If no improvements are made in this area, then the poor will have to work even longer hours to earn the same bare subsistence.

This study has only begun to address some of the crucial issues in rural development. It is hoped that the collection and analysis of data at the microlevel will provide policymakers with a better understanding of the internal dynamics of rural Indonesian households as well as the external factors affecting labor allocation behavior so that they can have a sounder basis for formulating and implementing policies.

NOTES

The data cited in this paper were obtained from field research conducted in Lombok, Indonesia, for a period of 20 months between 1977 and 1980. Research was funded by the National Science Foundation and the University of California Regents.

[1] Javanese data for the Nag et al. 1978 study was collected by White in 1972 and 1973. The work-input data pertain to the children and adults of twenty households in a Javanese village located 21 miles northwest of the city of Yogyakarta. These were medium- and low-income households that had children between the ages of 6 and 19 years. Data on time budgets, food consumption, income, and expenditures were collected once every six days for one year.

Hart's 1980 study, which was part of a larger project, was also carried out in Java. Data on labor allocation of each household member 6 years of age and over, as well as household income and consumption, were collected in 1975-76 for 87 households. Members of households were interviewed once a month during the course of one year.

[2] This finding is similar to those of other studies carried out in Indonesia. In Hart's 1980 study, rural Javanese women of a higher economic class spent over 50 hours more in housework activities than did women from a lower economic class. Wealthier women devoted a large portion of the time to cooking for household consumption. These women also used as many as three stoves simultaneously as compared with the one stove used by poorer women.

REFERENCES CITED

Collier, William, Soentoro, Gunawan Wiradi, and Makali
1974 Agricultural Technology and Institutional Change in Java. Food Research Institute Studies 13:169-194.

Farouk, A.
1980 Use of Time by Individuals: A Survey in Bangladesh. *In* Rural Household Studies in Asia. Hans Binswanger et al., eds. pp. 169-187. Singapore: Singapore University Press.

Hart, Gillian
1980 Patterns of Household Labor Allocation in a Javanese Village. *In* Rural Household Studies in Asia. Hans Binswanger et al., eds. pp. 188-217. Singapore: Singapore University Press.

Hüsken, Frans
1979 Landlords, Sharecroppers and Agricultural Laborers: Changing Labor Relations in Rural Java. Journal of Contemporary Asia 9:140-151.

Judd, Mary
1980 The Sociology of Rural Poverty in Lombok, Indonesia. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Berkeley.

Kauz, Peter, and Jean-Luc Maurer
1979 Rural Cooperatives and Development in Indonesia: A Preliminary Research in Lombok. Geneva: Institute of Development Studies.
Nag, Moni, Benjamin White, and Creighton Peet
1978 An Anthropological Approach to the Study of the Economic Value of Children in Java and Nepal. Current Anthropology 19:293-306.
Palmer, Ingrid
1977 Rural Poverty in Indonesia, with Special Reference to Java. *In* Poverty and Landlessness in Rural Asia. Geneva: International Labour Organisation.
Papanek, Hanna
1979 Implications of Development for Women in Indonesia: Selected Research and Policy Issues. Boston University: Center for Asian Development Studies.
Penny, D.H., and M. Singarimbun
1973 Population and Poverty in Rural Java: Some Economic Arithmetic from Srihardjo. International Development Monograph, No.41, Cornell University.
Sajogyo
1974 Modernization Without Development in Rural Java. Paper presented at Food and Agriculture Organization Conference, Bogor, Indonesia.
Stoler, Ann
1977 Class Struggle and Female Autonomy in Rural Java. Science 3(1):74-89.
United Nations Development Programme
1980 Rural Women's Participation in Development. New York: UNDP Evaluation Study, No.3.
White, Benjamin
1976 Population, Involution, and Employment in Rural Java. Development and Change 7:267-290.