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THE RURAL POOR in INDONESIA



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LIFE IN RURAL INDONESIA

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PREFACE

The profiles on the lives of five different types of rural Indonesians presented here describe life in rural Indonesia, particularly for the poor. The profiles are brief. They are not complicated scholarly studies but they capture the basic essence of the life of the rural poor.

These profiles were prepared by American women living in Jakarta whose husbands work for the U.S. Mission or private firms. These women are solely responsible for the information and interpretations provided in these profiles. The U.S.A.I.D. Mission, however, believes that these profiles precisely because of their simple non-jargonized styles can help anyone who reads them develop a closer empathy for the Indonesian people and the nature of the lives they live.

Isabelita Lumanlan Zimmerman provided the cover illustration for this manuscript.

THE UPLAND RICE FARMER

BY

DAPHNE BABUNAKIS

THE UPLAND RICE FARMER

This is an ethnography on the typical upland dry rice farmer. Although the characters portrayed in this paper (and those that follows) are fictional, the information presented here concerning their daily activities, living conditions, and general lifestyle is true insofar as it accurately represents one typical, upland, farming family. The characters are Adi, 36, his wife Sriyani, 33 and their four children. They live in Lani, a fictional village that is located in a mountainous region and has approximately 3,000 inhabitants. The story-line is a constructed account of this family's daily life, used as a vehicle to relate real information concerning their sources of income, land holdings and crop yields as well as employment patterns, physical living conditions and availability of health and educational facilities. An attempt has been made to portray humanistic qualities -- the interactions between family members, their relationship to the village and its traditional customs and government, and their personal hopes and fears for the future. Also, I have contrasted upland village characteristics with those of the lowland villages whenever possible.

Adi and his oldest son Ismu rose at dawn and carrying various farm tools walked to the small well located a few hundred feet from their house. Setting the tools aside, they refreshed themselves with a drink of water and chatted with friends from the other five families who share the well and who had gathered around it to fill water jugs or drink before walking out to the fields to work. After exchanging a few friendly greetings, Adi and Ismu started their half-hour walk to the rice field where they were to meet seven other farmers. These men own adjacent fields and belong to a gotong royong farm group traditional agricultural institution in Lani which provides for a mutual labor exchange between farmers. When the farm group has finished working on one member's field it then alternates to the other fields until all members have benefited. It is used in most phases of farm work from soil preparation to harvest and both men and women participate in gotong royong; however, the harder tasks of tilling, plowing, harrowing and repairing equipment are left to the men while women work on the planting,

weeding, harvesting, threshing and processing of food. When rice is being transplanted, men always work in the more difficult tegalan (non-irrigated) fields while women work in the sawah (rain-fed) fields.

Today, the men in Adi's group are plowing and fertilizing his brother-in-law's sawah field to prepare it for his second annual rice crop. To plow the ground they use two buffaloes that belong to a member of the group. Animals and farm equipment are not rented out, but are used by every member of the gotong royong when needed. After plowing the ground the men will apply a mixed fertilizer. In 1971 the only fertilizers on the market were urea and ammonium sulphate, but after it was discovered that the soils in Lani lacked phosphorous and potassium, fertilizers containing these minerals became available. A few years ago most farmers in Lani used only organic manure for fertilizer, but unfortunately it was often stored outside in open pits so that half of the nutrients escaped before application. Now, a government program provides fertilizer at a lower rate than the free market and with good credit terms. A farmer owning one hectare of land can buy 200 kg of fertilizer on credit for Rp.8,000 at an interest rate of 1% per month which can be repaid after harvest.¹

Adi owns one-half hectare of land, 75% of which is non-irrigated tegalan and the rest irrigated sawah. In his tegalan fields he grows corn and cassava which are the staple foods in his family's diet. In his remaining sawah Adi plants rice twice a year and, if both crops are successful, he manages to feed his family. Farms in Lani are substantially larger than those in lowland villages; the average farm size in Lani is between 1 and 1.5 hectare, whereas the average farm size in a lowland village is .5 hectare.² Also, lowland farming is characterized by sedentary rice cultivation with irrigation whereas Lani uses shifting cultivation without irrigation. Nearly everyone in Lani owns land, in contrast to lowland villages where most of the people are landless and farmers must hire 80% of their labor force. Since most people own and work their own fields the income distribution in Lani is more equitable, but lower than in lowland villages.

Land is rarely rented or sold so most property is kept within a family. But as family members increase fields become smaller through inheritance divisions and many farmers find themselves unable to grow enough food even for subsistence living. Therefore, a system called share-cropping has evolved whereby a near-landless farmer can increase his work load without directly owning more land.

Besides working on his own fields Adi share-crops with other farmers. For share-cropping a field from soil preparation to harvest, Adi receives a portion of the total crop. Farmers in upland villages never pay wages for labor; all payments are made with shares of the harvest. Money can be obtained later by selling the produce at market or to middlemen from another village. There is one exception to this general rule: men who share-crop the lurah's (village leader) land are paid money for their work since the lurah is usually occupied with administrative duties.

Since Adi owns land he has a petak, or government certificate, which is a proof of property rights and gives the dimensions of his fields for purposes of tax assessment. When his father died several years ago, Adi, being the oldest son, inherited the petak which now describes a collective property that includes both the title-holder and his siblings. Most farmers in Lani believe they have inherited land ultimately from their ancestors and for this reason are reluctant to sell it, and only then, to well-known relatives. Both men and women can be landowners, but only landowners can vote, petition the district head and join important discussions concerning village administration.

Farming is seasonal work requiring much strenuous labor during certain periods in the agricultural cycle and less during other periods. When Adi is not fully occupied working in his or another's fields he often goes to the village sugar mills for extra employment during his free time. Farmers in Lani grow sugarcane and process it into brown sugar. These are labor-intensive activities from which farmers can earn significant additional income.

When Adi works in the sugarcane fields he makes about Rp. 300 a day.³ His workday begins at sunrise and he either

hoes or plants cane until twelve at noon when the heat forces everyone to rest for a few hours. During this break Adi may eat some rice or cassava cakes he brought with him. After the midday break Adi continues working in the fields until evening. This work schedule is accelerated during the months of August and September when the sugarcane is being harvested. Time is a crucial factor during this period and men will often work eighteen hours a day, resting only three times to eat a simple meal provided for them. In addition to his meals each man is paid the equivalent of Rp.400. This is paid in bags of sugar rather than money and the average payment a man receives for working eighteen hours a day for two months is eighty sugar bags.

Another, though temporary, source of income for Adi has been helping the government in various reforestation programs which have been implemented on the mountain slopes near his village. For the past ten years government agriculturalists have been involved in growing teak and clove tree forests and Adi has occasionally found extra work planting seedlings.

While Adi has been working in the fields this morning, his wife, Sriyani, has been washing clothes and working around her house. The house is located in a crowded section of the village which constitutes one of its four hamlets. Most mountain villages consist of a number of hamlets which are scattered throughout the village grounds, in contrast to lowland villages which usually have a central district that runs along the main road or irrigation canal. The hamlet that Sriyani lives in is a crowded complex of make-shift houses that are built close to or continuous with each other. They form row of buildings where nuclear families can add on an extra room for new family members. It is common for a couple to live with their parents, children and perhaps a sibling's family.

The house is constructed of a wooden frame which is covered with sheets of bilik for walls. Bilik is a mat woven from split bamboo which requires frequent repairs for holes as it breaks easily. The house is about 4x5 meters in area, has a dirt floor and no windows or door; light enters through a large hole in one of the upper side walls.

The roof is made of thatch, a material which must be replaced often since it deteriorates readily under the sun and rain and is also a convenient breeding ground for rodents. Rats especially are a problem and are always getting into Sriyani's stored food.

The interior is divided into two rooms by means of a movable bamboo panel. Following Javanese custom, the front room is regarded as the masculine living quarters and the back room as the feminine quarters, women being known throughout Java as the "ministers of the interior." Furnishings are sparse, a few mats, some cooking utensils and one or two kerosene lanterns placed on a make-shift table. Outside the front of the house is a bare dirt yard lined with colorful flowers which Sriyani is very proud of and tends with care. Behind the house is a small garden where she grows vegetables for her family to eat and to sell at market.

Sriyani's daily activities are working on the family's corn and cassava fields, cleaning or clearing a neighbor's rice paddy, pounding or threshing rice, washing clothes in the stream or fetching water from the well. After Sriyani rose at six this morning she left her three-year old son with one of the village women, then gathered her family's clothes in a wicker basket to wash at the nearest stream. Since there is no running water or sewer the stream is used by people for bathing, washing clothes, and as a toilet facility. There is a small well for drinking water, but the water is impure, looks and tastes bad. It is estimated that less than 2% of the rural population has access to safe drinking water.⁵

After washing the clothes and hanging them outside to dry Sriyani went out again to clear the rice field of a neighbor on a gotong royong basis for three hours. In agricultural affairs, villagers keep strict mental account of what aid they render and expect their labor to be repaid; however, in matters of sickness, accident or death help from neighbors is spontaneous and generous and there is no debt incurred.

Besides working on her own and friend's field, Sriyani sometimes finds employment applying fertilizer in the sugar-

cane fields. This is the only work she is allowed to do in the sugarcane fields as the other activities are too strenuous for women. For one day's labor without meals she is paid Rp.200.⁶ Another source of income for Sriyani is selling her handmade goods in the market which is held every five days. She weaves mats, hats, and baskets from the fibres of pudak plants which she grows outside her house. These handicrafts can sell for up to Rp. 500 and require about one and a half months to weave. She also sells surplus vegetables she has grown and occasionally cassava cakes she has made for snacks.

Every fifth day Sriyani walks to the neighboring village of Kiet where the market is held. It takes her one hour to reach the market by foot. Most of the people have no source of transportation other than walking, but a few own bicycles and others use the popular delman, which is a pony-pulled cart. Even if Sriyani had another source of transportation it would not help her when going to market because the road to Kiet can be traveled only by foot. Before WW II there had been a road and bridge used by autos but during the war both were badly damaged and now Lani is inaccessible by car. This transportation problem contributes to Lani's relative isolation compared to Kiet where the government has recently improved the main road. Most lowland villages are closer to a paved road or railway and therefore enjoy greater trade and contact with larger towns.

At noon Sriyani returns home to escape the heat and prepare her first meal of the day, a gruel of corn and cassava served with simple spicy side dishes. Although rice is the main crop it is not the villager's staple food, but rather their "food of honor" reserved for guests at celebrations and visitors from out of town.

Adi and his family eat about 2 kg of half-and-half mixture of corn and cassava every day.⁷ Although there are few severe forms of malnutrition here, multiple deficiencies are widespread and nearly everyone suffers from a lowered resistance to diseases such as the diarrhea-pneumonia complex and tuberculosis. No one obtains sufficient protein or caloric intake; it is estimated that rural children eat as little as six grams of protein a day. Also, about 30% of

the toddlers have insufficient amounts of vitamin A and this lack causes blindness.⁸ Endemic goiter occurs more frequently in mountain villages due to insufficient iodine and anemia is widespread, especially in pregnant and nursing mothers. A host of other diseases such as malaria, dysentery, cholera, trachoma, hook tape and round worm are common but no single one predominates over the others.

There are no doctors or health facilities available in Lani but in Kiet, about one-hour walk away, there is a polyclinic staffed with a qualified paramedic team. When it first opened five years ago only the villagers from Kiet used it, but now villagers from Lani and surrounding remote areas visit the clinic. Sriyani delivered her last baby with the help of a trained mid-wife from the Mother-Child Health Clinic but her first three children had been delivered by a dukun, the village midwife, who uses traditional medicine and massage. The fourth child died within the first year and she suspects this may have been due to bad health conditions. The infant mortality rate looms high; about 150 babies out of every 1,000 die within their first few years.⁹ Most villagers in Lani desire large families because they believe many children are a blessing and also practical for parents in their old age. Adi wants Sriyani to have more children but lately she has been considering an IUD put in by a clinic worker.

After Sriyani ate lunch and fed her baby a bowl of mashed banana, she stayed inside her house and plaited mats while waiting for two of her children to return from school. Her son Atet, who is 12, and his sister Ivi, who is 9, left early that morning and walked to the primary school located in Kiet. There are no textbooks so they learn by dictation from their teacher. There is no secondary school in Kiet and it is too impractical for parents to let their children move away to attend the district one since secondary schools are expensive and parents need their children to help them at home. Also, it has been observed by villagers that children who attend secondary schools rarely return to their villages, preferring to move to larger towns instead where employment opportunities are better. Ivi does not attend

school on a regular basis as she is often needed at home to take care of her baby brother. Although she has the same educational opportunities as her brother, the villagers do not consider it as necessary for girls. Atet occasionally stays home when he is needed to cut pudak leaves for plaiting or to help his father in the fields during harvest.

Neither Adi or Sriyani finished primary school and they are illiterate; however, they realize the importance of education for their children and started sending them when they turned eight.

Both parents readily admit they want their children to have a better life than the one they now have, and that this is best accomplished through education. Yet they don't encourage their children to continue school or show interest in their achievements or ambitions. Wealthier village parents are more likely to let sons continue school and have expressed a desire for more vocational programs that offer practical courses in teacher-training, pharmacy-assistance and agricultural-training. These courses last for a few months and help meet the present needs of the villagers more realistically.

When the children return from school they prepare a lunch of cassava and corn. After resting awhile, they go out again to herd goats, ducks or cattle for the wealthier farmers as a part-time job. In the early evening they often bring back cattle from the pastures or buffalo that have been washed in the stream. On days when they are not busy herding animals they play village games with the other children or collect firewood for the evening.

Ismu, the oldest son, is considered an adult at fifteen and as such is expected to work in the fields with his father and to share equal responsibilities. He has finished primary school, but cannot continue his education because the secondary school is too expensive, too far away and his parents need him. He has decided to marry a girl from his hamlet who is one year younger than he. Although Adi and Sriyani did not arrange this marriage (as their own had been many years ago) they approve of his decision. When a couple

marries they nearly always move into the bride's parents' home for the first three to five years. A new dwelling is built promptly, sometimes sharing the same roof, but always with a separate kitchen to establish an independent household economy. Although the new bride may eventually want to leave her first home and establish residence elsewhere, one of her sisters is obligated to remain with the parents to care for them in their old age. Fathers prefer to have daughters remain with them rather than sons since after early childhood sons are expected to treat fathers with formality and detached deference and not establish any intimate ties.

Early that evening Adi returned from working in the fields, took a leisurely meal and then rested for a few hours. Some evenings during dinner he and his family practice a simple religious ritual called slamatan which helps them attain a state of spiritual calm. It is a communal meal of rice eaten in silence and is shared only with the closest family members and neighbors. Villagers in Lani always seek a state of slamat, or emotional calm, whereby supernatural dangers which they believe cause sickness, accidents and death can be averted. Adi and his family take their slamat whenever they feel a need for spiritual strength as well as during significant turning points of their lives, such as birth and marriage.

Sometimes in the evening there are various traditional art-musical performances put on by local residents. Adi and his family enjoy listening to the gamelan bands and selawatan singers or watching a dramatic puppet show. Adi is also fond of tjeki, a Chinese card game that the men and boys often play till late at night. There are no theatres or television sets and only a few people own radios, so most of the villagers spend their evenings quietly chatting with one another. One popular pastime is watching and betting on cock-fights although this form of entertainment is looked down upon by the village upper class. More socially acceptable activities are volleyball, soccer and badminton which are popular local sports.

Adi often goes to a local coffee-house where he can socialize with other farmers from his section of the village.

Every village is divided into wards and people from the same ward tend to associate with one another more than with others. In the ward coffee-shops men discuss village politics -- elections, appointments of officials, even land disputes. Though women hold equal rights in political matters as in most other spheres of life, they prefer not to get involved in public affairs and decline positions of leadership.

The village leader is the wealthiest farmer and owns the most land. He is responsible for holding village meetings where decisions concerning village life and community projects are made by consensus. Also, the village leader authorizes traditional marriages and makes the arrangements between bride and groom's parents. He acts as the public relations man between the villagers and government officials who request taxes, and implement various programs such as reforestation. The village leader seeks to maintain friendly relations with government workers, teachers from the school and medical personnel from the health center.

Over the past ten years the villager's attitudes toward the government officials appears to have changed from one of indifference and open suspicion to acceptance and trust in some matters. They now believe the government is sincerely trying to help them and they have accepted many agricultural innovations which were previously rejected. They appreciate the government's donating superior roosters to the farmers to help them improve their breeding stock, and may listen to the government-sponsored programs on the radio that advise on the use of fertilizers, high-quality seeds and improved farming techniques.

Yet, some farmers question the benefit of improved farming technology and the ultimate advantage of an increased agricultural output. Women are afraid they won't have any work when the traditional methods of harvesting rice with the hand-held ani-ani knife are replaced by men using more productive equipment like the sickle. Even a minor innovation such as the sickle effects a dramatic change in labor patterns by reducing 200 women-days of work to 70 man-days. Also, new rotary weeders used by men are

replacing women who used to weed by hand; they reduce 20 women-days to 8 man-days. Rice previously hulled by women hand-pounding is now machine milled.¹⁰

The advent of improved technology is also altering village social structure and economics. Previously, all rice was kept within the village and consumed only by the residents; now a surplus of rice must be sold to middlemen from outside the village in order to supply cash to buy the necessary inputs for more sophisticated agricultural techniques. Technology creates new classes of farmers whereby those who possess the financial means become the modern innovative group that can afford to disregard traditional institutions that care for the poor in the village. This creates a larger group of landless whose plight worsens as the population increases. Because of unemployment and under-employment many people, especially young men, are leaving their village to look for work in the larger towns and cities. Young girls leave hoping to find work as house servants. Adi and Sriyani are afraid their own children may eventually leave them, lured by the promise of work and a more exciting life in the cities.

Despite the changing village life Adi is not overly-concerned or worried. He is anxious, though, to increase his crops and buy fertilizer and better seeds on credit. He is afraid of droughts, floods and famines, but has no control over these disasters so is content to do the best he can with his limited resources. Sriyani wants to expand her vegetable garden and sell more produce at the market, and looks forward to some day replacing her thatch with red roof tiles. Although both believe they have 'cukupan', or enough, most of the time, they also look forward to improvements and a better life.

NOTES

1. Wade C. Edmundson, Two Villages Revisited: Agricultural Development in East Java, University of New England, p. 12.
2. USAID, Annual Budget Submission, June 1977, p. 31.
3. William L. Collier, Observations on Upland and Coastal Villages in East Java, February 1978, p. 4.
4. Ibid. p. 7.
5. USAID, Annual Budget Submission, June 1977, p. 37.
6. William L. Collier, Observations on Upland and Coastal Villages in East Java, February 1978, p. 7.
7. Ibid. p.4.
8. USAID, Annual Budget Submission, June 1977, p. 38.
9. Ibid. p. 35.
10. Ibid. p. 46.

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THE TYPICAL COASTAL FISHERMAN IN INDONESIA

BY

JUDITH A. THORN

THE TYPICAL COASTAL FISHERMAN IN INDONESIA

INTRODUCTION

This paper chooses as its typical coastal fisherman of Indonesia, only those in the traditional fishing sector who use sail powered boats. Motorized boats and trawlers are a fairly recent addition to fishing operations in Indonesia and usually operate out of the large port cities. Artisanal (small scale) fishing, using sail powered boats, is found along the coast wherever there is a small river.¹

In 1971 there were 1,323,800 full, part-time and occasional fishermen* in Indonesia, 28% of whom live on the island of Java.² If the number of Indonesians employed in the fishing sector are considered heads of households, then 6% of the Indonesia's households depend on fishing for all or part of their total income. Fish provide most of the animal protein consumed in Indonesia and is an important factor in the national economy.¹ Sea captured fish and shrimp totaled 860,000 tons in 1974, an 84% increase in tonnage since 1960.

The corresponding increase in motorized boats was primarily responsible for the high output, however, the motorized boats employ fewer fishermen and there has been a steady decrease in the total number of fishermen since 1968.

There are three sizes of sail boats (perahu): large, medium and small. The large perahu has a crew of fifteen or more, the medium five to fifteen crew members, and the small perahu, the most common, has a crew of two to five. There are 294,770 non-motorized boats in Indonesia, an increase of 126,795 since 1960.³

There are three main types of fishing gear: luring, snaring and attacking. Snaring is the preferred traditional gear and includes drag nets, drift nets and seine nets.¹

* Full time fishermen work 200 days a year, part-time 80 days and occasional fishermen work 25 days a year.

The typical coastal fisherman is described as an owner/operator of a small perahu.* The village here is not named, although most statistics cited are taken from studies on Bandungan, located about 60 km. from the City of Semarang. The fisherman's name is Anwar, eliminating repeated reference to a typical coastal fisherman.

TYPICAL HOUSEHOLD

Anwar is forty years old and has five children. His oldest son, 21, is married, and he and his wife have moved to another fishing village where there was a better opportunity for employment as a fisherman. Anwar's oldest daughter, 19, is married to a fishing laborer and lives in the house next door. Her husband cannot depend on fishing alone for his income, but must find work in other areas. He has worked as a farm laborer, a night guard, a small trader and most frequently he repairs fishing nets for additional income.¹

Three of Anwar's five children live at home, two daughters, 12 and 15, and one son, 17, who is a member of the three-man crew on Anwar's small perahu. Both Anwar and his oldest son attended grammar school, but because there was no money, none of the other children could go. Anwar's wife and daughters contribute to the household income by making and selling a fish paste from the trash or inferior fish Anwar brings back from his catch. Sometimes the trash fish is all he catches and the proceeds from the sale of the fish paste is their only income.

Anwar owns no land for agriculture, his only assets are his small perahu and his house. The house is situated near the village port where his perahu is moored. He is able to store his gear under the eaves of his house, unlike other fishermen who live further away. They must pay half a share of their catch to the owner of a house near the port for storing their gear. Anwar receives some of his income by storing another fisherman's gear at his house.

* There are different categories of traditional fishermen: owner/operator, land owner (does not accompany the perahu), and the laborer. The laborer is the most common, followed by the owner/operator of a small perahu.

Anwar's house is a small rectangular structure made of traditional Javanese materials: wooden pillars and beams with panels of bamboo and a thatched roof.⁴ The floor is loosely packed dirt and the kitchen area is located within the dwelling unit. There is no electricity, kerosene is used for cooking and lighting. Meals usually consist of rice and fish. Anwar's family does not eat corn or cassava.⁵ They consume about 1.7 kg. of rice per day, less than half the amount considered adequate at the poverty level.

VILLAGE

The village where Anwar lives is located on a coastal plain along the Sunda Shelf of the Java Sea. It is accessible by a black top road which runs from the major transportation road. The village is fed and drained by a fairly large river and several streams which are used for the water supply and drainage system.⁶ Because of the poor drainage systems found in many coastal areas, the threat of disease is a real problem. There have been major outbreaks of malaria, cholera and other diseases. Although Anwar's family has escaped the major diseases their shrinking income has caused a reduction in food consumption, affecting their nutritional balance.

Anwar's village has a mixed economy, rice farming, brackish water ponds and artisanal fishing. But some of the land holdings are owned by outsiders and over fifty percent of the residents are fishermen who do not own land. The population density is extremely high, 1,400 per sq.km. Studies show that villages with fishing as the predominant activity have higher densities than villages with rice growing or brackish water pond economies.²

The village has a small port, a cooperative fish auction and a market. The majority of boats moored at the dock are small perahus, although there are a few medium perahus. Usually perahus moored at the ports of different fishing villages along the coast are the same size.⁵ Many perahus moored at Anwar's village are not owned by the local villagers. Outside fishermen use the port for their fishing operations and are residents for only short periods.

FISHING ACTIVITY

A typical fishing day begins in the late afternoon when Anwar and his crew mend his net and make small repairs on the perahu. The work usually takes from two to three hours, but if there are major repairs the fishermen may work ten to thirteen hours. Anwar pays the cost of repairing the net but does not pay the crew for their labor. He does provide cookies and tea and, if the labor is more than one day, he provides food.¹

Because Anwar is fishing for shrimp, he uses a small meshed nylon net. His first mate who is the third member of the crew, is experienced in dipping the paddle into the water and listening for shrimp through the butt of the paddle.* The first mate has been with Anwar for many years, through both good and bad fishing seasons. His loyalty is very important, because it frees Anwar from the necessity of finding another crew member who may not be dependable. Fishermen who change crews often to gain more profit are called nyimbat. Loyal crew members are given priority to join a fishing crew. Approval of each crew member must come from the captain.¹

Anwar and his crew set out to sea at 2:00 A.M. Each provides his own food and cigarettes, although on some small and all medium perahus the food is provided by the owner and the cost is deducted from the sale of the catch. On perahus catching shrimp, the food is provided by the first mate and the cost is deducted from his share of the catch. If the fishing is unsuccessful and there is no catch, the first mate must still pay for the food.¹ There is no cooking on the perahu and, usually, the provisions include rice, condiments, tea, cloves, tobacco and cigarette paper.

Anwar spends an average 288 hours per month on fishing related activities.⁷ His long hours leave him little time to participate in other income earning activities, although many other fishermen, especially the laborers must work at

* Shrimp and other crustaceans make noises by moving their antennae and claws. The sound is similar to burning twigs.¹

a variety of jobs just to reach a subsistence income. There are about 200 fishing days per year, however, Anwar will always go to sea if the weather is good and if he has no problems with his fishing gear. The dry season, March through August, yields the highest catches. Anwar spends 24% of his fishing activities in gear repair and only 60% of his total work time is involved in fishing activities.

Anwar's average monthly catch is 110 kg., of which 99 kg. is sold at the auction. The difference is divided among the crew as wages in kind (lawuhan). The division is on a basis of five shares and Anwar receives three fifths as the owner/operator. The two crew members each receive a share and, because Anwar's son is a member of the crew, his share contributes to Anwar's household income. If the catch is good, the amount shared in kind is too much for the family to consume and can be sold for additional income. If the catch is small, which is becoming more frequent, the amount shared in kind is not enough to sell and does not even cover the expense of their food.⁷

THREATS TO THE TRADITIONAL FISHING INDUSTRY

In the past few years there have been problems with trawlers and motorized boats entering the artisanal territories. The Indonesian government passed a law forbidding the boats to enter an area ten miles from the coast. But the law has not been enforced and as a result the trawlers and motorized boats converge on the areas capturing all the fish and shrimp, and tearing the nets of the perahus.

There are signs of severe over-fishing in the artisanal waters off the coast of Java and the trawlers are blamed for the decreasing sizes of the perahus' catches.³ There are other indications which may have contributed to the over-fishing as well. The use of very fine mesh nets which pick up juvenile fish and shrimp, prohibiting maturation, may have contributed to the decreasing catch sizes.

The total amount of fish capture and fish exports have increased in Indonesia. This can be attributed to the increasing catch sizes of the motorized boats and trawlers

which can fish in areas out of bounds to the perahu fishermen. Although total fish production and exports have increased in Indonesia the fish catch of the traditional artisanal fishermen has decreased steadily since 1968. Employment opportunities have decreased proportionately in the perahu fishing sector and many fishermen, including Anwar's oldest son have left their villages to find work. The fishermen, however, almost always remain fishermen wherever they go.

Most fishermen have come from families which have always been involved in fishing as their major source of income. They have a different outlook on life and their beliefs are not the same as those tied to a piece of land. Most of their fish catch is sold, unlike rice production which is consumed by the family. Fishing does not involve the entire household as rice farming.¹

Anwar and other fishermen have an affinity for the sea and they have no desire to seek employment on land. But the population expansion and the decreasing employment opportunities will affect the future of their children. The threatening prospect of increasing unemployment in the fishing sector affects the traditional fisherman's family and no effort has been made to absorb the growing unemployed fishermen into other areas of the economy.

COMMUNITY WELFARE

After Anwar and his crew return to port at 3:00 P.M., the portion of the catch to be sold is carried to the cooperative auction. On the way about twenty young boys gather to grab the fish from the fishermen's baskets.⁷ The fishermen are not at all happy about the situation, but say nothing. For years it was an accepted activity, because the boys were orphans of the village and this was one of the ways of contributing to the poorer members of the village. Now, however, because the catch sizes are much smaller and the increasing number of boys are not orphans, the practice has lost its original intent of contributing to the community welfare. The best fish are often grabbed and the loss in profits is high.

Outside the auction small scale women traders of the village gather to buy the trash fish from fishermen at a low cost.⁷ The practice is common and helps the women, often widows of fishermen, to make a living. When there is a good catch the fishermen set aside the trash fish for sale to the women. They may also do this when their only catch is a bucket of trash fish, which is becoming more frequent. Anwar, however, does not sell his trash fish but takes it home for his wife.

At the weighing station near the scale there is a basket for donations of small amounts of fish to be sold to contribute money for community needs, such as repairs to the mosque or the dock. When the auction is almost completed for the day, the donated fish are sold and the proceeds are given to a collection committee.⁷

In villages where the only economic activity is fishing and there is no cooperative auction, the village head receives one third of a share of the fishing catch for his services. It has become increasingly difficult to collect, however, probably because of the small catches.⁷

The cooperative auction in Anwar's village collects a five percent tax on the gross sale of each catch. The money is used to pay management costs of the auctions, honoraria to the officials and taxes to the central government. The balance goes to the cooperative treasury. Sometimes this money is credited to boat owners who need to make big repairs, or as an aid to members during the low catch season.⁷ A certain amount is set aside for the Nyadrin festivities, a celebration held in February when fishermen give offerings to the Goddess of the Sea to ensure an abundant catch. In years past the fishermen were rewarded with large catches immediately after the ceremony, but three years ago the catch was meager. The fishermen thought that the fishing season had changed. However, each year since has not brought large catches and Anwar and the other fishermen have been living in depressed conditions.⁸ The decreasing incomes of the fishermen have begun to erode the traditional values of sharing and cooperation within the village.

INCOME

Anwar's monthly average catch sale yields Rp. 20,045.⁷ From the gross sale amount the auction tax is deducted and the remaining rupiahs are divided into five shares. Three fifths, Rp. 11,170, go to Anwar and from that amount he must deduct his operations expenses, the cost of kerosene, flashlight batteries and repairs to the net. His net monthly income is Rp. 10,210. The depreciation of the perahu is not included in the operations expenses. The cost of a new perahu is Rp. 122,667 and the small perahu has an average life of 23 years.¹ In 1975/76 Anwar's monthly net income was US\$24.60 about half his 1972 income which was US\$44 per month.⁷

The total household yearly income is US\$264, including Anwar's son's share of the fishing catch and the income from his wife's activities. Last year the household income was inadequate to cover daily living expenses which amounted to US\$350.

Anwar is concerned about his shrinking income. He has had to borrow from the cooperative just to pay the difference in his household living expenses and his income. Because there has been a steady decline in this year's catch, there is little hope he can repay the debt and he may have to borrow more to cover his current household expenses. Anwar, fortunately, has not had to pay for large repairs on his net or boat, but he is concerned that the many trawlers in the area will damage his net and he cannot afford to pay for large repairs.

Some fishermen in Anwar's village have abandoned their small perahus and hired on as laborers on the large motorized boats. Anwar is considering doing the same, but he feels if he could get help from the government to subsidize the purchase of a small motor, he would be able to fish further away in areas which are not overfished as the areas he is now restricted to. A less expensive possibility is the purchase of an ice chest for his perahu. One of the reasons Anwar is restricted to the nearby fishing areas is the real

possibility of his catch spoiling before he returns to port. Artisanal fishermen are limited in their range of operations because of the design and power of the perahu and their traditional fishing methods. From 30 to 40% of a catch spoils in the tropical temperatures of the coastal areas and there are no systems available to preserve the catch.¹ If Anwar has an ice chest on board, he could sail to areas now underutilized with no fear of his catch spoiling.

The pressures on the traditional artisanal fishermen have become more intense with the modernization of the fishing fleet. Most studies have centered on the agricultural sector of the Indonesian economy, but the fishing industry is extremely important for both employment and consumption. With unemployment growing in the fishing villages the young fishermen are leaving to find employment elsewhere. Other sectors of the economy are having problems with unemployment also and the fishermen cannot be absorbed into these areas. The erosion of the traditional value of sharing and cooperation in the village has begun because of the steady decline in the fishermen's income. When there is not enough income to cover household expenses, there certainly is none to share with the even poorer members of the village.

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A DAY IN THE LIFE OF
A TYPICAL TRANSMIGRANT FAMILY
ONE OF THE GROUPS OF RURAL POOR
IN INDONESIA

BY

JUDY TROSTLE

A DAY IN THE LIFE OF A TYPICAL TRANSMIGRANT FAMILY
One of the Groups of Rural Poor in Indonesia

Sukakaya is an Indonesian transmigrant; one of Indonesia's rural poor. In the following pages Sukakaya, his family, and the village he lives in are constructed representatives meant to depict a social-economic, cross-sectional profile of the life of Indonesian transmigrants.

The Government of Indonesia's transmigration program provides for the resettlement of people from the densely populated high unemployment areas of the "core islands" of Java, Madura, Bali, Lombok and Sumbawa to the sparsely populated "outer Islands" of Sumatra, Kalimantan and Sulawesi. The transmigration program has changed (generally improved) considerably during the last decade. Although the story depicts Sukakaya as having moved five years ago, the conditions describe pretty much what he would encounter if he moved today.

Sukakaya is a 41-year old man from the village of Masih Miskin, who has resettled in Sukamaju, a transmigrant village. He and his wife and two sons, ages 11 and 9 and one daughter age 6 came to Sukamaju five years ago aspiring for a better life. His wife became pregnant with their fourth child not long after they arrived in Sukamaju. This child died six months after birth. (The average transmigrant family faces a high average infant mortality rate of nearly 10% in the 0-4 year age group). Now his wife is pregnant for the fifth time. She and her husband feel that a large family is necessary to help till the land and insure their future security.

In the transmigration villages throughout Indonesia most of the heads of families are under 45 years of age and 50% of the transmigrant population is age 14 years and under. It is predicted that over one-third of these will not be ready to join the work force for another ten years. Only then will the scarcity of labor problem be alleviated in relation to the land available in the new settlements.

The house that was supplied by the Government for Sukakaya when he and his family arrived in Sukamaju was a three-room board structure approximately 5 meters by 8 meters with a thatched roof, dirt floor and openings for doors and windows. Ibu Sukakaya has made the small back room into her kitchen where she cooks on a wood fire pit dug in the ground. She carries water from a well that their family shares with five other families to do her cooking and cleaning. The middle room is arranged for the family's sleeping quarters. When they first arrived, they slept on woven mats on the ground. Now Sukakaya has built a sleeping floor made of planks up on posts. They keep a large wooden box in the sleeping area where they store their dishes and clothing. In another box they have unhusked dry rice which is the family's supply for daily use. Ibu Sukakaya is especially proud of her front room where there is a small table and two wooden chairs and she can receive guests. They have hung colorful sheets of plastic at the doorways, and decorating the walls are several old calendars and pictures from magazines.

When it rains Sukakaya is always busy fixing leaky places in the roof. Sukakaya and his wife are not satisfied with the present condition of their house. The termites have infested the lumber so they plan to pull down the whole house next year and build a larger one. Ibu Sukakaya wants a house with a tin roof as soon as possible so that they can stay inside comfortably when it rains.

The yard around the house is planted with bananas and some clove and coconut trees ranging from two to five years in age, and some kapok trees which they brought with them as saplings. From these kapok trees Sukakaya has obtained enough kapok to make a pillow. Behind the house at the edge of the yard and garden, there are some rotting logs. Several tall trees still stand in the back between numerous meter high tree stumps which have not yet been removed.

The usual source of water in a transmigration village is a nearby river, which is also used for laundry, dish-washing, bathing and toilet facilities. In villages located

far from a river the water supply is a shallow well. The water from the well is a dirty chocolate brown and is not potable. All water must be boiled for safe drinking. Many transmigrants do boil their drinking water, but this process takes a large amount of fuel which for most families is wood. Kerosene is too expensive because of the transportation costs to bring it into the village.

At about sunrise the silence in Sukakaya's house is broken by the sounds of Ibu Sukakaya boiling water for coffee. Sukakaya and the children are still asleep in the middle room. Ibu Sukakaya comes out of the house carrying a bucket for hauling water from the well which is several minutes walk from the house. She is wearing only a piece of batik cloth wrapped around her middle to form a sarong and a bra which she has not changed for a week. She rarely wears a blouse at home because she feels there is no need to and it is so hot.

For breakfast, there is coffee and boiled cassava on the table. Sukakaya begins eating at once. The children take their cassava and go outside to play with their friends. After eating and smoking for a while, Sukakaya takes his bamboo sun hat and goes to work in his field.

Sukakaya's two sons join him as he starts for the field. They will go part way with him on their way to school. They are happy about being able to go to school and their father hopes that they will be able to continue their education beyond elementary school. He only finished elementary school and then could not afford further education. Ibu Sukakaya was never able to go to school. Until she married, she helped her parents support the family by farming or small business activities.

Most transmigration villages do have elementary schools and on the average, 80% of the children attend school. The typical transmigrant child attends school for an average of somewhat over four years. The teachers are generally from within the village itself or among the indigenous population. School supplies are scarce and sometimes all the training is performed from one set of books, kept by the teacher.

After breakfast, Ibu Sukakaya gathers up her laundry and takes her daughter and joins the other ladies at the well to do their washing. This is a daily social time for the ladies.

Sukakaya is busy hoeing and pulling up cassava plants when his wife joins him in the field at about nine o'clock. She goes to the pile of cassava which her husband has gathered and sits down to peel the tubers one by one. She lays them out to dry in the sun. Her daughter continues to play with some of the other children that have joined their parents in the fields. While she works, Ibu Sukakaya carries on an intermittent conversation with her neighbors in adjoining fields.

When Sukakaya made the decision to migrate and make this drastic change in his family's life they were living the lives of typical landless laborers. Sukakaya heard about the transmigration program at Masih Miskin's village office. He and his neighbors were told that whoever owned little or no land could be helped by the Government through the transmigration program. Those who felt their incomes were insufficient could also join the program. According to the explanation, they would receive a house and two hectares of land. One hectare would be cleared land ready for cultivation. The second hectare would be for irrigated crops.

Sukakaya found himself aspiring for land and a house of his own, more food, and better education and health care for his children, so he applied at the Government office in his village to become a transmigrant. Sukakaya felt lucky to be among the 10% of the applicants that were accepted.

Sukakaya and his family left Masih Miskin travelling by bus to the port where they boarded a boat for the next part of their journey to their new home. After arriving at their destination, they were trucked to a point near the village. Since there were no roads into the village he and his family had to walk the last several kilometers into the village carrying all the personal belongings that they had been allowed to bring. He and his wife had brought with them only the essential cooking and eating utensils, clothing,

tools for working the land (hoe, ax and sickle), and a few saplings.

When they arrived in Sukamaju they were allocated a house and land. The house was built on 1/4 hectare of land. The remaining 1-3/4 hectares of land were on the periphery of the village. Only 3/4 of a hectare of his land had undergone land clearing, but much remained to be done before he could begin cultivation.

Sukakaya was discouraged when he saw the amount of trees, fallen logs and stumps still to be cleared. He did not even know how to begin to cut the trees or to remove the stumps. Fortunately, he did not give in to despair and began working with his neighbors to continue clearing the land. For the work of cutting down trees the transmigrants were provided with a few axes and machetes. Actually this work had been given to a contractor, but the work had not been completed. The project administrators suggested that the contractor in charge should pay the transmigrants for felling the trees on their own land.

Sukakaya would go to fell trees in the mornings with his wife and children. They would carry dried fish and rice from home to eat in the forest. They worked together with two neighbors and would rotate days working on each other's land. In the meantime, the wives and children would work cleaning grass and cutting branches. They would collect the wood to be burned, but it was a slow process because of the daily rains and it was hot at the edge of the forest--- very hot!

After clearing his land, Sukakaya began planting a kind of local cassava which he had obtained from a nearby village. Many of the shoots and saplings which he had brought with him could not be planted because the planting season was over when they arrived. The land is not irrigated and most crops are grown only during the rainy season.

Indications are that no matter how large the land allotted, the migrants seem to operate on somewhat less than one hectare. It is evident that the amount used generally

corresponds with the amount that had been cleared for them with Government assistance. This lack of progress in forest clearing by all transmigrants in general is not due to settlers' indolence or lack of motivation or that they are expecting the Government to eventually clear it for them. The main obstacles facing the transmigrants are: limited manpower, lack of traction power (tractors or water buffaloes), rapid weed and secondary growth, absence of demarcation of individual plots for the settlers in the uncleared areas by the authorities, and crop loss hazards due to pests.

The equipment that is possessed by the transmigrants includes simple tools such as hoes, crowbars, axes, and sickles. These are of limited use in clearing forest areas, therefore quick progress cannot be expected. With only a hoe for tilling the land, work goes slowly. Even in those areas where the land has been measured and marked, the transmigrants hesitate to clear more land and begin farming because of high rates of crop damage by wild animals in newly opened areas. They are not willing to risk losing both the crop and the seed and labor spent to grow the crop. This is of concern to the Government because the full benefit of the public investment in the areas developed may not be realized for some years and the settler cannot maximize agricultural production from only half his land.

According to the Government's plan, transmigrants are to receive a land certificate of ownership after being on their land for five years. In most cases if transmigrants have received certificates at all it has taken at least seven years. This presents difficulties when transmigrants try to obtain Government credit to expand production.

Throughout Indonesia the land that is being cultivated in transmigration areas is being used for a wide variety of crops (rice, cassava, corn, peanuts, soybeans, mung beans, sweet potatoes, and vegetables). Generally, the transmigrant continues with the same type of crop production that he was using in his native area. Most transmigrants, it seems, are quite willing to try new crop production ideas but less than 50% of the people have had any contact with an agricultural extension agent.

Rice is usually rainfed and not irrigated. Average yields are below the national average because of low quality of land, lack of irrigation systems and low rates of fertilizer utilization. Cassava is grown in the areas which are drier and the soil is less fertile. Corn can be grown in most areas and many times they plant two crops per year intercropping with peanuts. Peanuts and soybeans are grown extensively in areas where soil and moisture conditions are relatively good.

Frequent losses take place from attacks by pests, such as rats, wild pigs and monkeys. The incidence of crop losses incurred by transmigrants varies with the location of their settlements. Settlement areas surrounded by forests and swamps seem to be more vulnerable to pest attacks than other areas. Some farmers have virtually lost their entire crop from pest attacks. This crop loss can endanger the economic life of a new settler. It means that all the labor he spent to clear and till the land, to plant and cultivate the crop, is lost. Such losses prevent him from building up resources for the next season's subsistence and crop cultivation.

Most transmigrants eventually have some livestock. Some villages may have only one water buffalo but cows and oxen are more common. Generally about one-third of the families have a cow or oxen. Many families have about ten chickens and perhaps a duck or two. A few families have a goat or a horse.

If the family's farm production is greater than its own consumption needs then the transmigrant is faced with the problem of marketing the surplus. The cooperatives in the transmigration areas have not been geared to meet this need. Another problem in the marketing of transmigrant's produce is the absence of roads or the poor conditions of those that are available. These roads are generally about a three-meter wide earth track that was originally developed for the primary penetration of the area. During most of the year they are not easily passable and movement of goods is difficult, or impossible. This does not help to make the settlement areas places that attract buyers or sellers from outlying areas or encourage the settlers to produce for market.

Because of the difficulties of access to market, most transmigrants limit their production to meet their consumption needs plus a little extra to generate cash for basic purchased needs. To minimize the need for cash they tend to use only non-purchased inputs such as family labor and seed from the last crop's production.

After a few years Sukakaya is still working his 3/4 hectare field. This field is now clear except for some stumps half a meter high which stick up here and there. The top soil is fertile and black but underneath is red clay. Although this soil is not as fertile as the land in Masih Mishin that Sukakaya used to work on as a laborer, he feels fortunate to have land of his own to farm. It used to be hard work to produce enough gaplek (dried cassava; tapioca) to eat, but now they have a lot of gaplek at home and they are even able to sell some. Under such conditions he feels quite happy in his new home, especially since he feels that now he is really a farmer.

Sukakaya also has a one-hectare plot of land which was supposed to become a wet rice field, but this is in another area farther away from his house. So far this land has not been cleared because he has not had time. He plans to work with his neighbors in opening up this land, although secretly feels disappointed with this land because it is not the kind of land that was promised to them. This proposed wet rice land is no different from the dry fields and besides there are no facilities for irrigation.

Ibu Sukakaya does not stay long in the fields because the heat is so intense. She returns home to prepare her husband's lunch which will consist of rice mixed with gaplek. Then she goes to a neighbor's house to buy vegetables and spices to use in her cooking.

Sukakaya leaves the field at about eleven o'clock. The sun is high overhead and is burning hot. It is time to go home for a rest. He strolls homeward and arrives as his wife finishes their noon meal. Their children are just returning from school. Sukakaya hangs up his hat and rolls

a cigarette. He turns on the one-band transistor radio that is the only entertainment in the house. The radio plays much of the time. They bought it a year ago in a small town after harvest.

Today the family is eating rice mixed with gaplek, boiled noodles with tempe (processed soybeans), a few pieces of river fish and krupuk (fried crackers made from cassava). After eating, Sukakaya lies on the bed and plays with his daughter. Sometimes in the middle of the day neighbors come by to talk, but today no one comes so Sukakaya can sleep. Today Sukakaya sleeps until 2:30. As soon as he wakes up he leaves home and goes to work on the road that is being constructed just one kilometer from his home. In this way he can supplement his family's income, and he sees that the road will some day give them easier access to markets and for getting supplies into the village.

In a number of transmigrant locations considerable portions of total family income are derived from off-farm employment. Those who earn their living from employment outside their project areas travel as far as 50-70 kilometers from their settlement areas. They participate in such activities as construction of roads, bridges and irrigation structures for a wage ranging from Rp. 400 (\$1.00) with meal to Rp. 750 without meal per day. On an average, they work outside the settlement for about twenty-five days per year.

It is not undesirable for the transmigrants to seek employment outside their home area, as this might bring about the quick completion of some of the public works such as irrigation networks. It also supplements their farm income. Almost all of those seeking employment in the non-agricultural sector have farm backgrounds and would prefer to be primarily self-employed owner-cultivators rather than wage earners in these new settlements. However, they are often forced to supplement their incomes through non-farming activities because their holdings do not yield income sufficient for their basic needs.

Sukakaya's third child has not been feeling well for several days. While he is working on the road construction

his wife takes the child to the local dukun (traditional healer). Last year when their second child became very ill with high fever, vomiting and diarrhea they travelled nearly 15 km. to the nearest medical facility where, although there is not a doctor available, they could obtain medication and some guidance. The practical nurse felt that the child was suffering from cholera which is prevalent in transmigration areas. Also of high incidence are malaria, dysentery, various skin conditions and dietary deficiencies. It would have required a trip of about 100 km. to reach a doctor. In the future, his family looks forward to the day when there is a health clinic with a doctor in each district. About 50% of those in the villages have never been to a public health clinic.

In the late afternoon the road in front of Sukakaya's house is noisy with children playing soccer. When it begins to get late, Sukakaya's wife tells the children to go to the well for their baths. They run off without taking soap or toothbrushes. A few moments later Ibu Sukakaya, wearing only a sarong, goes to the well for her bath. She returns home carrying a bucket of water needed for evening chores. Sukakaya has just returned home, and dressed in a sarong he goes to take his turn bathing at the well.

The neighborhood grows quieter, flickering lights can be seen through the cracks between the boards of the houses. In Sukakaya's home there are three little lamps burning. These lamps are made of old cans and bottles filled with coconut oil. This village, like virtually all other transmigration villages, does not have electricity. Some of Sukakaya's neighbors have pressure lamps, but they are not used often because they use too much expensive kerosene and besides they are too hot.

Sukakaya's wife is getting dinner ready and she calls the children to come. After serving her children, she prepares Sukakaya's food. Tonight they have a dish of tempe with a little bit of noodles, krupuk and a few pieces of tempe fried brown. After they have finished eating, the children run out to play with their friends in the road by the moonlight. Sukakaya is smoking and drinking coffee

from a less than clean glass with a dirty, dented cover. Music can be heard from the radio. Sukakaya is smoking tobacco given to him by a friend who once needed money badly and borrowed it from him. When the man paid back the money, as a thank-you gift he gave a roll of tobacco which is worth Rp. 300 in the market. Sukakaya only has to buy cigarette paper and cut it himself. Because he has lots of tobacco the neighbors sometimes come around to ask for some and he always gives it to them.

At about seven O'clock Sukakaya decides to go on a stroll through the village. He will meet with some of his neighbors and discuss the events of the day, farming, current problems in the village and various village activities.

Sukakaya is active in the village organization. He is a member of a local organization which through the assistance of the transmigration department has received some training in the fields of agriculture, animal husbandry and fish raising. During this training there was practical work involving planting coconut trees in the empty land near the market and inoculating chickens. After this training all the participants received a certificate which states that the bearer has taken part in the training.

Sukakaya also participates in his village cooperative. After receiving training he and nine others became leaders of the cooperative. Their duty is to make the cooperative run more smoothly and help increase village economic activity. He has the duty of informing the neighbors if there is a house raising or some other community effort. This kind of community work sometimes includes such things as building village gateways, celebrating Independence Day, or working for their own group such as repairing a damaged bridge in the area, building roads or religious buildings.

There are a number of local institutions that function in the different settlements. The households, as in other parts of the country, have been grouped into Rukun Tetangga (RTs, or first level neighborhood groups) and Rukun Kampung (RKs, next level village groups). Each RT consists of about ten households and has its own chief. About ten RTs

constitute one RK. On an average there are five RKs for a village of 500 families. The chiefs of the RTs and RKs command a great deal of respect and authority among the settlers and provide leadership, organizational strength and expression to the transmigrants. The transmigration officials at the village level communicate with the settlers through the respective chiefs and utilize the services of these leaders for organizing community work.

Many villages have a village council that consists of the chiefs of the RKs and representatives of the different religious and social groups living in the settlement. They meet to discuss the problems they face in their new settlement life and to decide the course of action to follow in tackling these problems.

The Lembaga Sosial Desa (LSD) is a voluntary organization of rural people intended to assist the administration in the development of villages in Indonesia. The attempts to form this institution in the settlement areas have only been on a limited scale. The organization was set up to meet certain important social responsibilities such as the collection of funds for funerals, maintenance of public buildings and promotion of gotong royong activities (mutual self-help activities). It is within the structure of LSD that organizations such as the Boy Scouts are developed. The Hansip concerned with the upholding of law and order in the settlement is also handled within the LSD organization.

It is important to realize that within a transmigration village one will find people from several different densely populated areas across Indonesia. Therefore, their backgrounds are widely varied and there are vast cultural differences. So not only do these people have to adjust to a new life style physically, but they are faced with learning to live with each other and accept each other's differences. In many cases this can cause great difficulties. Religion is one of the major areas of difficulty. The integration of the transmigrant and the indigenous populations is another problem. Although both transmigrants and indigenous people are benefited by the transmigration program, difficulties do arise most often over rights to land.

Tonight Sukakaya joins a small group of farmers listening to a man who has just returned from a trip back to his home village. He relates that he was warmly welcomed by his friends and relatives there. For the first week he enjoyed being there, but after seeing the sad and overcrowded conditions in this old village he decided he did not want to live there any more and was anxious to return to Sukamaju and his family where he has better opportunities.

While Sukakaya has been gone his house has grown quieter. The transistor radio is silent, the house appears dark. Upon returning he checks on each one of his family. The youngest child is sleeping with his mother. They are all sleeping soundly without mosquito nets. Sukakaya has a new plastic mosquito net which he will use for his newborn child.

Sukakaya is satisfied with his life in the transmigration village. He believes his goal of a better life for his family is now within reach. When he lived in Masih Miskin he never produced enough food to feed his family. Now he is able to do so. Although life was very hard in the early years, things are slowly improving and Sukakaya feels that his life is better than it was when he was living in Masih Miskin.

Statistics and general observations indicate that the typical transmigrant probably is somewhat better off than his peers who remain in the densely populated high unemployment areas of the core islands. First, the transmigrants have more employment opportunities, both on and off the farm. The typical transmigrant family has an average per capita income of approximately Rp. 21,000 (\$50); Rp. 14,000 from on-farm and Rp. 7,000 from off-farm sources. The income of the landless laborers of the core islands may be 10 to 20% lower. In addition, the typical transmigrant tends to accumulate more wealth. A typical transmigrant may own assets of approximately Rp. 144,000 (\$350). This is composed of a house, Rp. 37,000; land, Rp. 74,000; livestock, Rp. 27,000; and farm tools Rp. 6,000. Definitely, most transmigrant families eat better than they did before they moved. It is true that in older transmigrant villages problems of land fragmentation and unemployment once again prevail. However,

in the early years, although the life of a transmigrant may be one of relative isolation and less secure family, social and cultural ties, it seems that transmigrants are able to fulfill more of their basic needs after having lived for several years in their new communities.

Sukakaya takes off his clothes except for his shorts. He lies down on his wooden bed. After brushing off a few mosquitoes, soon he is breathing regularly. He needs his sleep because he will have to be back working in his fields again tomorrow morning.

PROFILE OF A TYPICAL LANDLESS LABORER

BY

MANYA DROBNAK

PROFILE OF A TYPICAL LANDLESS LABORER

Suwarno, his wife, Wati, and three of their four children live in a village in the overpopulated Javanese, wetland, rice farming country. Historically this land was divided more or less evenly among the villagers. It was passed down from generation to generation and divided between the heirs. When Suwarno's parents died their little plot of land was too small to be divided. Instead, it was sold and the money was divided between Suwarno and his siblings. Now they are a part of the class of Javanese people known as landless laborers.

Since Javanese society is stratified largely according to assets, particularly the possession of land, the landless laborers are at the bottom of the social and economic hierarchy. This gives them very little bargaining power both in terms of finding employment and in terms of determining wages. While they comprise as much as half of the population of rural Java, they are unorganized and easily intimidated.

Because Suwarno must accept whatever work he can find, no matter what the wages (if he won't there is someone who will), he spends most of his time trying to earn a living. He and his family receive the highest returns for their time and efforts when they work in the ricefields. Therefore, whenever it is possible, they will seek employment in one of the village ricefields, augmenting this seasonal source of income with other sources which can be picked up during the agricultural slack and dropped during the peak season.

Traditionally the maintenance of the ricefields is carried out by the owners who share the work on each other's farms in a form of labor exchange. This form of shared labor excludes the landless like Suwarno who don't have any land to be worked by the others. It also limits the amount of work available to them.

The wealthier farmers who don't wish to do such a large portion of their own work may hire laborers from time to time, so Suwarno may be able to find work preparing the fields for a new crop, transplanting seedlings, or applying fertilizer.

Wati may also be involved in planting the crop, or in weeding the rice-fields. They earn the bulk of their income at harvest time when the whole family can work.

Traditionally the farmers throw open their fields at harvest time and anyone who wants may participate. Men, women, and children cut the individual stalks of rice with small knives called ani-ani. These stalks of rice are tied in bundles and carried to the farmer's house for storage. The workers are allowed to keep approximately one eighth of what they manage to harvest as their pay.

Suwarno's family usually sells most of its share at the market. The price of rice is deflated at harvest time, but the family needs the cash. The small amount of rice they keep for themselves is never enough to last until the next harvest, and they will have to buy rice later at an inflated price, but they seem to have no choice.

In recent years there have been so many people who want to participate in the harvest that the farmers are forced to turn away many. Suwarno and his wife were lucky. On the multitude of people who wanted to harvest, they were among the fifty percent to obtain work in their area.

This year many of the farmers have switched to the new high yielding rices which shatter easily. Remembering the headaches of last year when they had to turn away people who know it was their traditional right to harvest, the majority of farmers decided to sell their crops to middlemen before the harvest. The middlemen hired small groups of workers to harvest the crop using sickles. Suwarno was lucky enough to get a job harvesting for the middleman, but Wati could not find many opportunities to harvest in the traditional manner.

To supplement their meager income from working in the ricefields, the family must switch from situation to situation to find work where it is available. They cannot passively wait for work opportunities to find them. They must actively seek additional income in order to survive.

Much of the family's time is spent scavenging. Wati collects wild cassava leaves. She keeps her eye out for papaya leaves too. Most of these she sells at the market, but the family may occasionally consume some. Wati continues to collect these leaves even when she has work in the ricefields.

During the rainy season the children take fishing poles, some string, and hooks to the streams and pools near home. They try to catch fish, but they aren't very successful and what they catch is not worth much.

Every member of the family is involved in the search for firewood and newspapers or cardboard which can be used as fuel. If they manage to find a surplus they can sell it to a brick factory to be used as fuel for the kiln. A government greening project was started near the village, but when fuel was very scarce the families of the landless laborers cut down many of the small trees for fuel.

Wati brings in a small but fairly stable income by trading. She takes eggs, bananas, and cassava or papaya leaves to the nearest town about four kilometers away. There she sells her produce and purchases groceries which she puts in her basket and carries back to the village for sale. She cannot buy much with her limited capital, so she doesn't make much money from this endeavor. It is hard work carrying the heavy basket on her back with only a long, narrow piece of cloth to help distribute the weight to her shoulders. Eight kilometers to and from the village is a long way to walk barefoot in the hot, Javanese sun, but she has no choice. Sometimes her children accompany her carrying smaller baskets of produce on their backs.

Suwarno also makes some money by carrying things. He uses two baskets suspended from a pole over his shoulder to carry bundles of firewood to town. Sometimes he makes a ten-hour trip to collect bamboo for the family to make into rope. He often hires out his services as a porter carrying heavy loads for others.

Suwarno's teenage son has a flock of ducks which he tends everyday. The ducks hunt for their own food while he keeps them together, bringing them back to shelter at night. Occasionally the ducks lay some eggs which Wati sells in town. If he is extremely fortunate he might have an opportunity to care for a wealthy's farmer's waterbuffalo. Then he would get 40% of the profit after the purchase price and cost of feeding the animal have been deducted from the sale price.

The whole family makes rope. The bamboo which Suwarno gathers in the bamboo grove is split by the women into two or three centimeter widths. It is placed in the sun to dry, then split again to a half centimeter. These strips of bamboo are twined with a crosslike tool and two or three twines are combined to make a rope two or three meters long using a tool called a kincer. Household income of this sort is very low considering the time involved, but it is often depended upon to cover the family's expenses when other forms of income aren't available. It has the advantage of requiring no skill, and can be done while the women watch the children and cook the family meals. The ropes which the family makes are sold to a few village traders who, in turn, sell to customers and merchants in the cities.

There are other possible sources of income for Suwarno and Wati. During the slack time in the village ricefields Wati seeks employment in the sugarfields or harvesting rice outside the village. She has to walk a long distance to and from work and the pay is much lower than it would be in her own village because she is an outsider.

There are permanent and semi-permanent jobs maintaining fish ponds, but they are few and it helps to have a little pull with the owner. Work of this sort is more secure than agricultural employment, but the pay is much lower for work which is far more physically demanding. The nearest ponds are not within easy walking distance for Suwarno and he would have to live away from home.

If things became extremely tough for Suwarno and his family he probably would leave home. This is common among his friends. Shelter near his work would cost money even if he could live with a relative, and there is always the possibility that no jobs would be available by the time he got to a new area, so unless a relative sends word that there definitely are jobs opening up somewhere else, he isn't likely to venture far from home.

Suwarno has heard that some of the coastal fishermen are hiring men to crew for the boats. He knows that fishing is extremely risky. If the catch is not big enough to cover the expenses the month or two spent on fishing is wasted. If Wati's income were a little more stable and secure he might try fishing, but as it is he doesn't think it sounds like a good idea.

If Suwarno thought about it he might wonder why he and Wati should be having such a hard time earning enough money to eat when there are so many possible sources of income. They must compete with so many other hungry people for so very few jobs that they must accept whatever work they can find no matter how meager the pay. Even though they work very long hours, the wages are low and their productivity insufficient for them to earn more than enough to survive.

Suwarno, Wati, and the children have a roof over their heads because when they sold their parents' small parcel of land it was understood that the family would retain rights to the house. Nothing is written in any of the Government's files about that, but the Lurah (Village Chief) and all the people in the village know that the house is theirs and it will not be disputed.

After their parents' death Suwarno and his younger brother put a wall across the center of the small house which their two families now share. The house is a small, crudely constructed dwelling about twelve square meters consisting of a bamboo frame supporting walls of woven matting and an open doorway. The floor is dirt and the

roof was thatch until Suwarno and his brother borrowed money from the wealthy farmer who often employs them to replace the old, leaky thatch with corrugated plastic. During the rainy season the house is still wet, but it isn't as bad as it was when the rain came through the roof as well as the cracks in the walls.

Suwarno is about forty years old, although he doesn't know exactly because it has never been important to him to keep track of birthdays on passing years. He has had two years of schooling, but he really can't read or write much more than his name.

Wati is younger than Suwarno. She was sixteen when their first child was born and has been pregnant six times. At home, with the aid of a midwife, she gave birth to five children. The sixth was born dead, and one of their children died of malnutrition at the age of eighteen months.

The oldest child is grown and has started a family of her own. She moved to the nearest city after she was married because there wasn't enough work in the village. In the city, she and her husband were able to find work as washwoman and gardener for a wealthy family. Although she has a family of her own she still sends money to her parents whenever she can and visits them at Lebaran (Moslem Holiday).

Wati and her daughter both learned about family planning from a field worker who visited their village. Wati is one of a group of women who are very proud of the fact that they practice family planning. She had an IUD inserted by a midwife after the birth of her youngest child. Wati's daughter is not yet practicing family planning because she has recently begun her family, but she knows about it and will probably begin practicing when she has had enough children.

Wati's teenage son still lives in the village. He usually sleeps at the mosque at night because the family's share of the house is too small. When work is particularly scarce in the village he goes to the city to drive a becak (pedi-cab). He probably won't stay in the village much longer.

The two younger children help earn money as well as they can by gathering firewood and fishing. When they can, they attend the local school, but more often than not they are absent because it is their responsibility to care for their aunt's small children while she and their mother are working. They carry the little children on their hips wherever they go. One of the children is almost ten and will soon be able to go to work in the fields with the other women.

The day starts early for the family. They are up at dawn and start their household chores. The women and young girls fetch water from the nearest irrigation canal. The daily ration of rice is cooked on the communal fire. The rice has been mixed with corn because corn is considerably cheaper. When the family is in very bad financial straights (usually just before harvest) there may not be any rice and the family will have to get by with cassava as their staple although it has very little nutritional value.

Wild cassava is poisonous unless it has been treated properly. The treatment takes about three days. Once some of Wati's friends were so hungry they couldn't wait the three days. They ate the wild cassava too soon. Everyone was very sick and one of the children died. When Wati cooks cassava she tries to be sure it has been soaked and prepared properly so her family won't get sick.

Water for tea is also boiled on the fire. It is allowed to boil as long as the fire lasts, but firewood is scarce and the surplus can be sold, so the fire is not likely to last long enough for the water to boil the twenty minutes recommended for safety. If there is sediment in the water it may be filtered through sand before it is used for tea. None of this is adequate treatment for water which comes from the same irrigation canal where clothes are laundered and people bathe and go to the toilet.

The cooked rice is wrapped in banana leaves and carried to work where it is consumed as a mid-morning meal. Suwarno and the members of his family who have jobs work from about seven until noon. Then they are likely to sleep during the

heat of the day returning to work from four until six. They eat only one meal between 7:00 A.M. and 6:00 P.M.

At home the house is swept clean with a bamboo broom, the clothes are taken to the canal and pounded with stones to make them clean. They are dried on bushes or tall grass around the house. The ground is solidly packed around the house from constant foot traffic. It isn't suitable for growing any sort of crop so it is simply swept clean with a broom.

When their chores are done members of the family sit around and talk. While they are talking they often pick lice out of each other's hair. The other children and women make rope. Some of their friends make pots at home and others weave mats.

Shopping takes only a few minutes of Wati's time every day. She buys some tempe (soybean cakes) to fry and eat with the evening meal. Tempe is high in protein and good for her family. Salt fish is cheap and she sometimes buys a little to add to the rice for flavor. The children are not allowed to eat the salt fish although it is one of the highest sources of protein available to the family. Young children of three to six are extremely susceptible to malnutrition because they have been weaned from their mother's breast and are not getting sufficient supplies of protein. The green leaves that Wati collected from the papaya and cassava plants would be another good source of protein for the family and they would prevent vitamin A deficiency which is the cause of blindness in several of the village children. Unfortunately these leaves are considered too valuable and thus are rarely to be consumed at home. They are usually sold.

After their evening meal the family relaxes. Having an extended family is often useful. Suwarno and Wati do not own any kind of lamp. They usually go to sleep when it is dark. But Wati's brother has a lamp and sometimes the whole family walks to his house to sit around the light and talk. The lamp is small, a little brass container of kerosene with a wick. It doesn't shed much light, but it

is enough to see while they giggle and talk until they are tired. Then they straggle home to sleep on woven mats on the floor of their house, their sarongs pulled around their shoulders for warmth.

Whenever there is a birth, death, marriage or other event which is cause for celebration, the villagers hold a selamatan. The female members of the family spend the whole day cooking huge quantities of food which they wrap in banana leaf packages. In the evening the men gather for a short ritual celebration. Each one is given a small packet of food which he nibbles at while the female members of the household and neighboring houses peek through the doorway and cracks in the walls. When the ritual is over the guests leave, taking their packets of food home to share with their families. Suwarno and Wati are always pleased to have a little extra food at these times, but they remember what financial strain it was when they had to host a selamatan.

When someone is sick the local Dukun (medicine man) is consulted or the Jamu lady's folk medicines are used. There is also a Government clinic which is available in the nearest big town, but Suwarno and his friends are leary of outside help. They fear that if they switch and the clinic closes, the Dukun will no longer be willing to help them.

This fear of outside aid which might be withdrawn in the future carries into other areas. If Suwarno decided to try to help his wife open a small warung (bake shop) in the front of their house he would probably turn to the wealthy farmer who often employs him or to the visiting money lender who would charge him usurious rates rather than turn to an outside agency which supplies loans for working capital. It is probably just as well. If Suwarno did apply for a loan he would probably be told that there was no credit available or that he didn't have enough collateral.

Every week Suwarno pools some money with nine of his friends in a form of cooperative credit called arisan. The men draw for the kitty. The winner continues to contribute to the weekly pool, but he is barred from drawing again.

Everyone wins eventually. The amounts contributed are small, but the men don't seem to be able to save their own money so this gives them a larger amount at one time. Perhaps next time Suwarno wins he will be able to help Wati set up the warung. She will need to buy a couple of pots and some ingredients for the small cakes she will bake. If she can just get started she can bring in a small amount of regular income which would be a big help to the family.

In social situations Suwarno is the representative of the family. Wati retires to the background, but she is the silent head of the household. All of the shared income goes to her. She decides how it is going to be spent, consulting Suwarno only on major purchases. While she is paid less and the total income she contributes to the household is less than Suwarno's she does the most work and is the steadiest provider.

Once in a while the adults in the family participate in the election of some minor village officials. They have no other say in politics except that they must vote in the national elections when they are held. Aside from the minor officials there is no one who cares very much what conditions they endure. While Suwarno and Wati cast their votes in the national elections they are not very interested. Nothing that goes on at the higher levels of government has much effect on their lives and they certainly aren't going to have much effect on what goes on there, so they just do as they are told and try not to cause any trouble.

Suwarno, Wati, and others like them are marginally subsistent. Working full time they can pull in enough income to feed themselves and their family with little extra. Programs which have been designed to aid the rural poor by introducing high yield varieties of rice, more efficient methods of harvesting, and machine milling have had a negative effect on these landless laborers because they have decreased the number of jobs available. The increased productivity of the large farms has made it more and more difficult for the small farmers to keep their land so the number of landless laborers is

increasing making competition for the remaining jobs intense. With no skills, very little education, and no land to ease the burden of feeding his family the chance of Suwarno being able to improve his situation is slim. In fact, growing population pressure and improved farming efficiency will make it increasingly difficult for Suwarno to maintain his present level of subsistence.

THE POOR WET RICE FARMERS

BY

BARBARA REESE

THE POOR WET RICE FARMERS

I. SETTING

Wet rice farmers are the mainstay of agriculture on Java. There are, however, at least three different categories of these farmers, based on the amount of land they own or operate. Only about one-quarter of the wet rice farmers hold .5 or more hectares of land. Seventy eight percent of Java's wet rice farmers are "submarginal" and hold less than .5 hectares. For the submarginal farmer agriculture is a secondary source of income, although it is of primary importance to his household. In Central Java 51 percent of the land used for agriculture is at the submarginal level.

The typical rural poor wet rice farmer who holds .15 hectares of land might be considered a third category. His status as farmer is maintained by the Government, so that technically he would be eligible for their agricultural programs.

Pak Darno, who lives in Central Java with Isa, his wife, and their four children is a poor farmer. He holds .15 hectares of land, which was inherited from his father. Darno's family lives in a cluster of three houses amidst rice paddy, one kilometer from the center of their tetangga (sub-village), the smallest unit of local community structure. Their tetangga, Ubang, is a community of 50 households represented to higher authorities by a locally elected leader. Ubang is one of three tetangga that make a kampong (village). The kampong with 300 households, is the focal point for the tetangga, with its school and sports field. Several kampongs make up a kelurahan, with its head, the lurah, as the locally elected official.

The lurah is the intermediary between the villagers and the Central Government. He usually has no more than a primary education, and is remunerated for his service by being given access to the village communal land (bengkok land), thereby giving him a dominant and powerful influence over village affairs.

The lurah keeps the village vital statistics in a small section of his house which is used as his office. The villagers consider him responsible for the security and prosperity of the area and he is the primary conduit of relevant Government information. The Government on the other hand expects the lurah to represent its interests. His success depends upon how well he can harmonize these two different interests.

At the bottom is Darno who respects his lurah and normally relies on him through the tetangga head as a source of guidance when he and his tetangga needs help. His daily life, however, involves interaction mostly with the people from his own tetangga.

Pak Darno, 35, and Isa, 32, are guessing at their ages. They really don't know how old they are, and probably would find it strange for anyone to ask. They calculate their ages by relating to events which occurred in their villages when they were young.

Schooling has not been an important factor in either of their lives. In the fifties Sukarno offered to give teachers to the villages if the communities provided buildings. Although Darno attended one of these schools for a year and can write his name and recognize numbers and some words, he rarely gets the opportunity to use these skills and remains basically illiterate. Isa has had no formal schooling.

The village school which is completely maintained by the village, is two kilometers from Darno's house. The building is made of plaited bamboo walls with a one-meter gap at the top to provide some light. The roof swoops over the walls leaving a large overhead which prevents rain from entering. The roof is tiled, the floor is dirt. There are three rooms, each with an entrance from the outside.

Although records are kept of the children's attendance, this is not so of the teacher. It is not unusual for Darno to have his children come home from school relating that their teachers did not show up. Books should be provided,

but they never get to the village. Consequently, the children buy notebooks and write down the information from the teacher. There is no tuition cost for these Sekolah Dasar (Basic Schools) today, but fees for maintenance, mandatory uniforms, and otherwise, are high.

Darno's house is sixty square meters with two rooms. The walls are of plaited bamboo with a tile roof and dirt floor. One room is for cooking, the other for sleeping. The kitchen has direct access from the outside. The fire area is sectioned off from the rest of the room by a ring of stones with a second ring inside to hold cooking utensils. Next to this is an open rack for two earthenware pots and three dishes which is placed in the sun when utensils have been washed. No spoons or forks are used, as, in accordance with tradition, the Javanese feed themselves with their right hand. The dishes are for guests, the family eats off banana leaf squares.

There is one room for sleeping that has two beds, one double size with mosquito netting and a single without. There are two small windows each covered with wooden doles set into a frame. Darno and Isa sleep in the large bed with the two youngest children. The two older children sleep together on the small bed. There is a three-shelved wooden cupboard to store their belonging which consist mainly of a single change of simple clothing plus a good set for special occasions.

Outside, the roof overhead produces a shaded section in front of the entrance where guests are entertained and Isa works on her weaving. This porch-like area has a low wooden chair, and one small table.

Darno's tile roof represents an investment of capital. Tiles can easily be added or removed from a roof frame. If he should ever need capital, Darno could sell all or a portion of his roof and replace it with thatching.

One of Darno's younger sons fetches the daily water supply in the morning from a natural spring fifteen minutes walking distance from his house. He makes several trips filling three large earthenware containers. The water is used for cooking, drinking and light bathing.

In the early evening, the social time of day, Isa and her family go down to the main stream which cuts through Ubang to gather and bathe after the daily chores are done. They consider themselves very lucky to have such a fast flowing stream. Children frolic while the adults divide up according to sex and bathe. Bathing is an important part of Javanese ritual, and is done twice a day.

Those who live close enough to the stream, also use it in the morning for bathing. At this time the women will be seen doing their laundry along with everyone else who finds use for the water. Drinking water, for example, is taken by digging a hole in the sand along side of the stream. The sand is acceptable as a filter for the villagers.

It is not unusual to see someone brushing teeth a few meters from someone else toileting. This is not considered unsanitary because the water is flowing so quickly. Children can use the land near their houses for toileting, but it is expected that adults use the stream. The Government put an S-trap latrine in Ubang. Within a month, the novelty of using it was over. People could never understand the motivation behind standing in line when the stream was just off to their left. The latrine mold cracked, the people had no idea how to flush it, and during the dry season, the water had to be brought up from the stream. It quickly became an unpleasant place to be. Isa could not understand the reason for such a contraption.

The villagers have several different passageways to get from one place to another. Darno more frequently uses the footpaths along rice terracing. Isa has occasion to use the main pathway to the kelurahan road when she goes to the local market. This three-kilometer dirt path is bumpy, difficult for bicycles, and too narrow for mobiles. The road from the kelurahan connects to all its kampongs' pathways. The dirt surface is smooth but easy for bicycles only during the dry season.

The only form of public transportation is an opelet which travels from the kecamatan to the kelurahan four times

a day at a cost of Rp. 250 (60¢) one way. The opelet goes from the kelurahan to the kampong twice a day. The drivers of these opelets, remodeled stationwagons, are usually the owners or closely related to them. In order to profit, they wait until the mobile is full before starting. Thus, there is no schedule, making it difficult for the villagers to plan.

There is no telephone or post office at the kelurahan level. At the kecamatan there is a phone which can be used by the public with the permission of the camat. The post office is also at the kecamatan. There is a person from the kelurahan who picks up the mail daily and takes it back. Ubang organizes its own pick-up from the kelurahan.

The major irrigation canals and dams of the kecamatan are the responsibility of the central government Irrigation Service. The smaller feeder, or secondary canals and the canals that take the water from the fields are the responsibility of the village. If water is limited it is blocked out on a five-day cycle, based on the Javanese calendar. Darno is on a tertiary canal which must be kept clean of debris as during the dry season the water flows sparingly. This is solely his responsibility.

Health services from the Government are found at the kecamatan level. Here there is a PUSKESMAS (health center) which has a doctor assigned to it once a week, and a full-time mantri, a male assistant. Darno may use this service at any time, but it is 16 kilometers from his home. In the kelurahan there is a clinic run by a local mid-wife who can deliver babies, insert I.U.D.'s and give advice on the practice of family planning.

Family planning services (Keluarga Berencana) are found in the tetangga (sub-village) where there is a Pos K.B., run by a friend of Isa's, who was the first person in Ubang to be an acceptor. The Pos is in her home where the other women can come to pick up their monthly supply of pills. When a woman becomes a family planning acceptor, she automatically is a member of the Apsari Group. The purpose of the Apsari is social and educational. The ladies meet once a month and learn a handicraft, such as sewing, weaving, and tilemaking.

II. LIFE FOR THE RURAL POOR

We have established the parameters of life for a typical rural farmer. Darno whose .15 hectare of land brings him an annual capita income of \$40.00 with supplementary income is a typical rural poor farmer. Let us now expand on the dynamics of life for Darno and his family.

The concept of shared poverty is practiced in most rural villages. An opportunity for gaining potential income is given to several people in a village from even the smallest landholder, by allowing them to help harvest. Payment, in kind, is a proportional share of what they have picked. For those farmers who own land, the concept goes beyond one of sharing to one of spreading the risk. This concept has become village adat (unwritten code of ethics) and is the rationale behind Darno allowing people to help him in a field which provides him with his minimal rice needs. Under normal circumstances, Darno's land yields him two crops a year. This provides him with 600 kgs. of milled rice, 500 kgs. of which his family requires. Harvest shares and other payments related to the working of his land quickly consumes the extra 100 kgs.

There was a time when everyone was entitled to help in a harvest. But generations have divided their lands among the increasing numbers of descendents, diminishing land size to the point where adat is in conflict with subsistence.

Darno and Haryono, his son, begin the season by seeding. They will prepare the fields with a group of five men. The men are participating in gotong royong, a sharing of labor. His friends provide manpower for a job which he could not do on his own. Darno will reciprocate when needed. The only cost to him will be the use of a neighbor's water buffalo for Rp. 100 a day.

After twenty days the seedlings are ready to transplant. Twelve women are chosen, which is more than he practically needs. Darno, however, must respect social custom. They start early in the morning and remain until 3:30 p.m. Planting will take three days, and cost Darno 12 kgs of rice. Each person is paid in meals, two a day while transplanting.

Isa stays home to prepare the meals of rice and cassava. Even though she will be able to work in the fields of those transplanting, it will not make up for the cost to Darno to have his fields transplanted. He rationalizes that it needed to be done quickly, which is true.

The final stage is harvest which will occur about 160 days after transplanting. This is one of the most sensitive areas of village responsibility. There is pressure on many friends and neighbors in the harvest, as the payment is more desirable, and the amount directly related to how fast one can work.

Even though Darno used relatives, friends, and neighbors in the harvesting, several problems arose. As the harvesters rushed into the fields, they trampled a lot of the rice stalks in an effort to place themselves in a good area and maximize their take. In order to eliminate the problem, next season, the small farm holders plan to coordinate activities and start harvesting on the same day. This will limit the number of people available for a field, and remove the need to rush to get onto another field.

The second problem is related to the harvest share, bawon. Everyone who works in the field gets 1/7 of what they pick. It is not possible to divide according to weight because neither Darno nor any of his cohorts have a scale. Instead the bawon is divided up in the traditional way, by rice stalk. The harvester will choose his share as he starts towards Darno's home. Isa, is responsible for dividing up the shares and would never argue with her friends or relatives about taking the better quality or heavier panicles. In extreme cases, harvesters have "dropped" some harvest before arriving at Isa's station. All Darno can say is that he hopes they will be honest, and that maybe some day he can buy or gain access to a scale.

Another problem is the accepted practice of the gleaner. A gleaner is one who follows behind a harvester, picks up rice grains that may have fallen and cleans the stalks of any rice left. They keep all that they find. The harvester will invite her daughter or other close relatives to glean for her. This practice encourages sloppy harvesting.

In all three of these situations, Darno loses the maximum potential of his harvest for himself. Thus, village adat is in conflict with solving these problems to the producer's advantage. Darno feels he must include the landless villagers in the harvest, and he would not directly confront them with his feelings about dishonesty because it would cause disharmony, something that a Javanese would try to avoid at all times. Since it is not the nature of the villager to consider hostile feelings towards these people, the shared "cheating" continues -- a universal problem of the desire for more within an environment that is limited by a scarcity of productive land.

The cost to Darno to have his fields harvested was 50 kgs. This he hopes to make up when Isa works in his friends' fields. He realizes that next season she will be limited too, now that harvesting will take place simultaneously with his neighbors.

Darno appreciates the fact that there are some large landholders in his vicinity. They provide jobs without expecting to be in a reciprocal harvest agreement. The payment, in kind, is smaller than the small landholders give but the difference is made up in the fact that they will not expect to be in Darno's harvest. The only disadvantage to having a large landholder nearby is that if he were to harvest at the same time, the villagers would be eager to help on his land. The small farmer would have to offer a higher percentage of the share in order to attract harvesters.

Isa has just learned that the owner of the land has sold his unharvested crop to a middleman, a penebas. The landowner claims that some harvest failure in the area is going to bring in an onslaught of people wanting to harvest. It will be too difficult a task to select from such a large group so he has solved the problem by selling his unharvested crop to a middleman from an outside village. The landowner will be paid according to the price of rice today. This doesn't guarantee him of the price when he needs to buy, but he has capital to hold him over.

The middleman will bring his own helpers. Isa must find another way to supplement the rice income. To make up for the loss, she will try to step up her harvesting with relatives. She will enlarge her home garden, resulting in more supplies for marketing, step up her weaving activities, try to raise more chickens, and continue to hull rice by pounding. She would also like to sew children's clothes to sell at the market of the larger city nearby.

Isa will enlarge her home garden to include a wider variety of vegetables. It already includes spinach, cassava, banana and papaya (of the latter three the leaves also have marketable value). She plans to add squash and peanuts.

Due to lack of available credit, Isa takes her vegetables only to the local satellite market. What she doesn't sell directly, she knows she can sell to a wholesaler who will carry the goods to the market in the kecamatan. This makes it a low risk enterprise, as Isa neither has the time nor money to go to the larger market herself. This limitation, however, has denied Isa the opportunity to establish ties in the market where she could receive more for her goods.

In the afternoon Isa pounds rice for three hours, hulling rice for several households. This job pays a relatively high proportion of the rice she pounds: enough rice for several meals. Rice mills are now being set up privately in the villages and it is said that the lurah has been helping one of the wealthy landholders to obtain land to put up a rice mill. Although it may be too expensive for the people in their tetangga to consider using the facility, the possibility exists that a few will come upon some capital and use the mill. If this should happen, Isa would lose another source of family income.

Isa weaves sleeping mats from material found in the bamboo forest. The raw materials cost her Rp.500 and her profit is only Rp.50 (\$.12) for twenty hours of work. She can weave more mats if she stays up in the evening, but then she must consider the cost of kerosene for lighting.

Last year, a relative came to visit from another village. It was the first visit from Isa's side of the family in several years. They gave two semi-grown chickens as a "house-gift." This was a generous gift, semi-grown chickens are almost ready to produce, they could have been sold for a good price. Now the chickens are producing eggs. These kampong chickens are scavengers and cost almost nothing to keep, they have a box for egg laying which represents the only effort on the part of the owner. Isa sees to it that her chickens get into the rice pounding area when she works, a side advantage to her job. When they are well fed they produce more eggs. Eggs are sold rather than consumed. Isa has decided to let a couple of the eggs hatch. Her neighbor has a rooster and for some fertilized eggs, she will "borrow" him.

Darno must also supplement the household income, however, engaging in trade is out since he has no capital. He has no particular skill, limiting him in such handicraft jobs such as the plaiting of bamboo mats for wall. There is no one in the area who is paying for a labor force at this time. Darno would like to be hired by a large landholder to plow his fields, this pays Rp.500 a day, which includes the hiring of the water buffalo and plow. The chances are slim, as large landholders are few, and willing villagers are many. Another possibility would be to work as a porter for the owner of the field where Isa just lost her job. Darno could get Rp.100 per journey carrying bamboo from the forest to the kelurahan for further marketing, but he can make only two trips a day.

Time available to search for additional jobs is a problem. In a kampong where everyone owns a little land, it is the responsibility of all the men to donate their time in communal gotong royong activities. Gotong royong at the community level is the giving of equal amounts of time to the maintenance of canals, roads, bridges, and public buildings up to the kelurahan level. Along with the time he spends at the individual level of gotong royong in helping his friends to fix their houses, prepare land, etc., Darno has little time left to keep up his own possessions, plus search for jobs. It seems that the large landholders are kept busy with their

land and don't have the time to invest in such community activities, this situation, in turn, only increases the amount of time Darno is required to put into it.

Darno's four living children include three sons, Haryono, 14, Mardono, 9, and Suhati, 6, one daughter, Atur, 12. Isa also had one stillborn between the 12 year-old and 9 year-old. Isa is now a family planning acceptor, using the pill. The village mosque (langgar) sounds a reminder once a day to take the pill. Isa admits to forgetting when she is not home to hear the reminder.

Haryono, 14, is of the greatest help to his father. He assists in the fields and can do a day's work as a porter. He is still needed to teach the younger boys how to search for firewood. This activity starts at 1:00 P.M. in the afternoon and may take four hours for the three boys to find two days worth of wood. Haryono also shows an ability and interest in carpentry, but there is no capital to develop this potential.

Atur, 12, was recently relieved of full-time child care activities for her youngest brother, when he turned six. Now she will keep the fire going and cook meals. From time to time she will take over the rice pounding which will free her mother for weaving. Atur can also help in harvest at the adult level rather than as a gleaner. She gathers the eggs, and has the responsibility for marketing them. Atur has learned basket weaving in school and when time is available, which is rare, she will weave.

Mardono, 9, now has the main charge over his younger brother, but his principal responsibility is to collect firewood and water. Every once in a while he obtains a job watching the water buffalo of a neighbor. When he has the opportunity, Mardono will offer rides to the local children for Rp.25. Mardono is reliable and because of this, the owner gives Darno a lower rental rate when he needs the buffalo for his fields.

Suhari, 6, has not reached a very productive level yet. He eagerly tries to do things that his big brothers can do. A pleasant economic surprise is baby bird hunting and training.

Suhari is able to find birds' nests, catch baby birds just at the time when they are ready to fly and train them to respond to human whistling. A wholesaler buys these birds for Rp.250.

Suhari's health, however, is not good. He continually has a runny nose and bronchial cough. His stomach protrudes. Isa notices this, but accepts it as a common occurrence. The fact is that Atur, his sister, has had most of the responsibility for his upbringing. By the time a child is weaned, usually by 2 years, it is left to fend for itself with the aid of an older sibling. The mother is once more free to find work outside the home. So it was with Suhari. He was fed in a slendang (a cloth used to attach the child to the hip of an adult) by his sister twice a day. When he became able to run about and talk, he was expected to fend for himself. There are no set meal times for the children; the rice was always in the pot. Atur never realized that Suhari rarely ate though sometimes when he was hungry and not home, he would get cakes from the neighbors. Suhari is malnourished and infested with parasites which sap his strength and decrease his appetite.

Darno realizes the importance of schooling as a means to free his children from a dependency on his land for a living. There will be no future from his .15 hectare of land after it is divided up among his three sons who will have families of their own. On the average, the children of Darno's village enter school between 8 and 9 years of age, spend only two hours a day for three years in the classroom.

Haryono entered at ten because his mother needed him to help with the younger children. He remained in school for three years and would have continued but fees were too high. At one point the teacher requested maintenance funds for a leaky roof and Darno didn't have the money. Haryono couldn't face the teasing of the teacher and children who had already paid so he dropped out of school.

Mardoro and Atur are both in school now. Mardono entered a year ago and Atur two years ago. Although there

no longer is an official tuition for grades 1-6, roofs still leak and teachers need lunches. Darno must make sure that he can provide these funds as he does not want his second and third child to become dropouts.

Darno welcomes the manpower and income that his son Haryono provides for the household, but he is concerned with his lack of marketable skills. When it is possible Darno will send Haryono to the kecamatan to an apprentice of some kind. The cost to Darno at this time is prohibitive, but he is trying to build up capital for Haryono, and the children who are in school and will need funds for uniforms and school supplies.

Darno porters two times a week or more if possible. In order to get the needed capital, he has decided to sell the tiles on his roof and has asked Haryono to thatch a new roof. Darno's family will probably never have a tile roof again, and the thatching will need replacement every three years with frequent repairs in between.

At least Darno now feels sure that he can provide one more year of schooling for his two children, and buy supplies for Haryono, who in his spare time can build some tables and chairs to sell. Darno knows that the ideal would be to find someone to teach Haryono, but that would mean having him leave the village.

Pak Darno had also heard about high yielding seeds, pesticides, and fertilizer. He thought that he could greatly increase his yield if he had some. A villager in the next kampong who is a large landholder, received fertilizer from a Government program and announced that some of it was for sale. Darno was interested and sold some of his unharvested crop to a middleman for capital to buy the fertilizer for the next season. In order to attract a middleman to his small plot, he sold for a low price. He obtained the fertilizer and used it in the next planting, but not in conjunction with high yielding rice seed or pesticide.

Because he was expecting a good yield on the next harvest, Darno felt that he could afford to borrow on it. He had heard

of someone selling a radio for Rp.6,000, much less than it was worth, but more than Darno could afford then. Items like radios, bicycles and watches though, are seen as good capital investments. They bring pleasure and can be sold quickly if money is needed, although usually for a reduced price. Darno decided to look for a loan in order to get the radio.

There were several problems, however, with the official banking process. The first was the distance to the bank and the possibility that Darno would not be able to take out the loan. Land is his only collateral but .15 ha. isn't worth much. A rejected loan application would have cost him Rp.500, the round trip cost. Secondly, it all seemed so complicated. Darno cannot read the forms, and he doesn't know anyone well enough who he could trust. Finally, he would have monthly payments which would be high. Thus, Darno decided to try the local money lender. The village money lender never requests that forms be filled out, there are no transportation costs, and the monthly payments are what Darno can meet. He doesn't realize that most is interest, and the payments will stretch out for some time. The point is Darno can afford the payments.

Darno borrowed the needed amount. The willing lender was not concerned about Darno's ability to pay back. When a borrower doesn't meet payments, a visit is made to the home. A warning is given, and finally items are removed from the home. Darno would borrow from a friend before he would shame himself to that point. Besides, he was confident that he would be paying back his loan on the profits of his increased harvest yield.

Best laid plans often go awry and Darno's proved no exception. The harvest Darno was counting on finally came after a very dry spell so things will not go well this year. Darno's property is on a tertiary canal which means he doesn't get sufficient water during dry periods. His harvest yield was a little less than usual, thus he not only spent much needed capital on fertilizer, but now must reestablish himself in the harvest system. His friends understand his need for capital, but they need his field for harvest as well as he needs theirs. Darno is left with a loan to pay off and his debts of friendships.

Darno will not try to increase his harvest yield again this next year. He tried fertilizer and it didn't work. Neither will he invest in seeds and pesticides because to him it is a losing gamble. He could sell his radio, but everyone in the village knows what he paid for it, they would offer less. He needs the money, so he accepts Rp.5,000 for it. This money helps, but he must now make up for the rice which he did not get from his harvest this year and he is many kilos short of what he needs to feed his family.

Isa will be expected to expand upon some of her activities. She looks toward her Apsari group for help. The Apsari, made up of female family planning acceptors, and funded by the central government, has already been the recipient of a sewing machine, which Isa has learned to use. It was in this group where she also learned to weave. Now she would like to expand her sewing activities in order to make up the deficit in family income.

She and her friends finally approached the leader, the lurah's wife, to suggest requesting another machine. The leader promised that the next time someone came to see them from the kecamatan or higher levels, she would ask. After two months they received another sewing machine. The Apsari has provided Isa with supplies of thread and material what she will replenish as soon as the first profits come in.

Since Isa must remain away from the house longer, the household will rely more on help from Atur who will drop out of school to help. She will take over rice pounding and cooking completely. In the morning she will weave when she is not harvesting.

Sickness is another aspect of life in the kampongs. Animism plays a strong role in the village life of Central Java, and illness is believed to be the result of activities of evil spirits. Therefore, time is not spent in diagnosing beyond fever and cold. The patient is treated by the village dukun who prescribes jamu, traditional herbal medicine, and will give a healing massage. The mortality rate is high and death is an accepted way of life.

There is access to a doctor through the PUSKESMAS, the Government Health Clinic, but for all practical purposes it is too far away for Darno and his family. Also Darno would never jeopardize his position with the village dukun who plays a very prominent role in village life. To go to the doctor for treatment before consulting the dukun would be disrespectful. The doctors are usually called by suggestion of the dukun. Doctors, as a result, are given the patients who are seriously ill. They are then fearful of treating these patients because the possibility of death is quite high and the doctors fear that they would be blamed if this should happen thus compromising their efforts to gain the respect of the community.

The dukun is considered spiritually strong, magical, and mystically guided. He has proven his uniqueness with a life of devotion to Javanese literature and the ultimate fasting for forty days and nights. He is put into a higher level of humanity by the villager because of his spiritual achievements and becomes the medium between spirits and reality. Illness is so closely associated with evil that is consistent for the villager to use the dukun for healing.

Pak Darno appeared at the dukun's door one evening to ask for help. His daughter, Atur, was ill. The dukun listened to Darno describe how hot she was. No more questions were asked, jamu was given to take home. No payment was made, Darno will pay in kind as soon as he has something to exchange for the service. Perhaps a new sleeping mat from Isa.

Three days later Atur is still hot. The dukun comes to the house to give a healing massage, and read passages from a traditional Javanese book. The dukun sees that Atur is not responding. He suggests that Darno contact the doctor for some strong medicine. The mere fact that the doctor is suggested brings fear and a sense of urgency to Darno.

He begins the 16-kilometer journey to the PUSKESMAS, with a friend. Because there is no bicycle in the tetangga, they had to walk to the road where they were able to hitch a ride to the kelurahan. The lurah helped them to borrow bicycles to continue their journey. After a long treacherous

journey in the dark on the bumpy road, they arrived at the Camat's house. He informed them that the doctor was not on duty. A call to the next kecamatan got the doctor, but it was evident that he would not be attempting to come over that night. Darno took the mantri, a male assistant, back with him.

Darno arrived home at dawn, but his daughter passed away sometime during the night. Neighbors, friends and relatives gathered to assist where they can. There will be the ritual bathing of the body, preparations for selamatan, a feast with spiritual connotations and the burial before sundown. At this time of need, food will be given and money presented as small gifts by all who know Darno and his family. There is a great community togetherness at times like these.

The rural poor farmer accepts his life as it is. In most cases he does not try to control or change his environment. The hope is in his children, who must learn a skill beyond agriculture because the land is no longer available in large enough plots to pass on to them. Their hope is in realizing that there may be opportunities for the children who survive.

Economically, Darno will continue to balance his life within a thin margin of credit and debit. One season he may profit from a good harvest, sell, have capital, buy goods, and need to sell those good at a loss to make up for a bad harvest next year. He will probably never be able to guarantee himself or his family profits which would permanently place them one step ahead. For this he would need a steady job with monetary income. The nearest promise of this is only a temporary basis. It is the coming of a Government road building project outside his kelurahan. Darno would have to stay away from home for several days a week, but the cash income would be worth it. The trouble is, he really doesn't know how to go about getting such a job.

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Helpful Conversation and Interviews

1. Mr. Carlin of Catholic Relief Services, on nutrition
2. Mr. Fred Okada, AID, on rural housing income, energy consumption.
3. Dr. Ed Vanderhoof, AID, on water supplies.
4. Mr. Ron Trostle, AID, on rice harvesting.
5. Mr. Ware Heneveld, Ford Foundation, Education.