SSOAR

Open Access Repository
www.ssoar.info

The village in motion: a case study of socioeconomic and cultural changes among rice 'farmers' in Indonesia

Somantri, Gumilar Rusliwa

Veröffentlichungsversion / Published Version
Arbeitspapier / working paper

Empfohlene Zitierung / Suggested Citation:
Somantri, G. R. (2000). *The village in motion: a case study of socioeconomic and cultural changes among rice 'farmers' in Indonesia.* (Working Paper / Universität Bielefeld, Fakultät für Soziologie, Forschungsschwerpunkt Entwicklungssoziologie, 327). Bielefeld: Universität Bielefeld, Fak. für Soziologie, Forschungsschwerpunkt Entwicklungssoziologie. https://nbn-resolving.org/urn:nbn:de:0168-ssoar-422368

Nutzungsbedingungen:
Dieser Text wird unter einer Deposit-Lizenz (Keine Weiterverbreitung - keine Bearbeitung) zur Verfügung gestellt. Gewährt wird ein nicht exklusives, nicht übertragbares, persönliches und beschränktes Recht auf Nutzung dieses Dokuments. Dieses Dokument ist ausschließlich für den persönlichen, nicht-kommerziellen Gebrauch bestimmt. Auf sämtlichen Kopien dieses Dokuments müssen alle Urheberrechtshinweise und sonstigen Hinweise auf gesetzlichen Schutz beibehalten werden. Sie dürfen dieses Dokument nicht in irgendeiner Weise abändern, noch dürfen Sie dieses Dokument für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen.
Mit der Verwendung dieses Dokuments erkennen Sie die Nutzungsbedingungen an.

Terms of use:
This document is made available under Deposit Licence (No Redistribution - no modifications). We grant a non-exclusive, non-transferable, individual and limited right to using this document. This document is solely intended for your personal, non-commercial use. All of the copies of this documents must retain all copyright information and other information regarding legal protection. You are not allowed to alter this document in any way, to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public.
By using this particular document, you accept the above-stated conditions of use.

gesis
Leibniz-Institut
für Sozialwissenschaften

Mitglied der
Leibniz-Gemeinschaft

Universität Bielefeld

Fakultät für Soziologie

Forschungsschwerpunkt
Entwicklungssoziologie

Sociology of Development
Research Centre

Universität Bielefeld - Postfach 100131 - 33501 Bielefeld, Germany / Telefon (0521) 106-4650/4221, Fax (0521) 106-2980
http://www.uni-bielefeld.de/sdrc, E-Mail:sdrc@uni-bielefeld.de

Working Paper N° 327

The Village in Motion: A Case Study of Socioeconomic and Cultural Changes Among Rice 'Farmers' in Indonesia

Gumilar Rusliwa Somantri

Bielefeld 2000

ISSN 0936-3408

The Village in Motion:
A Case Study of Socioeconomic and Cultural Changes Among Rice "Farmers" in Indonesia*

Gumilar Rusliwa Somantri

Introduction

This paper deals with discussion of socioeconomic and cultural changes of the farmers in context of the integration of Indonesian society into the scaffolding of the world economy. We depart here from the notion that the market expansion process of the global economy may transform "peasants" into "farmers". In this relation, we ask the sociological question of how does market expansion as well as state policies of agricultural "modernization" affect local farmers' social and cultural life. To answer this question, we selected a farmer as a research subject based on five practical as well as theoretical criteria including the following. Firstly, he lives relatively close to the major urban area (Jakarta). Secondly, his is about 30-50 years old. Thirdly, he considers rice farming to be his main occupation. Fourthly, he involves himself in formal as well as informal local organizations. And lastly, he is comparatively "open" to relevant aspects of market expansion of the world economy.

The rice farmer is *Mang Oleh* (41). He lives in a village located about 75 kilometers south of Jakarta City. He is well known as a farmer activist in his village and for a long time has been dealing with new farming ideas as well as other aspects of "market" dynamics. The case study based on this informant was conducted from October 1998 until September 1999 and involved intensive field observation and "in-depth" interview methods. In this regards, the findings of the research will be organized in the following way. The first part consist of the introductory remarks. Since the research has been conducted while rapid sociopolitical reforms have taken place in the country, the second part of the paper will describe the research site and the "political geography" of the changes. The third part will present an intergenerational biography of the research subject. The research findings on how has the subject become a "farmer" will be discussed in the forth section. Whereas, the fifth part will present the actor's land ownership system and ideas about farming. This will be followed with a discussion answering the question of how does this informant practice farming and manage the agricultural calendar system. In the seventh part of this paper, the local irrigation institution and dynamics will be discussed in relation to the subject's farming activities. Related to the current prolonged economic crisis that has severely hampered Indonesian society, the paper will trace also the influence of this phenomenon on local farmers' socioeconomic and cultural behavior. In the conclusion, we will analyze the data presented in the previous sections and relate it to the macro "context" of changes.

* This study is conducted as part of the PRELUDE project sponsored by UNESCO/UNITWIN and chaired by Prof. Hidetoshi Kato of Chubu University. The project is organized by AMIC Singapore and funded by the Nippon Foundation. Thanks to Prof. Hans-Dieter Evers for his comments and criticism of the draft of the paper, given while the author was a DAAD visiting research fellow at the Sociology of Development Research Centre, University of Bielefeld, Germany.

The Research Site and Political Geography of Change

The village of *Situ Uncal* is part of the *Purwasari* sub-district, located in the *Dermaga* district of the *Bogor* regency, West Java. It is situated in a valley in the foothills of Mount *Salak*. A beautiful view of the village setting can be seen by standing in front of the District Meeting Hall, facing South. The green and fertile rice fields are spread out like a thick carpet over a marshy area. Farther off, we can see a group of houses on the south of the village, nearly hidden among the dense bamboo stalks, coconut trees, and other tropical plants. Meanwhile, in the background the mountain is soars high majestically with the blueness of the sky covering its peak. The scenery of the village is also quite beautiful when viewed from the eastern part of the hill, looking over to the West. The farmers' fields are also green. We can see farmers planting sweet potatoes on a higher terrain. Bordering this terrain and the fields spreading out on the lower area is a row of trees. To the North of these fields we can observe a sprawl of housing, a mosque, the farmer's community center, etc., which are located in the central part of the village. Visible in the distance, the western uplands are gigantic natural fixture for a village.

The village is linked to *Bogor* city by a five meter wide road, which was covered with low-quality asphalt in 1986. It already has holes here and there. The main transportation used by the villagers to go to the city is a small four-wheel minivan vehicle (*angkot*), which can accommodate up to 11 persons. The other motorized form of transportation common in the village is the small truck. This type of vehicle is usually used by the local retailers, who use it to transport various agriculture products to the main markets in the nearby cities including Jakarta. The road through the village itself is about two kilometers in length and somehow goes around what formerly was the shore of the lake. On its left and right are fields fenced with various plants and bamboo joints. Along the road is a row of concrete poles for supporting electricity and telephone wires. Modern lighting has only been used to be on used since 1987. However, the telephone lines already existed in 1992. These facilities were able to be built by the local government since the villagers "supported" the ruling party in the elections carried out during the last period of the "new order" totalitarian regime in Indonesia.

The village also has other "formal" as well as "informal" physical, social and economic facilities. The Community Center of the sub-district is situated in the north part of the village. Near this office, there are two state supported elementary schools, a private junior high school, and a Public Health Center. Meanwhile, the main religious facilities (two mosques) are located in the South and Central parts of the village. Many middle income and wealthy group of villagers own modern household's goods like televisions, radios, motor cycles, some even have a small four-wheel minivan vehicle or a car. The village also provides supportive facilities for rice farming, such as two private rice mills and two tractors, a gift from the regency government when the farmer's group attended the provincial agricultural competition in 1996. The three irrigation ditches in the village were reconstructed in 1998. Through these channels mountain water flows into the 50 hectares of rice fields in the area.

There is also a farmer's association whose main office is located in the center of the village. This organization has established a Savings and Loans Cooperative as part of its activities. This local financial institution fulfills the needs of the villagers for a "familiar" and "simple" system of "banking". Informal religious and social groups can be found throughout the village. For example, in the northern part of the village, are located a religious group for men, another group for women, and three rotating credit groups

(*arisan*). Small shops (*warung*) are found in nearly all Neighborhood Units, while the north and central parts of the village have 1 shop each. The owners buy goods from the main market in the city once or twice a week. In these small shops people buy goods to satisfy their daily needs such as rice, salted fish, cooking oil, salt, spices, food and the drinks that children usually like, including the popsicles produced by villagers owning a refrigerator. However, the richer villagers go to the city themselves sometimes to shop in the supermarkets and for the recreation that is available there.

Administratively, the village is divided into two Community Units and nine Neighborhood Units. The first Community Unit includes people living in the north and central parts of the village. The North Village has three Neighborhood Units, while the Central Village has two Neighborhood Units. The second Community Unit is in the south part of the village and divided further into four Neighborhood Units. One Neighborhood Unit usually consists of 40-50 households. The total population of the village is about 3,500 people. Thus, the number of the household is about 400. On average, each household in this village consists of five persons. Most households are nuclear families with 3-4 children. However, there are also three generations of some families living in one household. According to the official data, on average each household in the village owns only 1,100 square meters of land. In reality, we can find some villagers who do not own any land at all. While, some villagers own land amounting to over four hectares (Sub-District Office of *Purwasari,* 1998).

Most people in this village have a comparatively low income and educational background (elementary school). Nonetheless, some households do have children attending high school and even some with children that go to college. As can be seen in the data of average size land ownership mentioned above, the majority of the villagers are small-scale farmers. In relation to the existing disparity in land ownership size, we also find some many middle and some rich farmers. It seems that the ”poor” and ”rich” farmers do not share similar values and understandings concerning farming and the idea of what a farmer is. The poor understand these concepts in terms of their prevailing survival strategies at the very basic level. Thus, this group of villagers produce staple foods, like rice, merely in order to carry out their household subsistence economy as is usual for a ”peasant”. In contrast, for some middle and rich farmers, farming is not merely an aspect of their subsistence economy. They also produce rice to be sold at the market. During the dry season, they usually plant various vegetables and tubers to supply local market demands. They sells these surplus crops to local retailers, who bring the products to the local and main market, even to supermarkets in Jakarta and other the nearby cities.

As part of the rationalization processes, the rural occupational structure has undergone differentiation. There are some villagers who are now working mainly as teachers, merchants, drivers, and in home industries. However, most are also still farming as their second job. For example, a teacher who has inherited land can grow rice by paying farm laborers to do the work. Since during the day he is busy teaching, he does small activities of farming (control the water, etc.) on the weekend or in the afternoon. In terms of the present state of home industries in the village, there is a furniture making home industry located in the northern part of the village. This ”company” buys the half-finished products from a craftsman in Central Java. After the products are finished, the company sells them to certain furniture shops in the city. Beside this furniture industry, there is also a garment making activity that is located in the same neighborhood unit. This ”company” employs around nine young female workers. It produce and sew small elements (decorations) on various types of wedding dress cloth. The ”company” has a

kind of sub-contracting relationship with a big export-oriented garment company located in Jakarta. This big company regularly markets the products to various countries in Asia especially to Korea, Taiwan, and Japan.

Most of the inhabitants of the village were born there. All are Moslems and members of the *Sundanese* ethnic group. The villagers oriented politically in the past to the ruling-party of the government functionaries (*Golkar*). At that time, a domination by the party strongly emerged in the village. For example, the election of 1997 showed that the party won the majority of the votes at the two-polling stations located in the village. This situation was closely related to the important sociopolitical role of the local formal leaders, especially the head of the sub-district: He functioned as the ruling party activist in the area. He ordered the villagers to vote for *Golkar*. He said that if the party was defeated in the area, the government would perceive the villagers as not being loyal and as inclined to agree with radical Islamic political movement. As a result, the local government officials would halt development programs in the area. As the consequences, the villagers were afraid to cast their vote for candidates of any parties except the ruling party.

This is changing in today's era of reform. Many villagers are not the ruling party's supporters anymore. As we can learn from the 1999 data, the result of the election in the village reflects the same situation as described at the macro level, i.e. the ruling party was decisively defeated by the opposition party. For example, at a polling station located in the neighborhood unit 01 in the northern part of the village, the opposition party won unequivocally (Election Committee of the *Purwasari* Sub-District, 1999). The defeat of the ruling party in the last general election was not a big surprise for many elite villagers, who are apparently well informed about the current social and political changes at the national level. Informal leaders like teachers, farmer organization activists, and local religious leader know from the media that today is the era of democracy, freedom, and governmental transparency. Thus, in practice the local elite and residents do not hesitate to support any party they like. Even ordinary villagers dared to criticize the head of the sub-district, who was perceived as still aligned with the ruling party. They know from various sources, that according to the new political system, he is part of the bureaucratic apparatus at the lowest level, which must be politically neutral.

Macro political changes also have influenced the behavior of farmer in electing the local political leader. In the end of 1999 the villagers elected a new sub-district head. The previous official had held the position for two terms and received a letter of retirement from the regency office. The villagers were very enthusiastic in support of their candidates. There were two candidates. The first was well known as one of the loyal aides of the former sub-district head. The second candidate was an activist for the farmers association. The first was supported by the formal leaders of the sub-district. While, the latter was backed by the informal leaders in the area. Although, the formal leaders urged the villagers to give their votes to the first candidate, the villagers did not want to him elected. They perceived this candidate as being part of the " bad old regime" of the sub-district administration. The villagers largely votes for the second candidate, who was believed to be a "clean man" and a having better plans for helping local farmers to cope with their problems.

In addition to the situation mentioned above, the farmers are generally critical about adopting the government's farming programs. For example, some farmers activist criticize the government policy of

introducing the use of pesticide in relation with the ongoing farming ”modernization” programs. They said that the pesticide producers are Jakarta-based tycoon with close connections with the former ”new order” regime. These producers would be able to sell their products to local farmers who co-operate in the government promoted farming intensification programs. The implication was that the farmers could not have any choice except to buy pesticides. This have resulted in the massive use of pesticides bringing with it two consequences. Firstly, it was common to be find farmers in the area suffering from skin, lung and throat diseases. This was related to the fact that the ordinary farmers had little knowledge about the danger of pesticides. Secondly, in past recent years, the farmers in the area had been hampered by an epidemic of pest. Some experts told them that this was related to the damage to the environmental system including the extinction of predators. Despite this, activist farmers in the village have reduced their use of pesticides and started pioneering an alternative strategy of pest control system by conserving their natural enemies (birds, frogs, etc.).

The Actor’s Intergenerational Biography

Mang Oleh’s father is named *Bah Saeli* (65). He came from a modest family who lived in the neighboring village. When he was seventeen, impelled by his parents’ poverty, he became a servant for a rich family in the village. He especially helped his master to work on the fields, such as preparing the land for cultivation, harvesting, etc. After a few years of working there, he married a female servant, whose usual job was cooking and pounding paddy for the same family. After he married in the 1956, he started to live on his own and no longer wanted to work for his former employer. He said that he wanted to have a better future than just being a servant for a rich family. As a matter of fact, he was a hard working person with a strong will to succeed.

To realize his dream, he purposely worked as farm laborer in villages far away from his home village It is true that at that time his decision to be independent created a strain in his relationship with his former master. However, he did not care, and he still was determined on making an dependent living. At that time, work as a farm laborer was not paid in cash but rewarded with produce, such as paddy. The rice compensation was not measured in kilograms, but rather in bundles (*gedeng)*. One bundle equals 6-7 kilograms or 4-5 kilograms of paddy with no stalks. As his reward for harvesting the paddy, he might be paid with hundreds of bundles in one harvest season.

His family’s daily expenses by means of the money earned by his wife by pounding paddy. The paddy he got from laboring in the harvest season in distant villages he then lent to his neighbors in his own village, which had to experienced a long drought *(paceklik)*. A few months later, when the neighbors were harvesting their paddy, they paid back the paddy they had borrowed from him. As a result, his barn was always full at this time. This process of saving paddy was kept up for years; thus, he always had a great amount of paddy stored up. After his paddy was piled high, he sold it, and he was able to use the money to buy some land on mortgage. After a while, the land was his. In illustration, he took a hectare of land belonging to a neighbor as collateral for a loan. As time went by, since the neighbor could not pay back the loan, the land changed hands and became his property. This happened a few years after their first son was born in 1958. He cultivated the land very well and harvested a large crop, between 400-500 bundles.

In 1970, the rice harvest in the villages on Java Island, including in those of his region, was totally destroyed. In the midst of the prolonged dry seasons, rats and others pests severely attacked the fields. Driven by his responsibility to support a family with five children, he tried his luck in a city that offered various jobs in the informal sector of the economy. He became a *pedicab* driver in *Bogor* city. After he worked in the city for two years, he became acquainted with a friendly Chinese merchant. By chance, the merchant told him that in Surabaya there was an exporter who needed a supply of dried leaves of *cingcau* plant in great amounts. The merchant suggested that he supply the goods since the plants grew in abundance in his home village. Moreover, the transportation from the city to Surabaya by train was quite good and safe. In 1972, he stopped driving *pedicabs* and started to be a trader. Once he brought five tons of the dried leaves to Surabaya in a freight car. He bought the product from farmers on credit. In the other words, he did not pay the cash in advance but after he returned from selling the goods in Surabaya.

As a result of making a lot of profit from selling *cingcau* leaves, he was able to buy a half-hectare of land and build a permanent house one year latter. This house was the first brick house in the village. In a short time, it is changed local people's opinions about his socioeconomic status. First he was known as a domestic servant, next as a farm laborer, as a *pedicab* driver, and later on as a dealer in agricultural commodities. Then, he was among the comparatively well-off and respected people in his village. However, after two years in business, he started to experience setbacks as there were other suppliers from other towns in East Java, which are closer to Surabaya. They could offer the goods at lower prices since the transportation cost was cheaper. Due to this unfortunate situation, in 1974 he altered the course of his business. He was selling various kinds of agriculture products among others banana and handicrafts made of bamboo. He was taking the products to several large cities including Jakarta. However, he decided in 1976 to stop dealing in commodities and again devoted his time to farming.

At the present time, he is about to retire from farming. Meanwhile, his land has been divided among his five children. He has three sons and two daughters from his marriage. The oldest son, *Mang* Oleh, is now working as a farmer. The others two sons, both of them are now working as teachers in the senior high school and at elementary schools. However, neither of his two daughters continued their study after finishing elementary school as they were immediately married to local villagers who work as a driver and a farmer. In short, he no longer has any of his children dependent on him. And he now receives some support from his children. However, he still works on a small part of his oldest son's rice field based on a crop sharing system. He also does this to stay physically active and healthy in old age. Additionally, he said that he did not feel comfortable if economically he was fully dependent on his children's generosity.

From Peasant to Farmer: How Did the Subject Become a "Farmer"?

Mang Oleh finished his elementary schooling in 1972. He was then 14 years old. Two years later he was helping his father in trading but he felt unsatisfied doing business. He preferred to stay in the village

and take care of his father's land. His father noticed his serious intent to farm and encouraged him to concentrate on his farming work. His father once told him, "You don't need to find any other job, just go on farming. If you are really serious in farming, later on in the future you will finally find your path to fortune. You will succeed and be somebody." When his father was home, he received his father's guidance in farming. At that time, he started to plan sweet potatoes and cucumbers. After that, he learned how to plant legumes. The effort went on with planting tomatoes, juicy tubers, and finally farming local types of paddy.

When he reached the age of eighteen, a neighbor asked his father to arrange a marriage with the neighbor's daughter and *Mang* Oleh. The neighbor was very impressed by his diligence, honesty and work ethos in farming. The neighbor wanted to pass on his knowledge of farming, including the custom of rice farming, to *Mang* Oleh. At that time, his father was rather reluctant to give his approval to the marriage. This was because the neighbor used to be his own father's master. As a result, *Mang* Oleh's father felt a bit awkward and uncomfortable. However, his father finally approved of the marriage based on the consideration that his son already had had the proper basic skills in farming and was well behaved. Finally, the wedding was held in 1976.

After marrying, he was given a quarter hectare of land by his parents-in-law. The land used to be a pond with a thick mud bottom. It is located on the north of the village, about 800 meters from his house. He cultivated the pond land seriously so that it could be planted with paddy. Although a new type of paddy had been introduced, namely International Rice (IR), that needed a shorter time to harvesting, he was not yet interested in it. His attitude was based on several reasons. Firstly, he had no experience in growing this type of rice. Secondly, based on his subjective judgment, he was not sure that this new type of paddy could produce an amount of rice equal to the well-known types, let alone exceeds their yields. And thirdly, in term of the subsistence economy, new paddy types such as the initial generation of IR, did not taste good. Even though local paddy needs more time until harvest, it tasted better since it smelled good and had a soft texture.

After the paddy was grew for seven months after planting, it was harvested. At that time he might get three hundred bundles of filled-out, good-quality rice paddy. In each bundle there was about five kilograms of paddy which would produce four kilograms of rice. His production of rice reached more or less, 1.5 tons. He did not store nor consume the paddy but sold all of his crop to a local "dealer". The price of paddy per bundle was 250 *rupiah*. He earned 75, 000 *rupiah* from selling his harvest. Since, at that time, the rural dwellers had little knowledge about banks, he spent the money on gold jewelry to be used or stored by his wife. This only cost 1, 800 *rupiah* per gram. He purchased himself 30 grams of gold jewelry from a Chinese merchant in the city and spent the rest of the money to buy clothes and watches for himself and his wife. He could freely sell the harvest and spend the money because his father-in-law was willing to pay for his family expenses for one full year after his wedding.

The 30-gram of gold was then used to obtain a quarter-hectare of land on pawn from his neighbor. Thus, the land then cultivated by *Mang* Oleh then was a half-hectare of paddy field. From this land, he could produce lots of paddy, namely about five hundred bundles per year. The land also produced 4-5 tons of sweet potatoes and juicy tubers that were planted during the dry season. He sold the crops and stored some for his own family consumption. The income from farming was more than enough to

support a newly wed couple with no children. Hence, after two years of marriage, from his own savings he could enlarge the house given to him by his parents-in-law, buy furniture, a transistor radio, and clothes. A few years later, the pawned land was finally bought for the price of one million two hundred thousand *rupiah*. Noticing that he was working even harder and making a lot of progress in his farming, his wife's parents gave him another quarter-hectare of land.

With a holding of three-quarter-hectares of land, he started to farm more systematically. The one-quarter hectare just given by his in-laws was used for planting vegetables so that he could earn more income from selling his vegetable harvest, which included legumes, cucumbers or chilies. Meanwhile, on the half-hectare of land he was farming rice. During the dry season, he planted tubers on this land. Therefore, in one year he only obtained one sweet potato harvest as it needs 4-5 months for sweet potatoes to be ready for harvesting and one paddy harvest. His field could produce 500 bundles or two and a half tons of paddy for each half-hectare land. Meanwhile, the same land produced 4-6 tons of sweet potatoes. With the good harvest and income from selling the crops, his family living condition improved. After several years attending a family planning program introduced by the local government, then, he decided to have children. The basis of this decision was that his household economy was already strong enough to support the financial expenses of having children. His first son was born in 1980.

In 1985 he stopped planting local paddy and started to plant prime-seed paddy. This change was due to the unavailability of the traditional paddy-peeling machine in his village. The only peeling machine for processing the local paddy had just broken and was irreparable. Apparently, the owner of the rice mill did not try to replace it with a new one since there were not many people using the machine anymore. Along with the state-introduced program of rice farming intensification, most farmers no longer planted local paddy as they had turned to cultivating the prime-seed paddy. The other factor was that he was interested in planting new types of paddy for several reasons. Beside the plants are growing fast, they are producing also more paddy means more profitable.

Cultivating prime-seed paddy was a totally new thing for him. Therefore, he first had to learn from an experienced neighbor. The farmer had started planting the new prime-seed paddy in the 1970s. The neighbor had also tried growing almost all kinds of prime seed paddy and thus, had mastered the details of the cultivation of the plants. He learned from the neighbor how to seed, plant, fertilize, maintain, and harvest the new type of paddy. Technically, there are some differences between cultivating local and the new-types of paddy. For example, in the seeding process, he just needed to plant the stalk of local paddy in an orderly row --after it had been soaked and sprouted-- on the seeding soil that had been prepared in advance. On the other hand, the sprouts of new types of paddy had to be seeded with a special hand movement technique so that, they would spread evenly and the buds would not be broken or damaged.

Indeed, he had some economic advantages by cultivating the new types of paddy, which only needed four months to harvest after seeding, or three months shorter than the local type. Thus, he could use the three-month time period to plant sweet corn, which sold well in the market. His farming pattern was then changed, i.e. 4-5 months for planting sweet potatoes and juicy tubers, three months for growing sweet-corn, and four months of the year for paddy cultivation. Meanwhile, the overall advantage was

that he could earn an additional income from the sweet-corn he grew to the regular income he had from sweet potatoes and paddy. The area of his rented land also increased. Furthermore, in 1987 he received 2000-square-meters of land as a gift from his father and his father-in-law gave him an additional half-hectare of land just before he died. Thus, the total of holding land nowadays is two-and-a-quarter hectares. With a better income, he was able to enlarge his house again, buy electronic gadgets, install modern lighting, new Jepara-style furniture from his neighbor, etc. Now, the subject also spends his money for various household as well as cultural expenses like schools for his children and religious tithes. He saves also some of his money in the local farmer group cooperative and rotating credits.

The household economy of the subject depends mainly on his farming activities. From his one hectare of land that he cultivates, annually he can harvest about six tons paddy (six million *rupiah*). From selling sweet potatoes and corn that are produced from the land, he also gets six million (10 tons) and three million (5 tons) respectively. Since he must also spent a lot of money to prepare his land, pay farm-laborers, as well as buy fertilizers and pesticides (in total about 2.5 million), his net income from farming is 10.5 million annually. Besides this income, he also earns annually about two million from renting out his fields and about 500 thousand from selling *popsicles*. Thus, the total household net income per year is about 13 million *rupiah*. Whereas, the subject routine monthly household expenditures (electricity, children's school transportation, daily expenses, etc.) are about 460 thousands (or 5.5 million per year). Annually, he has the expense also of college tuition for his son of 1,2 million and pays land and building taxes of 270 thousand. Thus, total expenditures of the farmer household are about 7 million. From this data, we can calculate, the sum of money that the subject can save annually using various forms of savings (cooperatives, land mortgage, rotation credit, jewelry, etc.) namely reaches the sum of 6 million *rupiah* annually.

The Land Ownership System and Farming Ideas

Mang Oleh's daily activity is working on his rice field. When he leaves for work, he is usually carrying a mattock on his shoulder, and in his hand is a big plastic teapot containing drinking water. During the busiest time period, such as soil cultivation, planting, or harvesting times, he usually works from early in the morning until late in the afternoon. He usually returns home at noon to have a nap, take a shower, say a prayer, and have lunch. When there are very many things to do on the field, he usually gets help from his wife and his mother-in-law, while his children usually help during the school holiday. Furthermore, while the above activities are in process, the farm laborers, who work for him based on the crops-sharing agreement, are usually present and helping him working on the field. Under regular conditions, such as when the paddy has been planted and he just waits for the harvest, he is usually not very busy. However, he still working on his field, checking the growing plants, the water, etc.

As mentioned above, *Mang* Oleh has about two hectares of farmland. He does not work on the entire land holding by himself, but only cultivates one hectare of his total estate. He has a reason for this. He felt unable work the entire two-hectares of land on his own. For him, farming is a kind of work that demands full attention. Therefore, a farmer must pour out his entire mind and energy on cultivating the land and maintaining the plants. According to him, if he depended completely laborers to farm his lands,

just like many other farmers in his village are doing, his crops would not be satisfactory. With this operating system, in which a landowner does not completely involve himself in farm work, he can experience losses from plants that are not well maintained and suffer from diseases. However, he also has a kind of relationship with the group of farm laborers that help him by cleaning the *field-bund*, cultivating the corners of the fields before plowing, and harvesting. Besides receiving a daily wage, at harvest time the laborers will be rewarded with a fifth of the crop in the form of wet paddy. This system is known in local term as *ngepak*.

The one-hectare of land that he cultivates is divided between two locations The first field is about five hundred meters north of his house. This a half hectare land area was bought from a neighbor 18 years ago. At that time, the entire land was priced at 12 million *rupiah*. At first, the neighbor pawned his land to him for 1.5 million *rupiah*. A year later, he sold it to him for the price of 10.5 million *rupiah*. He divides the field on this location into two areas according to different farming methods used. There is a small ditch between both areas that can also serve as divider. Each area is a quarter hectare, which is relatively fertile and has good irrigation access so that it can be farmed throughout the year. In this area, he has also two small fishponds for raising local freshwater fish. One of the ponds is now being used for raising large prawns. Except for the prawns, the fish are usually not for sale but for home consumption.

The second field is located rather far from the house, about a kilometer to the North, although it is still located close to the village. To get to this location, he can pass through his first field and walk along the river for about 500 meters to the North. After passing the small ditch that serves as an irrigation branching, he then turns left for about a couple hundred meters. His field on this location is an inheritance from his parents in-law. The soil is so fertile and loose that it is good for either paddy or vegetables and tubers. To irrigate it there is a small ditch that diverts water from the small river into his rice field.

Besides the hectare of land that he is cultivating as described above, he also has two fields that he rent out. This is based on the grounds that he wants to be financially secure in order to afford his children's education. He has three children from his marriage, namely a son and two daughters. His oldest child is a son who is now entering the first year of college in the city. His oldest daughter is about 15 years old and studying at a Junior High School. His youngest daughter is about six years old and soon will start the first grade of elementary school. For educating the children, he has to spent a lot of money. For example, his son needs 7,000 *rupiah* for the daily transportation to-and-from Bogor city as well as for pocket money an for the son's college tuition, the subject has to spend about a million *rupiah* per year. In renting out some of his land, he always receives a fixed amount of money. Although he does not earn much profit if the harvest is good, he neither experiences any losses when it fails. In his calculation, his annual income from the rent is not far from what he would get if he cultivated the land himself.

One of the rented fields is situated next to the field that he is working on. Just like his field to the South, this land was also inherited from his father-in-law. This one is rented out to a merchant from a neighboring village. The rent is 1.2 million *rupiah* annually. The merchant leaves the cultivation of the 5000-square-meter of land to one of his sons, who plants crops sellable on the market, such as legumes, corn, string beans, etc. The tenant's son is now 19 years old, diligent and perseverant in farming. Also, this young man's behavior is very good and calm. It seems that the subject sees the

reflection of himself when he was young in this modest, yet high spirited young man. He hopes that this impressive young man will some day be his son-in-law, perhaps married to his oldest daughter. It seems his daughter is rather reluctant to continue on to senior high school once she finishes junior high school. The daughter said that her father was able to make a good living from farming. Therefore, the daughter only wants to have a husband who is hardworking and serious about farming, just like her father, even if he is not highly educated. This pleases *Mang* Oleh very much since his son does not seem to be interested in being a farmer. The son wants to finish college and work as civil servant after graduation. *Mang* Oleh himself seems to support his son's desire. He also wants his son to be intelligent, respected and successful as a civil servant.

Another rented field belonging to him is situated in a neighboring village, which is about two kilometers from his house. It can be clearly seen from the open area of his village, as it is located on a lower terrain. The field is 5000 square meters and was bought from a neighbor in 1979. Before he bought the land, he had already had the land on pawn from its owner for over three years. Since he could not redeem his mortgage and even asked for more money, a few years later he was able to buy the entire land in installments with a total price of 4.1 million *rupiah*. The land in this neighboring village is now rented out to a villager there. The annual rent is 750 thousand *rupiah*. It is lower than the rent for the land located in his own village since the fields are somewhat less fertile. Moreover, the irrigation system in this neighboring village is not as good as the one in his own village. Concerning land rental, he does not rent out his land to just anybody. For him, a field is like a building. If he rented it out to somebody who did not take good care of it, it would be ruined. Examples of careless behavior in land cultivation are *field-bunds* that have never been cleaned nor fixed, soil that is not well cultivated, etc. Hence, the subject rents out his land only to a selected villager that is hard working and will never neglect his field.

The last field belonging to him is situated in the western part of the village. He bought this field in 1991 from his mother's siblings, who thought that it is better to sell the inherited land to their own nephew. The 2500-square-meter of land is shared-crop to his own father and a poor neighbor. Related to the sharing-crop relation with the neighbor, he wished to "help" the neighbor who does not own any land. This reflects to his views concerning land and wealth in general. He considers them to be gifts and goods entrusted from God. Therefore, it is important to consider the lives of one's less fortunate neighbors in the use of the land. He actualizes this value by giving his neighbor an opportunity to cultivate his land based on the system mentioned above. In detail the crop-sharing system is commonly regulated as following. If the land owner covers the costs of seeding, plowing and fertilizing, the tenant will get a third of the crops (*mertelu*), while the land owner get the other two-thirds. However, if those costs are covered by the tenant, both of the land owner and tenant will get a similar share (a half) of the crops (*maro*). If the tenant does not spend any money at all on the land except for his labor, the land owner will get eighty percent of the crops.

Farming Calendar and Practices

Besides knowing and using the Roman calendar in his daily life, the subject is also familiar with the *Sundanese* calendar that applies the system of calculating dates based on the moon's rotation (lunar calendar). It has 360 days and twelve months in a year. This local calendar has exactly 30 days per

month, with each month having six weeks and each week consisting of five days. The respondent uses this calendar to manage his farming. Besides taking this into consideration he also uses natural features and signs as farming guides. Before the subject decides what kind of plants he will cultivate, and when he will start planting, he observes the position of a cluster of stars in the night sky, namely the Big Dipper. When this cluster of stars appears just in the eastern sky at about thirty degrees, it indicates a good time to start planting paddy. This means, the time has come for farmers to raise seedling on the seedbeds, work on their fields, and then start planting. The stars are usually in this position during the eleventh month of the local calendar. Every 100 days, it shifts twice to a higher location.

From the ninth to the tenth months, the Big Dipper will disappear for more or less forty days. According to his late father-in-law, when the Big Dipper disappears, it is the best time to start planting tubers. In contrast, it indicates a bad time for planting paddy. These principles are supported by the subject's experience. For example, the tubers that are planted at this time usually are of high quality as well as quantity. In fact, if he plant the paddy late, so that the paddy blooms as the Big Dipper sinks, the harvest usually fails. This is relate to the fact that most rice grains are empty after being attacked by the various kinds of insects. The subject has not a rational explanation concerning the fact. Rather, he taken for granted belief on the "wisdom" of his previous farmers in the village, including his late father-in-law.

The subject only planted paddy once during the appearance of the Big Dipper in the sky. In the past, when he still planted slow-growing paddy, he did the seeding in the eleventh month of the local calendar, and harvested seven months latter. Yet, he could theoretically plant prime-seed paddy twice in a row when the stars are shining. However, he rarely does it because he has learned from experience that the second harvest is usually far less productive than the first one. For an example, the paddy harvested from a quarter-hectare field located 500 meters to the North of his house in November 1998, resulted in 12 quintals. He sold the crops since the price of paddy was high at that time. However needed also to store rice for his domestic consumption. This is based on the fact that rice was hard to obtain on the market due to the prolonged economic crisis. Hence, he decided plant paddy once again in the same fields since the other fields were being used for planting corn. From the harvest in March 1999, he could only get 8.5 quintals of paddy.

The respondent has two rational explanations concerning the lower yield amount of paddy which resulted from the second harvest. Firstly, he mentions the decreased natural fertility of the soil since the field was used for planting paddy twice in a row. In this regard, the fertility of the soil needs to be maintained by not using it for planting the same type of plants continuously, together with mixing organic manure with chemical fertilizer. Secondly, he diseases the problem with the increase in pests during the second planting season. This is quite understandable because the chain or the life cycle of the pests is left undisturbed. For example, a pest known as the gold snail were first brought to Indonesia from Brazil for aquariums. The snails can reproduce very fast in a natural setting and destroy the young rice plants eating them. The gold snails can stay dormant on dry fields for months and will become active again when the fields are watered. Usually, if the fields are used continuously, the snails can survive and reproduce even more. On the other hand, if the fields are used alternately for vegetables or tubers, the snails will eventually die after several months and the rice plants during the following planting season will be free from a severe pest investation.

To succeed as farmers, according to the subject, besides complying with the modern technique of farming as well as local calculations, it is also necessary to respect the nature and its Creator. Especially one must hold the proper farming ceremonies, the purpose of which is to maintain harmony between human beings, nature, and God. There are three such ceremonies: first is a ceremony at the time of seeding, second is a ceremony conducted just before starting to plant the paddy, and the last is a ceremony at harvest time. In this context, the subject carries out the ceremonies in ways somewhat different than the villagers in the past time had done them. He adjusted the ceremonies' processes and materials to his current situation. For instance, in the past the farmers put the offering in the village barn, where the local was paddy stored. The subject now puts the offerings in a room where he usually stores rice, since he does not own a barn anymore. This relates to the fact that the farmer nowadays store their crops in the rice mill building. The other example: In the past the farmers used the top of young sugar oil palm as a material used in the planting ceremonies. Since the plant is now rarely found in the village, he uses the tip of young *zallaca* leaves as a substitution. There is also reinterpretation on the meaning of the ceremony towards more practical and profane forms since he is confronted day to day with the rational values of modern life.

Just before seeding, aside from observing the natural sign, the respondent also chooses the best day to carry out this activity. According to the local beliefs, the first day of the local calendar represent the best day for seeding since it is associated with the characters of Sri (the paddy goddess). After setting the day, he conducts the seeding ceremony. The subject start performing the ceremony in the afternoon by preparing a kind of fruit salad with sweet sauce (*rujak manis*) at home. His wife or his mother-in-law usually helps him to prepare it. The offering consists of banana, orange, guava, a local fruit of a *zalacca* species, seed banana, young coconut and basil seeds covered with a red mixture of water and sugar. The offering is placed in a bowl and put on a tray along with two cups of coffee (black and sweet) and three to seven kinds of flowers, such as rose, tropical magnolia, jasmine, etc. The offering is put in the room in which rice is stored (*pagoahan*) and must not be disturbed, let alone eaten, until the next day.

The seeding is started early in the morning. Immediately before the seeding, there will be a short ceremony conducted on the field, or more precisely on the seedbed. For this ceremony, he usually prepares some materials among other things the leaves of a flowering tree of the species of *erythria*, a bundle of the stems of dried coconut flower and incense. To start the ceremony, the leaves and the stem of dried coconut flower, which has been set aglow at its tip, are planted. He then burns the materials and light the incense. While he is doing this, he reads a prayer honoring nature, the paddy goddess, as well as God Almighty. Thus, the seeds will grow well until they are ready to be planted on the rice field. The ceremony is ended, when he starts spreading the sprouted paddy seeds evenly on the prepared seedbeds.

When the seedling has grown for about 25 days, he starts to plow his rice field with a tractor. This equipment can be rented from the farmers association in his village, for 60 thousand *rupiah* per day. He used to work with a traditional plow pulled by buffaloes with a neighbor driving the plow. However, since the farmers association has tractors to rent, a farmer activist always teased him whenever he used the plow with buffaloes to do the work. As he did not feel comfortable anymore, he finally used a tractor to work his land. The advantage of using a tractor is the increased speed of plowing a field although it cannot dig as deep as the buffalo plow. When using the buffalo plow, the mud is dug deeper,

but the job usually takes longer.

When the field is plowed, the farm laborers help him working on the field. They will till the parts of the field, especially the corners, which the tractor cannot work on. Usually, a half-hectare of land can be cultivated in less than one work day. When the field is ready, the process of planting is started. This is ideally carried out on the second day of the local calendar. Before proceeding with planting, he usually holds another ceremony, in which he will make the same offering as that bestowed in the seeding ceremony. Nonetheless, there is a slight difference concerning the objects used on the field, which are *zalacca* leaves or sugar palm leaves, dried coconut flowers and a small bamboo plant with long joints. The materials are embedded in the location chosen to hold the ceremony, in the field that has been plowed or muddied. The location stretches over one square meter of land. The bunch of dried coconut flowers is burnt and the incense is lit. Then, he will read also a prayer in order to gain protection from the paddy goddess and God Almighty. Hence, the paddy will grow well, and he fertile, protected from various diseases.

The next step is to plant the paddy in the chosen location. There are some symbolic rules which guide the planting. First, right in the middle a stalk of paddy seed is planted as the center. Next, some more stalks are planted according with the main points of the compass. To the East of the center, two stalks are planted, while to the South, West and North of the center, three, four and five stalks are planted, respectively. Six stalks are planted to the Southeast and seven more to the Southwest. Meanwhile, to the Northwest and Northeast, each direction is planted with eight and nine stalks. Thus, the number of stalks planted ranges from 1 to 9. This mirrors the general local understanding of the farmers of the harmonic relation between human beings, nature, the universe, as well as their Creator.

After the subject finishes conducting the symbolic planting ceremony, several female farm laborers start planting the paddy seeds. In the past, the laborers used to walk forward while planting the paddy, so that the seeds were sometimes stepped on. Nowadays, the custom has changed. They now walk backward when they are planting the paddy so that there is no longer a risk of the paddy seeds being treaded on. This activity takes about one to two workdays for a quarter-hectare of the subject's land. After all the paddies are planted, the field is watered for 15 days. The first fertilization is then carried out by drying the field and applying various chemical fertilizers. The subject only applies a half of the standard suggested by the agricultural office (250 kilograms). This is based on the argument that the soil on his field still contains organic fertilizer from sheep and chicken droppings used for fertilizing the corn from the previous season. According to the subject, most farmers think that the suggested amount of fertilizers is simply too much, while the Cooperative of the District Unit (KUD) only seems to encourage them to use more fertilizer so that they will buy more from the institution on credit.

After being dried for the whole day, the field is watered once again. When the paddy has grown for 25 days, the field is dried once more for one week. During this time, the field is cleaned of weeds and the second fertilization is applied in the same amount and composition. The process of cleaning weeds from the field is usually done by the same female laborers who do the planting. The field is again watered for another 40 days before it is dried for ten days. During this time, additional fertilization is sometimes applied on certain parts of the field that are not growing quite well. Once more the field is watered when the plants start to wave, flower, and are finally filled with rice grains. Then, it is time to dry the field for

the last time to help the ripening process of the rice grains and to make the rice harvesting easier later on.

As the paddy is blossoming, the subject constantly checks his paddy. The paddy at this stage is usually attacked by a kind of insect that releases a pungent odor (*walang sangit*). Beside using pesticides, he practices a simple method to overcome the threat of the insect attacks to his blooming paddy. He gathers crab from the river and puts them out as bait for the insect. The crushed crabs are held with small bamboo sticks, which are placed along the field-bund within 2-5 meters. For weeks, the insects will gather around the sticks to drink the putrid fluid from the crabs. They prefer drinking this fluid to the juice of the young rice plants. After the paddy is filled out, this insect is no longer a threat to the paddy.

When the paddy turns yellow and is ready for harvest, the subject choses the best harvest day. According the farmer's belief, the best day for harvesting is the third day of the local calendar. The day represents wealth characters and symbolizes the hope of gaining a successful harvest. At the harvest time, he usually also holds a ceremony. The ritual is started a day before the harvest. In the afternoon, the subject prepares, offering the same gift as the previous ones, for the seeding ceremony. As the offering is put in the rice store room, he brings to the field a tip of bamboo along with its branches which are decorated with seven kinds of leaves of local trees. He embeds the bamboo there, exactly in the chosen area where the previous planting ceremony was held. On the following day, he brings the offering to the field. The offering is more complete, compared with the one that is put in the rice store room. To it is added brown sugar, sweet sugarcane, a big slice of young coconut, the tip of cone rice and some boiled eggs. At the chosen area of the field, that is marked by the decorated bamboo, he will start the ceremony by burning the incense. Then, he says a prayer as an expression of his being grateful for God's blessings. At the same time, he askes permission of the Goddess Sri to carry out the harvest.

Upon finishing his prayer, the subject starts to cut the five stalks of paddy he has selected. The five stalks are then tied at the tips with white cloth and called "the mother paddy". He cuts some five handfuls of paddy with special knife, ties them one by one using bamboo string, and puts one stalk of "the mother paddy" in each of them. After completing this stage, he puts the bundles of paddy next to the offering and covers them with white cloth. Next, he says the closing prayer containing praises and thanks to God. The white cloth is finally uncovered as a mark that the ceremony is over. The stalks of paddy are brought home and put for the night in the room in which he stored rice. On the following day, the subject will peel the stalks and the rice grains will be put together with the paddy harvested before they are stored in the paddy granary located in the rice millhouse. In the past, when he was still planting the strong-stalk local paddy, "the mother paddy" would be put together with the bundles of paddy from the harvest. The bundles were later stored and arranged with the bundles in a special barn used for storing paddy.

As the ceremony is finished, children and farm laborers who have been waiting all morning and who are chatting, gossiping and joking with one another, usually eat the offering. As soon as the offering is eaten, the laborers start the harvesting process. The work is well distributed between the men and the women although the division of labor is rather flexible. The male laborers cut the stalks, collect them and carry them to the peeling place located on the field harvested, while the female laborers peel the paddy using a simple tool of a short wooden ladder. They pick a handful of rice stalks and beat the tips that are full of

ripened rice grains on the wooden tool until the grains fall off the stalks. The grains are collected on a wide canvas sheet under the ladder, and as they are piled high, the female laborers will put them in the sacks previously used for urea fertilizer. After all the stalks of paddy are cut, peeled off, and packed in sacks, the male laborers will bring them to the millhouse, which has many of functions including storing and drying the paddy. Concerning the male and female division of labor in harvesting mentioned above, there have been changes when compared to the past. In the past, the women were the ones who harvested the paddy with a special knife, while the men were the ones who tied the paddy into bundles and brought them from the field to rice barn.

In the millhouse, weighing the harvested paddy involves usually the field owner and the farm laborers who have a share-crop relationship with him. After all the paddies are weighed, both the owner and the laborers will know how much is his share of the harvest based on the 5:1 proportion. In illustration, the last harvest of March 1999 one of his fields resulted in 8.5 quintals of paddy. Based on the above proportion, the farm laborers got a share of 1.4 quintals, while the remaining 7.1 quintals belonged to him. From his share, he also paid for the services of the water supervisor who was also present during the harvest and the crop distribution. The water supervisor got 14 kilograms for the work of irrigating the 0. 25 hectares of the subject's land.

If the sun shines brightly on the harvest day and the fresh paddy is not wet; it can be stored in the barn for a couple of days before it is dried. However, if the harvested paddy is rather wet, putting it in a sack too long can be dangerous, as it will sprout. Therefore, the paddy must be dried right away or on the following day, at the latest. The paddy drying can be done on the cemented front yard of the millhouse. It might take one day or several days depending on the weather. In extremely hot weather, if the farmer is diligent in turning over the paddy, the paddy will dry fast. Some farmers usually gather around during this time to dry their paddy while gossiping and joking with others. Thus, the millhouse seems to be one of the places that have socially quite a significant meaning for the people of this village. After being dried, the paddy is ground. The cost of grinding the paddy is 200 *rupiah* per kilogram. While his wife is grinding paddy, a female laborer collects the husks of the rice grain used for feeding poultry and fish. Meanwhile, the operator of the grinding machine is collecting the rice grains.

The Local Irrigation System and Its Dynamics

In the village of *Situ Uncal*, irrigation is supported by the people who use it through the local institutions of the water supervisors: *ulu-ulu* and *siring*. The former is a local resident appointed by the regency (”formal” water supervisor). Whereas, the latter is a local resident appointed by the farmers (”local” water supervisor). Theoretically, the ”formal” one supervises the local water supervisor. Since the ”formal” water supervisor does not do a good job, the farmers are reluctant to pay him with the crops after the harvest. Thus, in reality, the farmers in the village pay only the local water supervisor. This local water supervisor will earn fifty-six kilograms per hectare per harvest. Usually, during the harvest he will

come to the fields carrying sacks. When the harvest is done and the paddy is weighed, the water supervisor can claim his share for his work.

A local water supervisor has a duty to manage the irrigation system in the village. He opens the closed water channels in the water-source area, to fix the irrigation channel in case of leaking, and to arrange water distribution to farmers' fields. It is a big job during the dry season because he has to open the water channel from upstream almost twice a week. The process of distributing water is also very sensitive considering the limited amount of water available and the large amounts the farmers need for their fields. It is not at all unusual that a conflict concerning water distribution rises among farmers during the dry season. Nevertheless, the duty of this *siring* is lighter during the rainy season as there is normally then sufficient water in the irrigation channel.

As it has been mentioned earlier, there are three small streams in the village that carry the water from upstream to the rice fields. Each of them is managed by a water supervisor. The first stream named *Cirahong*. It is situated in the western part of the village and flows from South to North. It makes the border that separates the village housing compounds from the fields in the West and North. These water channels was constructed by the early inhabitants of the village because of the urge to open up a wider range of farmlands to the North of the village, which is topographically lower than the courtyard of the housing area. For a long time the channel has been functioning as one of the important irrigation system in the area, since it waters into 25 hectares of rice field in the area. Beside the stream mentioned above, there is another important creek in the village named *Setubala*. It is situated in the South of the courtyard of the housing area. It separates housing compounds from fields on the marshy lands which used to be a lake. The stream irrigates about 15 hectares of the fields close to the marshy areas. Meanwhile, the last stream is situated farther to the South of the marshy lands and named *Cadasgantung*. This "river" separates the village from another neighboring village in the eastern part of the hill terrain. It is located higher than the village, therefore, it can irrigate the hilly part of the village located in the North, exactly behind the sub-district meeting hall and the private junior high school complexes. The river channels irrigation to about fifteen hectares of rice fields in the area.

The water in the three small streams mentioned above comes from the current of a big river, named *Cihideung*, to the West of the village and flowing from South to North. The river upstream is in the highlands near the peak of Mount *Salak*. There are a lot of boulders in the river, but the current is still quite swift. The villagers built three dams by piling up big river stones to cut the course of the river. The water rose higher and some of it flowed into the three tributary streams they had constructed earlier. This work was carried out together by means of mutual cooperation. Similarly, whenever the dam needs repairing and the water supervisor cannot do it on his own, the villagers will fix it on a cooperative basis. The work takes only one or two days. For example, in March 1999 the people of the village worked together to fix the dam, raising its height and building it up, so that the course of the irrigation channels would flow smoothly. That time, the people become more enthusiastic since the water channels had been reconstructed by the government.

The subject is, for farming, very dependent on the irrigation flow from the *Cirahong* river above mentioned. Fortunately, the local water official is, in charge of managing the small river, is known to be diligent, fair and responsible in his job. He always enjoys his work because, in his opinion, maintaining

the flow of the water can serve both as a religious act and a public service. Water keeps life going; therefore, if the water does not flow smoothly to the fields, there will not be a paddy blessing for his neighbors. Because the farmers think that he is quite hardworking, air and responsible in his job, he is still trusted to occupy this position. In terms of being fair, a water supervisor must distribute the water evenly to all farmers. The standard of measurement is a 30-cm wide and 2-cm high hole dug for irrigating water to the fields. The amount of water distributed can be equal to the flow rate of the water used by a farmer or may exceed the flow rate in special condition, such as during plowing, in which a lot of water is needed to muddy the soil of the dry field.

As long as he is in charge of the irrigation, there has hardly ever been a case of water conflict during the dry season because of his unfair dealings. However, when a long dry season struck as an effect of *El Nino* back in 1987, there were ten cases of water conflicts. In this dry season, that was so unlike the usual ones, the fields on the North of the village suffered from a water shortage. A water conflict is more often caused by the greediness of some farmers who only think of their own benefit. The incident usually starts with an attempt by a farmer to ”steal water,” i.e. diverting the water to his field outside of his scheduled time. The process often takes place at night. If a conflict occurs, the local water supervisor usually intervenes in reconciling the parties and straightening out the matter. The farmer, found guilty of stealing the water, will not be given any material sanctions. However, the guilty farmer will face social consequences, such as getting a negative reputation and become the object of gossip and ridicule.

So long as the subject has worked on his fields in these two locations, the local water supervisor, in charge of distributing water from the channel, has been changed three times. The first man worked for twelve years. As he grew old and had less energy to carry out his duties of distributing water, the farmers then looked for his replacement in 1998. The replacement process took several weeks. At first, there were one or two farmers who complained about the irregular flow of water to their fields. When they asked him to fix the water channel, which might be leaking or blocked, he was unable to do his job because he was ill. Since this went on for quite some time, the farmers then discussed the matter during the break or just before they started working in the fields. This discussion was very informal as it was held spontaneously in the subject’s field. At that time, the subject was one of the farmers who asked his neighbors to hold the discussion.

The result of the first discussion was that the farmers were going to ask the local water supervisor whether he would still be capable of carrying out his duty in the future. At that time, the subject talked to the local water supervisor on behalf of his neighbors. He stated to the subject that he was no longer capable of carrying out his duties due to his health problems. After that, a second discussion was held, in which the farmers agreed to appoint a new supervisor. After the second and third discussion, they decided to nominate the new local water supervisor. This second local water supervisor was only in charge for three years since he could not fulfill the farmers’ expectations to do a better job than the previous one. When farmers came to ask him to accelerate the water flow from upstream, he often did nothing about it. In fact, he often refused and even scolded the farmers for bothering him and disturbing his break after working all day on his field. This had happened ever since his first year. However, the farmers still tolerated his behavior while hoping that he would soon recognize his position and duty. Nonetheless, in the second year, the farmers could not stand it any longer so that they spontaneously held a meeting.

At this meeting, the farmers decided to replace him. After reaching a consensus to find a new candidate, they contacted him. However, he refused to resign because he could make quite a large income each season. In one season he can get as many as 1.4 tons of paddy since he is in charge of irrigating 25 hectares of land, which is divided into 200 plots of rice field. Finally, the farmers agreed to let him keep his job, under the one condition that he had to carry out his duties well. However, a year later there still was not any improvement. The local water supervisor finally realized that he was no longer wanted in his position so that in the third year he was willing to be replaced by another villager who is still working at this date.

Farmers and the Crisis

The economic crisis that has struck Indonesia since mid 1997 also seems to affect the people of the village. Farmers find life more and more difficult as prices have skyrocketed beyond their average financial ability. For example, the prices of fertilizers, as well as pesticides, have increased over 100 percent. Dramatic price-hikes occur on basic daily needs, especially for rice, which now costs four times as much. Many people in this village, particularly small-scale farmers and farm laborers, have to buy rice in the market or at the nearest small shop for their daily consumption. The increase on the price of rice is caused by the scarcity of rice stock on the market added to the government policy to import rice during the crisis. The imported rice has to be paid for in US dollars, while the value of the *rupiah* has been greatly (seventy percent) depreciated against the currency.

Furthermore, the government has also raised the basic price of paddy from 700 to 1500 *rupiah*. The policy to raise the basic price of paddy is aimed at improving the farmers' lives as well as stimulating the productivity of paddy harvest. It is believed that the high price of paddy will raise the farmers' income and accordingly will encourage them to plant paddy. In due course, the production of domestic rice will be in creased, which means reducing the state dependence on imported rice. However, in reality, particularly for the people of the village, this policy has been quite a blow. As the basic price of paddy rises, the price of rice has skyrocketed up to as much as 2000-5000 *rupiah* per kilogram, depending on the quality. It is a "disaster" for the people who do not have any farmland or have only a small land tenure. These farm laborers and peasants experience quite a problem in obtaining rice, as it has become so expensive. Before the crisis, with a daily wage of 5,000 *rupiah*, a male laborer could afford 5-10 kilograms of rice. After the crisis, the price of rice increased many times over, while the daily wage has only been raised to 7,000 *rupiah*. Thus, he only has enough for 1-2 kilograms of rice for the whole family, which usually consists of 4-5 persons. Moreover, he also has to provide for other daily needs, such as side dishes of vegetables and meat, and pay for his children's education.

Table: Harvested Area of Paddy, Production and Productivity 1975-1998

Year	*Harvested Area (in Hectare)*	*Productivity (ton/hectare)*	*Production (1000 ton)*	*Production Growth*
1975	8495	2,63	22331	-
1976	8368	2,78	23301	4,3
1977	8360	2,79	23347	0,2

1978	8929	2,89	25772	10,4
1979	8850	2,97	26283	2,0
1980	9005	3,23	29652	12,8
1981	9382	3,49	32774	10,5
1982	8988	3,74	33584	2.5
1983	9126	3,85	35302	5,1
1984	9764	3,91	38134	8,0
1985	9902	3,97	39033	2,3
1986	9988	4,00	39726	1,8
1987	9923	4,04	40078	0,9
1988	10138	4,11	41676	4,0
1989	10531	4,25	44726	2,6
1990	10502	4,30	45179	1,0
1991	10282	4,35	44689	-1,1
1992	11103	4,34	48240	7,9
1993	11013	4,38	48181	-0,1
1994	10734	4,35	46641	-3,2
1995	11439	4,35	49744	6.7
1996	11569	4,41	51101	2,7
1997	11141	4,43	49377	-3,7
1988	10788	4,45	46290	-8,8

Source: BPS (Statistical Central Bureau), Rice Production 1998

For some farmers in the village, this condition has been worsened with the long dry season lasting from mid 1997 to early 1998. Particularly for farmers whose fields are located outside the previous lake and marsh area, the dry season has caused them suffer some losses since the irrigation does not run properly. Farm laborers also have less job opportunities, as fields become dried and unproductive. Yet, they are reluctant to find a living in the city for there have been a relatively limited job opportunities in the informal sectors during the crisis. Moreover, many of the villagers who previously went to work in the city have started to come back to the village due to a lack of urban job opportunities. It is true that some field owners in the village can still farm their lands, especially those whose lands are located on the previous lake and marsh area. Unfortunately, some harvests have failed as rats and insects attack their fields. Many of them relate this situation with the natural phenomenon of *El Nino* that they learned about from television and agricultural counselors from the government office of the local regency, who usually give them information and guidance related to farming.

Since the government introduced the intensification-farming program back in the 1970's, the regency office of agriculture has actively helped farmers in solving any kind of problems they have had in farming. One of the ways is by sending trained field counselors (PPL) to villages. A councilor is assigned to give counseling to one up to three villages; thus, he usually visits the villages in turn. If the councilor is active, he will come to visit one village once a week. During the visit, he will meet with the farmers either individually or in a group through such organization as farmers association. The presence of these counselors in the fields is considered to have been relatively effective during this crisis, especially if they

bring new information on how to minimize the impact of the crisis on the agricultural sector and the difficulties resulted from the long dry season. By the mid of 1997s, for example, they introduced a new technique to rice cultivation known as direct seed planting (*tabela*), in which farmers can directly plant the paddy seeds on the field without going through the seeding process. According to the councilor, this technique has some advantages because paddy can continuously grow well so that the harvest will come two weeks earlier than usual. Even though some farmers in the village do not really give much heed on this technique, there are still many others who give it a try. In January 1998 some students from Bogor Institute of Agriculture conducted an obligatory internship, in which senior students go to villages to apply their knowledge and to conduct social actions in the interest of the villagers. They supervised the farmers who were interested in practicing the new planting technique mentioned above.

Another role of the councilor is to encourage the activities of the farmers association to be more effective, such as by helping to develop the cooperative and thus to give more benefit to the farmers during the crisis. The co-op was established in mid 1998 and is a part of the farmer's group activities. The cooperative office located on the West side of the road that links the South and Central parts of the village. The office is a semi-permanent hut constructed with bamboo and wood. Every Tuesday from 8 a.m. to 3 p.m., this place is always crowded with the cooperative members who come to visit. Now the cooperative has 140 members, who usually save their money through the cooperative. Members who need an easy, near, low-interest (6% p.a.) loan also come to this place on that day. They usually need the money for various major necessities, such as farming capital and school tuition. In addition, the PPL helps farmers to obtain grants and aid from the government. For example, in March 1999 the office of fisheries of the Bogor regency donated 80 thousand large-prawns to the people, particularly members of the farmer's groups. In another example, in mid 1998 the members of the farmer's groups were also given a facility to obtain credit for a farming scheme (KUT). A package of credit is worth around 900,000 *rupiah*. The credit is distributed to farmers through Bank BRI based on a proposal submitted collectively by their farmer's groups.

The councilor together with scholars from *Bogor* Agriculture Institute (IPB) introduced, in December 1999, "the integrated farming project" to the members of the farmers association. This project originally aimed at setting a concrete example to encourage farmers to make use of narrow fields effectively so as to add their domestic income during the crisis. Thus, on such a limited space, farmers can breed fish and manila ducks, as well as grow vegetables. The worm and edible snail breeding is very useful for making nutritious and inexpensive food for the fish. The snail is fed with vegetable leftovers, while the worm can be fed with animal droppings. Even though this project has run smoothly, the expected outcome has not been achieved. In the future, it is expected that farmers will develop the same kind of project, while the project itself can generate profits for the farmers association in order to support their cooperative.

The farmer's group in the village was founded with the guidance from the PPL and the sub-district government in 1995. This organization aimed at helping farmers to solve their problems and, at the same time, improving their standard of living. On that account, the group was named "*Mekar Sari*," which means giving benefit to farmers. Although this organization is formed on the lower level, its grass-root characteristic does not really show because it tends to represent the extension of government interests. Therefore, often times this organization seems to be artificial, formal and ceremonial in nature, and is oriented towards the government programs that are often non-continuous and nothing but a burden for

the farmers. For instance, in 1996 and 1997 the local government had this farmer's group participated in an inter-group competition on the regent, provincial and even national level. For this purpose, the farmers had to volunteer their time and energy in preparation for competition and put aside their farming routines. Even though the group finally ranked fourth on the national level, there has been no significant impact on the improvement of the farmers' standard of living.

Another case is when government officials come to survey their organization and, at the same time, bring donations. In 1997, the local government gave a donation to fix the farmers' (hut) used as a place for discussion, which had been blown down by the wind. As a matter of fact, the total of the donation given was relatively small or just equal to the money they had to spend to welcome these officials. The farmers had to arrange the place, prepare the food, leave their work, and so on.

The farmer's group has been legally recorded as a rural institution in a notary document. The leader, secretary, treasurer of this group is democratically chosen by the members. The respondent has a position in this group, namely as head of agricultural section. This group's most prominent activity at the moment is the saving and loan cooperative. The co-op has apparently turned into an alternative financial institution for the villagers during the crisis. In the old days, people used to borrow some money from moneylenders at a very high interest rate. In spite of this, *Mang* Oleh thinks that the farmer's group does not give any benefit to villagers who do not become members of this group. The non-members usually are farm laborers, old widows, and other poor and needy people who do not have their own land. In his opinion, the existence of this farmers association only has limited usefulness, such as helping in obtaining donations. This facility, however, cannot be enjoyed by all villagers but only by certain farmers who happen to be active in the organization.

The majority of farmers in the village affected most by tumultuous disasters in the country such as long drought caused by *El-Nino*, haze problems, economic crisis, and political turmoil. In such a difficult situation as illustrated earlier, the hope of the poor villagers cannot be fully dependent on the government and their programs. Instead, these people have to empower themselves by utilizing the potential within themselves and their environment. They have to find a way around the crisis through activities by a grass roots organization in a small neighborhood. This kind of organization has always existed in their society and is deeply rooted in their social cultural life. Their activities are in line with social and religious values as well as real domestic economic needs.

Concerning this, the subject has a dream deliver his family and neighbors from the crisis. He thinks that, in the future, he will prefer to farm commercial vegetables so that he can earn a lot of money for his family and the laborers who work for him. This idea occurred to him after his son entered the university and needed more money especially during the crisis. He knows that the import demands of Japanese consumers for agricultural products, among others for Japanese eggplant, etc. are very high. He has a plan to contact an exporter in the city who can provide him with the seeds and sell the product to him when the harvest comes. However, he will never forget to plant paddy, at least for growing rice for his own consumption.

Beside this pragmatic farming strategy mentioned above, the subject thinks that mutual help among the neighbors can also offer another important solution to the serious life problems of the villagers. This is

one of the reasons why he and his family have taken part in organizing three socioeconomic activities at the grass root level. The respondent, for example, has organized a rotating credit plan aimed at helping members to hold a ceremonial feast. On the first Sunday of each month, He collects the money from his neighbors (Rp.10, 000 each). Since there are 80 members of this rotating credit plan, in one month he can collect as much as 800 thousand *rupiah*. The money is then given, in turn, to its members who will hold ceremonial feasts to celebrate such events as a wedding, seven months of pregnancy, childbirth, and circumcision. If, in one month, there are more than one members who have not had their turns and are going to hold a ceremonial feast, he will draw a lottery to avoid conflict. Meanwhile, if there is no member holding a feast that month, the money will be given to a member who has not had his turn, yet has an urgent need, such as renovating his house or paying for his child's annual college tuition, which can be very expensive. The advantage of this rotating credit is quite significant so that people in this village can carry out their social cultural activities or even domestic economy without going through too much trouble. Moreover, in this time of crisis any extra money spent can result in a serious impact on the domestic economy. Therefore, an extra financial source, which is safe, easy and in harmony with the local social life offers a good alternative in these difficult times.

Another social economic activity is the rotating credit for the feast of sacrifice (*qurban)*, which has 40 members and is coordinated by his wife. While attending a regular meeting of a religious group of women who recite the Koran and study Islam, each member donates 500 *rupiah*. Thus, in one week the money collected is around 20 thousand or 80 thousand *rupiah* per month. Within a year, the group can collect more than 900 thousand *rupiah*, which is then used to buy sheep in the month of the feast. With this amount of money, this group can afford eight sheep, which will be slaughtered on the day of the feast, known as the sacrificial ceremony. Thus, in one year there are eight members of this religious group who get take their turns to hold the ceremony. Since the activity has been running for four years, there are eight people left who have not had their turns. The sacrifice is held on the 10th day of the last month according to the local as well as the Islamic calendar, which in 1999 fell precisely on March 28. On that day, the *Hajj* pilgrims in Mecca are completing the final stage of their pilgrimage, and cattle are sacrificed as a sign of piety to the Almighty God. A third of the meat is given to the person who sacrifices the cattle, while the rest is given to the poor and needy, especially those in the neighborhood.

This activity has two positive effects. First, for the members, it can be viewed as a low-cost alternative to performing the sacrificial religious act and ritual. It can be imagined that at the time of crisis a villager who wants to sacrifice has to buy a relatively expensive sheep. By joining this rotating credit plan, eventually he can get a turn to perform the religious act of sacrifice. Secondly, for other villagers, especially the poor, this sacrifice ritual makes them happy since they can have a share of the meat, which they can rarely eat in their daily life. During the crisis the price of meat has soared three times higher than before the crisis began.

Aside from the two grass-root activities above, the subject is also involved in organizing another activity. The community members save money weekly and collect it for one year to buy a buffalo (*matung*). The animal will be slaughtered and its meat will be distributed one day before the day when Muslims celebrate the end of the fasting month, the holy day of *Idul Fitri*. He has been engaged in these rotating credits, for a long time, long before the economic crisis hit his village. These activities seem to have a greater benefit for neighbors who are economically weak.

The subject became an organizer of this type of activity basically in order to continue the tradition of his father-in-law, who had told him to carry on the tradition and to help neighbors to have a good meal on the holy day. For the rural community, especially the people of the village, meat has a very important meaning on that holy day. As they rarely have meat on their daily menu, having meat on that day is very special. In fact, according to a villager, having meat on the holy day is far more important than buying new clothes. Therefore, many villagers try to buy meat even though they have to borrow the money from moneylenders or sell their paddy.

He once asked his father-in-law about the origin of this tradition. According to the father-in-law, a long time ago there was an incident on the holy day of *Idul Fitri*. Three children and their families visited their father. The two older children brought meat with them, while the youngest only brought salted fish. The father asked his youngest son why he did not bring meat for him. Answering the question, the son said that he did not have the money to buy meat, as the money he had was just barely enough to live on and he could not even buy his children new clothes to celebrate the holy day. Upon hearing this answer, the father was lost in thought before finally realizing that each person had a different life. Therefore, to make everyone happy and have meat for the meal on the holy day, the father had an idea to organized the saving activity. Since then, this activity has become a tradition and has been adopted by many other villagers.

In relation to saving, the subject collects the money from his neighbors once a week. Every Sunday he purposely works on his field only until two in the afternoon. After that, he usually rushes back home and starts making his rounds to his neighbors' houses to collect their donations. The amount of money to save each week for a package of meat weighing 2-4 kilograms is 1000 *rupiah*. Meanwhile, the price of the package paid in full is 55 thousand *rupiah*. A kilogram of meat sells for around 26 thousand *rupiah* on the market. This is quite large amount of money compared to the small income earned by most farm laborers. However, if the package is paid in installment weekly, it will still be affordable even for poor laborers and widows. To put simply, a farm laborer earns 5000 thousand *rupiah* for one day's work. From this money, the laborer can put aside one or two hundred *rupiah* to pay for the dues to be collected by the organizer on Sundays. The money starts to be collected on the second week of the first month of local as well as Islamic as well as local calendar and ends two weeks before the fasting month begin. Thus, the period to collect the money extends for 44 weeks. In the fasting month, the money collected for each package is 44 thousand *rupiah* and the total money collected reaches five million two hundred thousand *rupiah*. This amount of money was enough to buy two big buffaloes at that time. However, after the crisis, the price of a big buffalo has reached up to four million *rupiah* each. Therefore, during the fasting month members still have to add as much as 11 thousand *rupiah* to their weekly contribution to afford a package of meat costing 55 thousand *rupiah*.

He do not keep the money collected in the bank. Banks seem to be a modern financial institution unfamiliar to farmers like *Mang* Oleh. He usually saves the money from his harvests in a form of jewelry from a Chinese merchant in the city, uses it to pawn lands belonging to his neighbors who happen to need some money, as well as putting the money into the local cooperatives. In the case of communal saving activity, the money collected from his neighbors, for up to one year, is used for loans. Thus, he lends the money to trusted neighbors who run a business so that the business can thrive. He does not

make any profit at all in lending the money, which he does merely on account of the security in saving the money as well as helping his neighbors. However, some neighbors are use give him some money later as their expression of thanks for his help. The important thing for him is that the debtors can return the money in time for him to buy buffaloes two weeks before fasting month begin. If he buys them later, for instance in the fasting month, the price of buffalo usually has gone up. Thus, the communal saving members receive less meat in their packages.

Each household usually takes only one package. However, there are also relatively well off villagers who take more than one package. In this case, the subject usually sets a limit in which one household is allowed to take a maximum of two packages. This is aimed at giving an opportunity to indigent neighbors to join this activity and have the meat on the Holy day. In last year's activity, the buffaloes were slaughtered on the Holy day in 1419 of the Muslim year with a total member of 120 households consisting of 130 packages. During this period, the money collected was around seven million *rupiah*, which was enough to buy two buffaloes. As the buffaloes were bought two weeks before fasting month, he had to keep them for approximately one month until the time came to slaughter them. He did not get any advantage from this activity, except for a package of meat that, based on tradition, is awarded free to the organizer of this activity. Apart from that, the person who keeps the buffaloes for one month after the purchase also gets a package for free. Thus, he got two packages of meat gratis. Even though there should be 130 packages for members, the meat was allotted in 135 packages, in which two packages were for the organizer and the buffalo keeper, two more packages for the sub-district officials, and one package left for the slaughterer.

His neighbors --the rich or the poor, the old or the young-- always gladly welcome the event of buffalo slaughtering. They are happy to greet the holy day of *Idul Fitri*, that is, to celebrate on the next day. The slaughtering of the buffaloes was held one day before *Idul Fitri* of 1419 of the Muslim year, precisely on Tuesday, 19 January 1999. Thus, The buffaloes were slaughtered on Monday, on which day the children had been gathering around the buffalo shed since dawn. hey laughed happily, joked around, and stepped on the crossbars of the shed. After the adults finished their morning prayers, the children started to help prepare for slaughtering, cleaning, and distributing the meat. The slaughtering was done early in the morning just when the sun was about to rise. Cleaning of the meat, the hide and the innards as well as distributing them can take several hours. After the package is ready for distribution, the villagers were called through a loud speaker although long before that most of them usually had gathered at the slaughtering location, 50 meters behind his house. The packages were then distributed based on the list on his hand.

The women seemed to be very happy to receive a package of 2.5 kilograms of meat although the meat they got that time was not as much as usual since the buffaloes that he could provide were not too big. The price of buffalo had increased again shortly before fasting month begin. The price-hike was not only due to the economic crisis that was still going on but also because buffaloes were in high demand during that month. As many other people also held the same communal saving activity, the stock of buffalo in the market in that month became low. Therefore, among the happy villagers, there were also some others who were complaining about the weight of the package being less than last year's 3.5 kilograms. Nonetheless, it seems that these people are among those who envy the subject's success in organizing the activity in the middle of the economic crisis. Some among them also used to be the communal saving

activity organizers who did not succeed in the past because the money collected was spent for their own daily needs.

Watching his neighbors happy to have the meat to celebrate the holy day of *Idul Fitri* always delights him. He feels happy to be able to do something useful to alleviate their burdens as life is getting more difficult and burdensome. He himself is not really affected by the economic crisis, especially the price hikes. According to him, this is likely due to the careful management he has been running so far rather than the size of his property. For a long time, he has lived economically and never depended too much on consumer goods, except for basic necessities that he cannot produce himself, such as sugar, salted fish, salt, etc. Daily consumption is directed more toward a subsistence pattern. For instance, vegetables, rice and side dishes are provided by his own garden or fishpond. In this case, he is among the fortunate villagers with quite large estate that enable his subsistence economic activities to function very well. However, sometimes he also buys meat and eggs, especially when he is going downtown or after the harvest.

In his opinion, many of the well-off people in his village have experienced difficulties during the crisis due to their careless in household management. For example, one of his neighbors would rather buy cars on credit than invest the money in his farming business. The informant has never been interested in cars, because he feels a car is unsuitable for a farmer who has to spend most of his life in the fields. However, he does not mind buying modern consumer goods, as long as he considers the goods necessary and useful. Once, his son asked him to buy him a motorcycle for the son's transportation to school. At that time, the farmer agreed with this idea, but his son finally changed his mind after one of his friends had a traffic accident. In spite of this, he bought various electronic gadgets, such as a TV, refrigerator, and modern rice cooker (magic jar). The television set is important not only for gaining access to information concerning agriculture but also to serve as a means of entertainment. He is mostly interested in the news and agricultural counseling programs on television, while his wife and daughter prefer the drama series on television. His son, seems to enjoy the news and films. Although, each member of the family seems to have different interests, they are very flexible in deciding which show to watch on television. The refrigerator is important for preserving food and make small *popsicles* to sell to the nearest small shop. Concerning the magic jar, he said that it is rarely used to cock rice. His wife usually uses traditional cooking ware and stores the cocked rice in the magic jar. By using this technique, the rice stays fresh and warm for several days.

Concluding Remarks:
The local Social and Cultural Dimensions of the Market Expansion

The discussion of aspects of the research site's "political geography" presents the fact that, since the 1970s onward the village has experienced physical, social, economic as well as political changes. The infrastructure of the village has been transformed from the "traditional" into "modern" forms. Some examples can be seen here, among others the construction of the rice-mill house at the turn of 1970s, the building of the street in 1986, introduction of modern lighting in 1987, the installation of a telephone system 1992, the use of tractors in 1997, etc. The social structure of the village is characterized by the presence of rural occupational diversification, grassroots organizations' dynamics, contractual job

relations, etc today. We also observed the fact that many farmers sells their crops on the market. This has resulted in the massive need for cash as we can see from the establishment of the local financial institution (savings and loans cooperative) as well as the development of a ”trading” sector in the village. In the meant time, the political structure of the village has been transformed from ”conservative” one into more a democratic and critical forms following the social and political changes that have taken place on the macro level of the Indonesian society. These changes, seem closely connected to the fact that the market globalization process has influenced the process of integration of Indonesian society into the world economy (Booth, 1998; Bowie, 1996; Bresnan, 1993; Evers, 1997; cf. Featherstone and Lash, 1999; Urry, 1999; Wallerstein, 1980). This process has been followed by a ”modernization” process of the society including rural areas. These process transforms peasants (subsistence production) into farmers (market production) (Evers, 1996; Evers and Gerke, 1999; Hill, 1997). Politically, this market expansion process can be connected also with the democratization process of the society, especially since the crises teaches Indonesians that an undemocratic system does not fit with either the market dynamics or market principles (Alatas, 1997; Anderson, 1998; Corden, 1999; Falk, 1999; Hirst and Thompson, 1999; Liddle, 1996; McVey, 1996).

Following the discussion of the village dynamic, the data on the actor’s intergenerational biography shows empirical evidence of the comparatively long term nature of encounters of the villagers with the market expansion process. The subject’s father was a ”peasant” who at the turn of 1970s migrated to the city involuntarily and worked in the informal sector of the economy. As rural lowly-qualified labor, the subject’s father was absorbed into the informal sector of the economy by working as *pedicab* driver. However, the subject’s father changed his job and later worked as a local retailer that supplied an exporter of certain agriculture products. Based on these activities, the subject’s father was able to buy land and build a house. He thus gained a higher social status and was respected by his neighbors. This ”story” reveals the fact that since, the turn of 1970s, in the city many new job opportunities can be found in the formal as well as the informal sectors of the economy as a result of the impact of the ”modernization” and integration process of Indonesian society into the world economy (see Evers, 1991 and 1980; cf. Portes et al., 1991; Sassen, 1991). These processes also provides economic opportunities for the villagers to develop networks with traders in the city. These have direct relations with the world market (see Smith and Feagin, 1993; Smith and Tardanico, 1993). This leads to ”upward social mobility” as well as the accumulation of cultural capital by the local actors (see Evers and Gerke, 1999; Bourdeau, 1991; cf. Giddens, 1993).

Now, we look at the subject’s process of encounter with the market expansion phenomena. He started farming seriously shortly after his marriage in 1976. He was cultivating a quarter hectare of land given to him by his wife’s parents. As a ”peasant” his goal was subsistence production. However, he was entitled to the economic support of his wife’s family who were willing to provide for his family’s needs for one full year after his wedding. He was able to sell his crops and save in the form of jewelry as well as a mortgage on land. With this kind of strategy, he was able to enlarge his land holding as well as to buy ”modern” household goods as necessary such as television, refrigerator, etc. From 1986 onwards, he has owned land amounting to about two hectares in size, although, he is presently cultivating only a hectare of the land, another hectare has been rented out. To satisfy his household subsistence needs, he always saves about 700 kilograms of paddy per year. The rest of crops are usually sold on the market through local retailers. Thus, he is considered a successful ”farmer” in his village owning a large house

with comparatively modern facilities, with his children going to school, and he has become an important farmer activist in the village. This phenomena shows how the subject has been affected by the globalization process. He has become a member of the local society that has been incorporated into a transnational system of social stratification. Culturally, the subject also experiences changes of life style oriented towards consumption of ”modern” products (see cf. Castells, 1997; Evers and Gerke, 1999; Giddens, 1994; Portes et al. 1991; Roberts, 1994). This ”modernization” process of the subject and his household allows him to develop cultural capital as a successful ”farmer” as well as to gain membership in the local strategic groups such as the farmer's association in the village (see Evers, 1966; Evers and Schiel, 1987; Korff, 1986). Through the production process, he orientates himself to the market. He also develops a kind of social network together with some local retailers based on trust and ”ethnical” sentiments. In a nutshell, the subject's social and cultural life is characterized by the transformation from a moral economy of peasant to farmer (see Evers and Schrader, 1994).

In connection with the fact that the subject is well known as a ”successful” farmer, his land ownership system and farming ideas provides additional evidence of the local social and cultural transformation affected by the market expansion process of the world economy. Increased land ownership becomes an obvious cultural symbol of wealth and prosperity in the rural local community. Thus, this land ownership system in general can be related to the process of cultural capital accumulation of the subject (see Evers, 1996). Although he offered some obvious reasons why he does not cultivate all his land himself, instead renting it, or share-cropping with some farm laborers, it seems the ”latent” motivation is more clearly understandable in terms of cultural capital. In this regard, having land rented out or share-cropped is a status symbol. This can impacts also to the better position of membership in certain ”ethnic” community and increases trust as well as strengthen social networks with the related actors to his market production process (see Evers, 1980; Geertz, 1960; Guinness, 1986; Koentjaraningrat, 1977; Leaf, 1991; cf. Urry, 1981)

In terms of the discussion of the subject's farming calendar and the local irrigation system, we find that there are changes in the social as well as cultural setting of local rice farming that can be related closely to the market expansion process of the world economy. For instance, the subject arranges his farming calendar based on the consideration of gaining maximum profit by selling his crops. Another example of the changes is the social relation between land owner and farm laborers transformed into a contractual one. Also the division of labor between male and female laborers is changing into a form that reduces the role as well as job opportunities of women. Related to the cultural setting, we can also observe that new consumption patterns are being established. Among others, the fact is that many villagers now do not consume their own paddy rather the ”market” rice. They produce paddy, however, they sell the crop to the local retailer who takes the product to the city. When their households need rice, they buy it from the small shop nearby in the village. The small shop owners usually buy the rice usually from the city and some of them import from Thailand, Vietnam, Japan or United States (see Booth, 1998; Bowie, 1996; Bresnan, 1993; Corden, 1999).

The presentation on the farmers and crisis high light the fact that there is a close relation between the wider arena of the global economy and the local situation (Carnoy, et al., 1993; Dickens, 1990; Evers and Korff, 2000; Harloe, et al., 1987; Korff, 1996; McGee and Robison, 1995). The farmers face the fact that the government agricultural policy as well as program design to ”help” them out during crisis did

not match the local situation and needs. For instance, the policy to increase the basic price of paddy profited the rich farmers most and leaves the poor farmer in an even deeper economic disaster. In this context, the role of the grassroots organization is crucial in reducing the poor farmer misery brought on by the crisis (see Castells, 1983; Rüland, 1984). In this regard, the organization can be used as the medium for finding some opportunities to improve the farmers life as well as how to emerge from the crisis. For example, the farmer's association in the village has introduced the "high-intensive farming system" that integrates various activities, among others fish, vegetable and manila duck farming. Whereas, the "cultural" grassroots organization such as rotating credit systems and cooperatives, represents alternative institutions to reduce the impact of the crisis on household economy. During the crisis, some farmers tried to find new way of farming by developing ties with a large-prawn retailer in the city. In the case of the subject, he sees that crisis can also bring more opportunity and luck. In his opinion, a local farmer can produce crops that can be possibly to be exported to Japan or the other countries. By doing so, he hopes that his market production will provide him with a new possibility to earn enough money. In this connection, he plans to develop social networks with some exporters living in Jakarta.

In the nutshell, the world economy has been undergoing a crucial transformation process in terms of market globalization (Evers, 1996; Evers and Gerke, 1999; Sassen 1999). This phenomenon is characterized by the emergence of transnational social stratification as well as by the development of the global life style and mass consumption behavior. Since 1970s, Indonesian society has been impacted by the market expansion process and steadily integrated into the world economic system (Booth, 1998; Bowie, 1996; Bresnan, 1993; Rüland, 1996). In relation to this, we witness that the society has carried out a rapid "modernization" process in urban as well as in rural areas. Following this process, the social and cultural dimensions of rural society have been changing, as shown in the development of local strategic groups and the related cultural capital (see Evers and Schiel, 1987). On the more micro level of analysis, this process has a crucial consequences on the "moral economic" aspects of the people who are transformed from subsistence ("peasants") to market oriented production ("Farmers") (see Evers, 1991; Evers and Schrader, 1994). Seen in this context, the social and cultural dimensions of the market expansion can be seen in the existence of social networking, trust and ethnic ties among the villagers (cf. Geschiere and Meyer 1998; Harloe et al. 1990; Roberts, 1994; Walton, 1993).

Glossary

alu--rice pestle
Angkot--small four-wheel minivan
ani-ani--special knife used for harvesting the local paddy
arisan--rotating credit
cingcau--a plant with leaves used to produce gelatin (used for cool drink)
gedeng--bundle
Golkar--the ruling party of "new order" regime
Idul Fitri--Moslem holiday following *Ramadan*.
Qurban--feast of the sacrifice
KUT--a credit farming scheme
maro--a system of work relationships between a land owner and a tenant where

each party get a half of the crop.
mertelu--a system of work relationship between a land owner and a tenant:
where the tenant get a third of the crop.
ngepak--a system of work relationship between a land owner and laborers:
the laborers do the agricultural task and get a fifth of the crop as their reward
Paceklik--long drought
Pagoahan--a room in which rice is stored
PPL--trained agriculture councilor
rujak manis--a kind of fruit salad with sweet sauce
siring--local irrigation institution formed by farmers
Tabela--direct seed planting technique
*Ulu-ulu--g*overnment-introduced irrigation institution
warung--small shop

Bibliography

Alatas, Syed Farid (1997) *Democracy and Authoritarianism in Indonesia and Malaysia*. Macmillan, London.

Anderson, B (1998) *The Spectra of Comparison: Nationalism, Southeast Asia and the World.* Verso, London.

Booth, Ane (1998) *The Indonesian Economy in the Nineteenth and Twentieth Centuries: A History of Missed Opportunities*. St. Martin's Press, London.

Bourdieu, Pierre (1991) *Language and Symbolic Power.* Cambridge University Press, Cambridge.

Bowie, A. (1997) *The Politics of Open Economies: Indonesia, Malaysia, and Thailand.* Cambridge University Press, Cambridge.

BPS (Statistical Central Bureau) *Rice Production 1998*. BPS, Jakarta.

Bresnan, John (1993) *Managing Indonesia: The Modern Political Economy.* Columbia University Press, New York.

Carnoy, Martin et al. (1993) *The New Global Economy in the Information Age: Reflections on Our Changing World.* The Macmillan Press Ltd., London.

Castells, Manuel (1983) *The City and the Grassroots.* Edward Arnold, London.

_____ (1997) *The Power of Identity.* Blackwell, Oxford.

Corden, Max (1999) *The Asian Crisis: Is There a Way Out?* ISEAS, Singapore.

Dickens, Peter (1990) *Urban Sociology: Society, Locality, and Human Nature.* Harvester Wheatsheaf, London.

Election Committee of the *Purwasari* Sub-District (1999) *Data Hasil Pemilu Tingkat Desa*. Sub-District *Purwasari, Bogor.*

Evers, Hans-Dieter (1966) The Formation of A Social Class Structure: Urbanization, Bureaucratization and Social Mobility in Thailand. *American Sociological Review* 5, 480-488.

_____ (1980) Subsistence Production and the Jakarta "Floating Mass". *Prisma* 17, 27-36.

_____ (1991) Shadow Economy: Subsistence Production and Informal Sector: Economic Activity Outside of Market and State. *Prisma* 51,34-45.

_____ (1996) Globale Märkte und soziale Transformation. In G. Müller (ed.), *Weltsystem und kultureles Erbe: Studie zur Sozialanthropologie*, Reimer, Berlin.

_____ (1997) Globalisasi dan Kebudayaan Ekonomi Pasar. *Prisma* 5, 79-86.

Evers, Hans-Dieter and Heiko Schrader (eds.) (1994) *The Moral Economy of Trade: Ethnicity and Developing Markets.* Routledge, London.

Evers, Hans-Dieter and Rüdiger Korff (2000) *Southeast Asian Urbanism*. Lit, Münster and London.

Evers, Hans-Dieter and T. Schiel (1987) *Strategische Gruppen.* Reimer, Berlin.

Evers, Hans-Dieter and Solvay Gerke (1999) Globale Märkte und symbolischer Konsum: Visionen von Modernität in Südostasien. In Claudia Rademacher et Al., *Spiel ohne Grenzen? Ambivalenzen der Globalisierung*, Westdeutscher Verlag, Opladen/Wiesbaden.

Falk, Richard (1999) *Predatory Globalization: A Critique*. Polity Press, Cambridge.

Featherstone, Mike and Scott Lash (eds.) (1999) *Spaces of Culture: City, Nation and World (Theory, Culture and Society)*. Sage Publications, Lanham.

Geertz, Clifford (1960) *The Religion of Java.* University of Chicago Press, Chicago.

Geschiere, P. and Birgit Meyer (1998) Globalization and Identity: Dialectics of Flow and Closure. *Development and Change 29, 601-615.*

Giddens, Anthony (1993) *The Constitution of the Society.* Polity Press, Cambridge.

_____ (1994) *The Consequences of Modernity.* Polity Press, Cambridge.

Guinness, P. (1986) *Harmony and Hierarchy in Javanese Kampung.* Allen and Uwin, Sidney.

Harloe, Michael, Chris Pickvance and John Urry (1990) *Place, Policy, and Politics: Do Localities Matter?* Unwin Hyman, London.

Hirst, Paul and Grahame Thompson (1999) *Globalization in Question*. Polity Press ,Cambridge.

Hill, H. (1997) *Indonesia's Industrial Transformation*. ISEAS, Singapore.

Koentjaraningrat (1977) The System and Spirit of Gotong Royong. *Prisma* 6, 20-25.

Rüdiger, Korff (1996) Global and Local Spheres: The Diversity of Southeast Asian Urbanism. *Journal of Social Issues in Southeast Asia* 11, 288-313.

Leaf, Michael (1993) Land Right for Residential Development in Jakarta, Indonesia: the Colonial Roots of Contemporary Urban Dualism. *International Journal of Urban and Regional research* 1, 476-491.

Liddle, William R. (1996) *Leadership and Culture in Indonesian Politics*. Allen and Unwin, Sydney.

McGee, Terry G. and I. Robison (eds.) (1995) *The Mega-Urban Regions of Southeast Asia*. UBC Press, Vancouver.

McVey, R. (1996) *Redesigning the Cosmos: Belief System and State in Indonesia*. *NIAS Report*, Copenhagen.

Portes, Alejandro et al. (1991) *The Informal Economy: Studies in Advanced and Less Developed Countries*. The Johns Hopkins University Press, Baltimore and London.

Roberts, Bryan (1994) Informal Economy and Family Strategies. *International Journal of Urban and Regional Research* 18, 7-23.

Rüland, Jurgen (1984) Political Change, Urban Services, and Social Movements: Political Participation and Grassroots Politics in Metro Manila. *Public Administration and Development* 4, 325-333.

_____ (1996) *The Dynamics of Metropolitan Management in Southeast Asia*. ISEAS, Singapore.

Sassen, Saskia (1991) *The Global City: New York, London, and Tokyo.* Princeton University Press,

Princeton.

_____ (1999) *Globalization and Its Discontents: Essay on the New Mobility of People and Money*. The new Press, London.

Smith, Michael Peter and Joe R. Feagin (eds.) (1993) *The Capitalist City*. Basil Blackwell Ltd., Oxford.

Smith, Michael Peter and Richard Tardanico (1993) Urban Theory Reconsidered: Production, Reproduction and Collective Action. In Michael Peter Smith and Joe R. Feagin, *The Capitalist City*, Basil Blackwell Ltd., Oxford.

Sub-District *Purwasari* (1999) *Monografi Desa*. Sub-District *Purwasari, Bogor*.

Urry, John (1981) Localities, Regions and Social Class. *International Journal of Urban and Regional Research* 5, 456-473.

_____ (1999) *Sociology Beyond Society: Mobility for Twenty First Century*. Routledge, New York.

Wallerstein, Immanuel (1980) *The Modern World-System II: Mercantilism and the Consolidation of the European World-Economy, 1600-1750*. Academic Press, New York.

Walton, John (1993) Urban Protest and the Global Political Economy: The IMF Riots. In Michael Peter Smith and Joe R. Feagin, *The Capitalist City*, Basil Blackwell Ltd., Oxford.