

A Century of Change in the Javanese Rural Economy: Contrasting Developments in Upland and Lowland Klaten

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Introduction

This paper reviews rural development in Java from an economic anthropological perspective focusing on change at the regional and village level. As past discussion of agrarian change in Java, in particular the Green Revolution debate, suffered from a too limited temporal focus, I will extend my time perspective to include rural developments during the last c. 100 years. To consider all major developments and regions are beyond the scope of this paper. Here I will rely on my field experience in the Klaten area of Central Java. I will briefly describe country-wide trends of continuity and change from the vantage point of this agrarian surplus area, focussing especially on the wet rice-producing village where I did research in 1978/79 and shortly in 1984.² However, besides assessing developments in the irrigated parts of Klaten I wish to consider change in the dry field areas of Klaten, an economic sector which has been too easily glossed over in past discussion of agrarian change in Java (but see Boomgaard 1989:ch.6).

The Klaten area is renown as a highly fertile rice-producing district located midway between the cities of Yogyakarta and Surakarta (660 km², 1.075 millions of inhabitants in 1978, cf. Figure 1 below). In former times this

1 My thinking on actual trends in Java is influenced by some of the findings presented at a workshop on agrarian change in Java, Centre for Asian Studies Amsterdam, in February 1988. Especially the exchange with the following people shaped my outlook: H. Antlöv, S. Cederroth, J.J. Fox, F. Hüsken, J.L. Maurer, T. Svensson. In addition I would like to thank M. Schweizer, S. Schmidt and J. Daszenies for helpful comments on a first draft which was presented at the Indonesia panel, Association of South East Asian Studies U.K. conference, Cambridge, in March 1988. Besides P. Carey's suggestions who organized the panel R.H. Barnes' points of discussion were very useful. As usual I am alone responsible for the content of this paper.

2 The fieldwork was conducted under the sponsorship of the Research Centre for Rural and Regional Development, Gadjah Mada University, with the approval of LIPI. It was funded by the German Research Foundation (DFG), and Margarete Schweizer collaborated as co-investigator. The main results of this research are presented in my monograph (1990a).

Central Javanese rice bowl belonged to the *apanage* region of the courts of (mainly) Surakarta and Yogyakarta. Plantation agriculture of sugar and tobacco started very early (in the 1850s) and experienced a tremendous growth in this area. Indigenous agriculture has been permeated by cash considerations for a long time, starting around at least the turn of the century (in parts even earlier, reaching back to the first part of the 19th century, cf. Carey 1986:85-6 and Houben 1987:ch.5). Large-scale as well as small-scale industry and the service sector developed alongside agrobusiness and remain very important in this region.

The tranquility often ascribed (wrongly) to the Central Javanese courts and their vicinity was never characteristic for this agrarian heartland of the principalities: Klaten looks back on a long tradition of banditry, crime and political protest in the 19th and 20th c. In particular, the area was in turmoil in the 1920s - strikes for higher wages afflicted the plantations, culminating into general opposition against the Dutch government and the Surakarta "feudal regime" (Larson 1987; Sartono 1978:130-133; Soejatno 1974). In the 1960s the area was a PKI stronghold which fueled conflicts on landreform between large landowners and small-scale or landless peasants (Sartono 1984:pt.I). In 1968/69 Klaten became an early trial area of the Green Revolution strategy. Accordingly some of the labour-saving devices and, later, the income-generating effects of agrarian intensification could be observed in the district very early. In essence the Klaten region is one of those foremost agrarian surplus spots in Java (like Karawang in the West and the Brantas area in East Java, cf. Maurer 1986; Fox, Kadarsilo and Soelaksono 1988) where country-wide developments can be anticipated in advance. Thus my discussion does not relate to "normal", but to extraordinary conditions which are diagnostic of future transitions in other areas of rural Java.

Prior to my description of agrarian change in Klaten I will shortly comment on the analysis of change (Schweizer 1990b). Herein I will refrain from contrasting a stable, traditional, oriental village type past with an ever-changing, modernizing, disharmonious present (Christie 1986; Bremen 1987). As far as I know the Javanese past was much more muddled and 'modern' than we formerly believed (Day 1986). The invented tradition of an eternal mandala-patterned state with subordinate peasants passively obedient to their masters has led us astray. The present as well is a mixture of cultural persistence and change which is sometimes difficult to decipher. In my paper I will focus on processes linking past and present. This should illuminate the interplay of cultural maintenance and cultural change. Some events, like the rice harvest, are diagnostic of these competing tendencies at the local level (Moore 1987). Furthermore, large-scale economic and political developments

at the national macro-level set the stage for on-going small-scale changes in the village. I will discuss such diagnostic incidents and the local impact of national events within a temporal and regional framework.

Agriculture

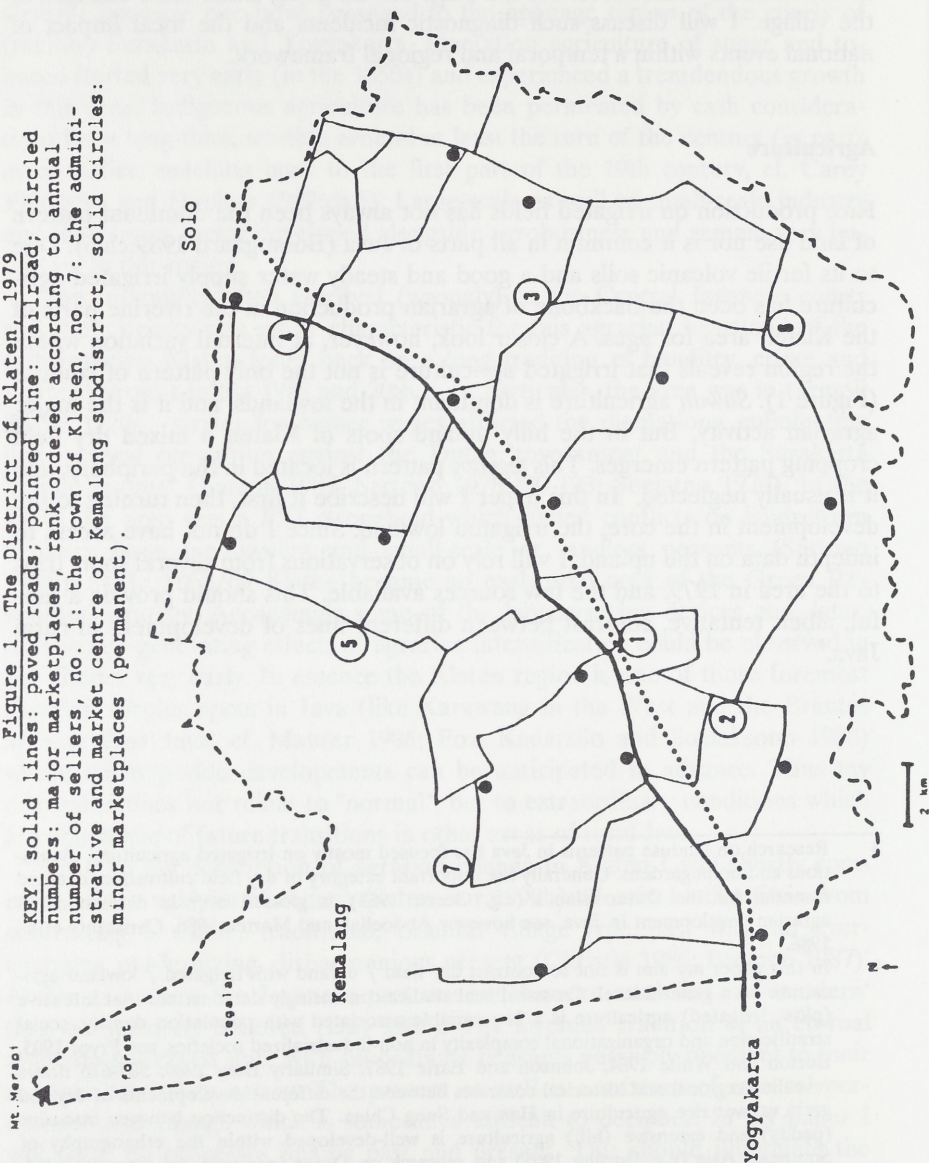
Rice production on irrigated fields has not always been the dominant pattern of land use nor is it common in all parts of Java (Boomgaard 1989:ch.6). Due to its fertile volcanic soils and a good and steady water supply irrigated agriculture has been the backbone of agrarian production in the riverine parts of the Klaten area for ages. A closer look, however, at internal variation within the region reveals that irrigated agriculture is not the only pattern of landuse (Figure 1). *Sawah* agriculture is dominant in the lowlands, and it is the major agrarian activity. But in the hilly upland spots of Klaten a mixed dry field cropping pattern emerges. This *tegelan* pattern is located in the periphery, and it is usually neglected.³ In this paper I will describe it first, then turning to the development in the core, the irrigated lowland. Since I do not have access to indepth data on the upland, I will rely on observations from several short trips to the area in 1979, and the few sources available. This should provide a useful, albeit tentative, contrast between different lines of development in rural Java.⁴

3 Research on landuse patterns in Java has focused mostly on irrigated agriculture, plantations and homegardens. Generally the important category of dry field cultivation, deemed essential for the Outer Islands (e.g. Geertz 1963), is glossed over in discussions of agrarian development in Java, see however Abdoellah and Marten 1986, Christanty et al. 1986.

4 In this paper my aim is not to contrast dry field / upland with irrigated / lowland agriculture on a general level. Cross-cultural studies convincingly demonstrate that intensive (plow, irrigated) agriculture is a key variable associated with population density, social stratification and organizational complexity in non-industrialized societies, see Pryor 1985, Burton and White 1984, Johnson and Earle 1987. Similarly Bray 1980: 587-616 draws revealing regional and historical contrasts between the different developments of dryland grain vs. wet rice agriculture in Han and Sung China. The distinction between intensive (paddy) and extensive (hill) agriculture is well-developed within the ethnography of Southeast Asia (e.g. Burling 1965) and research on Outer Indonesia (cf. Fox 1977:ch.1, 1979 discussing various ecosystems and their cultural correlates). My point is that extant studies on Java tend to neglect dry field (*tegalan*) cultivation at the expense of irrigated agriculture and, increasingly (cf. Stoler 1978, Penny and Ginting 1984) garden (*pekarangan*) cultivation.

Figure 1. The District of Klaten, 1979

KEY: solid lines: paved roads; pointed line: railroad; circled numbers: major marketplaces, rank-ordered according to annual number of sellers, no. 1: the town of Klaten, no. 7: the administrative and market centre of Kemalang subdistrict; solid circles: minor marketplaces (permanent).



The Upland Pattern: Dry Field Agriculture

The hilly parts of Klaten at the slope of the Merapi volcano (2911 m) exhibit a dry field agricultural pattern. This is particularly the case in the Kemalang subdistrict (52 km², 28,400 inhabitants in 1979, on the average 250 m above sealevel). Population density reaches a low of 550 persons/km² (compared to the average of 1720 in the whole of Klaten and numbers above 2000 in some of the irrigated subdistricts). Irrigation is impossible in this steep terrain as the water cannot be retained from running downhill to the lowlands.⁵ Thus people in this hinterland usually grow maize - their basic staple -, cassava, dryland rice, sweet potatoes, peanuts, tobacco and fruits on dry fields. The boundaries between gardens (*pekarangan*) and fields proper (*tegal, tegalan*) are difficult to recognize as both kinds of land interlock. Land is not a particularly scarce resource. In several villages we visited in 1979 only few households were reported to be landless. Exchange labour among neighbours is the common way of hoeing, ploughing and harvesting.⁶ Wage labour was rare. Generally animal manure is used to fertilize the fields. The produce, especially maize, is mainly used for home consumption. Surplus is sold at periodic markets within the region. Basically, dry field agriculture is run at subsistence level. Its productivity is much lower than the yields achieved in irrigated agriculture. Most people from the hills work in the agrarian subsistence sector. Craft production for local needs (furniture) was reported as a sideline occupation in some villages. Very often the settlement pattern of the villages was rather dispersed. Houses were generally made of wood and bamboo walls (*gedeg*). Property items were few and locally produced (e.g. wooden furniture). Village officials were not very different from ordinary villagers regarding their assets and style of living which appeared simple indeed. In the dry season you could notice women who had fetched drinking water in the lower parts of Kemalang returning to their far away upland homes where water was extremely scarce (cf. LPIIS 1979). In this hinterland only periodic marketplaces could develop, as the population density and the income level of

5 An exception are 50 ha of irrigated land in the southernmost and least hilly village of Kemalang. This is the administrative centre of the subdistrict, and it also houses the only permanent market in the subdistrict. In ecological terms this southern part of Kemalang is a border zone which exhibits a mixture of dryland and wetland features.

6 In contrast to dry field agriculture which is commonly practiced as a swidden system in the Outer Islands (cf. Fox 1977:ch.1), the farmers in Kemalang are only tilling the soil by hoe and plowing it by help of cattle. Burning is *not* an essential part of their cultivation practice (if they practice it at all, see, however, the observation on burning in West Java in Christanty et al. 1986:150) since they do not cultivate primary or secondary forest. In general, Javanese dry field cultivation is typically not slash-and-burn agriculture, see de Bie 1901:I, 97-143.

the population could not sustain permanent markets. The administrative centre in the Southern part of Kemalang was connected to the main roads in Klaten, but roads and public transport leading to the mountaineous interior of the subdistrict were not in good condition. The marketing and transport systems in this periphery display a dendritic structure, the interior lacks major market centres and all commercial activity is centred at the largest and only permanent market place at the Southern edge of the area. A minor centre lies to the Southwest in the neighbouring subdistrict. Markets and roads are linearly strung out from these two central places. This lack of central-place articulation hampers the development of trade within the area and makes it dependent on external traders (Smith 1977:129-34). Judging from the marriage registers of the villages the subdistrict is nearly endogamous (very different from the lowland subdistricts). The extent of out-migration in the most backward villages seemed to be very low. People from places closer to the main road had left seasonally or permanently to become labourers (*buruh umum*) or servants (*pembantu*) in the better-off lowlands. In former times the woods of Kemalang were the ideal hiding places of robbers and thieves who earned their living in the affluent lowlands.

In sum this "highland area" of Klaten exhibits some of the features Clifford Geertz (1963) singled out as characteristic for Javanese society in the irrigated parts of Java (here I do not want to discuss the quality of Geertz' account as a valid description of conditions in the irrigated parts of Java which has been a major debate in the literature; in passing I only want to point to some striking and unexpected resemblances): In this peripheral dry field system there is shared poverty, a low degree of social differentiation, almost no disparity in land resources, and the indigenous agriculture works at a minimum level of monetization and commercialization.

But in a processual perspective this characterization of contemporary conditions is deceptive and incomplete. I will now focus on events diagnostic of change and the impact of outside forces. In colonial times the area was incorporated into the wider economic system. Plantation companies used part of the upland area to grow perennials like nutmeg, cocoa, coffee, kapok and pepper (Röll 1971:61, Ockers 1934). In the villages where this *bergcultuur* occurred, 2/5 of the land were permanently reserved for growing cash crops (the contract regulating this permanent division of land was called *bengkok*, cf. Rouffaer 1937:237). Another 2/5 remained for the farmers' subsistence needs. The village officials received a share of 1/5 of the land as salary. The farmers were obliged to corvée work in the plantations. According to Houben's detailed research (1987:ch.5) European plantation agriculture started in the larger Surakarta region in 1816. Prior to 1860 coffee was the

main export crop in the Klaten area, to be superseded by a boom in sugar cane and tobacco production thereafter. Whereas coffee remained the most important cash crop in the upland plantations of Klaten, other plantation products were grown in the irrigated lowlands of Klaten. For the 20th century one gets the impression that these cash crop ventures in the upland were not very profitable (Röll 1971, also on the subsequent developments). In some places the *bergcultuur* came to a standstill during the Japanese occupation. Village people were allowed to occupy the plantation fields for growing *pala-wija* (the roots and tubers mentioned above). During the Independence War the remaining plantation area in Kemalang was redistributed to villagers owning no land or gardens only. This transfer confirmed spontaneous squatting as well as the results of communal decision-making. 645 ha of dry fields changed their owners this way in Kemalang. This event partly explains the present-day even distribution of land. The deeper reason behind this act of benevolence was political: According to Sartono (1978:25-26) political leaders from the lowlands cultivated ties to bandits and village officials in the mountainous areas of Merapi and Merbabu (hence this criminal network was renowned as MMC - *Merapi Merbabu Kompleks*). "The chiefs of many villages in the Merapi Merbabu complex were ex-bandits, and urbandwelling robbers (*grayak*); many reverted to brigandage whenever additional money was needed to pay taxes." (Sartono 1984:25). These men of violent action joined in anti-Dutch and anti-feudal struggles, and they hid their political allies when they were being prosecuted. The PKI was especially prone to secure this support in the hinterland of Klaten. In turn the politicians coopted their violent allies by letting them and the peasants who supported them occupy the now useless plantation land. When Independence was won, however, illegal actions did not stop in the MMC area. Displaced soldiers joined the ranks of the bandits. In the end sixties the army took over the administration of Kemalang subdistrict. Nowadays Kemalang is considered safe (*aman*), and you will not be easily reminded of the incidents of the past.

The winds of change were to be felt in another event in 1979. In several villages we could observe that people had started cultivating cloves (*cengkeh*) for some years. The "cold" climate in the mountain area was considered fitting for the cultivation of cloves. Due to the high and steady demand of cloves in the Indonesian cigarette industry this commodity was a first-rate venture. Since it takes the plants several years until they can be harvested, there was not yet a profit. But in one village clove cultivation had started in 1955 on a trial basis, proving to be a success. Clove production is organized on a small-holder and family enterprise mode. At harvests, however, wage labour is employed, and we were told that (Chinese) traders from Solo and Semarang

come to the village in remote Kemalang to purchase the harvest.⁷ Otherwise small-scale village traders act as brokers who sell the produce in the next periodic market. We even heard a rumour that urban people from the lowlands had once tried to buy land in Kemalang to produce cloves, but were denied to do so in the seventies. - These events are diagnostic of the emergence of a cash crop sector in a peripheral dry field economy.

New and on-going research by H.D. Evers (1989) and associates on trade in the Jatinom subdistrict enhances our understanding of the economic situation in the upland areas of Klaten. Jatinom is located to the East of Kemalang. In this area ecological conditions are similar to but less extreme than in Kemalang and traffic conditions are better (see the tables and maps in Schweizer 1990a:616ff, 712ff). Apart from dry field cultivation there is irrigated agriculture. In 1979 Jatinom produced the largest amount of cassava in the Klaten region (Schweizer 1990a:619). In the Southern edge an important market place (# 5 in Figure 1) connects the area with the main traffic arteries and central marketing network in the lowland. Evers' study reveals a bifurcation between small-scale local trade and large-scale external trade which we also observed in Kemalang. In the case of itinerant local trade (Evers 1989:19) "[g]oods are collected from other traders or directly from farmers early in the morning and are paid for in the evening. Profits are small or often non existent. This trade often assumes the character of a subsistence trade based on barter" whereas (p.19) "[l]arger traders, like agents specialized in buying large quantities of a particular agricultural product ... act profit-oriented and not subsistence oriented. They have the chance to accumulate trading capital, expand to other markets and buy their own means of transportation, like vans or trucks. Especially larger traders from neighbouring towns enter small village markets with the improvement of the road system... It can be expected, that petty traders will slowly loose their function in the process..." Due to its better connection with the traffic and marketing system Jatinom is embedded tightly into the outside world and large-scale trade is already institutionalized whereas in present-day Kemalang - a disconnected, marginal hinterland with poor infrastructure - commercial developments are just in their beginnings. Let me now turn to developments in the commercial centre of the rural economy in Klaten.

7 This external trade connection reminds one of Smith's general characterization of dendritic marketing systems (1977:131-32): "... small rural market centers tend to orient to a single major center, which both buys their product and provisions them with some consumption goods. A special class of traders, a distinct ethnic group rooted in a more developed external economy, operates in the wholesale center and generally controls the organization of trade in the region."

The Lowland Pattern: Irrigated Agriculture

The riverine parts of Klaten are the densely populated arena of highly productive wet-rice agriculture. As elsewhere in Java irrigated land is in short supply, and social stratification is based upon access to land. The village where we conducted research in 1978/79 had an area of 123 ha and a population of 1614 (density 1312 inhabitants/km²). 43% of the 330 households in the village did not own any of the 75 ha of irrigated land in the village. The average area of *sawah* owned amounts to 0.23 ha per household. A rural elite of village officials, large-scale farmers and large-scale (rice) traders possesses a higher share of land. In the case of the village studied the village leader's family owns 4.3 ha of *sawah*, and 9.5 ha of the irrigated land of the village is reserved for village officials. Central to the accumulation of land by the village elite is the fact that officials receive irrigated land as salary. If they manage to have close kin succeed them in office they can transfer the official land to their offspring. In addition to inter-marriage this is a common strategy in the rural Javanese elite (e.g. Hüsken 1989, Th. Schweizer 1988), and accordingly dynasties of village officials emerge. Social hierarchy is expressed in the ownership of landed resources and possession of consumer valuables (housing, motorcycles, TVs). To a certain degree, however, social differentiation is mediated by cross-cutting religious and neighbourly ties. Such links will not prevent an actor from pursuing his economic interests, but (rich) people still feel obliged to fulfil their religious duties by staging (lavish) communal festivals (*slametan*), and to support their neighbours in rituals or during personal crises.

As a consequence of the scarcity of land, villagers are eager to make the best of it. As rice is the most prestigious and high-demand staple in Java farmers are cultivating it in a monoculture in the lowlands of Klaten which is ideally suited for rice production. With high-yielding varieties they achieve 5 harvests in a two years period. All farmers are keen to produce good yields and to keep the costs of production as low as possible. Hence they do their best to have the work done by unpaid family members. At peaks of labour demand and in accordance with customary rules governing the work schedule wage labour has to be hired for several tasks. Farmers would like to pay the lowest possible wage, but they have to avoid being called mean. Gossip of this sort is much feared. Poorly paid labourers will be reluctant to help next time when the farmer is in pressing need of having tasks completed in time. The farmer will adhere to what is considered common for the time being. Thus the profit-motive of farmers and the self-interest of labourers is embedded into and hidden in an idiom referring to custom and tradition. But this "tradi-

tion" in rice cultivation is in a constant flux, and not at all historically fixed (cf. Boomgaard 1989:104-6 on shifts in harvesters' shares in the 19th c.).

A short glimpse at the rice harvest in the village studied will provide an example of cultural maintenance and change. Two thirds of the rice-growing area were reaped in *tebasan* in 1979. In this commercial contract farmers sell the ripe and standing crop for cash to a local middle(wo)man (*penebas*) who organizes the harvest. The *penebas* employ female harvesters from the village who reap the panicles with the traditional cutting implement (*ani-ani*). The harvesters' share of 7% to 8% of the panicles varies with the regional rice price. The share is weighed. Every woman may participate in the *tebasan* harvest, but there is an upper limit of harvesters allowed to reap a plot (c. 40 women on a field of standard size, 0.22 ha). The *tebasan*-mode of harvesting is not considered unfair by the labourers, as it is a business, and large-scale as well as small-scale farmers have no moral reservations to enter this contract when they are in need of money (Schweizer 1987, 1989, 1990a:ch.6). In contrast, the owner-harvest (*bawa pulang*) is restricted to a smaller circle of women who are invited in advance (c. 20 harvesters on a quarter hectare). They receive a higher share which, nevertheless, is orientated on the proportion (*moro*) prevailing in current *tebasan*. Older farmers still practice the most traditional variant of the owner-harvest: the share is handed over unweighed. Most farmers use scales nowadays, but they pay a slightly better proportion than the *penebas* and/or they grant an extra-bonus to their helpers. A minority of large-scale farmers organize their owner-harvests on *tebasan* terms. This is not particularly approved of. Harvesters do not mind a farmer using a *tebasan* contract, but they disapprove of the overt intrusion of commercial thinking into the realm of reciprocal help. In rhetoric at least, mutual aid should characterize the owner-harvest. This description refers on the rice harvests in 1979. Wage labour as part of indigenous agriculture and *tebasan* as a common mode of harvesting in the wet-rice areas of Klaten are mentioned in the sources as early as for the 1930s (Schweizer 1987: 41-42, cf. Soekasno 1939:748, 754, Stuvell 1931:77-84). On a casual revisit to the village in 1984 I could observe another change: Now the *penebas* and many farmers paid the harvesters' share in cash. This innovation occurred in a time of record harvests and risen income - the farm labourers had been earning higher real wages for a couple of years (Schweizer 1987:64-5). This good income situation explains why rural entrepreneurs could successfully adopt the move into further commercialization without having to bear social costs (cf. Röpke 1986 on the general course of development in harvest rights).

The rice harvest is an event diagnostic of change in the short-run. The impression of change in irrigated agriculture is deepened if we assess the impact

which certain macroevents had on the local economy during this century: The European sugar and tobacco plantations (c. 1850-1930s) changed the agrarian landscape in the irrigated subdistricts of Klaten: They introduced wage labour which eventually permeated indigenous cultivation, and they competed with native agriculture for land, water and labour. New research shows that even under these restrictions which degraded Javanese cultivation to a supplementary role native agriculture did not stagnate (van der Eng 1988). The Japanese war economy (1942-45) put great pressure on the village people forcing them into construction work and into a life at the margins of existence. We were told by farmers that in rice cultivation the Javanese adopted the planting in rows at the advice of the Japanese. The Independence War (1945-49) put strains on the rural economy. After Independence political conflict broke out, the implementation of land reform being the issue in Klaten. In the Soekarno era there were first programmes to improve rice production. But the bad economic conditions in conjunction with the political strife and disruption in the 1960s prevented a change for the better. The introduction of new rice seeds and the new technology which later was incorporated into the nation-wide BIMAS programme had an early start in Klaten in 1968/69. Due to the complexity of this change in rice cultivation the expected production targets were missed at first. Instead, labour-saving devices, for example rice mills, gained in importance and cut the income opportunities of the landless, thus aggravating economic inequality. Many observers expected a polarization process to occur in village Java. When eventually production had been intensified yields rose, but then disastrous *wereng* (plant-hopper) infestations again diminished returns. The cultivation of the traditional rice varieties had to be given up, and a series of *wereng*-resistant new varieties had to be planted. Since the end of the seventies, and even more so in the eighties, there has been a big increase in rice production. The expected polarization did not occur. There is more social inequality, but the risen income compensated for some of the losses associated with the early phases of the Green Revolution (Maurer 1984, Schweizer 1987, Manning 1988). In contrast to the urban economy which was hit by world-wide recession and the slackening of the oilboom the agrarian sector experienced a tremendous economic growth. Surely, the more difficult economic situation of today will have repercussions on the rural sector via prices and employment opportunities.⁸

8 According to Hans Antlöv this possible effect has not been observed yet in the West Java village where he recently conducted research. He refers to the income-generating impact of the Supra-Insus programme which aims at further intensifying rice production, cf. Hobohm 1987:25. Jim Fox (personal communication, summer 1988) reported income loss

A description of change in the wet-rice areas of Klaten and elsewhere in Java would be distorted without taking into account off-farm employment and the development of consumptive patterns. Fundamental to developments in these sectors is the extreme and historical scarcity of irrigated land in Java, forcing the peasant family to look for off-farm income opportunities. Thus occupational multiplicity, seasonal changes in working patterns, occupational specialization within households, circular and permanent migration are part and parcel of the Javanese villagers' strategy of coping with shortage of resources. In many households of the village studied women specialize in the trade and cash sector of the economy, and younger people look for non-agrarian income outside the village. In the riverine plane of Klaten commercial activities are supported by a well-articulated central-place marketing system (cf. Smith 1977). The nucleated settlements and permanent marketplaces are integrated into a regional hierarchy of marketing levels and transport arteries (see Figure 1). In a representative sample of household heads and their spouses a comparison between the occupation of the (adult) respondents and their parents revealed considerable differences in occupational mobility between the present and past generation. Agrarian occupations lost in importance in the present generation. Whereas one generation ago 92% of the men worked as farmers or farm labourers this percentage dropped to 42%. Among the women the percentage of agrarian employment declined from 62% to 49%. The percentage of female traders remained stable at c. 30% (otherwise women mainly take care of the children and housework). Among the men 15% earn their living as craftsmen (carpenter, mason, tailor) nowadays. Another 19% are employed in the regional iron-processing, textile, sugar and fibres industries. 7% are engaged in trade which is often connected to the industries. 6% of the male household heads are working as hired hands in the regional construction business. The household survey revealed that 12% of all family members had left their home to look for employment. Most of them had settled permanently in Javanese cities.

The prosperity in the urban sector in the seventies and the subsequent agrarian growth in the eighties found their way back into the village. Successful migrants reinvested into house building and even the construction of roads. Circular migrants brought back some income. The income situation of the rural elite as well as the middle and lower class in the village improved. What is done with the revenues from agrarian and off-farm employment?

(1) *Consumption*: Housing standards and furnishings improved. In 1979 93% of the households lived in a house made of brickwalls, concrete floor

in the Klaten area in the late 1980s due to pests. On current developments - intensification as well as integrated pest management - see Fox 1989.

(39%) or bricks floor (40%). 77% owned a bicycle, 63% a radio, and 50% possessed a set of table and chairs. Motorcycles (8%), cassette recorders (6%) and television sets (5%) were luxury items which characterized the spending pattern of the affluent few. Village neighbours, however, regularly watched TV in the home of the owners; music entertainment by cassette recorders was a common part of ritual celebrations; if need be motorcycles could be borrowed. In 1984 a sedan car, a truck and the building of urban-style houses had to be added to this list. Even farm labourers could afford rice as their daily staple in 1979. They need not fall back on maize and cassava as second-rate staple as regularly happened at times of food shortage in the past.⁹ The middle and upper class occasionally bought meals, snacks and manufactured cigarettes in shops and stalls outside the village. Western style clothing (e.g. 'jeans') gained in importance. Affluent villagers invited one third to half the village households to their lavish ritual celebrations (on consumptive patterns cf. Schweizer 1989).

(2) *Education*: In addition to this 'consumerism' the trend to educate ones children ranks high on the preference scale of rural families. This tendency affects family histories as some of the high school students continue their education in institutions of higher learning far away from the village, and eventually decide to stay in the urban sector. I wonder whether this trend will have an impact on the village official dynasties in the area (cf. Hüsken 1989; Th. Schweizer 1988): Due to better educational chances the children of these families have a higher probability of entering urban employment and thus they will not continue the career pattern of their family line.

(3) *Commercial investments*: Besides a rise in level of consumption and (higher) education income is invested. Revenues are not primarily used to purchase irrigated land. Clearly there is a tendency of well-to-do families to accumulate land in order that each of their children will inherit some land. But irrigated land is not available in large quantity for sale. Furthermore rice production is remunerative, but not without hazards. My impression is that wealthy households accumulate irrigated land on a social security basis only, and extra money is invested into more profitable ventures in the trade and service sector. In the irrigated parts of Klaten many people are eagerly

⁹ For the village poor the constant supply of rice is the most important aspect of economic betterment. The taste of rice is an additional criterion of value for the village middle and upper class. In the course of agrarian development the initially worse-tasting new varieties were succeeded by more appreciated new varieties. Due to *wereng* infestation the planting of some of the best liked old varieties had to be given up in the area. In 1979 and 1984 most people consumed new varieties of the better-tasty quality and liked it. Some well-to-do farmers, however, cultivated new varieties as a cash crop only. For their home consumption they bought tasty old varieties in the market.

looking for and seizing chances for economic betterment. But fundamentally they are not capitalists-in-production but entrepreneurs-in-exchange. This characterization is much more akin to Braudel's (1985:ch.2) broad notion of merchant capitalism emerging in the sphere of long distance trade than to Marxian constructs (cf. Wolf 1982:78-9).¹⁰ Starting a shop for selling household supplements; launching a rice trade; opening a service station (*kios bensin*) along the Yogyakarta-Solo road; having a mini-bus commute on this road as a cheap public transport facility have been the foremost investments in the area. The rise of the construction industry and the transport sector in the whole of Java are evidence for a large-scale trend towards off-farm employment. In the village social structure this new development entails the emerging of a more diversified social stratification systems. Access to land and a village official position have been the traditional yardsticks of social status which still persist. We asked key informants in the village to rank order a sample of people according to their prestige. Then our questions as to the criteria employed in these judgements revealed additional features of social status: modern education, *pengeration* (knowledge of the outside world) and wealth as such, generated also by trade and industry, were used as new criteria of social standing (M. Schweizer 1988).

Finally, let me come back full circle to the dry field areas. Some households in the village could afford a maid in their household, and generally these employees had come from the poor dry field areas. On my visit to the village in 1984 the village leader had not only bought the first sedan car, but it also turned out that he and his son-in-law - a well-to-do customs officer in Semarang and an offspring of a local *lurah* family - had purchased a plot in the Tawamangun area of Yogyakarta. This upland area is ecologically very similar to Kemalang and not far away from it. The plot had attracted the interest of these two rich people precisely because they could get hold of a blossoming clove production site within the wider region. In the eighties this land no longer was a restricted resource.

Conclusion

The beginnings of cash-crop production in dry field Kemalang and the increased prosperity in the irrigated parts of Klaten are but local examples of

¹⁰ Another case of rural capitalism in Java is analyzed in Hüsken 1989; Thrift 1987 discusses the important role of commercial capital in the modern world; see also Tilly 1988 on the flexibility of development in Europe during the 19th century.

Table 1: Contrasting developments in the upland and lowland areas of Klaten

CHARACTERISTIC	UPLAND (Kemalang)	LOWLAND (river plane)
location	periphery	core
landuse pattern	dry fields (tegalan)	irrigated fields (sawah)
population density	low	high
settlements	dispersed	nucleated
cultivation	subsistence production roots & tubers exchange labour manure	commercial production wet rice wage labour new technology (HYVs, fertilizer, pesticides)
productivity	low	high
social differen- tiation	low	high
market places & marketing system	impermanent dendritic central-place	permanent
infrastructure	less developed	well developed
migration & frequent, whole of circulation	infrequent, same district, rural	Java, urban
off-farm employ- ment (industry, trade, services)	low	high
consumption	local products	local & extra-local products
plantation history	perennials	sugar, tobacco
recent develop- ments	clove production (cash crop)	intensive rice pro- duction & commercial boom (building industry, transport)

country-wide developments in the 1970s and 1980s. They fit into the strategy of intensifying dry crop cultivation on the one hand, and the ongoing efforts to stabilize rice production as well as to strengthen the off-farm sector on the other hand. The main differences between the dry field and the wet-rice areas of Klaten explored in this paper are summarized in Table 1.

In a still broader comparative perspective some changes can be recognized in the present which would lead to a new level of economic and political integration in the archipelago. What one can notice in Java of today is, firstly, that state control is much more efficient and tight (Hart 1986, Hüsken and White 1987, Hart, Turton, and White 1989): Development schemes, for example, are implemented very strictly down to the local level. There is not much room for maneuver left at the lowest level, e.g. expressing discontent by passivity. Secondly, the improved transport system makes it much easier for people to circulate between village and town. Thirdly, as the off-farm sector is growing the rural economy gets much more orientated on extra-local markets. All these developments point to the same conclusion: The *linkage* between the Javanese village economy of today and the outside world has become more close. The rural and the urban sector are much more dependent on each other. Regional, national and worldwide events find their way much more easily down to the village level. The world Javanese peasants have lost during the 20th century never was a static oriental economy, it has always been in a constant flux, but there was a considerable regional and local autonomy. Thus Javanese communities of today have become units in a well-connected, countrywide network of economic and political ties. This process of establishing linkages even incorporates hinterland Kemalang via cash crop production into its wider circuits. This connectedness at a higher level of economic and political integration (cf. Johnson and Earle 1987) entails on the one hand the price of lost autonomy. On the other hand it will perhaps enable better participation of local people in national and supra-national affairs, thus improving their share not only in costs, but also in the benefits of the larger system of production, exchange, power and communication they are embedded in.

References

- Abdoellah, Oekan S., and Gerald G. Marten, 1986: The Complimentary Roles of Homegardens, Upland Fields, and Rice Fields for Meeting Nutritional Needs in West Java. In: *Traditional Agriculture in Southeast Asia. A Human Ecology Perspective*. Gerald G. Marten, ed. pp. 293-325. Boulder: Westview Press.

- Bie, H.C.H. de, 1901: *De Landbouw der inlandsche Bevolking op Java*. 2 volumes. Batavia: G. Kolff.
- Boomgaard, Peter, 1989: *Children of the Colonial State: Population Growth and Economic Development in Java, 1795-1880*. Amsterdam: Free University Press.
- Braudel, Fernand, 1985: *La dynamique du capitalisme*. Paris: Les Éditions Arthaud.
- Bray, Francesca, 1980: Agriculture. in: *Science and Civilisation in China*. Joseph Needham. Vol. VI:2. Cambridge: Cambridge University Press.
- Breman, Jan, 1987: *The Shattered Image: Construction and Deconstruction of the Village in Colonial Asia*. Amsterdam: Centre for Asian Studies Amsterdam.
- Burling, Robbins, 1965: *Hill Farms and Padi Fields. Life in Mainland Southeast Asia*. Englewood Cliffs, N.J.: Prentice-Hall.
- Burton, Michael L., and Douglas R. White, 1984: Sexual Division of Labor in Agriculture. *American Anthropologist* 86: 568-583.
- Carey, Peter, 1986: Waiting for the 'Just King': The Agrarian World of South Central Java on the Eve of the Java War (1825-30). *Modern Asian Studies* 20: 59-137.
- Christanty, Linda; Abdoellah, Oeklan S.; Marten, Gerald G.; Iskandar, Johan, 1986: Traditional Agroforestry in West Java: The Pekarangan (Homegarden) and Kebun-Talun (Annual-Perennial Rotation) Cropping Systems. In: *Traditional Agriculture in Southeast Asia. A Human Ecology Perspective*. Gerald G. Marten, ed., pp. 132-158. Boulder: Westview Press.
- Christie, Jan Wisseman, 1986: Negara, Mandala, and Despotic State: Images of Early Java. In: *Southeast Asia in the 9th to 14th Centuries*. David G. Marr and A.C. Milner, eds. pp. 65-93. Singapore: Institute of Southeast Asian Studies.
- Day, Tony, 1986: How Modern was Modernity, How Traditional Tradition, in Nineteenth-Century Java? *Review of Indonesian and Malayan Affairs* 20: 1-37.
- Eng, Pierre van der, 1988: *Productivity Change in Indonesian Agriculture, 1890-1985*. Unpublished paper, Faculty of Economics, University of Groningen, Groningen.
- Evers, Hans-Dieter, 1989: *Trade as Off-Farm Employment in Central Java*. Paper presented at the Workshop "Off-Farm Employment in Rural Java", University of Tübingen, April 9-12, 1989.
- Fox, James J., 1977: *Harvest of the Palm. Ecological Change in Eastern Indonesia*. Cambridge, Mass.: Harvard University Press.
- 1979: A Tale of Two States: Ecology and the Political Economy of Inequality on the Island of Roti. In: *Social and Ecological Systems*. Philip Burnham and Roy F. Ellen, eds., pp. 19-44. London: Academic Press.
- 1989: *Managing the Ecology of Rice Production in the New Order*. Conference Paper, Research School of Pacific Studies, Australian National University, Canberra.
- Tri Kadersilo, and Bambang Soelaksono, 1988: *Rice Growing and marketing in Mojosari, Kabupaten Jombang*. Unpublished Mscr., Center for Policy and Implementation Studies.
- Geertz, Clifford, 1963: *Agricultural Involution: The Processes of Ecological Change in Indonesia*. Berkeley: University of California Press.
- Hart, Gillian, 1986: *Power, Labor, and Livelihood: Processes of Change in Rural Java*. Berkeley: University of California Press.

- Andrew Turton, and Benjamin White, eds., 1989: *Agrarian Transformations: Local Processes and the State in Southeast Asia*. Berkeley: University of California Press.
- Hobohm, Sarwar O.H., 1987: Survey of Recent Developments. *Bulletin of Indonesian Economic Studies* 23(2): 1-37.
- Houben, Vincent J.H., 1987: *Kraton en Kumpeni. Surakarta en Yogyakarta 1830-1870*. Dissertation Leiden.
- Hüsken, Frans, 1989: Cycles of Commercialization and Accumulation in a Central Javanese Village. In: *Agrarian Transformations: Local Processes and the State in Southeast Asia*. G. Hart, A. Turton and B. White, eds., pp. 303-331. Berkeley: University of California Press.
- and Benjamin White, 1987: *State Patronage in a Divided Society: Government and Peasantry in Java*. Paper read at the 6th European Colloquium on Indonesian and Malay Studies, University of Passau, June 22-7, 1987.
- Johnson, Allen W., and Timothy Earle, 1987: *The Evolution of Human Societies: From Foraging Group to Agrarian State*. Stanford: Stanford University Press.
- Larson, George D., 1987: *Prelude to Revolution: Palaces and Politics in Surakarta, 1912-1942*. Dordrecht: Foris.
- LPIIS (Lembaga Penelitian Ilmu-ilmu Sosial), 1979: *Proyek Penyediaan Air Minum Pedesaan di Daerah Lereng Merapi: Baseline Data Survey*. Salatiga: Satya Wacana University, Research Report Series No. 24.
- Manning, Chris, 1988: *The Green Revolution, Employment, and Economic Change in Rural Java: A Reassessment of Trends under the New Order*. Singapore: Institute of Southeast Asian Studies.
- Maurer, Jean-Luc, 1984: Agricultural Modernization and Social Change: The Case of Java over the last Fifteen Years. *Masyarakat Indonesia* 11: 109-119.
- 1986: Modernisation agricole et changement socio-économique à Java: Kutagandok, un village de la grande plaine rizicole de Karawang. In: *Der große Archipel*. Wolfgang Marschall, ed., pp. 335-362. Berne: Schweizerische Ethnologische Gesellschaft.
- Moore, Sally Falk, 1987: Explaining the Present: Theoretical Dilemmas in Processual Ethnography. *American Ethnologist* 14: 727-736.
- Ockers, B., 1934: *Grondenrecht en Grondhuur in het Gewest Soerakarta*. Yogyakarta: van Kolff-Buning.
- Penny, D.H., and Meneth Ginting, 1984: *Pekarangan, Petani dan Kemiskinan*. Yogyakarta: Gadjah Mada University Press.
- Pryor, Frederic L., 1985: The Invention of the Plow. *Comparative Studies in Society and History* 27: 727-743.
- Röll, Werner, 1971: Bevölkerungsdruck und Siedlungsaktivität in Zentral-Java: Ein Beitrag zur Landnahme unterbäuerlicher Sozialgruppen nach dem Zweiten Weltkrieg in Indonesien. *Geographische Rundschau* 2: 56-66.
- Röpke, Jochen, 1986: Landwirtschaftliche Entwicklung und Wandel der Ernterechte in Südostasien: Am Beispiel des Reisanbaus in Java und Luzon. *Internationales Asienforum* 17: 255-271.
- Rouffaer, G.P., 1931 [1905]: Vorstenlanden. *Adatrechtbundels* 34: 233-378.

- Sartono Kartodirdjo, 1978: *Protest Movements in Rural Java*. Kuala Lumpur: Oxford University Press.
- 1984: *Modern Indonesia: Tradition and Transformation*. Yogyakarta: Gadjah Mada University Press.
- Schweizer, Margarete, 1988: Soziale Schichten im dörflichen Java. In: *Die deutsche Malaiologie (Festschrift Irene Hilgers-Hesse)*. Karl-Heinz Pampus and Bernd Nothofer, eds., pp. 213-229. Heidelberg: Groos Verlag.
- Schweizer, Thomas, 1987: Agrarian Transformation? Rice Production in a Javanese Village: *Bulletin of Indonesian Economic Studies*, 23(2): 38-70.
- 1988: Detecting Positions in Networks: A Formal Analysis of Loose Social Structure in Rural Java. *American Anthropologist* 90: 944-951.
- 1989: Economic Individualism and the Community Spirit: Divergent Orientation Patterns of Javanese Villagers in Rice Production and the Ritual Sphere. *Modern Asian Studies* 23(2): 277-312.
- 1990a: *Reisanbau in einem javanischen Dorf: Eine Fallstudie zu Theorie und Methodik der Wirtschaftsethnologie*. Cologne: Böhlau Verlag.
- 1990b: Prozeßanalyse in der Ethnologie: Eine Exploration von Verfahren und Problemen. *Zeitschrift für Ethnologie* 114: in press.
- Smith, Carol, 1977: How Marketing Systems Affect Economic Opportunity in Agrarian Societies. In: *Peasant Livelihood. Studies in Economic Anthropology and Cultural Ecology*. Rhoda Halperin and James Dow, eds., pp. 117-146. New York: St. Martin's Press.
- Soejatno, 1974: Revolution and Social Tension in Surakarta 1945-1950. *Indonesia* 17: 99-111.
- Soekasno, 1939: Het Particuliere Landbouwcrediet in het Soenanaat Soerakarta. *Volkscredietwezen* 27: 733-91.
- Stoler, Ann L., 1978: Garden Use and Household Economy in Rural Java. *Bulletin of Indonesian Economic Studies* 14(2): 74-89.
- Stuvel, G.H., 1931: Seizoen - en Maandleeningen in het Onderdistrict Delanggoe (Klaten). *Volkscredietwezen* 19: 77-137.
- Thrift, Nigel, 1987: The Fixers: the Urban Geography of International Commercial Capital. In: *Global Restructuring and Territorial Development*. Jeffrey Henderson and Manuel Castells, eds., pp. 203-233. London: Sage Publications.
- Tilly, Charles, 1988: Misreading, Then Rereading, Nineteenth-Century Social Change. In: *Social Structures. A Network Approach*. Barry Wellman and S.D. Berkowitz, eds., pp. 332-358. Cambridge: Cambridge University Press.
- Wolf, Eric R., 1982: *Europe and the People without History*. Berkeley: University of California Press.