

The Contemporary Agrarian Change in Rice Production Village in Klaten Regency, Central Java

Muhammad Musiyam*

Lecture of Universitas Muhammadiyah Surakarta, Indonesia

Sugeng Utaya

Lecture of Post Graduate Program, State University of Malang, Indonesia

Singgih Susilo

Lecture of Post Graduate Program, State University of Malang, Indonesia

Budi Handoyo

Lecture of Post Graduate Program, State University of Malang, Indonesia

Abstract

Rural Java areas underwent significant changes during the last 20 years due to increasing education and health level and improving transportation and communication infrastructure, but researches on agricultural transformation, especially rice farming in Java, was limited. This study aimed at understanding the structure of land ownership and tenure, and the changing of land tenure institutional system in wetland farming, in its relation to the contemporary demographic change in the Javanese rural areas. The research was conducted in Kauman Village, Klaten Regency, Central Java. There were 307 farmer households in the village. The samples of 52 farmer households were taken randomly. Data collection used questionnaires and in-depth interviews with 52 respondents and 6 key informants. The analysis was carried out by comparing the data before the green revolution and 2016 data. The results of the study were as follows. Firstly, the number of landless farmers was very large (60 percent). Despite the green revolution, the proportion of this group had been already high before the green revolution program was intensified. Secondly, the level of land ownership disparity was moderate and tended toward equity due to the continuity of land ownership fragmentation through land inheritance processes, and no land ownership concentration occurred on the basis of agricultural land purchase. Thirdly, the level of inequality of land tenure was moderate and even close to low, and tended toward equity as the number of land tenants was much greater than the land owners. Fourthly, the bargaining position of the land tenants tended to be stronger than the land owners due to the declining attraction of agricultural work as a source of employment.

Keywords: Landless farmers; Inequality of land ownership; Inequality of land tenure; Land tenure institutional system.



CC BY: [Creative Commons Attribution License 4.0](https://creativecommons.org/licenses/by/4.0/)

1. Introduction

Beginning in the 1980s, about two decades after the green revolution was launched, the Javanese rural areas underwent significant changes. The level of education and health of rural communities increased as a result of the massive implementation of health and education programs. Rural infrastructures, namely transportation, communication, energy, clean water, improved significantly as well. The condition enabled rural households to gain wider access to non-agricultural activities. The growth of massive public and private means of transportation also permitted rural laborers to engage in different types of jobs in higher-income cities.

However, the appeals of the agricultural sector as a source of employment declined rapidly. The phenomenon was characterized by the decreasing number of farmer households and the aging of the farmer age structure. In 1983-2003 the number of farmer households increased by 6.6 million (Booth, 2012). In the next decade, it decreased by 5.10 million or 16.32 percent (BPS Propinsi Jawa Tengah, 2013). Klaten Regency decreased more sharply, namely 42.81 percent, compared to provincial and national context (BPS Propinsi Jawa Tengah, 2013). The aging of the farmer age structure was characterized by the dominance of aged agricultural labor in the agricultural labor structure. By contrast, rural youth groups, that generally gained better education, were reluctant to engage in agricultural work. As a result, the proportion of young agricultural labor became very small. The result of 2013 Agricultural Census strongly demonstrated the symptoms. The proportion of farmer household heads aged above 45 years was 60.45 percent. On the other hand, the proportion of the new generation farmer, 15-24 and 25-34 years old, was only 0.88 percent and 11.98 percent (BPS Propinsi Jawa Tengah, 2013). In Klaten Regency, the proportion of farmer household heads aged less than 35 years old was only 5.64 percent, whereas the proportion of farmer households aged above 35 years was 94.36 percent. The proportion of household heads aged over 65 was still quite large at 21.43 percent (BPS Propinsi Jawa Tengah, 2013).

The structure of land tenure also changed significantly. Between 1983 and 2003, the number of farmer households cultivating agricultural land of less than 0.1 hectare increased by 3.05 million or 17 percent (Booth,

*Corresponding Author

2012), whereas in the next decade it decreased by 5.04 million or 53.75 percent. The number of farmer households cultivating land of less than 0.5 hectare (*gurem* farmers) decreased by 5.18 million or 26.15 percent (BPS Propinsi Jawa Tengah, 2013). Among the 26 districts in Central Java Province, Klaten Regency had the steepest decline in the number of smallholder farmers, namely 45.90 percent (BPS Propinsi Jawa Tengah, 2013).

There had been abundant researches on agrarian change, especially on wetland farming in Java, between the 1970s and the late 1980s, but in the last 20 years, researches on the topic was very limited. As rural areas had undergone significant changes since the last two decades, it was, therefore, necessary to study the agricultural transformation in the context of contemporary rural social change. This background, therefore, drives to a research question “how does the contemporary demographic change in the Javanese rural areas relate to agrarian transformation?”. This study aimed at understanding the structure of land ownership and tenure, and the changing of land tenure institutional system in wetland farming, in its relation to the contemporary demographic change in the Javanese rural areas. The remainder of this paper will explain the research methodology, present and discuss the result, and conclude the overarching findings.

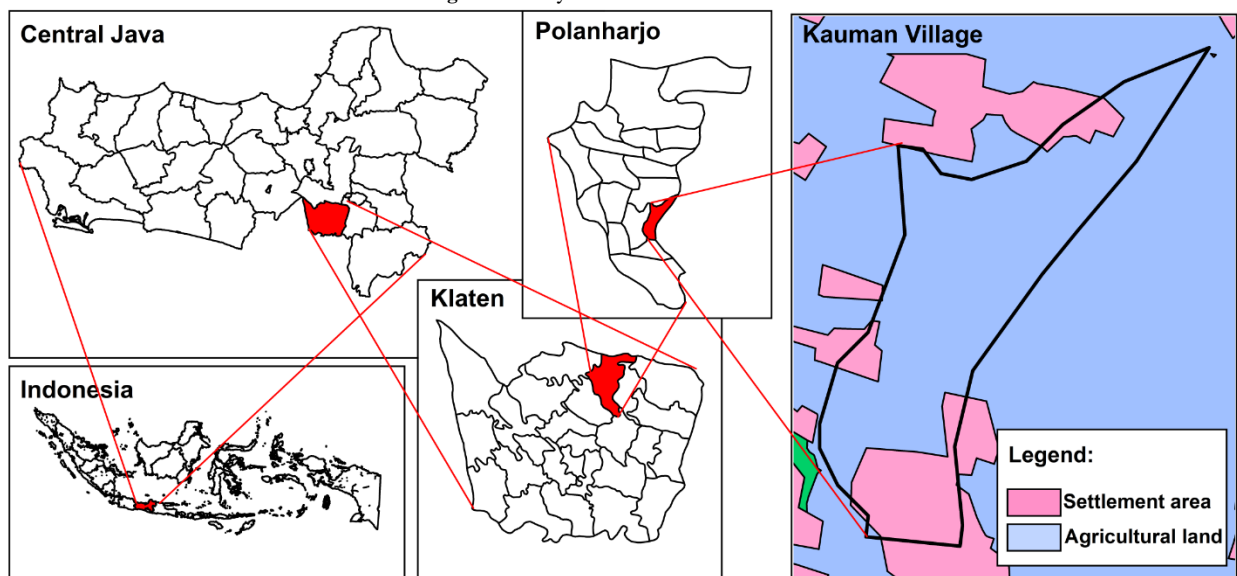
2. Methodology

2.1. Study Area

The Klaten region was located in the southeastern part of Central Java Province and is split by the Solo-Yogyakarta provincial road. This area covered 660 km², inhabited by 1,316,907 people (2013), with a population density of 2,009 people per km². This figure was almost twice as much as that of the average population density of Central Java (1,022 inhabitants/km²). Approximately 50.7 percent (33,220 ha) of the area were paddy fields, 57.49 percent (19,097 ha) of which had technical irrigation throughout the year.

This research was conducted in Kauman Village, Polanharjo, Klaten (Figure 1), about 17 kilometers from the town center of Klaten, Indonesia and approximately 20 kilometers from Surakarta city, Indonesia. The village was located on Merapi foot plain approximately 153 meters above sea level. Most of the agricultural land in the area was rice fields (78.69 percent) that got irrigation throughout the year, unless there was an acute drought. Therefore, the commonly planted rotation of cultivation was rice-rice-rice.

Figure-1. Study area location and landuses.



2.2. Data Collection and Analysis

Various techniques were employed to collect both primary and secondary data. There were three techniques of primary data collection including field observation, farmer household-level survey, and in-depth interview with key-person. Field observation was purposed to provide a general overview of the study area and collect the actual issues from the field. Meanwhile, the farmer household-level data collection was conducted by questionnaire survey. This survey was purposed to collect socio-economic characteristics of farmer households. The participant was selected by simple random sampling. There were 307 farmer households in the village. The samples of 52 farmer households were selected as participant. Meanwhile, the in-depth interview was purposed to gather information regarding general socio-economic of the study area, history of the agricultural system, and the dynamics of the agricultural system, organization or agricultural institution. There were 6 key informants were selected as participants. The interview with the informants were guided by structured questions. On the other hand, the secondary data was collected from literature, general statistics, agricultural statistics, and village monograph. Data analysis was carried out by comparing the data of agrarian structure 1980 (before the green revolution) and 2016.

3. Results and Discussion

3.1. Historical Background of Study Area

Historically, the rural inhabitants of Klaten had no authority over the land. In the era of the Javanese kingdom (Kasunanan Surakarta and Kasultanan Yogyakarta), the land fully belonged to the king. Farmers, therefore, only acted as land tenants or "*nggaduh kagungan dalem*". Padmo (1994) described the system used for regulating land ownership in the Kingdom of Surakarta as *apanage* system ("*nggaduh*" system). This system was introduced after the division of Mataram Kingdom into Surakarta Kasunanan and Yogyakarta Sultanate in 1757. In *apanage* system, Sunan (king of Surakarta Kingdom) was honored as the owner of all land in Surakarta, including Klaten. Realizing that land was the main source of livelihood, Sunan then distributed the land to the family members and royal employees. In return, they were in charge for tax collecting.

In 1830 the Dutch colonial government began to implement the cultivation system (Abdullah, 1994; Elson, 1994; Fernando, 1996; Hüskén, 1998; Suhartono, 1991; Van and Robert, 1984). Since then the lease of *apanage* land to the expansion of the plantation area increased. The area of coffee plantation that had been initiated since the mid-18th Century continued to expand, while the new sugar cane plantation began to expand after the mid-19th Century.

In the early 20th Century, Klaten region was the center of the sugarcane and tobacco plantations, as well as the center of the sugar industry in Java. In 1920, it was estimated that about 25 to 40 percent of agricultural land in Klaten was used for sugarcane plantations. In 1926, from 55 sugar mills in Central Java, 40 percent were concentrated in Klaten region (Daldjoeni, 1972). Until 1920, with an area of about 1/13 of Java, Klaten produced 1/6 of sugar production and 1/3 of tobacco production in Java (Suhartono, 1991). In 1934, however, sugar cane plantations in the region declined considerably due to sharp decline of the world demand for sugar as a result of the world economic recession. For replacement, rosella was then developed (Roll, 1983).

The plantations in Klaten introduced the money economy system to rural populations through land rent and wages for plantation workers (Elson, 1994; Hüskén, 1998). The process of commercialization spread nationwide when rural elites implemented rational agricultural management. The previously reciprocal agricultural labor relation based on the principle of mutual cooperation was replaced by the wage labor system (Hüskén, 1998).

Between 1920 and 1971 the ratio of population to farmland had more than tripled, from 1,225 m² per person to 447 m² per person (Roll, 1983), and in 2014 it increased to fourfold, i.e. 300 m² per person. The sharp increase occurred in 1971, but since 1986 the increase had been relatively slow. This was due to the declining population growth in this region. Between 1920 and 1960 the average annual population growth was 1.8 percent, and in 1960-1971 it increased to 2.3 percent per year (Roll, 1983). However, from 1986 to 2013, as the success of the family planning program focused on birth control, the average annual population growth decreased consistently from 0.49 percent to 0.23 percent. Along with that, between 2010 and 2013, the net migration rate increased from -606 to -700 inhabitants. In 2013, some districts began to indicated population symptoms characterized by a minus population growth rate (BPS Kabupaten Klaten, 2014).

In the decade of the 1960s the number of households without agricultural land increased to 62 percent, resulting in non-agricultural activities as important sources of livelihood for farmers who could not meet their household needs without additional income (Roll, 1983). Since then, people in rural areas could no longer rely solely upon agricultural activities to meet their needs, as the previous generation did. As Roll (1983) noted, in 1971 only about 29 percent of the population in Klaten worked in the non-agricultural sector. By 2014 that figure increased to 81.10 percent (BPS Kabupaten Klaten, 2015). This suggested that between 1971 and 2014 the proportion of people working outside the agricultural sector multiplied more than 2.5.

Important changes occurred in the early 1970s when the Indonesian Government began to modernize agriculture known as the green revolution program. Since then Klaten became the major food supplier for Central Java and represented a pilot area for the implementation of the green revolution program. In 1970 the region had a surplus of food production in Central Java, in addition to Kerawang in West Java and the Brantas region in East Java (Abdullah, 1994) (Schweizer, 1987). Besides, this region also became the center for the development of a variety of new seeds, such as B5, PB8, and C4 varieties (Suwondo, 1997). However, the implementation of the green revolution led to the loss of agricultural employment opportunities. The proportion (*bawon*) system in harvesting was replaced by the sold-on-the spot (*tebasan*) system, the field (*kedokan*) system in planting was replaced by the wage (*upah*) system.

Klaten decreased significantly. During the period, the proportion of farmer households in this region decreased by 43.04 percent (BPS Propinsi Jawa Tengah, 2013). The decline was much greater than the national average (16.32 percent) (BPS Propinsi Jawa Tengah, 2013) and the provincial average 25.65 percent (BPS Propinsi Jawa Tengah, 2013). Between 2003 and 2013, the number of farmers aged above 45 years, on the other hand, increased by 10.6 percent, while farmers aged less than 44 years dropped about 17.6 percent. The data demonstrated that the scarcity trend of farmers for 10 years in Klaten was running faster than the national and Central Java average.

3.2. Changing of Land Ownership and Land Tenure

Nearly 60 percent of farmer households in Kauman Village were landless farmers (Table 1). In Klaten region, the great number of landless farmers, especially in paddy fields, was not a new phenomenon. Djojopranoto (1958), Slamet (1965), Roll (1983), Research Institute of Social Sciences of LPIS (1972), and Schweizer (1987) indicated that the proportion of landless farmers in Klaten had already been high, ranging from 43 to 80 percent, since the mid twentieth Century. The proportion of landless farmers in Kauman Village alone was 53 percent in 1972 (LPIS, 1972) (Table 1). Those studies suggested that the green revolution, which was characterized by the increasing

commercialization of agriculture, was not the sole cause of the rising number of landless farmers because, as the studies demonstrated, the proportion of that group had been high before the green revolution program was intensified.

The average agricultural land ownership in the research location was very small, approximately 0.12 ha. If the number of landless farmer households was not included in the calculation, the average agricultural land ownership would be 0.31 ha or 1.5 *pathok* by the local measurement (Table 1). Soekasno (1939) in 1939, Djojopranoto (1958) in 1958, Roll (1983) in 1970, and Schweizer (1987) in 1978 showed that the average area of wetland ownership in some areas in Klaten ranged from 0.23 to 0.44 ha. Specifically for Kauman Village the average land ownership in 1972 was 0.22 Ha (LPIS, 1972). The studies suggested that, over time, the fragmentation of wetland farmland holdings continued through the process of land inheritance.

Table-1. Farmer Household Landless and Average of Land Ownership

Area Studies	Farmer Household Landless (%)	Average of Land Ownership (Ha)
Klaten district 1939 ¹⁾	-	0,41
Klatendistrict 1958 ²⁾	62	0,37
Klatendistrict 1969 ³⁾	65	0,28
Sawah Village 1978/79 ⁴⁾	43	0,23
Kauman Village 1971/72 ⁵⁾	53	0,22
Kauman Village 2016 ⁶⁾	59,62	0,12
Gini Index Kauman Village ⁷⁾	0,39	

Source:

1 Soekasno (1939)

2 (Djojopranoto, 1958)

3 Roll (1983)

4 Schweizer (1987)

5 LPIS (1972)

6 Author own field work, 2016

7 Calculate from author own field work, 2016 from Primary Data, 2016

The gini index of land ownership in the research village was 0.39 (Table 1) meaning that the inequality of land ownership was at the moderate level. On the one hand, the number of landless farmers was nearly 60 percent but the level of land ownership inequality was not high due to the continued fragmentation of land ownership through inheritance, which was divided into smaller patches. On the other hand, the concentration of land ownership did not occur because the sale and purchase of agricultural land was relatively small. During the last 10 years, the intensity of the land sale occurred only once.

Although the number of landless farmers was quite large, the absolute landlessness was not found. Absolute landlessness farmers referred to those who were completely landless and had no arable land. In the research location, nearly all farm laborers were at the same time also tenant farmers. The number of farmer households holding land less than 0.1 ha was only 1.92 percent (Table 2). The study conducted by Wiradi (2008) in West Java, Central Java, and East Java in 1971 found that the number of absolute landless farmers was 31-78 percent. This suggested that the pattern of land tenure in Java had been moving towards equity.

This study also found that the average land tenure per farmer household was higher than the average land ownership, i.e. 0.46:0.12 ha (compare Table 1 and Table 2). On the one hand, this phenomenon occurred because landowners, especially those with narrow lands, had their lands cultivated. In addition, farmers with relatively larger lands generally sent their children to college. Having graduated from college, the children generally worked and settled in the cities. The rice fields they inherited from their parents were then rented. On the other hand, the number of farmer households willing to be tenant was limited. Such conditions then brought about an economic specialization. Farmer households whose main source of income was from agriculture tended to increase the area of arable land, but those whose main sources of income were non-agriculture tended to rent or cultivate agricultural land.

Table-2. Farmer Households based on the area of Land Tenure in Kauman Village

Land Area (Ha)	Households		Area		Average Ha
	Number	Percent	Ha	Percent	
Absolute Landless	0	0	0	0	0
< 0,1	1	1,92	0,06	0,25	0,06
0,1 - < 0,2	2	3,85	0,44	1,83	0,22
≥0,2 - < 0,5	32	61,54	7,81	32,43	0,24
Sub total	35	67,31	8,31	34,51	0,24
≥0,5 - < 1	10	19,23	6,88	28,57	0,69
≥1 - < 2	6	11,54	6,89	28,61	1,15
≥2	1	1,92	2	8,31	2,00
Sub total	17	32,69	15,77	65,49	0,93
Total	52	100	24,08	100	0,46
Gini Index	0,37				

Source: Author own field work, 2016

The gini index of land tenure is 0.37 (Table 2) was slightly lower than land ownership (0.39). The inequality of land tenure was at a moderate level because the number of farmers was much greater than the landowners. The number of farmers who rented and or bought other people's lands was only 5.77 percent, while the number of landless farmers who worked on other people's lands was 63.46 percent (Table 3). This indicated that what happened in the research village was the tendency towards equitable distribution of land tenure and not the concentration of land tenure as described by the previous researchers (Collier, 1977; LPIS, 1972; Sajogyo, 1982; Setiawan, 2006).

3.3. Changing of Land Tenure Institutional System

The results of the study conducted by LPIS (1972) LPIS demonstrated that the number of tenant farmers was only 10 percent in the dry season and 20.8 percent in the rainy season. By contrast, the present study found that the percentage of tenant farmers was 63.46 percent (Table 3), indicating that since the early 1970s until 2016 the number of tenant farmers had tripled. This radical change suggested that the pattern of cultivating the wetland farming in Java had changed from one's own land cultivation to a share-cropping cultivation. In addition, the share-cropping system was not only applied by farmers with larger farming fields but by those with small fields as well.

Table-3. Number of Farm Households by Status of Land Tenure

Status of Land Tenure	Number	Percent
Working on One's Land	13	25,00
Working on One's Land and other's Land	3	5,77
Working on Other's Land	33	63,46
Owning the Land labored by Others		3,5,77
Total	52	100

Source: Author own field work, 2016

Before the 1970s the dominant system of the share-cropping was *mrapat* (1:4) (Roll, 1983), while the current dominant system was *maro* (1:2). The present study found that the number of farmers applying the *maro* system was greater (42.86 percent) than the *mrapat* system (19.05 percent) (Table 4). In addition, before the 1970s the share-croppers were active in searching for arable land, but the landowners now took the initiative to offer their land to work on Roll (1983). The shift of the share cropping system from the *mrapat* to *maro* signified the stronger bargaining position of the peasants than that of the landowners.

Table-4. Number of Farmer Households by Share-cropping System

Share-cropping System	Number	Percent
Rent	8	19.05
Maro (1:2)	18	42.86
Mrotelu (1:3)	0	0
Mrapat (1:4)	8	19.05
Hak Penuh(full right)	1	2.38
Others	7	16.67
Total	42	100

Source: Author own field work, 2016

Compared to the 1970s the convention of the current *maro* system had shifted favoring to the tenant farmer. In the 1970s, the practice of *maro* system was based on the principle that all of the production costs was at the expense of the tenant farmer. Prior to obtaining the official rights, the tenant farmer (*pemaro*) had to give the landowner some amount of money (down payment) to signify the traditional contract. In addition, the landowners also asked the tenant farmer for a certain share of the gross harvest, usually one-eighth share, as a condition for the tenant farmer to obtain full rights to the contracted land. The rest of the harvest, after being subtracted by one-eighth, was equally split into two for both sides (Roll, 1983). In the current system, the tenant farmer was also responsible for all production costs but they did not have to give the down payment and an amount of share in order to obtain full rights to cultivate the land. In some cases, when they had poor harvest, the tenant farmer could request the landowner to give some portion of what he should receive to cover the cost of production.

The triggering factor contributing to the shifting patterns of land tenure and leasing institution was the declining appeals of agricultural work as a source of employment. In terms of age structure, the average age of the farmer household head was relatively old, i.e. 56 years old. One the one hand, there was no head of farmer household under the age of 34 years. On the other hand, the proportion of the farmer household heads over 65 was still relatively large, i.e. 17, 31 percent. Nearly 58 percent of farm household heads had worked as farmers for more than 20 years, the rest (42 percent) had worked for less than 20 years (Table 5). This suggested that over the last 20 years, the number of new households interested in becoming farmers was relatively small, i.e. 2.1 percent or one person per year. As mentioned above, in the research village there was no head of farmer households that was less than 34 years old. Thus, those who entered agricultural work for the last 10 years were not new households but old households who had worked at non-farm livelihood and then entered the agricultural work after retirement.

Table-5. Head of Farmer Households by Age and Working Time in Agriculture

Age and Working Time in Agriculture	Number	Percent
Age		
35-44 years old	4	7.69
45-64 years old	39	75.00
≥65 years old	9	17.31
Total	52	100
Average	56,3	
Working Time in Agriculture		
≤5 years	7	13.46
6 -10 years	5	9.62
11-15 years	7	13.46
16-20 years	3	5.77
21-25 years	6	11.54
26-30 years	0	0
31-35 years	6	11.54
≥35 years	18	34.62
Total	52	100

Source: Author own field work, 2016

Education level of rural youth was relatively high, namely 47,37 percent of them finished the senior high-schools and 26,32 percent were college graduates. They were generally more interested in non-farm employment because of the higher income and social prestige. Those who wanted to work on farms were only 21.05 percent, while 78.95 percent prefer non-farm work, especially urban occupation, such as public servants and state-owned employees, teachers, police, and the like. Their motives for choosing the desired type of work were largely based on economic reasons, namely to earn better livelihood and definite income (44.44 percent), the rest for reasons of adjustment to the level of education they achieved or were pursuing (20.78 percent).

4. Conclusion

Based on the preceding discussion, this study comes to the following conclusions. *Firstly*, the number of landless farmers was very large (60 percent). Despite the green revolution, the proportion of this group had been already high before the green revolution program was intensified.

Secondly, the level of land ownership disparity was moderate and tended toward equity due to the continuity of land ownership fragmentation through land inheritance processes, and no land ownership concentration occurred on the basis of agricultural land purchase.

Thirdly, the level of inequality of land tenure was moderate and even close to low, and tended toward equity as the number of land tenants was much greater than the land owners. *Fourthly*, the bargaining position of the land tenants tended to be stronger than the land owners due to the declining attraction of agricultural work as a source of employment.

References

- Abdullah, I. (1994). The muslim businessmen of jatinom, Religious reform and economic modernization in a central javanese town.
- Booth, A. (2012). *The performance of the indonesian agriculture sector: Twelve questions and some tentative answers, dalam anne booth, chris manning, Dan thee kianwie (ed), 2012, Land, livelihood, The economy and the environment in indonesia*. Yayasan PustakaObor Indonesia: Jakarta. 51-84.
- BPS Kabupaten Klaten (2014). *Klaten dalam angka*. Badan Pusat Statistik: Kabupaten Klaten. Klaten.
- BPS Kabupaten Klaten (2015). *Klaten dalam angka 2014*. Badan pusat statistik kabupaten klaten. Klaten.
- BPS Propinsi Jawa Tengah (2013). *Hasil sensus pertanian 2013 propinsi jawa tengah*. Badan Pusat Statistik Propinsi Jawa Tengah: Semarang.
- Collier, W. L. (1977). *Agricultural evolution in java, The decline of shared poverty*. Paper unpublised.
- Daldjoeni, R. (1972). Kepadatan penduduk dan proses involusi pertanian di kabupaten klaten. *Cakrawala*, 5(1): 3-16.
- Djojopranoto, R. N. A. (1958). Persaingan tanaman perdagangan di daerah surakarta dan sekitarnya, Khususnya daerah klaten, Dalam teknik pertanian. (11/12):
- Elson, R. E. (1994). *Village java under cultivation system*. Allen and Unwin: Sydney. 1830-70.
- Fernando, M. R. (1996). Growth of non-agricultural activities in java in the middle decades of the nineteenth century. *Modern Asia Studies*, 30(1): 77-119.
- Hüsken, F. (1998). *Masyarakat desa dalam perubahan zaman, Sejarah diferensiasi sosial di jawa*. Gramedia Widiasarana Indonesia: Jakarta. 1830-980.
- LPIS (1972). *Changes in rice farming in selected areas of Asia*. LPIS Universitas Kristen SatyaWacana: Salatiga.
- Padmo, S. (1994). Socio-economic history, The trend in the study on indonesian history. *Humaniora*, (1): 1950-80S.
- Roll, W. (1983). *Strukturpemilikan tanah di indonesia :Studikasuk daerah surakarta jawa tengah*. CV Rajawali: Jakarta.
- Sajogyo (1982). Modernization without development in Rural Java. *The Journal of Social Studies*, 15: 32-67.

- Schweizer, T. (1987). Agrarian transformation? Rice production in a javanese village. *Bulletin of Indonesian Economic Studies*, 23(2): 38-70.
- Setiawan, I. (2006). Analisis jaringan komunikasi petani pada berbagai zona agro ekosistem di kabupaten bandung. *Jurnal Agrikultura*, 19(1): 66-74.
- Slamet, I. (1965). *Pokok-pokok pembangunan masyarakat desa*. Bharata, Jakarta.
- Soekasno (1939). Het Particuliere Landbouwcrediet in het Soenanaat Soerakarta. *Volkscredietwezen*, 27: 733-91.
- Suhartono (1991). *Apanage dan bekel, Perubahan sosial di pedesaaan surakarta*. Tiara Wacana: Yogyakarta. 1830-920.
- Suwondo, K. (1997). The emergence of civil society in rural java: Socio-political change under the new order in a central javanese village.
- Van, N. and Robert (1984). *Munculnya elit modern indonesia*. Pustaka Jaya: Jakarta.
- Wiradi, G. (2008). *Pola penguasaan tanah dan reforma agraria*. Yayasan Obor Indonesia: Jakarta.