

Gold Green: A Survival Strategy of Farmers in Kayumas Village, Situbondo Regency

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Abstract. Kayumas Village was a unique village to study. The uniqueness could be traced through an evidence on 19 April 1883 when the Dutch investor HHvan Kol and his colleague JCEgter van Wissekerke were interested in leasing 504 *bau* of vacant land in Kajoemaas plateau to the Dutch colonial government for 75 years to establish the company "Cultuur Maatschappij Kajoemaas", whereas the location of Kajoemaas region was isolated and difficult to reach. The land was apparently planted with Arabica coffee because of the geographical location of the area was more than 760-1550 meters above sea level, and succeeded in producing Arabica Coffee exported to Europe. When Indonesia gained its independence, the company was nationalized and changed its position by PT. Perkebunan Nusantara XII (PTPN XII) by changing the name to be "Kayumas Arabica Coffee Processing". This Arabica coffee processing factory later inspired the farmers of Kayumas Village to cultivate their lands. This study was dissected using a political economy theory as combined with the historical method. The theory of Political Economy was used to trace the emergence of the critical thinking of Kayumas Village farmers to grow and crop Arabica coffee as the same as the PTPN XII. Meanwhile, the historical method was used to track the strategies used by farmers to survive. This study has resulted and proven that the majority of farmers in Kayumas Village chose to plant Arabica coffee as a strategy to survive along with PTPN XII. It was also proven that the coffee farmers in Kayumas village were more prosperous than farmers in other villages.

1 Introduction

During the period of *cultuurstelsel* (Forced Cultivation System) [1,2] which was applied in the Dutch East Indies region (called as the State of Indonesia during the Dutch Colonial period) in 1830-1870, the Indonesian people were introduced to a modern European-style plantation model [3] that was professionally managed through mandatory crops that must be

planted by farmers, such as coffee, sugar cane, indigo, and many others. These crops would be then exported to Europe. At the time, the farmers were not accustomed to growing these plants; they were just accustomed to growing rice and crops for merely subsistence needs. In addition, in a period of nearly 40 years, the *cultuurstelsel* system had succeeded in boosting the economy of the Netherlands Kingdom [4]. The success of the *cultuurstelsel* system was inseparable from the cooperation with traditional bureaucracy, such as the king, the regent as well as the lowest governmental position in a village, namely *bekel* (head of the village). The *bekel* was the spearhead of the Dutch colonial government to mobilize labor for the benefit of the *cultuurstelsel* system. On the other hand, for most farmers, the mobilization carried out by *bekel* to mobilize labor was considered as a form of compliance, especially in Java.

The success of *cultuurstelsel* system had invited a jealousy of big capital owners in the territory of the Netherlands Kingdom. They demanded that the parliament could be given the facility to invest in the Dutch East Indies. Hence, the investor pressure was finally paid off with his endorsement called as “*Agrarische Wet*” (Agrarian Law) and “*Agrarische Besluit*” in 1870 [5,6]. Both regulations had provided security guarantees for investors to invest in the Dutch East Indies. Almost all regions of Java had become places for investors to invest in, particularly by opening a large plantation business, such as coffee, sugar cane, tobacco, tea, rubber, etc. The Kajoemaas plateau was also becoming the target of the investors. It was proven that on April 19 1883, the Dutch investors H.H. van Kol and his colleague J.C. Egter van Wissekerke were interested in leasing 504 *bau* of vacant land in the Kajoemaas plateau to the Dutch colonial government for 75 years by establishing the NV Company named as “Cultuur Maatschappij Kajoemaas” [7], whereas the location of Kajoemaas region was isolated and difficult to reach at the time. The land was apparently planted with Arabica coffee because of the geographical location of the area with more than 760-1550 meters above sea level, and succeeded in producing Arabica Coffee that was exported to Europe. At that time, the exported Arabica coffee was known as “Java Coffee”.

Furthermore, when Indonesia had gained its independence, the NV Company “Cultuur Maatschappij Kajoemaas” was nationalized by the Indonesia government. The PTPN XII had taken the opportunity to process the Arabica coffee plantation company, and changed its title to be “Kayumas Arabica Coffee Processing”. This Arabica coffee processing was later inspiring the people of Kayumas village to plant it in the community’s plantations. This study uncovered the idea of Kayumas village farmers to grow Arabica coffee as the same as the PTPN XII program that had taken an opportunity to success Arabica coffee processing..

2 Method

This research was dissected with political economy theory [8] as combined with historical method. The theory of political economy is based on the assumption that humans have individual consciousness and always use rational calculation in carrying out their actions. On the basis of these assumptions, this theory focuses on village communities and individual decision making as well as expanding the conception of the head of village’s role in the economic life of farmers. In this context, Popkin believes that farmers as rational problem resolving based on their interests and need for bargaining together to achieve a mutually beneficial final result. In the theory of political economy, farmers' actions are based on the mechanisms of mutual interest of individuals as the members of community.

This research used the historical method to reveal in detail and chronology about the strategies used by farmers to survive amid the large plantations, namely the PTPN XII. There were four stages in the historical method, namely: 1) the heuristic stage; the stage of data

collection, 2) criticism stage; the stage of sorting through data classification, 3) interpretation stage; the stage of data analysis, and 4) historiography stage; the stage of writing [9].

3 Results And Discussion

3.1 The Glory of NV “Cultuur Maatschappij Kajoemaas” in the Colonial Period

The opening of the Dutch East Indies region for investors was well exploited by H.H. van Kol and his colleague J.C. Egter van Wissekerke [10]. They rent vacant land in the Kajoemaas Residency Bezoeki (Residency of Besuki). The Kajoemaas' vacant land has become the choice of Dutch investors to establish a coffee plantation with full of consideration and calculation, but the investors have already studied and calculated their profits in the Kajoemaas region. Geographically, Kajoemaas region was located above the altitude 760-1550 meters above sea level with climatological suitability for growing Arabica coffee. Likewise the isolated areas, it minimized the theft and destruction when a coffee plantation had been established. The *erfpacht* rights (lease rights) were obtained by issuing a Decree of the General Governor on March 31, 1883 to HH van Kol for a period of 75 years, and recorded by a license No. 22 which was made and published before the Bezoeki Resident on April 19, 1883 to lease 504 *bau* of land in Kajoemaas for a coffee plantation. On August 9, 1883, HH van Kol established a coffee plantation company NV "Cultuur Maatschappij Kajoemaas" which was approved by the notary Al Snouck Hurgronje in Surabaya. The company's capital was F 80,000, divided into 4 shares with F 20,000 on for each sharing [11].

During the Dutch Colonial period, Kayumas Village was the name of a parcel, namely Persil Kajoemaas which was part of Soemberwaroe District, Afdeling Panaroekan, the Bezoeki Residency (Besuki Residency) [12]. The coffee plantation company NV "Cultuur Maatschappij Kajoemaas" was managed professionally. The land area of 504 *bau* for rent was divided into 8 afdeling [13] as follows:

1. Afdeling Soekma Ilang
2. Afdeling Kidang
3. Afdeling Sabrang
4. Afdeling Radja
5. Afdeling Kidoel
6. Afdeling Taman
7. Afdeling Pondok
8. Afdeling Kendeng

The effort undertaken by the coffee plantation company NV "Cultuur Maatschappij Kajoemaas" by growing Arabica coffee plants in the area was located in the 8 afdeling. The coffee yields from 8 afdeling can be seen in table 1. The beginning of coffee cropping was begun in 1883. In 1884, the planted coffee plants had changed to bear fruit with a yield of 68 weights. In 1885-1886, the yields had decreased, but starting in 1887 the yields had continued to increase (see table 1). This change is due to the professional handling of the leaders who manage coffee plantation company NV "Cultuur Maatschappij Kajoemaas". Based on the fact, its Arabica coffee production was exported to Europe through Panaroekan Port headed to Rotterdam, Netherlands by a steamship "Rotterdamsche Lloyd" [14]. In 1959, the NV Company "Cultuur Maatschappij Kajoemaas" was nationalized based on the Government Regulation No.19 of 1959 [15].

Table 1. Coffee Production of the Coffee Plantation Company NV "Cultuur Maatschappij Kajoemaas" [16]

Year	Yields	Price / per weight
1883	-	-
1884	68 picol	F. 30
1885	35 „	F. 25
1886	61 „	F. 32
1887	150 „	F. 30
1888	151 „	F. 25
1889	306 „	F. 45
1890	440 „	F. 54
1891	1,084 „	F. 57
1892	1,286 „	F. 56
1893	1,892 „	F. 52
1894	722 „	F. 56
1895	2,345 „	F. 52
1896	708 „	F. 57
1897	2,964 „	F. 39
1898	1,458 „	F. 38
1899	1996,	F. 35
1900	1,670 „	F. 30
1901	2,271 „	F. 43
1925	4,216 „	F. 125
1926	2,452 „	F. 126
1927	4,430 „	F. 126
1928	736 „	F. 109
1929	4,853 „	F. 86
1930	4,550 „	F. 89
1931	4,129 „	F. 91
1932	2,466 „	F. 56

3.2 “Kayumas Arabica Coffee Processing Factory” by the PTPN XII: A Source of Inspiration

The PTPN XII has gotten an opportunity from the Indonesia Government to continue the management of the Arabica coffee plantation inherited from the NV Company "Cultuur Maatschappij Kajoemaas" owned by the Dutch investor HHvan Kol. The government prefers the PTPN XII to manage the NV Company "Cultuur Maatschappij Kajoemaas", because it is managed professionally and gives profit to the state every year [17]. The PTPN XII is a limited liability company with a composition of shared-ownership covering the state about 10% and 90% for the PTPN III [18]. The status of plantation land rights managed by the PTPN XII is the right to cultivate under a decree No. SK HGU 45/HGU/DA/88 dated June 15, 1988. The date of expiration was on December 31, 2013 with total area of 838,800 Ha. There were 682.64 Ha land used for Arabica coffee, 64.2 Ha of TTAD Arabica coffee, 24.35 Ha of various kinds of planted wood, 31 Ha for cultivation of seeding, 3.6 Ha for factory building, 12.49 Ha for employee housing, 45.83 Ha for free areas, and 3.35 Ha for non-planted areas [19]. At present, the extension of the PTPN XII's cultivation right of land will expire on December 31, 2038.

The Arabica coffee with a label "Kebun Kayumas" that was managed by the PTPN XII was also exported to Europe, and has not been able to meet European market demand for almost every year. The taste of Arabica coffee “Kebun Kayumas” was favored by connoisseurs of Arabica coffee in the European region. The Arabica coffee plantation "Kebun Kayumas" was able to absorb a lot of workers. Starting from clearing garden land from grasses and wild plants, fertilizing, rejuvenating plants, harvesting, drying, and sorting to the coffee process to be exported. During the harvest season, the PTPN XII was able to absorb up to 200 people from the community in Kayumas Village every day. They received a wage of 0,12 USD (1,800 rupiahs) per-kilograms for harvesting red logs (see figure 1). This condition has provided prosperity for the people in Kayumas Village who worked at the PTPN XII plantation. Working on Arabica coffee plantation managed by the PTPN XII has educated the public on how to plant, maintain, harvest, dry and process the correct Arabica Coffee. The people in Kayumas Village who worked at PTPN XII indirectly learned to process Arabica coffee based on the Standard Operating Procedures (SOP). To get a quality of Arabica Coffee production, the workers needed to consider several points, namely: (1) picking red coffee fruit; (2) fruit sorting to separate green, yellow, dried, ripe fruits with a minimum of 95% red fruit; (3) fruit mining, separating floating fruit; (4) stripping red skin with a machine/pulper; (5) cleaning and mining wet-skinned seeds; (6) the fermentation for 18-36 hours; (7) washing these with clean water; (8) drying to 12% moisture content; (9) storage of dry-horned (temporary) shelled seeds; (10) grinding using a machine / huller; and (11) ready to sell.



Fig.1. The Workers at PT. Perkebunan Nusantara XII are harvesting on July 7, 2020 [20]



Fig. 2. Arabica Coffee Drying Process by PT. Perkebunan Nusantara XII Kebun Kayumas (Research Document)

3.3 The “Green Gold” Becomes the Pride of the Farmers

Previously stated, this research used the theory of political economy by Samuel L. Popkin and combined with historical method to describe in detail and chronology about the strategies of the farmers in Kayumas Village to survive along with large plantation managed by the PTPN XII as well as to think smartly to choose Arabica coffee as the superior product of farmers in Kayumas Village. The farmers in Kayumas Village used the opportunity to learn how to plant, care for, harvest and process Arabica coffee from PTPN XII's "Kayumas Plantation" by becoming temporary-daily employees as recruited by the PTPN XII. Finally, those farmers could learn that Arabica coffee has a higher selling value as compared to other types of coffee.

The researchers chose the name "Green Gold" to refer to "Arabica Coffee"; arguing that "Arabica Coffee" was like gold, because the selling price was higher than Robusta coffee. The selling price of Green Bean Arabica coffee can reach 6,93 USD (100,000 rupiahs/kilograms, while the selling price of Robusta Green Bean Coffee only reaches 2,29 USD (33,000 rupiahs/kilograms. These prices (both Arabica and Robusta Coffee) fluctuate depending on the time of sale. The more harvest is reduced, and the longer it is stored, and the higher the price of coffee can be.

Kayumas Village that becomes a spatial scope in this study is located in Arjasa Subdistrict, Situbondo Regency. The geographical location of Kayumas Village is more than 760-1,550 meters above sea level, with an area of 76, 29 Km². Kayumas Village consists of 8 villages, namely: (1) Tanah Merah; (2) Tunggul Gunung; (3) Pelle; (4) Krajan; (5) Alun-Alun; (6) Cottok; (7) Kayumas; and (8) Sukmoelang [21]. The majority of the community's livelihoods are farmers, especially Arabica Coffee farmers. The area of Kayumas Village is located at an altitude of 760 – 1,550 meters above sea level. It is suitable for growing Arabica coffee. This condition is used by farmers to grow Arabica coffee, especially in Kayumas Village and Sukmoelang Village located at an altitude of 1,550 meters above sea level. The "Kayumas Plantation" belongs to the PTPN XII inspires the farmers in Kayumas Village to be more active in growing Arabica Coffee. One of the Arabica Coffee plantations of the farmers in Kayumas Village can be seen in the following figure.



Fig. 3. Arabica Coffee Plantation owned by Kayumas Village Farmers (Research Document)

In general, Arabica coffee farmers in Kayumas Village have coffee plantations inherited from generations, but not all farmers in Kayumas Village have private land to plant Arabica coffee. The solution obtained by the farmers in Kayumas Village to increase the area of cultivated coffee land comes from PERHUTANI's land. The PERHUTANI (Government Agency for Forested Area) prepares forest land for coffee cultivation with the concept of agroforestry. This is a solution to the limitations of coffee cultivation land outside the forest area. This organization is under the authority of Indonesia government to manage, care for, maintain and plant new crops as well as to distribute forest land for the welfare of the people; certainly by the existence of a MoU with the Regent. The MoU needs to be done, so that people who are given the opportunity to use forest land do not damage the forest.

Furthermore, the distribution of land for the benefit of people's welfare can only be given by PERHUTANI. According to Suwarno, the Head of the Research and Development Center (Puslitbang) Government Agency for Forested Area said, "... that PERHUTANI manages 2.4 million hectares of forest to easily increase the area of land for people's coffee plants". Suwarno added that currently the area of coffee plants in PERHUTANI's land has reached 115 thousand hectares stretching from Banten to Banyuwangi [22]. This agency is collaborating with LMDH Bukit Jaya at Kayumas Village to assist the distribution of Kayumas Forest Administration (RPH) land. The standard area of Kayumas RPH forest land is 820, 52 Ha, while the area of forest for coffee cropping by 249 coffee farmers in Kayumas Village is 269.50 Ha (see table 2) [23].

Table 2. The Collaboration of Coffee Agroforestry in the Division of Bukit Jaya LMDH Kayumas Village, Arjasa District, Situbondo Regency [24]

No	RPH	Plot	Standard of Area (Ha)	Coffee Plant Area (Ha)	Number of Cultivators (people)
1	Kayumas	21 A	6.60	6.60	6
2		21 B	139.00	60.50	56
3		21 D 1	11.40	4.00	3
4		21 D 2	3.32	2.00	4
5		21 E	3.25	2.00	3
6		21 F	7.80	7.80	6
7		21 G	99.64	82.50	53
8		21 I	8.90	6.20	6
9		21 K	30.10	11.00	22
10		21 L	39.90	34.90	25
11		22 N	28.90	19.00	6
12		21 H	13.56	6.50	8
13		22 D 1	364.00	3.50	14
14		22 D 3	27.50	6.00	11
15		22 L	13.42	5,00	5
16		22 O	8.00	3.75	8
17		22 N	8.23	4.00	3
18		22K 1	7.00	4.25	10
Total			820,52	269.50	249

To maximize revenue in addition to the assistance from this agency, the coffee farmers in Kayumas Village have formed farmer groups to get assisted with facilities from the Situbondo District Government, East Java Provincial Government and the Ministry. There are six coffee farmer groups that have been formed, namely: (1) Delima I; (2) Delima II; (3) Sejahtera; (4) Kayuputih I; (5) Kayuputih II; and (6) Kayuputih III [25]. Besides, the smallholder coffee farmers also process Arabica coffee alike the PTPN XII. During the drying process (see picture 4), the process of dry HS grinding to Green Bean (see picture 5) to the process of making coffee powder (see picture 6).



Fig. 4. The Research Team and Mr. Edianto as the Chairperson of Delima Coffee Farmers Group at Kayumas Village along with the Results of its Arabica Coffee Product (Research Document)



Fig. 5. The Milling Process of Dry HS into Green Bean Owned by Mr. Edianto Head of Coffee Farmers Group at Kayumas Village (Researcher's Document)



Fig. 6. The Downstream Coffee Products for Smallholder Coffee Farmers at Kayumas Village (Research Document)

4 CONCLUSION

The farmers in Kayumas Village are apparently able to think critically living along with a great plantation company PTPN XII that manages "Kayumas Garden". There is no resistance to PTPN XII, but instead inspiring the community in Kayumas Village to continue cropping Arabica coffee as a legacy from their ancestors with export quality standards. For farmers who do not plant coffee are finally interested in growing and cropping Arabica coffee alike planted by PTPN XII with a higher selling value than other types of coffee. Unfortunately, the efforts made by farmers to grow Arabica coffee do not get full support from the Situbondo Regency Government. It is proven that there is not enough support from the Situbondo District Agriculture Office to find the equipment needed by the coffee farmers in Kayumas Village (both from the Situbondo District Government, East Java Provincial Government and the Ministry). Many of the equipment used by smallholder coffee farmers are not suitable for use, such as pulper, and coffee roaster or coffee powder maker. The existence of such equipments is very influential on the coffee products (output). Likewise with the branded coffee of the people in Kayumas Village, there is no effort performed by the Situbondo Agriculture Office to search for the management of Geographical Indications, whereas Bondowoso Regency has already branded coffee for its people namely "Java Ijen Raung".

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