

## **COFFEE PRIANGAN IN THE NINETEENTH CENTURY**

by

Mumuh Muhsin Zakaria  
(Universitas Padjadjaran)

The course of Priangan history during almost two centuries, in the VOC and Dutch colonial period, was nearly identical to coffee cultivation. The consideration based on that Priangan was temporally the first region in Java where coffee cultivation introduced; then quantitatively coffee cultivation of Priangan engaged the number of man power and large of land extensively, so that consequently the product of coffee from this residency was always the highest than the other residencies throughout Java. Besides, in favour of coffee cultivation, within residency was operated very long aged system then known as *Preangerstelsel* from 1677 until 1870.<sup>1</sup>

The significance of Priangan coffee to Dutch treasury could be illustrated as follows. Around 1726 the VOC accounted for about 50 percent to 75 percent of the world coffee trade. Of the total turnover of the VOC, which was over 4,000,000 pounds, approximately over 75 percent was produced in Priangan.<sup>2</sup> Further evidence, in the first half of the nineteenth century for Dutch exchequer, coffee had always been the product on which the greatest profit was made. For

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<sup>1</sup> Jacob Worter de Klein. 1931. *Het Preanger-stelsel (1677-1871) en zijn nawerking* (Doctor diss., Leiden). Delf: J. Waltman Jr.

<sup>2</sup> G.J. Knaap. 1986. "Coffee for Cash; the Dutch East India Company and the Expansion of Coffee Cultivation in Java, Ambon and Cylon 1700-1730" in J. van Gor ed. *Trading companies in Asia 1600-1830*. Utrecht: Hes Uitgevers, p. 34.

example, between 1840 and 1849 alone was obtained about 65 million guilders compared with 15 million for indigo. Sugar did not become profitable until after 1845. The highest contributor for coffee production was Priangan.<sup>3</sup> As the main producer of coffee, the position of Priangan had been first replaced by Pasuruan in the beginning of 1860s,<sup>4</sup> but the Priangan Residency remained a bulwark of the coffee system.

Initially coffee was introduced by the VOC to Priangan in the early of eighteenth century. The first coffee was planted in 1707. The motivation that encourage the VOC to plant coffee in its controlled region was highly connected to the global competition of world coffee market. Towards the end of the seventeenth century the demand for coffee in Europe was rising. To respond the need of coffee in the European market the VOC bought it from Yemen in amount which was increased steadily. For instance, around 1695 of 300,000 to 400,000 ponds, around 1707 of 500,000 ponds, from 1715 onwards almost 1,500,000 ponds.<sup>5</sup> The buyers of Yemen coffee were, of course, not only the VOC, but also from other countries such as British, Turkey, and so on. Consequently, the rivalry happened and strengthened, and, in turn, the cost price started to rise considerably, so the margin obtained was little. Therefore, to replace the position of Yemen, the VOC made an effort to seek an alternative region where could have been a place to product much of coffee.

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<sup>3</sup> C. Fasseur. 1975. *The Politics of Colonial Exploitation in Java; the Dutch and the Cultivation System*. SEAP: Cornell University, Ithaca, New York, p. 36.

<sup>4</sup> For detailed figure of coffee production by 1854-1870 in Javanese Residencies see R.E. Elson. 1994. *Village Java under the Cultivation System 1830-1870*. Sydney: ASAA and Allen and Unwin, p. 139.

<sup>5</sup> G.J. Knaap, 1986: 36.

In 1723 reported that in the Priangan residency there were approximately 2,141,000 coffee trees from which 1,041,000 were fruit bearing. In western Priangan the population had started cultivation on their own lands on a large scale, and east and centre Priangan were to follow this example very soon. Therefore, around 1725 surprisely, Priangan coffee had surpassed Yemen as the principle centre of coffee production from which the VOC purchased it.<sup>6</sup>

The question, then, appears is how the cultivation system of coffee in Priangan operated, so that was stable relatively, at least, until the half fist of the nineteenth century. The successful of coffee cultivation really related to some factors, among others were the suitable land, available man power, crop payment, cultivation percentage, and supervision. Such factors could be categorized into four board variables that are ecology, organization of production, and labour.

### **Ecology and Soil**

For the successful of coffee plantation the first factor was naturally the suitability of the soil. In principle coffee plantation were laid out on virgin lands relatively far from the villages, so that, unlike sugar, these planting did not occupy

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<sup>6</sup> *Ibid.* As comparison, coffee purchased by the VOC from Yemen and Priangan from 1722 to 1728 could be seen the followed table (production in ton):

Year	Yemen	Priangan
1722	832	6
1723	427	36
1724	399	663
1725	228	1,264
1726	277	2,145
1727	264	2,076
1728	0	2,021

See David Bulbeck et al. (comp.). 1998. *Southeast Asian Exports since the 14<sup>th</sup> Cloves, Pepper, Coffee, and Sugar*. Singapore: Institute of Southeast Asian Studies, p. 144.

farming land intended for food production. The altitude was just as important as the soil; ideally between 1,000 and 4,000 feet. Beneath the level the shrub was able to grow but needs grow even better, hence lower altitudes meant a lot of maintenance. The agriculture chemist P.F.H. Fronberg believed that the cultivation of coffee below 1,000 feet should be forbidden. About 4,000 feet the coffee shrub would remain productive longer and could grow much older than at lower level, but the yield per shrub was much less.<sup>7</sup> So, the better results are usually obtained in higher situated areas.

Coffee plantation was usually situated in the hilly lower ranges of mountain slopes. The landscape of Priangan is fortunately dominated by mountain ranges and high plains. The high mountain ranges in Priangan gave the plantation relatively good protection against the strong sea winds. Moreover, in the eighteenth and nineteenth centuries the condition of soil would have been quite suitable for coffee. Priangan which was not yet a densely populated territory must have had a very considerable area of uncultivated land. Coffee particularly well on soil newly reclaimed from primary forest.<sup>8</sup>

Therefore, it is understandable when within the Cultivation Reports have never stated how many *bouw*<sup>9</sup> of land were assigned for the cultivation of coffee that was contrast with the data provided for sugar and indigo cultivation.<sup>10</sup> For the

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<sup>7</sup> Frans van Baardewijk. 1994. "Rural response to intensifying colonial exploitation; coffee, state and society in Central and East Java, 1830-1880", in G.J. Schutte. *State and Trade in the Indonesian Archipelago*. Leiden: KITLV Press, p. 161.

<sup>8</sup> G.J. Knaap, 1986: 44.

<sup>9</sup> *Bouw* is a unit of traditional large measurement equal to 500 Rijn roeden<sup>2</sup> or 7096,5 m<sup>2</sup> or 1,7587 acre (Engl. measure); see Anon. 1914. *Maten en Gewichten van Nederlandsch Oost-Indie (handboek voor cultuur en handels-ondernemingen in nederlandsch indie)*.

<sup>10</sup> C. Fasseur, 1975: 28.

cultivation of coffee, unused or waste land (*woeste gronden*) was gradually employed, whereas sugar and indigo cultivation took place in the densely populated lowlands. Such a situation, in turn, appeared a considerable difference between coffee cultivation and sugar cultivation both in agrarian and social implications. Coffee was not grown in symbiosis with rice, but rather on virgin land, even often located far from the village. Thus, officially coffee was grown alongside other foods and commercial crops. In the other side, the cultivation of coffee was also far simpler in organization than that of sugar. The role of the village elite was more restricted and this reduced their chances at strengthening themselves politically and economically. It seems that coffee cultivation did not lead to the drastic changes in the distribution of land-ownership and income which apparently were so typical of the sugar growing areas. Besides, there was hardly any ruled for additional labour, hence it offered the landless peasants no new job opportunities. Then, coercion certainly played a role in rising coffee production, but in the long run, in many districts coercion was not a decisive factor. There the economic significance of coffee cultivation to the planters themselves determined its destiny.<sup>11</sup> For the nineteenth century control over labour was more crucial than control over land; for the later seemed in oversupply, whereas the former, if not in short supply, was difficult to manage and exploit.<sup>12</sup>

Within Priangan residency itself, the suitable land for coffee cultivation was not similar. The western Priangan was the principal area of production then followed by the eastern Priangan, as well among the regencies within the eastern

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<sup>11</sup> Frans van Baardewijk, 1994:153.

<sup>12</sup> *Ibid.*

one. For example, regencies of Bandung and Cianjur were more productive than Parakanmuncang and Sumedang. Therefore, in the early of nineteenth century, in the period of Daendels, the grouping of regency to which one grouped was based on the fairly similar production of coffee as consideration. Daendels, for instance, at 20 June 1810, divided Priangan into two groups: firstly, regencies of Cianjur, Bandung, Parakanmuncang, and Sumedang entered to Jacatra (now, Jakarta), then named “*Landdrost-ambt der Jacatrasche en Preanger bovenlanden*”; secondly, regencies of Sukapura, Limbangan, and Galuh entered to Cheribon, then named “*Landdrost-ambt den Cheribonsche Preanger-regentschappen*”.<sup>13</sup> In the other side, Daendels stated a policy that the carrier and conduit of a regent based on the successful of coffee production of his regency. Even Daendels could whenever retire a regent who was not success in coffee cultivation. Such a case happened to the regents of Sukapura and Galuh.<sup>14</sup>

Although the widespread obligation to expand coffee trees and to increase product had already persisted, even, since the VOC period, but the regional impact of forced coffee was uneven. The difference amount of total trees and production among the regencies within Priangan residencies might have been among others caused by the difference altitude of each regency and the level of suitability and fertility. As a concrete illustration of these differences could be seen the figure of coffee trees in each regency within Priangan in the periods of 1832 – 1864

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<sup>13</sup> Then at 2<sup>nd</sup> March 1811 Daendels reformed Priangan, that was regencies of Limbangan and Sukapura which before were in *Landdrost-ambt den Cheribonsche Preanger-regentschappen* to have been a part of the *Landdrost-ambt der Jacatrasche en Preanger bovenlanden*; and the latter named *Landdrost-ambt der Jacatrasche en den Cheribonsche Preanger regentschappen*. See J.A. van der Chijs. 1897. *Nedrlandsch-Indisch Plakaatboek, 1602-1811*. Zestiende deel 1810-1811. Batavia-'s Hage: Landsdrukkerij-M.Nijhoff, pp. 234-235 and 591-235.

<sup>14</sup> J.A. van der Chijs. *Ibid*.

(TABLE 1) that shows the shifting size of coffee cultivation within Priangan as a whole and the different development within each regency, although late 1830s was top.

**TABLE 1**  
**COFFEE TREES IN PRIANGAN (1832-1864)**

REGENCY	TOTAL TREES				
	1832	1835	1836	1839	1864
Cianjur	13,017,006	19,180,432	24,202,804	24,488,406	13,619,303
Bandung	15,942,158	30,020,550	30,247,200	29,398,100	20,041,750
Sumedang	9,971,177	17,736,760	18,587,093	8,598,230	10,100,360
Limbangan	5,965,989	8,045,155	10,245,845	18,979,676	5,252,983
Sukapura	375,000	6,225,670	10,678,612	5,627,097	2,005,337
Total	45,271,331	81,208,567	93,961,554	87,091,509	51,019,733

Sources: *AV Preanger*, 29a/19, 1932; *AVPreanger* 36/3, 1835; *AV Preanger*, 2/7, 1935; *Preanger Statistiek* 1836, *AV Preanger* 7/1, 1837; *AV Preanger* 34/1, 1839; *AV Preanger* 30/6, 1864.

Parallel to the differences of amount of coffee trees, from which clearly seem that Bandung was the most then followed by Cianjur, Sumedang, Limbangan, and Sukapura, the similar situation happened on the differences of amount of product (TABLE 2). Possible reasons behind it were natural and structural factors. The first factor meant that the southern regencies were not so suitable for coffee; and the second factor meant that the regencies were located far from central government of Residency, so the supervision of coffee cultivation was not as intense as Regencies closed to central of Residency.

**TABLE 2**  
**COMPARISON OF COFFE PRODUCTION IN PRIANGAN (1820-1835)**  
**(in pikul of 125 pond Amsterdam)**

YEAR	REGENCIES OF					TOTAL (in <i>pikul</i> )
	Cianjur	Bandung	Sumedang	Limbangan	Sukapura	
1820	10487	17311	5917	4570	0	38285
1821	18014	28521	18262	16610	0	81407
1822	24837	26931	17542	17264	0	86574
1823	18269	24767	11295	12374	0	66705
1824	18512	23172	13890	10102	0	65676
1825	48515	22139	21931	13411	0	105996
1826	24770	24473	16278	15312	0	80833
1827	50726	30448	23514	17214	0	121902
1828	42109	23139	15328	14206	0	94782
1829	18839	25562	10398	9665	0	64464
1830	18748	22084	11693	9649	0	62174
1831	10683	17723	5812	4786	0	39004
1832	11543	22328	9560	9805	0	53236
1833	12321	33290	9347	10084	61	65103
1834	46711	74428	20122	18045	717	160023
1835	16116	46228	7936	10517	288	81085

Source: "Statistiek der Residentie Preanger Regentschappen 1837", *Preanger* 29a/1 1837, ANRI

### Organization of Production

Generally the success of coffee cultivation in Priangan was not only thanks to ecological factors, such as suitable and fertile soils but also practically the cultivation was operated by a system that has been credited to state coercion, building on traditional forms of tribute levying and forced labour.<sup>15</sup> The Dutch administration did not contact to village inhabitants directly and did not interfere in the execution of cultivation. The colonial government left almost all aspects of

<sup>15</sup> Frans van Baardewijk, 1994: 152.



coffee production in the indigenous hands both of peasant growers and local heads, despite some efforts at modernization in the late of nineteenth century. Coffee cultivation consequently remained outside the close supervision of the administration. This was in striking contrast to sugar cultivation, which was scrupulously managed by colonial officials.<sup>16</sup> All regulations related to the coffee cultivation, included the distribution of the burdens and other tasks, have been a matter of the village administration. The local heads, ranging from the regents to the village heads, were responsible to organize daily activities. Even between the regent and the village heads, the two ends of the formal line of administration, there was a range of “intermedary heads” who had a real influence on the implementation of the colonial system of exploitation in this region.<sup>17</sup> On their hands the coffee cultivation to which required a lot of additional labour and land was arranged. They designated areas for coffee planting, assembled labour, and supervised cultivation and harvesting.<sup>18</sup> In the respect, the way in which government cultivation were organized did not differ from that of *corvee* services (*heerendiensten*), that is, the money unpaid services for all kinds of projects and works for which the governments call up people.<sup>19</sup>

Little known which mode of coffee production firstly operated in Priangan among the three: regular plantation, agro-forestry, and hedge and kampong coffee. But, seemingly, hedgerow mode was the initial; thereafter the coffee cultivation

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<sup>16</sup> M.R. Fernando. 2003. “Coffee Cultivation in Java, 1830-1917“, in William Gervase Clarence-Smith and Steven Topik. *Coffee Economy in Africa, Asia, and Latin America, 1500-1898*. Cambridge University Press, p. 158.

<sup>17</sup> Frans van Baardewijk, 1994: 152.

<sup>18</sup> W.G. Clarence-Smith. 1994. “The Impact of Forced Coffee Cultivation on Java, 1805-1917”, in *Indonesia Circle*, No. 64, p. 245.

<sup>19</sup> C. Fasseur, 1975: 29.

concentrated on the plantation system.<sup>20</sup> These different kinds of production were significant both for administration reasons and other regulations: workforces, distribution of wage labour, transportation, and so on.<sup>21</sup>

Growing coffee in plantation located far away from villages was the most onerous mode of operation for peasants, but the government preferred it, because of its greater short-term productive capacity. The distance from village growers to coffee plantations varied between 10, 20 and 34 *paal*. Therefore, coffee planters had to build *pangkalans* or *prataks* (shelters) in the plantations, so they could stay there in the times of preparing, harvesting and transporting.<sup>22</sup> To prepare coffee plantations, people assigned were mobilized all together. They cleared land of shrubs and large trees and ploughed, weeded, terraced, and fenced the cleared land, before planting out. This preliminary work was normally carried out during the dry season, but it continued into the early part of wet season. During this initial phase, coffee-planting household were required to stay in temporary shelters to save time and labour.<sup>23</sup>

Forest coffee was simple planted in suitable areas, usually involving only the removal and burning of undergrowth before planting took place; thereafter the crop sites required periodic weeding and clearing. Hedgerow coffee was similarly uncomplicated, since it was generally cultivated in well-settled and established environments in either house garden or small village plots which allowed great participation in their maintenance, harvesting, and processing by women and

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<sup>20</sup> The change of orientation likely had begun since the last of 1840s.

<sup>21</sup> Frans van Baardewijk, 1994: 158.

<sup>22</sup> *AV Priangan*, 30/3, 1852, ANRI.

<sup>23</sup> R.E. Elson, 1994: 65; M.R. Fernando, 2003: 166; Frans van Baardewijk, 1994: 160-167.

children. Little labour was needed for clearing the land, weeding was kept to a minimum by the canopy of tall trees.<sup>24</sup> Because much of the coffee classification as hedgerow coffee was on reality grown in small plots to village, therefore, such a mode known also as kampong coffee.

Among the three modes, which one was the most popular within Priangan? At least, based on the comparison of each mode along the nineteenth century, there were different tendencies by each decade. In 1830s and early 1840s hedgerow and forest coffee were very popular in Priangan; even by 1837 in regencies of Bandung and Sumedang were more than fifty percent coffee trees in hedgerow or kampong, and in regency Sukapura more than 63 percent in forest. By 1839 the increasing number of coffee trees in hedgerow or kampong were happened in three regencies of Bandung, Sumedang and Sukapura respectively 55.71%, 55,48%, and 53% (see Appendix 5.A).

In the beginning periods of 1850s, contrast to before, coffee cultivation largely concentrated to plantation mode, even for 1857 – 1868 more than 80 percent as plantation coffee (TABLE 3). As comparison, in 1870 forest coffee was very popular in Pasuruan; even, by 1875 some two-third of coffee in the crucial area of Pasuruan was cultivated under this mode,<sup>25</sup> while hedgerow coffee was much practiced in Kedu and Banyumas.<sup>26</sup>

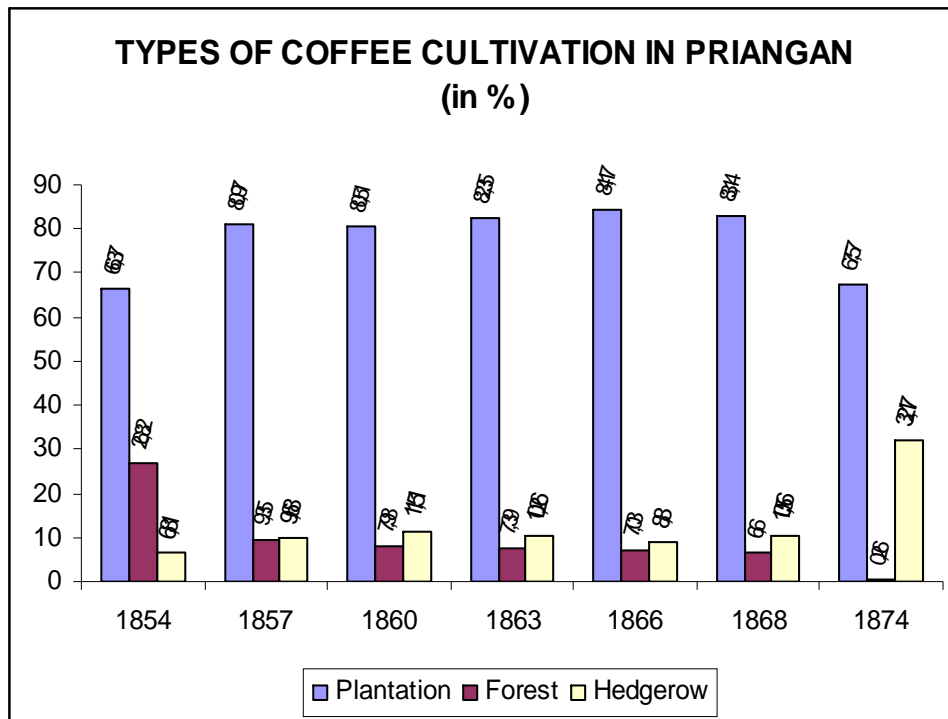
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<sup>24</sup> R.E. Elson, 1994: 65-66; W.G. Clarence-Smith, 1994: 252.

<sup>25</sup> *Ibid.*

<sup>26</sup> Frans van Baardewijk, 1994: 167.

TABLE 3



\* Calculation based on KV 1854, *Bijlaag K*, No. 12; KV 1857, *Bijlage N*, No. 12; KV 1860, *Bijlage O*, No. 14; KV 1863, *Bijlaag O*, No. 17; KV 1866, *Bijlage IJ*, No. 26; KV 1869, *Bijlage EE*, No. 3 CC; KV 1874, *Bijlaag NN*, No. 40.

In addition to the government coffee in Priangan developed also private coffee plantations. Although much mentioned that private entrepreneurs began to cultivate export crops by 1870s as consequence of introducing Liberal Policy, but in case of Priangan the participation of private enterprises had already begun as early as nineteenth century. Since first decade of nineteenth century coffee had been cultivated in private lands, which was in Ujungberung (Regency Bandung), Gunung Parang, and Ciputri (Regency Cianjur). In 1813 the private coffee

cultivation had begun to produce, although just contributed seven percent from total production from throughout Priangan<sup>27</sup> (TABLE 4).

**TABLE 4**  
**YIELDING COFFEE OF PRIANGAN, 1808-1821**  
(in *pikul* of 125 A.p.)

YEAR	Government Coffee	Private Coffee		
		Ujungberung	Gunung Parang	Ciputri
1808	106.223,12	-	-	-
1809	96.583,55	-	-	-
1810	91.191,92	-	-	-
1811	17.654,10	-	-	-
1812	43.022,10	-	-	-
1813	41.670,48	256,38	4.103,53	-
1814	36.878,11	287,28	1.101,86	4,28
1815	54.641,11	854,10	3.725,88	-
1816	56.712,12	886,30	3.121,78	-
1817	52.782,11	694,85	10.932,69	-
1818	69.600,11	782,12	11.272,75	97,00
1819	54.813,58	1.185,81	7.001,44	116,54
1820	43.332,18	1.144,77	5.133,10	123,40
1821	82.182,38	1.904,50	8.835,82	480,40
T O T A L	847.286,96	7.996,11	55.228,85	821,62

Source: A.V. *Preanger* 34/1, 1840, ANRI.

In the 1840s private coffee cultivation had increasingly boosted in all regencies, except Tasikmalaya. More than 70 million coffee trees were cultivated and in 1853 had produced 321,610 *pikul*. The Bandung Regency was the most popular area of private coffee from where more than threefourth trees and product were from there.<sup>28</sup> Then, in 1870s private coffee plantations both on *huur- en erfpacht* lands were some of 58 plantations which had reached in large of 20,249 *bahu* spread in almost all *afdeelingen* in Priangan (TABLE 5).

<sup>27</sup> AV *Preanger* 34/1, 1840, ANRI.

<sup>28</sup> *Archieve Minister van Kolonien*, 1850-1900 (Inv. Nr. 27), 14 February 1856, ARA.

**TABLE 5**  
**PRIVATE COFFEE ENTERPRISES**  
**ON HUUR-EN ERFPACHT LAND IN 1870s**

AFDEELING	Number	SIZE (in <i>bahu</i> )
Bandung	1	409
Cicalengka	5	1,595
Cianjur	25	7,948
Sukabumi	23	9,116
Sumedang	3	629
Tasikmalaya	1	552
Total	58	20,249

Source: K.F. van Delden Laerne, "Verslag over de Koffeecultuur in Amerika, Azie en Afrika", in *Bijdragen tot de Taal- Land- en Volkenkunde van Nederlandsch Indie*. Negende deel. 1885, pp. 539-540.

Some of the private coffee plantations which were most popular were Sitarja (*Afdeeling* Cicalengka), Calorama, and Cibungur (*Afdeeling* Sukabumi). These three plantations since 1873 had begun to produce.<sup>29</sup> In the same time the government had opened the opportunity to the indigenous to open up coffee plantations then known as *vrijwillig*, *merdeka* or *manasuka tuinen* (free plantation). By 1874 reported in eight *afdelingen* of Priangan residency there were 382 indigenous peasants who cultivate coffee in large of 4,729 *bahu*.<sup>30</sup>

## Labour

Coffee cultivation made demands on the work. How heavy a burden on the shoulders of the planters was the work required? According to the calculation of

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<sup>29</sup> K.F. van Delden Laerne, "Verslag over de Koffeecultuur in Amerika, Azie en Afrika", in *Bijdragen tot de Taal- Land- en Volkenkunde van Nederlandsch Indie*. Negende deel. 1885, pp. 539-540.

<sup>30</sup> *Koloniaal Verslag*, 1875.

the Director of Cultivation, B.J. Elias, for a new plantation of 600 shrubs a planter had to work 135 days a year for the first three years. The burden practically varied in each region.<sup>31</sup> In Priangan the burden of coffee cultivation greatly varied among the regencies as well among periods of time. In 1820s population engaged to government's forced coffee was just about 33.70 percent, to which was responsible on average some of 534 trees of coffee.<sup>32</sup> In 1830s the percentage of population involved and the amount of trees had to have been maintained were considerable increased to 62.74 percent and 1,275 trees in 1837 and to 64.36 percent and 1,092 trees in 1839, respectively.<sup>33</sup> By 1852 each household was obliged to cultivate coffee of about 1000 shrubs and worked on average of 100 days per year.<sup>34</sup> In 1852 some of 113,447 house holds in Priangan engaged in forced coffee cultivation, more of 39,782 households than in 1837 (TABLE 6). By 1859 each households cultivated and maintained no more than 600 trees.<sup>35</sup> By the time of 1864 the household growers were 63,32 percent, each of them maintained 600 trees.<sup>36</sup>

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<sup>31</sup> For example, in Regency Galuh in 1857-1862, the regent R.A.A. Kusuma di Ningrat, calculated that in his regency the work required to plant and maintain 500 shrubs according to administration rules amounted to an average of 115 man-days a year (Frans van Baardewijk, 1994: 163); Elson has collected widely varying estimates as to the number of days of labour performed in coffee work by households, ranging from 53 days per year in Semarang in 1856 to 124 days in Tegal in 1865. In 1871 estimates ranged from 100 to 240 person-days. Households were usually allocated 600 trees in regular plantations and or forest, but this varied greatly. Enthusiastic officials in Mojokerto had burdened their people with an average of 1,674 trees per households by 1837 (Elson, 1994: 65, 89, 205, 231; W.G. Clarence-Smith, 1994: 255).

<sup>32</sup> Calculated from *AV Preanger* 29a/7, 1828, ANRI.

<sup>33</sup> "Statistiek der Residentie Preanger Regentschappen 1837", *Preanger* 29a/1 1837, ANRI.; *AV Preanger* 34/1, 1839, ANRI.

<sup>34</sup> *AV Preanger* 30/3 1852, ANRI.

<sup>35</sup> *AV Preanger* 5/1 1859, ANRI.

<sup>36</sup> *AV Preanger*, 30/6, 1864, ANRI.

**TABLE 6**  
**HOUSEHOLDS ENGAGED IN FORCED COFFEE CULTIVATION**

REGENCY	1836/37	1852
Cinjur	29,716	30,029
Bandung	30,749	37,493
Sumedang	4,208	33,119
Sukapura	6,789	6,456
Limbangan	2,203	6,350
Total	73,665	113,447

Sources: *Preanger Statistiek*, *Preanger* 7/1 1839; *AV Preanger* 30/3 1852, ANRI.

Decreasing of both peasant growers and the number of government's coffee trees in throughout Priangan likely had already seemed since 1850s. The drastically decreased of coffee trees had happened in 1870s, so that in 1874 a household just maintained government coffee on average of 220 trees. From 1876 onwards the number of government coffee gradually increased again (TABLE 7).

**TABEL 7**  
**HOUSEHOLDS OF COFFEE GROWERS IN PLANTATION AND FOREST**

YEAR	Households of coffee growers	Number of coffee trees	Coffee trees per household
1854	90,845	64,712,369	712
1857	84,195	56,729,964	674
1860	89,801	44,789,254	498
1863	85,042	40,168,440	472
1866	87,146	39,660,814	455
1868	91,223	37,801,110	414
1874	121,054	26,594,008	220
1876/77	117,062	30,950,994	264
1880	118,515	37,140,656	313
1882	128,072	42,116,671	456
1885	92,363	n.d.*	n.d.*
1888	87,825	70,396,038	802
1893	71,621	92,711,198	1294
1897	75,657	67,654,442	894

\* n.d. = no data

Sources: KV 1854, *Bijlaag K*, No. 12; KV 1857, *Bijlage N*, No. 12; KV 1860, *Bijlage O*, No. 14; KV 1863, *Bijlaag O*, No. 17; KV 1866, *Bijlage II*, No. 26; KV 1869, *Bijlage EE*, No. 3 CC. KV 1874, *Bijlaag NN*, No. 40; KV 1877, *Bijlaag M*, No. 40; KV 1881, *Bijlage UU*, No. 47. KV 1883, *Bijlage CCC*, No. 55; KV 1886, *Bijlage VV*, No. 47; KV 1889, *Bijlage UU*, No. 47; KV 1894 *Bijlage ZZ*, No. 52; KV 1898, *Bijlage SS*, No. 45.



### **Crop Payment**

Instrument to stimulate the indigenous planters to grow coffee and to increase production was by means of crop payments; whereas to increase the involvements of local heads and European administration was applying the notorious cultivation percentage which gave officials a direct financial interest.

Theoretically, peasants' response to coffee cultivation would be increasingly depended on the payment for their crop and work; while the local crop payment followed the fluctuation of world coffee price. Such a theory did not always happen in Priangan. Although Priangan peasants were disinclined to undertake work that did not bring them adequate financial rewards, they could not give up coffee plantation, because it was a compulsory crop. Therefore, the member of households forced to cultivate coffee rose until it amounted to nearly 60 percent of all peasant households across Java throughout the middle decades of the nineteenth century. West Java in which Priangan had been a core region had more coffee growers than Central and East Java (TABLE 8).<sup>37</sup>

Peasants households' enthusiasm for coffee, really, somewhat waned when it brought little money; however, there was still other reason of enthusiasm of peasants to grow coffee that was correlated to the level need of ready money. To raise their money income, they found it on coffee. Coffee was for a time a reasonably source of cash, notably, for people who could grow it on a small scale in forest and hedge or kampong near their homes.

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<sup>37</sup> M.R. Fernando, 2003: 169.

**TABLE 8**  
**HOUSEHOLDS OF FORCED COFFEE CULTIVATION 1830-1870**

REGION	PEASANT HOUSHOLDS	1836	1840	1850	1870
West Java	Number peasant households	159,689	161,422	134,521	139,857
	% all peasant households	65	57	45	47
Central Java	Number peasant households	148,496	192,361	153,093	192,834
	% all peasant households	32	40	39	31
East Java	Number peasant households	97,560	111,101	113,606	133,516
	% all peasant households	27	30	27	27
Java	Number peasant households	405,745	464,884	401,220	466,207
	% all peasant households	38	41	36	33

Source: M.R. Fernando, "Coffee Cultivation in Java, 1830-1917", in William Gervase Clarence-Smith and Steven Topik. 2003. *Coffee Economy in Africa, Asia, and Latin America, 1500-1898*. Cambridge University Press, p. 171.

There were three tendencies of coffee price development in this residency. In the eighteenth century that was early periods when coffee cultivation introduced the price of coffee clearly tended to follow world market. Thereafter, in the nineteenth century the government purchased coffee in very lower fixed price. Three decades towards the end of the nineteenth century onwards the government began to increase somewhat higher than before. And, in really, the fluctuation of payment had no a positive correlation to the expansion of trees and product, because of the forced nature of coffee cultivation. When the fluctuation of product happened, that was not caused by the fluctuation of purchasing price, but rather due to natural factors, such as on the weather that was to have been either too dry or too wet.

In 1711 when the regent of Cimjur, Aria Wiratnu, offered the first consignment of coffee to the VOC, he requested that a price be fixed, and this was done to eight heavy (or in Asian valuation, ten light) *stuiver* per pond. According

to the letter of 23 July 1711, the *Heeren XVII* (VOC directorate) would have been prepared to pay up to eight or even fifteen *stuivers* per pond. For a time, however, supplies remained negligible, at most a few thousand pounds. Such a high price seemingly attracted to the Priangan peasantry, so that towards the end of 1720 the production of coffee reached 100,000 ponds. By 1724 the enormous expansion of production in Priangan appeared an anxiety to the *Heeren XVII* in the Netherlands and the High Government in Batavia about overproduction. The anxiety was in really happened, not long after that coffee price on the European market stagnated; in the Netherlands it self was just f 1.00 per pond (TABLE 9).

**TABLE 9**  
**COFFEE PRICES IN THE NETHERLANDS**  
**IN THE EIGHTEENTH CENTURY**

YEAR	GUILDER/ POND
1720-29	0.89
1730-39	0.68
1740-49	0.57
1750-59	0.58
1760-69	0.53
1770-79	0.49
1780-89	0.50
1790-99	0.82
1800-09	1.03

Source: David Bulbeck et al. 1998. *Southeast Asian Exports since the 14<sup>th</sup> Centuries, Cloves, Pepper, Coffee, and Sugar*. Singapore: Institute of Southeast Asian Studies, p. 175.

Therefore, the *Heeren XVII* insisted on a price reduction. In 1725 the High Government in Batavia reduced prices for West Priangan coffee from twenty to

nine *rixdollars* for a *pikul* of 125 ponds; prices for East Priangan coffee were reduced to ten *rixdollars* a *pikul*. On 15 January 1726 a definite decision about prices was taken in Batavia, each *pikul* from Priangan would be worth five *rixdollars*. This meant a price of coffee only two and half *stuivers* per pond<sup>38</sup>. Although the price of coffee in Java, excluded Priangan, was higher than that of coffee in Priangan, but it remained to indicate the similar tendency. Table 5.10 demonstrates that from 1720 to 1767 the price steadily decreased, and from 1769 until the end of the century seemed the fixed price worth 8.9 *rixdollars* per *pikul*.

TABLE 10  
COFFEE PRICES PAID BY VOC IN JAVA  
IN THE EIGHTEENTH CENTURY

YEAR	RIXDOLLARS PER PIKUL	YEAR	RIXDOLLARS PER PIKUL
1720	20.5	1769	8.9
1727	5.0	1770	8.9
1733	7.0	1772	8.9
1735	7.0	1775	8.9
1740s	n.d.	1778	8.9
1754	12.1	1786	8.9
1756	13.2	1787	9.6
1759	13.2	1790	8.9
1761	13.2	1791	8.9
1767	12.1	1792	8.9

Source: David Bulbeck et al. 1998. *Southeast Asian Exports since the 14<sup>th</sup> Centuries, Pepper, Coffee, and Sugar*. Singapore: Institute of Southeast Asian Studies, p. 168.

The other reasons to implement the price reduction were of a security feed, financial, and political nature. In the early days of Priangan coffee, when the VOC paid a good price, the response was good. The cultivators were said to be

<sup>38</sup> G.J. Knaap, 1986: 41.

delighted at the unfamiliar experience of earning money, and it was even feared that they might neglect to grow rice, because they could maintain themselves with less effort and more profit by coffee. When, however, in 1726 the government at Batavia, lacking specie and hearing that some regents were using the money to buy fire-arms, drastically reduced the price.<sup>39</sup> Moreover, the *Heeren XVII* feared that in the end Priangan might hold a monopoly in the production of coffee. A monopoly such as this would secure the considerable revenue of the Priangan producers. West Priangan, for example, in 1725 produced over 3,150,000 ponds and east Priangan produced 650,000 ponds would received about f.733,000 and 280,000 respectively. As a consequence, these regions might become importance centre of political power. The rise of such centres of power so close to Batavia was to be prevented.<sup>40</sup>

Respond to the price reduction within Priangan was not felt equally everywhere. The production in East Priangan even increased. In 1730 East Priangan was to produce nearly as much as the western.<sup>41</sup> The indigenous population of Priangan, however, continued cultivation, although the returns for the producers were seldom attractive either. In the year 1729 – 1730, even thousands new trees were planted in Central Priangan.<sup>42</sup> In West Java, generally, by the second half of eighteenth century the coffee product delivered to the

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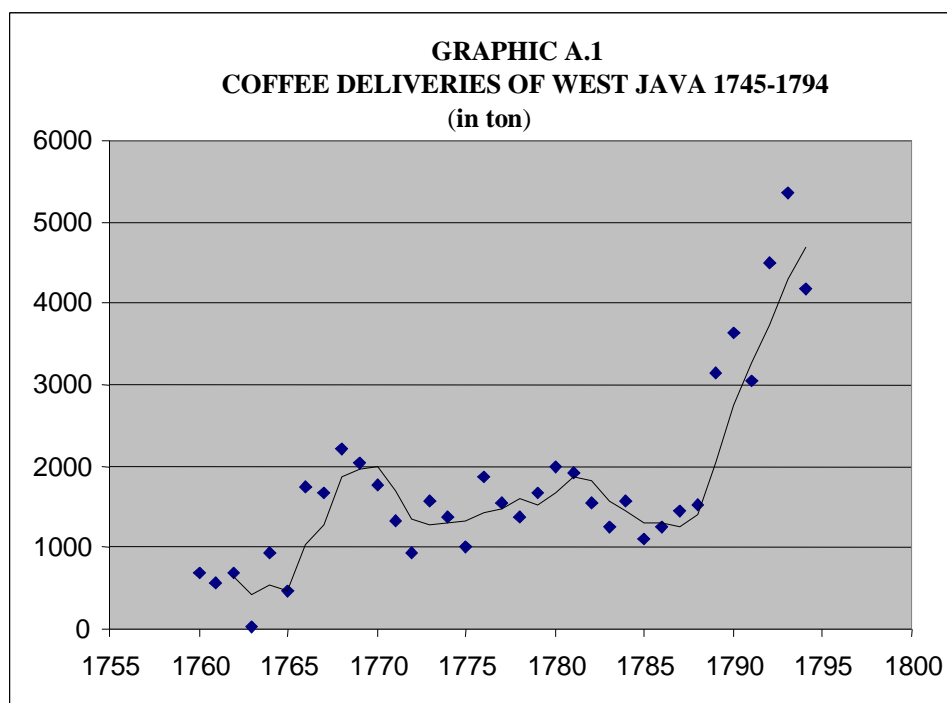
<sup>39</sup> H.R.C. Wright. 1961. *East-Indian Economic Problems of the Age of Cornwallis and Raffles*, London: Luzac and Company, p. 27.

<sup>40</sup> G.J. Knaap, 1986: 41.

<sup>41</sup> *Ibid.*, p. 43.

<sup>42</sup> *Ibid.*

government storehouses even increased, although the price was no more than f. 2.42 per *pikul*<sup>43</sup> (see GRAPH A.1).



The chart is based on the Creutzberg's statistical data of the *CEI* vol. I (see also Stevens, 1982: 155)

Until the first three decades of nineteenth century the compulsory coffee cultivation which subjected to monopoly was just prevailed within Priangan. The obligation to deliver coffee to the government was imposed on the people of other residencies by 1833 when the Governor General issued a resolution of 3 February (*Indische Staatsblad*. 1833, no. 7). Before this time, peasants of other residencies maintained coffee plantations and they had been free to dispose as they wished of

<sup>43</sup> Henri Charles van Marten. 1887. *Overzicht van de hervormin van het Preanger-Stelsel*, Leiden: J.J. Groen, p. 26.

the product. As a consequence, most their coffee sold to private buyers.<sup>44</sup> Van den Bosch, however, did not include coffee cultivation as early as the cultivation system operated. There were, at least, three reasons to explain it. First, prices of coffee were low in the 1830s. Second, he wished to eliminate the suggestion that his new policies in Java were just based on compulsory. Third, there was no immediate advantage in aligning coffee cultivation with his policies.<sup>45</sup>

Within this period there were three categories of coffee price policy in which closely related to the obligation of land rent levying to the government. The three categories were represented in three modes of residencies in which the differences of levying land rent operated, namely, Priangan residency, residencies of Madiun, Kediri, Pacitan, Banyuwangi, and the rests.

Coffee prices in Priangan until 1873 were considerably lower and always below the standard level, because in this residency **no land rent on non-coffee land** was collected by the Dutch, but special taxes was due to the local heads, the amount of which is accurately not known.<sup>46</sup> There is no official reason why the land rent system was not introduced in Priangan residency. It might be, perhaps, because people in this residency have too few means and resources to be subjected to a regular monetary tax as happens in the coastal residencies; but more likely because of fears of tinkering with the lucrative Priangan coffee system.<sup>47</sup> Before

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<sup>44</sup> C. Fasseur, 1975: 36.

<sup>45</sup> R.E. Elson, 1994: 63.

<sup>46</sup> Frans van Baarderwijk, 1993. "The Cultivation System, Java 1834-1880", in *Changing Economy in Indonesia*, Volume 14. Amsterdam: Royal Tropical Institut, p. 13-19; W.G. Clarence-Smith, 1994: 246.

<sup>47</sup> R.E. Elson, 1994: 47.

1837, for instance, the crop payment was just about f. 2.42 to f.2.92 ½ per *pikul*,<sup>48</sup> whereas in Surakarta and Yogyakarta f. 18.33 and rest of Java f. 10.00.<sup>49</sup>

Van den Bosch by means of a resolution of 3 February 1833 wished a highly advantage from a minimum price for coffee to which it related to tax burden. His original intention was that every kind of land rent should be deducted from coffee payments. Such a form prevailed only in rather remote and backward areas like Pacitan, Madiun, Kediri and Banyuwangi. Peasants in these residencies had to plant a relatively large number of coffee trees per household. They also received less money for their coffee than in other residencies, on the grounds that **land rent for every category of land** was deducted from coffee payment. In 1837, for example, when in Priangan was about f. 3.13 per *pikul*, in Pacitan, Madiun, and Kediri were f. 6.25; and it lowered to f. 5.21 per *pikul* in 1844. Over the long term, their income might have been larger if they had received a higher payment for their coffee land, and then paid land rent on non-coffee land separately.<sup>50</sup> In Madiun, Pacitan, and Kediri such policy put an end in 1859; and in Banyuwangi in 1873.

In all other residencies subjected to forced cultivation, payments of coffee were meant to reflect market price in Batavia, which at that time was fixed at f 25.00 per *pikul* of 125 ponds. From that of per *pikul* price the government, however, deducted a 40% in respect to **land rent** owed specifically for **coffee**

<sup>48</sup> Henri Charles van Marten , 1887: 26.; C. Fasseur, 1975: 38.

<sup>49</sup> K.F. van Delden Laerne, "Verslag over de Koffeecultuur in Amerika, Azie en Afrika", in *Bijdragen tot de Taal- Land- en Volkenkunde van Nederlandsch Indie*. Negende deel. 1885, pp. 536-537.

<sup>50</sup> K.F. van Delden Laerne, 1885: 536-37.; Cf. W.G. Clarence-Smith, 1994: 246; C. Fasseur, 1975: 36.



lands;<sup>51</sup> and, furthermore, took a sum of f 3.00 for the cost of transporting coffee from the storehouses in the interior to the storehouses on the coast; in addition, the government from fear of being short-changed in deliveries, still took on every *pikul* of coffee 2%. Consequently, the grower actually received less than half of the officially fixed price, namely f. 12 per *pikul*.<sup>52</sup> Therefore, the adjustment to market prices such as meant in the resolution did not happen in practice. As a comparison of coffee price across Java it could be seen on the graph A.2.

Generally, it can be said that coffee payment was paid below world market prices, and hence the government obtained a high profit margin from selling them in the Netherlands. The new policy financially successful beyond the expectations of Dutch politicians, and it remained in place until 1870s. At this point, its basic principle came to be politically unacceptable, and they were replaced by a set of liberal ideas. However, compulsion in the coffee sector prevailed on much longer than for other crops.<sup>53</sup>

Indeed, by 1870 a set of new economic opportunities opened up and world coffee prices rose ever higher. Although it influenced to higher purchasing price of peasants coffee, however, the fixed price of government coffee remained increasingly unrealistic. In 1870, producers received f.13.00 per *pikul*, when the average auction price in Java was f.33.00. In 1874 the price in Amsterdam auction was almost f.64.00, compared to f.14.00 received by growers.<sup>54</sup>

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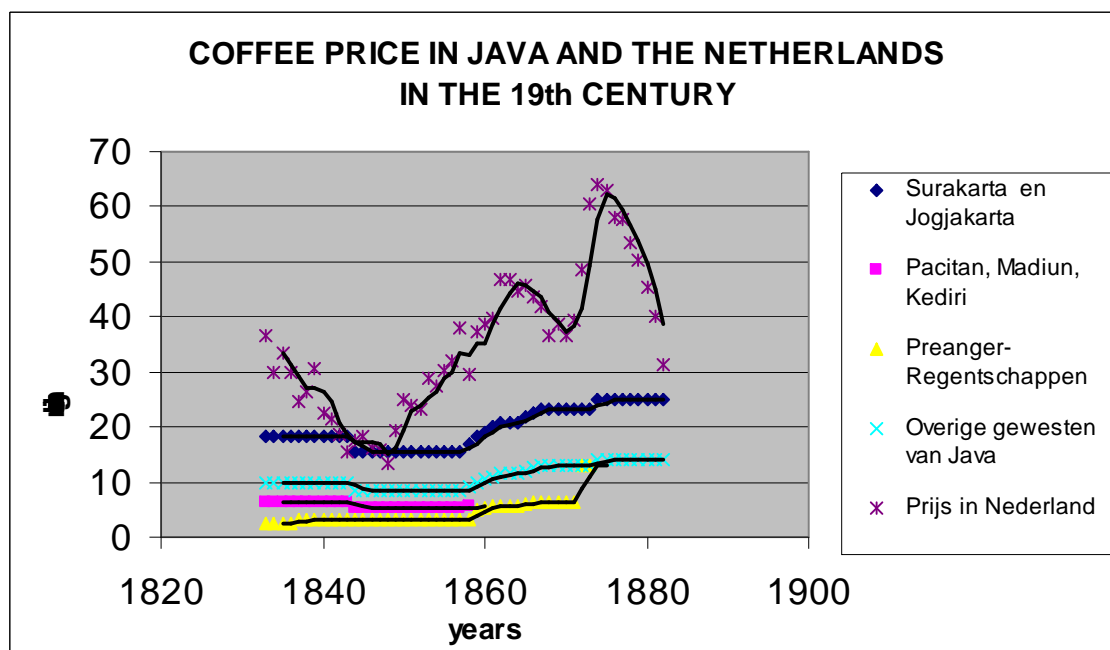
<sup>51</sup> And land rent for non-coffee lands was assessed for the whole village, usually as a fixed proportion of the rice harvest, and was paid in a quite separate transaction.

<sup>52</sup> C. Fasseur, 1975: 36-37; R.E. Elson, 1994: 63; W.G. Clarence-Smith, 1994: 247.

<sup>53</sup> R.M. Fernando, 2003: 160.

<sup>54</sup> W.G. Clarence-Smith, 1994: 248.

GRAPH A.2



The chart is based on the data of K.F. van Delden Laerne's table on the "Verslag over de Koffeecultuur in Amerika, Azie en Afrika", in *Bijdragen tot de Taal- Land- en Volkenkunde van Nederlandsch Indie*. Negende deel. 1885, pp. 536-537.

### Cultivation Percentage

The other effective means to speed development and to make officials cooperate in the introduction and expansion of government cultivations, besides crop payment, was the cultivation percentage; that is the government granted incentive payments both to European and local heads in proportion to the amount of coffee, indigo, and so on produced in the residency or area of their administrative function.<sup>55</sup> The higher the production is the higher the cultivation

<sup>55</sup> C. Fasseur, 1975: 44; R.E. Elson, 1994: 182.

percentage. For those who served faithfully, the rewards could be substantial; sometimes these payments were greater than official income.

Therefore, indeed, could be said that cultivation percentage had double functions. In one side, as we know that the implementation of coffee cultivation in Priangan was almost completely in the hands of indigenous heads, for which they did not receive salary from the government treasury; because of no land rent was levied from this residency. Alternatively, these percentages were the only source of their income, as a compensation of no salary from the government treasury. In the other side, these percentages could encourage the officials to boost plantation and production.

The cultivation percentage was practiced within Priangan, at least, as early as period of Dutch colonial administration. The payment of coffee percentage to regents and lesser chiefs in Priangan was regulated in a decree of 1808.<sup>56</sup> In 17 March 1810 Daendels decided the tariff and nine indigenous officials who were entitled to these percentages and the tariff (TABLE 11).

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<sup>56</sup> C. Faseur, 1975: 248..

**TABLE 11**  
**PERCENTAGE OF COFFEE IN PRIANGAN (1810)**

Regent	12 <i>stuivers</i> of each <i>pikul</i> coffee of 126/128 A.p.
<i>Patih</i>	1 <i>stuiver</i> for all delivering of coffee of regency
Two <i>Ngabehis</i>	1 <i>stuiver</i> for all delivery of coffee of regency
<i>Cutak</i> /district heads	4 <i>stuivers</i> for delivering of each <i>cutak</i>
Two Commissioners	2 <i>stuivers</i> for delivering of each <i>cutak</i>
<i>Mandors</i> of <i>cutak</i>	2 <i>stuivers</i> for delivering of each <i>cutak</i>
<i>Camat</i>	1 <i>stuiver</i> for delivering of his <i>cutak</i>
Secretary	½ <i>stuiver</i> for all delivering
Lengser	½ <i>stuiver</i> for all delivering

Source: Van der Chijs, J.A. 1897. *Nederlandsch-Indisch Plakaatboek, 1602-1811*. Zestiende deel 1810-1811. Batavia-'s Hage: Landsdrukkerij-M.Nijhoff. pp. 133-134.

In addition, the government in 17 June 1811 appointed nine controllers of coffee cultivation, whom the percentages were also paid. These nine controllers were in Buitenzorg, Cianjur, ~~S~~karaja, Rongga, Bandung, Targong, Parakanmuncang, Sukapura and Sumedang. Each received some 12 *stuivers* for delivering of a *pikul* of 126/128 ponds plus yearly income between 1,500 – 2000 *rixdollars* of silver money.<sup>57</sup> In the period of the Cultivation System Van den Bosch more supported that the implementation of cultivation percentage; even it was not only to indigenous heads but also European officials; and it was in effect to other residencies. He had thought the introduction of cultivation percentage was fair because government cultivations, certainly in the begiming, caused the officials concerned a lot of extra work.<sup>58</sup>

By 1836 for delivering coffee of minimum 90,000 *pikul*, the officials of Priangan enjoyed the percentage as follows:

<sup>57</sup> Van der Chijs, J.A. 1897. *Nedrlandsch-Indisch Plakaatboek, 1602-1811*. Zestiende deel 1810-1811. Batavia-'s Hage: Landsdrukkerij-M.Nijhoff. pp. 591-594.

<sup>58</sup> C. Fasseur, 1975: 248.

**TABLE 4.12**  
**TARIFF OF THE COFFEE PERCENTAGE IN PRIANGAN (1836)**

Level of officials	Cultivation Percentage for each <i>pikul</i> of 125 ponds
Regent	f. 1.20
Minor heads <sup>59</sup>	48 cents
Resident	6 cents
Assistant Resident	6 cents
Controller	6 cents

Source: "Statistiek der residentie Preanger Regentschappen 1837", *Preanger 29a/1 1837*, ANRI

Total coffee percentage they received in 1836 was f.205,487.70 (TABLE 13). Until 1850s and 1860s the number of officials enjoyed cultivation percentage and the tariff remained stable; and the total earnings of percentage of every year was not always same, but depended on the number of coffee production levied to the government's storehouses. There were great differences in the cultivation percentage paid among regents and lesser chiefs in Java. During the periods of 1858-60s, as comparison, the four regents in Banten received annually on average less than f.2,500, but the five regents of neighbouring Priangan regencies received no less than f.90,000, or 36 times as much. The five regents in Surabaya received

<sup>59</sup> The minor heads included and their tariff (in cent) were:

1. <i>patih</i>	:	3.50
2. head <i>mantri</i>	:	1.00
3. <i>kaliwon</i>	:	1.00
4. secretary	:	0.50
5. head of <i>jongol</i>	:	0.50
6. commissionaire	:	5.00
7. head of district	:	16.00
8. <i>camat</i>	:	3.50
9. secretary of district	:	1.50
10. <i>lengser</i> of district	:	1.00
11. <i>patinggi</i>	:	4.00
12. <i>mandor</i> of coffee plantation	:	6.00
13. head of village	:	2.50
14. <i>priayi</i>	:	2.00

Source: "Statistiek der residentie Preanger Regentschappen 1837", *Preanger 29a/1 1837*, ANRI.

f. 26,000 per year; the three regents in Pasuruan received f. 38,000, and three four regents in Rembang f. 3,600.<sup>60</sup>

**TABLE 13**  
**COFFEE PERCENTAGE IN PRIANGAN (1836)**

LEVEL OF OFFICIALS	CULTIVATION PERCENTAGE FOR EACH <i>PIKUL</i> OF 125 PONDS (in f.)
Five Regents	128,757.83
Minor heads	73,103.09
Resident	933.81
Assistant Resident	933.81
Controller class I	933.81
Controller class II	825.35
T o t a l	205,487.70

Source: "Statistiek der residentie Preanger Regentschappen 1837", *Preanger* 29a/1 1837, ANRI.

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<sup>60</sup> C. Fasseur, 1975: 248.

## BIBLIOGRAPHY

### I. Archives:

- Algemeene Verslag van Preanger-Regentschappen Preanger* 29a/7, 1828, ANRI.  
*Algemeene Verslag van Preanger-Regentschappen Priangan*, 29a/19, 1932.  
*Algemeene Verslag van Preanger-Regentschappen Preanger*, 2/7, 1935.  
*Algemeene Verslag van Preanger-Regentschappen Preanger* 36/3, 1835.  
*Algemeene Verslag van Preanger-Regentschappen Preanger* 7/1, 1837.  
*Algemeene Verslag van Preanger-Regentschappen Preanger* 34/1, 1839.  
*Algemeene Verslag van Preanger-Regentschappen Preanger* 34/1, 1840, ANRI.  
*Algemeene Verslag van Preanger-Regentschappen Preanger* 30/3 1852, ANRI.  
*Algemeene Verslag van Preanger-Regentschappen Preanger* 5/1 1859, ANRI.  
*Algemeene Verslag van Preanger-Regentschappen Preanger*, 30/6, 1864, ANRI.  
*Archieve Minister van Kolonien*, 1850-1900 (Inv. Nr. 27), 14 February 1856,  
 ARA.  
*Preanger Statistiek* 1836,  
 "Statistiek der residentie Preanger Regentschappen 1837", *Preanger* 29a/1 1837, ANRI.  
*Preanger Statistiek*, *Preanger* 7/1 1839.

### II. Printed Documents:

- Koloniaal Verslag* 1854, *Bijlaag K*, No. 12.  
*Koloniaal Verslag* 1857, *Bijlage N*, No. 12.  
*Koloniaal Verslag* 1860, *Bijlage O*, No. 14.  
*Koloniaal Verslag* 1863, *Bijlaag O*, No. 17.  
*Koloniaal Verslag* 1866, *Bijlage IJ*, No. 26.  
*Koloniaal Verslag* 1869, *Bijlage EE*, No. 3 CC.  
*Koloniaal Verslag* 1874, *Bijlaag NN*, No. 40.  
*Koloniaal Verslag*, 1875.  
*Koloniaal Verslag* 1866, *Bijlage IJ*, No. 26.  
*Koloniaal Verslag* 1881, *Bijlage UU*, No. 47.  
*Koloniaal Verslag* 1883, *Bijlage CCC*, No. 55.  
*Koloniaal Verslag* 1886, *Bijlage VV*, No. 47.  
*Koloniaal Verslag* 1889, *Bijlage UU*, No. 47.  
*Koloniaal Verslag* 1894 *Bijlage ZZ*, No. 52.  
*Koloniaal Verslag* 1898, *Bijlage SS*, No. 45.

### III. Books, Articles:

- van Baarderwijk, Frans 1993. "The Cultivation System, Java 1834-1880", in  
*Changing Economy in Indonesia*, Volume 14. Amsterdam: Royal Tropical  
 Institut.

- van Baardewijk, Frans. 1994. "Rural Response to Intensifying Colonial Exploitation; Coffee, State and Society in Central and East Java, 1830-1880", in G.J. Schutte. *State and Trade in the Indonesian Archipelago*. Leiden: KITLV Press.
- Bulbeck, David et al. (comp.). 1998. *Southeast Asian Exports since the 14<sup>th</sup> Cloves, Pepper, Coffee, and Sugar*. Singapore: Institute of Southeast Asian Studies.
- van der Chijs, J.A.. 1897. *Nedrlandsch-Indisch Plakaatboek, 1602-1811. Zestiende deel 1810-1811*. Batavia-'s Hage: Landsdrukkerij-M.Nijhoff.
- Clarence-Smith, W.G.. 1994. "The Impact of Forced Coffee Cultivation on Java, 1805-1917", in *Indonesia Circle*, No. 64.
- Fasseur, C. 1975. *The Politics of Colonial Exploitation in Java; the Dutch and the Cultivation System*. SEAP: Cornell University, Ithaca, New York.
- Fernando, M.R.. 2003. "Coffee Cultivation in Java, 1830-1917", in William Gervase Clarence-Smith and Steven Topik. *Coffee Economy in Africa, Asia, and Latin America, 1500-1898*. Cambridge University Press.
- de Klein, Jacob Worter. 1931. *Het Preanger-stelsel (1677-1871) en Zijn Nawerking* (Doctor diss., Leiden). Delf: J. Waltman Jr.
- Knaap, G.J.. 1986. "Coffee for Cash; the Dutch East India Company and the Expansion of Coffee Cultivation in Java, Ambon and Cylon 1700-1730" in J. van Gor ed. *Trading companies in Asia 1600-1830*. Utrecht: Hes Uitgevers
- Laerne, K.F. van Delden, "Verslag over de Koffeecultuur in Amerika, Azie en Afrika", in *Bijdragen tot de Taal- Land- en Volkenkunde van Nederlandsch Indie*. Negende deel. 1885.
- van Meerten, Henri Charles. 1887. *Overzicht van de hervormin van het Preanger-Stelsel*, Leiden: J.J. Groen.
- Stevens, Th. 1982. *Van der Capellen's Koloniale Ambitie op Java; Economisch Beleid in een Stagnberende Conjntuur* (Thesis Ph.D. University of Amsterdam) Amsterdam: Historisch Seminarium.
- Wright, H.R.C. 1961. *East-Indian Economic Problems of the Age of Cornwallis and Raffles*, London: Luzac and Company.