

Fields for Coffee. Forest lands contestation in Upland Java, 1850s – 2010s.

Pujo Semedi¹

¹ Dept of Anthropology, Gadjah Mada University

1. Introduction

Speedy encroachment of forest area in upland Central Java commenced in 1820s, as Java War 1825-1830 pushed low lands farmers to seek a refugee from insecurity and famine. In the hill range they cleared forest for semi-irrigated paddy fields and for coffee fields which got a strong boost from government's effort to recuperate from war economic deficit through Cultivation System, 1830-1860. Forest were cleared by thousands hectares until eventually by 1900s almost all were gone and Java was left with sad views of denuded hill range. This work is about contestation of forest lands between the interest of government and small holding farmers; between interest to protect environment for general welfare and interest to earn revenue to settle upland farmers' day to day economic needs in the course of the 20th century.

2. Research question:

Is tug of war of forestlands – farmlands always unavoidable in the Javanese farmers history? Who needs more lands anyway as green revolution allows productivity per hectare of lands to increase and the growing of city based industry and service sectors attracts rural youth to migrate out? Is there any possibility for common ground between general public interest of environmental protection and specific interest of farmers to fulfill their day to day revenue?

3. Method

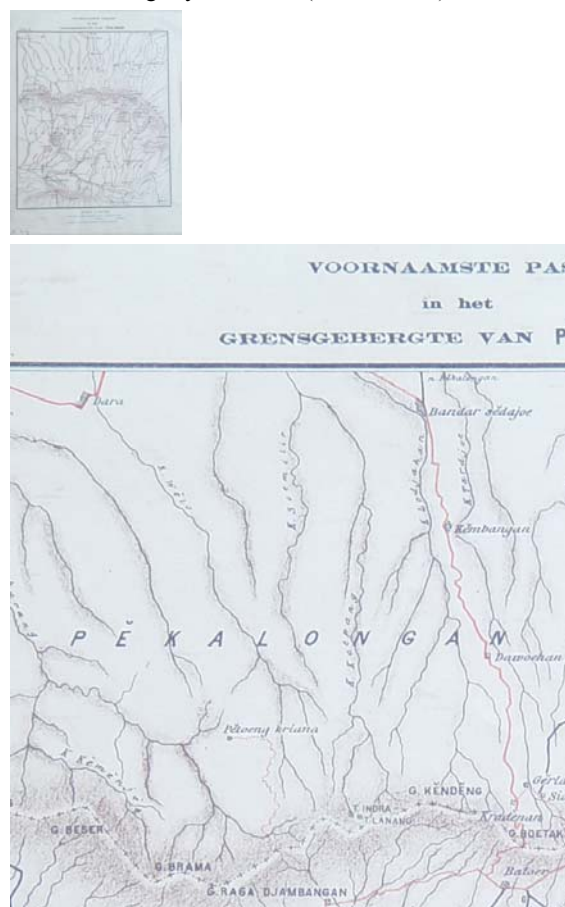
Research was conducted in Petungkriyono sub-district, Central Java. Data were obtained from colonial topographical maps, long term participant observation, ground check with GPS and Google earth satellite image.

4. Post-Java war upland area

Upland Central Java, just like most of hinterland of the island, until early 1800 was still vacantly populated. Javanese account from that time (Centhini, 19...: ...) described how vast area between Pekalongan town on the coast to Dieng plateau was covered mainly by dense tropical forest where rare travellers easily came face with rhinoceros. Small hamlet of a few inhabitants scattered sparsely in the midst of the forest, that virtually the area was inhabited more, in Peter Boomgaard words (19...: ...) by rhinoceros and tiger than by human. Population from the lowlands entered and resided in the upland Java as the Java War (1825-1830) raged and people looked for safe place to live, secured from conscription as well as the war direct destruction (Carey, 20 ...). Further population influx

to the upland occurred as the War came to an end, and the Colonial Government introduced the Cultivation System. The policy provided a bigger path for closer integration of Javanese farmers with global economy through cultivation sugarcane, tobacco, indigo, coffee, cinchona. Good revenues motivated lowland farmers to clear forest, initially for the so called forest coffee, *boschkoffie*, cultivation which requested only low input of labour. Growing demand for coffee in the subsequent decades led to the expansion of coffee fields, both by local farmers and Dutch planters. More labour was put to coffee cultivation and farmers took residences in new hamlets located next to their fields to ensure that their investment bear fruit. New villages, more population had increased pressure on the upland as villagers did not merely cultivate coffee but food crops as well to cover their basic subsistence. In the 1830s, there were two villages in sub-district of Petungkriyono; Petung Kriana and Tlagapakis, population 200, located in the base of valley surrounded by ricefields.

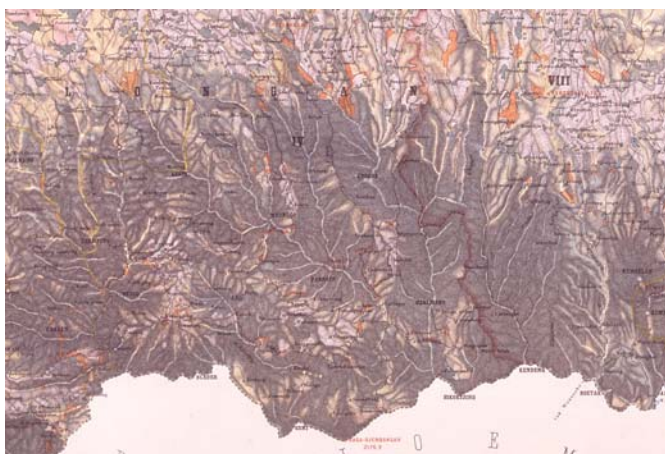
Pic.1. Petungkriyono 1840s (Coll. KITLV)



By 1860s, several new villages had emerged including Sokakembang, Kajupuring, Kedjer, Petungkriyono, Totogan,

Sawangan, all located next to coffee fields. Dotes of coffee fields in the upland were surrounded by larger patch of farmlands—either dry or irrigated—to produce food crops for farmers. Dry farmlands were cultivated for corn or cassava in combination with taro, sweet potatoes and vegetables in extensive mode. After a planting season dry farmlands were left to nature to regain their fertility for few years—enough to convert them into tall grasslands (alang-alang) but not enough to grow shrubs. Wet farmlands, located next to river, were cultivated intensively for rice during rainy season and corn or cassava during dry season. All main staples—corn, rice, cassava—were long season crops, which take 8 to 9 months to harvest. In spite of once a year food crops harvest, combined with coffee and semi-wild sugar palm small scale production, agriculture in upland was able to provide good economic life among farmers. Which in turn invited more peopel from lowlands to migrate to the uplands.

Pic. 2. Petungkriyono, 1863 (Coll. KITLV)



5. Early 20th century

By early 1900s the face of upland Java had totally changed from lush green of tropical rain forest into hills patched with villages, degraded grasslands, farmlands and coffee fields. Population increase led to establishment of more villa ges, by 1910s there were several hamlets next to big, main hamlets in Petungkriyono: Kedjer, Klilin; Jasaredja(Ngreja); Danding; Sembodjaa, Sawangan Kidul, Totogan Kidulb. Around 7 lakes of large enough size to be taken into note in the 1863 map, only one remaining present that of Telaga Indra but siltation splat the big lake into two smaller lakesc. The other lakes, were intentionally dried up for farmlands—when I did fieldwork in

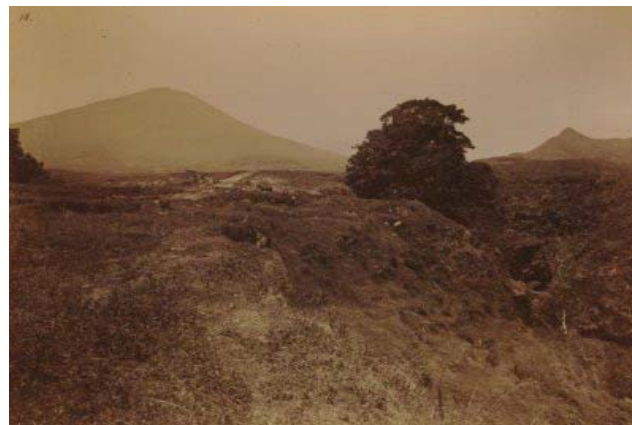
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the 1984 the lakes name still lingered in the farmers memory but only three lakes Tlaga Indra, Tlaga Kendal and Tlaga Pakis still present. The last two were gone by early 1990s.

Picture 3. Djumprit 1890s (Coll: KITLV)



Floods in lowland and drought in uplands got severe that eventually, in 1920s, the government issued reforestation policy. Thousand hectares of farmlands were bought and given back to nature to grow into young forest. Many villages were disbanded and the inhabitants were resettled in nearby hamlets. In Petungkriyono all small hamlets mentioned above were reorganized with bigger vilalge. While the policy produced impact in reducing flood and drought, it had also increased population pressure over farmlands in upland area; as farmers were pressed to intensify their works in reduced size of farmlands. Coffee was nolonger priority, since farmers had to deal with their immediate needs of staple foods. Farmers encroached river banks and lakes in effort to gain bigger plot for rice fields. Yet the effort is not enough to keep the farmers' economy in proper shape. Abandonment of coffee cultivation had cut the farmers main source of cash. To compensate the revenue loss, the Agricultural Extension Service introduced cultivation of temperate zone vegetables such as cabbage, leeks, beans and carrot. Almost without delay the new crops were adopted, but they were in competition with food crops over farm lands and labour. The new crops also demanded continuous supply of fertilizer.

Picture 5. Farmers house with vegetable plots in the yard, Dieng 1915 (Coll. KITLV)



To keep their household economy going, farmers had to juggle their labour among pressing works of tending food crops, vegetables crops, collecting fuel woods to boil palm sap into sugar and collecting fodder for goats—to produce manure. Revenue per man working day of vegetables was a way lower than coffee. It was a common practice in effort to cover a pressing need of cash, farmers sold some of their rice or corn. Slowly food shortage and poverty crept into the uplands. Roots were cultivate to fill the gap between the end of food stock in the granary with the next harvest (*ganjel lumbung*). Tired of eating roots, farmers culled not ripe yet rice (*nyulik*) from the fields. Apparently it was from this era, upland rural area became a blatant symbol of poverty and backwardness in Java as expressed in the pejoratives *wong gunung* (hill billies), *wong ndesa* (villagers).

6. The late 20th century

Since the closure of forest, migration into the upland area had stopped. Yet pushed by demand of labour for intensive farming population in the area kept increasing. Lacked of machineries and supply of chemical fertilizer, all farm tasks must be tended manually. More children was more labour force in the household, but it seemed, in the following decades just like anywhere in Java, rate of population growth in the upland was faster than economic growth. By 1960s Petungkriyono was heavily overpopulated. A good number of villagers were landless or close to landless. Squeezed by poverty, in the early 1970s teens households participated in the government sponsored transmigration program—moved out to Sumatra. In the upper part of Petungkriyono, the poorest area, people took seasonal migration to Pekalongan and other towns and later on to Jakarta to take menial job as mason helpers, shopkeeper assistants and house servants. Menial job, menial revenue but it helps the farmers through reducing number of mouth to feed at home as well as remittance.

Pic. 4 Petungkriyono, 1990s



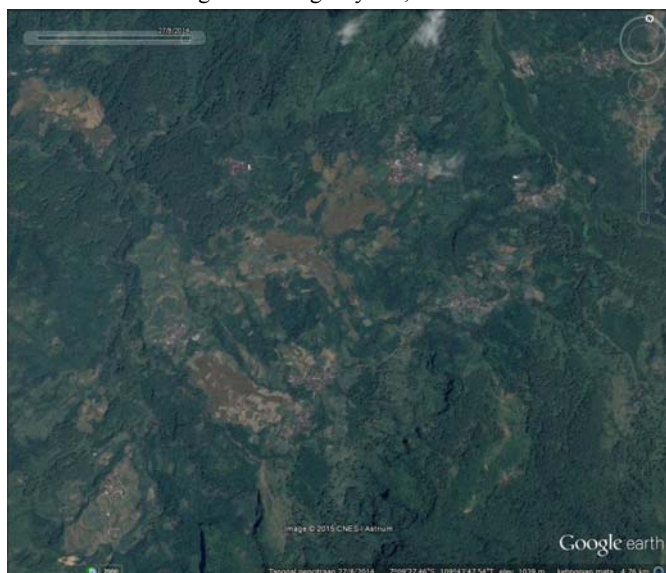
Forest in Petungkriyono makes up 70% of area of Petung and the economic right over the forest resources was held exclusively by the Forestry Service. The taking of fuel wood, building wood, rattan, bamboo, and other forest products by the villagers is strictly forbidden, even though in practice the villagers often use many kind of forest products for their daily needs. In the 1960s the Forestry Service planted the forest lands—the one bought from farmers in the 1920s—with pines trees. For few years, the farmers got additional source of cash by planting trees. Some 15 years later the got job opportunity to tap the tree resin. Wage was poor and resin tapping was arduous, especially in carrying it from forest to the collecting point, but at least the forest produced some cash for farmers. Quietly farmers kept coming to the forest too in effort to get fuelwood and building materials. They termed the illegal action as wood nicking, *ngutil kayu*, not wood stealing, *mencuri kayu*, and did it whenever forest rangers were not around. Upon questioned by Forest Service staff, the farmers replied pragmatically; “There is hardly any alternative, isn’t there? Where do we suppose to get fuel woods and building materials if not from forest?” So the woods nicking kept going on.

Heavier pressure to forestlands occurred in the early 1980s as the rise in demand for meat in the local Indonesian markets in the 1980s pushed the spread of cattle raising to all the farming households. The farmers would buy a calf that was 6 months old, and then raise it for one and half until two years. When it was big enough, they would trade it for two more young calves or one calf and some money. Farmers that were too poor to buy a calf could help raise their neighbors cow, for half the profit; thus after two time raising a calf they would get one calf of their own (Nusrat, 2003: 31). The expansion of the cattle business took off quickly, in the 1980’s there was only a few households in the village of Yosorejo, Tlagapakis, Kasimpar and Sanggawedi raising cows and two decades later village reports mentioned that every household has between 2 and 4 cows. The economic scenario among the farmer with their cattle raising business is to use harvest from their farmlands to cover every day consumption and money from the cows for a yearly big shop. From the beginning the yearly big shop was a project to rehabilitate house. Once every 15 to 20 years Petung farmers have to rehab their wooden houses due to the high level of humidity. All the parts of the house that are broken are fixed with the wood that they took form the forest—with the risk of being caught by the Forest Ranger. With the success of the cattle raising they now have money to buy cement and other stronger building materials that last longer and certainly don’t carry the risk of being caught by the constable. In the middle of the 1990’s Petung began to witness the era of cement walls for houses. One by one, farmers would improve their wooden houses and make them into cement houses with metal roofs and ceramic tiled floors. Depending on the size of the house and the quality of the materials, usually the average cost to build a cement house is about the same as the price of 5 to 7 cows. Cattle requires constant supply of fodder, on average adult cow takes 40 kg of fresh fodder per day. Tons of fodder had to be collected on daily basis by the farmers and the only way they

could get it was by converting forest into grasslands. Initially farmers just collected wild shrubs, later on they planted grass on certain empty spot in the forest. The Forest Rangers were getting soft this time, since farmers did not cut down trees but cultivating grass. However as demand for grass increased, the farmers expanded their grasslands by cutting tree roots till the trees slowly died as if due to natural cause. After years the result is noticeable in satellite image.

The chance for the farmers of Petung to grow coffee in the forest land began in the middle of the 1990's. Responded to criticism from NGOS, villagers associations and village heads and in the mid 1990's the *Perhutani* gave up part of their exclusive right and permit Petung farmers to cultivate coffee in the forest lands in a hope to prevent further destruction of the forest by the farmers. Without waiting for second order Petung farmers who live close to the forest immediately took off to the forest. They cleaned away underbrush and—according to them—left the big trees to allow shade on their coffee fields. Like the palm trees grown in the jungle mentioned earlier, coffee trees grown in forest lands is generally claimed as belong to the men, or at most are owned by the family because the wife also works the clearing, planting and growing the coffee shrubs. Closer observation shows that not every household were involve in forest coffee cultivation. Poor household with limited labour force and limited cash to cover the land clearing labour cost rarely ventured into forest coffee. They prefer to make use any energy left in the household to raise cattle. So did better off farmers with enough farmlands and one or two household members migrated to the city—they prefer to send their kids working in the city and cultivate part of their farmlands for fast growing trees. This left farmers of middle socio-economic status to grab the opportunity of forest coffee.

Pic. 5. Satellite image of PetungKriyono, 2015



Since the early 1990s the social-economic position for Petung males increased further with the opening of job opportunity for them in the city based industrial sector. In the beginning job for Petung youth that generally graduated from elementary school, is in the textile industry of Pekalongan. They worked dyeing the cloths or whatever else needed to be done. To save

money they would sleep at their place of employment or in a shared rented house. They would go home once a month, at the end of month bringing their money home to their families to pay for improvements on the house, to buy accessories for the house, and to get ready for marriage.

Sources for money for the youths grew with the offer to join working for the projects paving the road and sugar cane crops. They learned the skill to pave road from workers from other districts who work to pave Petung road in the late 1980s. After awhile, the contractors on the road projects liked to use the youth of Petung as workers because they were on time and hardly ever were absent. From then on more and more work offers from other areas came in for them. If there was a project outside of Petung the contractors would ask the youths of Petung to come with them to carry out the work. In this way they creates contacts that would let them know when there was work paving roads. From paving road projects, they got information about another job opportunity that of harvesting sugar canes of sugar factories. Working in the sugar cane fields gave them access to a large trade network since the sugar companies are related to each other. They would move working from one field to another, even going as far as Lampung, Sumatra.

Work in the textile business trade, paving the roads and sugar cane harvesting has not ruined the economic system for the farming community of Petung. Instead, success of the businesses above has supported their economy. Connected to the routine work they do all week and month, the youth that work in Pekalongan has to be absent from the farming activities in their villages. This leads to less household labor for the farming works, but this discrepancy is compensated by the salary from the city based industry which is lot higher than the wage of farm labor in the villages. By working in Pekalongan the youths are able to keep the subsistence farming in the village going with the help of paid farmhands, and there is still a good amount of surplus of their paycheck for themselves. This surplus has become bigger if we calculate that paid farmhands are need to be emplyed for a number of days at the preparation stage of the fields only. Moreover, in time of necessity the youths who work in the city can ask for a week or two off to get the fields ready or to harvest the crop. Work paving the roads and sugar cane harvesting are seasonal. One project paving the roads is last for one or two months then the youth can go work in other road paving projects or to the sugar cane harvest. Because this work is by short-term contract, the youths can decide when they would like to go home that, usually, is when there's farming work to be done. Thus the households rarely experiences labor shortage for the farming although most of the time the household's youth working somewhere else some distance from Petung.

When a friend from work in Pekalongan wants to visit his home Anto feels embarrassed; "Don't come. My house isn't very good to use ...". But the friend came anyway, and he was surprised upon seeing Anto's house food storage which is stocked up with enough corn until the harvest of next year. "You, people of Petung are very well off. You earn the success of work in the

factory as well as success of your own farmlands. That's different from us of the lowland areas. The factory wage is our only source of income. As soon as I get my paycheck it's used up with food for my family. I see now how you can afford a new *honda...*," said this friend.

7. Conclusion

Discussion in the paper shows us 4 important points in relation to contestation over forestlands between farmers and Forestry Service. First, even when access to forest land was opened under the Forestry Service term, not every farmer household made use of it to invest their labour and money to establish coffee cultivation. Second, instead, most of farmer household prefer to illegally encroach and convert forestlands into grasslands for cattle fodder. Third, in the meantime ecological role of forest lands to provide green coverage in the upland has been gradually complemented by farmers with their fast growing tree garden. Fourth, most of farming household now have a member or more involve in the city based service and industry sector. There is a pattern farmers who cultivate their lands for fast growing trees are mostly from household with access to migration and have one or more member working in the city. On the other hands farming household without migrating member tend to engage in cattle raising thus opening grasslands in forest and or opening coffee fields in the forest. It seems that after two hundred years of exercising constant pressure over forest in the upland, farmers begin to reduce the pressure; but only farmers with access to migration can afford to do that.