

From Rice to Cocoa through a Political Economy of Dishonesty, Sulawesi, Indonesia

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ABSTRACT

Sulawesi has been the theatre of a spectacular cocoa boom, which started from scratch in the late 1970s, with production exceeding the 200,000-tonne threshold in the mid-1990s. Sulawesi also used to be a rice granary for Indonesia. Although it still exports rice to other provinces, Sulawesi turned its dynamism towards cocoa. They mostly are Bugis farmers. Then Balinese and Javanese transmigrants started to follow. From that historical development in Sulawesi, the objective is to analyze at the microeconomic level, how Indonesia switched back from rice self-sufficiency to structural dependency on imports since 1994. Bugis used their experience and capital built on rice to start cocoa pioneer lives that proved to be highly successful. They also benefited of involuntary helpful policies such as fertilizer subsidies that were conceived for rice self-sufficiency, not for cocoa. Within official projects, Balinese and Javanese transmigrants were often obliged not to plant tree crops, or at least not beyond the 0.25ha backyard. How did these policies involuntarily trigger new impetus to cocoa and eventually hamper the development of paddy cultivation in the 1990s? The Sulawesi cocoa story may be a showcase for understanding why the gap between the national demand and supply of rice increased since the mid-1990s.

INTRODUCTION

Indonesia is known for having made the political choice of self-sufficiency in rice in the 1970s, for having achieved this self-sufficiency in 1985 and lost it since 1994. Dependency upon a narrow international market of rice is a dangerous game in a country above 200 million people. This was one of the things clearly understood by the ex-President Suharto. Sulawesi is one of the rice granaries for the archipelago. It still exports rice to other Indonesian islands although its paddy growth rate is on the decline in the 1990s. In the meantime, Sulawesi has been the theatre of a spectacular cocoa boom which started from scratch in the mid to late 1970s, with production exceeding the 200,000-tonne threshold in the mid-1990s.

The first objective is here to explore in Sulawesi how Indonesia switched from rice self-sufficiency during some 15 years to come back to structural dependency on rice imports since 1994. The achievement in rice self-sufficiency was in itself a key element in agricultural policies. It has gone. Was it the output of too much complacency after a relatively costly but successful policy? Was it the result of mistakes and of a policy of dishonesty? Was it the result of dynamic farmers ready for self-help action, not for national self-sufficiency in rice at any cost?

Was that cocoa boom voluntarily or involuntary accelerated by a mixture of successful and harmful rice-oriented transmigration policies? Compare to other agricultural sub-sectors, was is not the great chance of the Sulawesi cocoa boom to start when the regime and the Suharto family had not enough time to try to control it? Does the end of regime favor farmer empowerment?

By tentatively answering these questions, one should reach a second objective, which is to enter the debate about diversification and policies. Is there a need for governments to promote diversification itself or should this be left to smallholders? According to Delgado and Siamwalla, “Policy makers seem to consider farm diversification a major ‘economic’ issue, thus an *objective*. Economists typically neglect it, seeing farm diversification as an outcome from pursuing another objective. They tend to see farm diversification as an outcome of economy-wide policies or secular trends affecting relative incentives.” (Delgado and Siamwalla 1999, 126-127). The authors “argue that in some cases, but only in some cases, it makes sense for both economists and governments to approach farm diversification as a specific objective, even to the point of concentrating analysis and interventions on favored sub-sectors and outputs. If markets do not work well, if agriculture accounts for a large share of employment and exports as well, if agriculture is also pre-commercial, a commodity-specific approach may be needed to commercialize agriculture, speed up the transmission of incentives to the farm level, to promote adjustment of output mixes in ways favorable for growth and equity” (Delgado and Siamwalla 1999, 138-139).

We argue that this conclusion is perfectly true as long as governments are reasonably ‘honest’, and have themselves a reasonable access to information, which is far from being prerequisites. As shown in the case of Indonesia that partially fit the conditions for seeing diversification as a government objective, diversification from rice and cloves to cocoa in Sulawesi is more the unexpected outcome of a political economy of dishonesty versus an extremely efficient access to cocoa information by smallholders.

METHODS OF INVESTIGATION

Most investigations are done on the cocoa side. The basic tools are migrants’ biographies and investigations about their various sources of capital for funding migrations and land acquisitions. Most early pioneers usually do not own any paddy fields. This is precisely because they are only sharecroppers and/or they only own dry uplands, not irrigated paddy fields, that they move and search land elsewhere. However, when these poor migrants come back a few years later and can afford buying motorcycles, saying that this ‘wealth’ comes from cocoa, the copying effect and the ‘surprise effect play their full role (Pomp and Burger 1995). Relatively richer farmers, owning some paddy fields, also move to forest regions and grow cocoa. In 1992, we made a rapid investigation in a paddy region and found that already 25% of rice growers moved to the cocoa frontier.

COCOA VERSUS POLITICAL OBSESSION IN RICE SELF-SUFFICIENCY

As foreseen by a Dutch geologist in 1909, Sulawesi has fertile alluvial plains such as the Masamba-Malili plain which “is not cultivated although it can compete with the best irrigated plains of Java ... and could be turned into the granary of Central Celebes” (Abendanon, 1938, quoted by Pelzer, 1945). This eventually happened. Sulawesi became a rice barn for the whole Indonesia. Big irrigation dams started under the Dutch colonization in the thirties and forties, for local Bugis people, for instance in Pinrang and also for Javanese transmigrants, especially in this plain between Masamba and Malili, at the head of the Gulf of Bone (Pelzer 1945).

After the independence, once local uprisings were ended, these types of irrigation projects were resumed in the 1960s, both for local Bugis and transmigrants, not only in South but also in Central

Sulawesi. It was the beginning of the green revolution and Sulawesi is still exporting rice to other islands of the archipelago and sometimes to Singapore and Malaysia. In comparison with the Java rice granaries, South Sulawesi produces twice as much paddy rice per inhabitant of the province. According to national statistics, in 1990, South Sulawesi was producing 470 kg per capita versus 240 to 280 in the three Java provinces. However production seems to have stagnated around the threshold of 3,000,000 tons. During this time, the Sulawesi cocoa boom was entering its exponential phase. At the microeconomic level, there is little wonder why. Bunkgu is one of the most dynamic pioneer front in the late 1990s. Migrants' jobs and origins before coming to Bungku confirm the importance of transfers from the rice to the cocoa sector (Table 1).

Table 1: Status and jobs of migrants before they came to Bungku

Status/ job	Percentage
Rice farmer	37
Rice farmer's son	13
Cocoa farmer	13
Cocoa and rice farmer	8
Cocoa farmer's son	3
Cloth trader, driver	10
Wood trader	3
Agricultural worker	3
Resettled by the army	5
Non active, still young	5
Total	100

The transfer of labor through migrations from the rice-growing regions to cocoa pioneer fronts was started in the early 1990s, and continued in 1997 and 1998. The paddy sector and rice self-sufficiency policies played an involuntary role in cocoa adoption, through several mechanisms.

FOOD SECURITY AS A SAFE ENVIRONMENT FOR COCOA MIGRANTS

The structural surplus of rice in Sulawesi helped in generating a safe environment for Bugis migrants who decided to concentrate on cocoa. They knew that they could buy cheap rice. For those who owned a sawah (irrigated paddy field) and did not need to sell or pledge it to fund their migration, the paddy grown in their farm in the origin region was sometimes brought to the new cocoa farm in the pioneer region. This especially happened if migrants kept working in their paddy field with regular trips between the 'paddy space' and the new cocoa site.

ASSET AND CAPITAL

The assets accumulated by Bugis from paddy and the green revolution also played an important role. The very first wave of cocoa adopters was made of ex members of an uprising and made of poor migrants. They did not own rice fields. That is why they migrated. However, their early success on cocoa attracted plenty of relatively better off farmers who owned sawah. Those new candidates to cocoa-driven migration started selling their cows, buffaloes, houses, gold jewels and even the sawah. Capital and assets accumulated by and for paddy fund migrations, land purchase and cocoa planting at the edge of pioneer fronts. Since the mid 1990s, in all our surveys of cocoa sites, around 65% of migrants were ex paddy farmers, sons of paddy farmers, and/or sharecroppers. Despite the increasing proportion of cocoa accumulators, funding a second cocoa migration by a first cocoa farm, the migrations funded by paddy are still dominant in the late 1980s. This is verified in Bungku (table 1).

PLEDGING OF THE RICE FARM AS AN INVESTMENT MULTIPLIER

Migrants sometimes avoided to sell their sawah by using the technique of ‘Gadai’ (pledging). They pledge the paddy farm for two to four years and manage to refund the capital borrowed with early incomes got in the new region from cocoa and valuable annual crops such as chilly. The ‘gadai’ technique proves to be a wonderful institutional arrangement as investment multiplier. Firstly it plays that direct role in covering migration costs and land purchase without de-capitalization in the origin region. Secondly, as it accelerates the successful conversion of paddy capital into cocoa, it increases the potential impact of copying effect that early migrants may have on their followers.

The role of copying effect in cocoa adoption has been demonstrated in the case of autochtons, (here defined as a population established for more than two generations), with farmers copying their neighbours in the village (Pomp and Burger, 1995). As guessed by these authors, it also works in the more general case of cocoa adoption through migration. According to our surveys, the very first cocoa migrants in Sulawesi started to show off their success to others by buying a ‘zing roof’ (corrugated iron sheets). Then the impact of copying effect increased with the gadai investment multiplier applied to cocoa farms. After pledging one of their cocoa farms, some migrants came back to their original village not with iron sheets but with a car. Others bought a sawah and/or precisely took sawah in Gadai, which generated a demand for rice farm pledging, and thus help to fund migrations of followers. However, one of the most important means of showing off one’s success was to fly to Mecca and become ‘Haji’ (Ruf and Jamaluddin, 1995).

GREEN REVOLUTION AND LABOR-SAVING TECHNOLOGIES

Threshers and herbicides enabled substantial savings in labor from the 1970s onwards (Naylor 1992). Motor cultivators have been diffused very rapidly in Sulawesi since 1985/86, at least in regions where control of water makes possible two and possibly three crop cycles per year. The equipment is accessible to a larger number of people on a rental basis. This costs Rp 80,000 per ha in 1993 (\$40). In comparison with tillage using buffaloes or cows, motor cultivators save 10 to 15 days of labor per hectare per tillage operation and remove almost all the labor constraints during the soil preparation period.

Days of labour for one tillage operation

man + hoe	45
pair of buffaloes	15
motor cultivator	3

Sources : authors' surveys, Sidrap, 1994.

This freeing of labor played an important role in accelerating cocoa migrations. They were two main mechanisms. Firstly, as seen above, the middle-income rice farmers were influenced by the 'have not' who succeeded in cocoa before them. They put at least one of their two or three sawah plot in gadai and migrated. In addition to reducing the number of days of labor, mechanization makes tillage less laborious and seems to raise the flexibility of labor organization. It helps to manage a sawah even without living permanently. Secondly, the use of hand tractor helped the upper class of rice farmers to fire many 'bagi hasil' (share croppers) and to manage their rice plots directly. Those Bagi hasil had little option but to migrate to cocoa pioneer fronts. Although they had no savings, they could easily get land there, by 'bagi tanah' (free access to forest or fallow land but pay back by sharing the plantation after three years)

UNEXPECTED IMPACT OF 'RICE INPUT' SUBSIDIES

A large proportion of cocoa smallholders stated that their adoption of fertilizer for cocoa comes from their experience in rice farming. [Hefner (1990) has also shown that the adoption of fertilizer in coffee farms in Central Java results partly from the lessons learnt in rice growing]. There is thus a transfer of subsidy not foreseen by the state, since planters also place fertilizer subsidized for rice on cocoa. The subsidies had being gradually phased out for KCL and TSP in the mid-1990s but maintained for urea up to krismon in 1998. In the meantime, it can be said that the government slightly but involuntarily subsidized some 10 years of cocoa expansion.

TRANSMIGRATION POLICIES: REPLENISHED LABOR SUPPLIES FROM RICE TO COCOA

By opposition to migrations that are supposed to be spontaneous and local (within the same island), transmigration or 'transmigrasi' is the official word to define government-organized migrations from the over-populated islands of Java and Bali to 'outer islands'. Which were the objectives and policies that lie behind transmigration schemes? In the mid-1990s, transmigration became an institution playing a role in the political landscape but without precise objectives (Levang 1995). However, for decades, one of the supposed and declared official objectives of transmigration was to ease the 'surplus' of population in Java and fulfill the supposed 'empty' regions of the outer islands. It was so unrealistic that one might consider that is rather was to make outer islands more Javanese. Transmigration obviously was a wonderful tool of control for the military regime to build a nation (Levang 1995, 401). Another objective was more agrarian. At least until the 1980s, it was to help to achieve the rice self-sufficiency of the country. For that reason, transmigrants were often obliged not to plant tree crops, or at least not beyond the 0.25ha backyard. How did this policy involuntarily trigger new impetus to cocoa and eventually hamper the development of paddy cultivation in the 1990s?

In South Sulawesi, plenty of young Balinese, usually the sons of transmigrants based in the

Mangkutana region (north of Bone Gulf), come to work for several months in Bugis cocoa farms before the rice harvest on the family holding. In Central Sulawesi, where several sites were financed by the World Bank in the 1970s, the 'family life cycle' of the transmigrants also matched the 'cocoa cycle' well. Even if the rice scheme were a full success, bringing people to grow rice unavoidably would supply labor one generation later, not necessarily for rice, especially if the green revolution is freeing labor. Transmigration provided labor with the children of the transmigrants who reach working age. Some of them found land, sometimes with their fathers. This process led to supply plenty of young chiefs of families ready to adopt cocoa in the 1980s. Last but not least, by investing in infrastructures like roads and bridges, transmigration schemes also attracted a number of spontaneous migrants. They could be 'spontaneous transmigrants' being 'trans-migrant' in that sense that they come from other islands but being 'spontaneous' in the sense they decided it by themselves and did not benefit any official support. There were also plenty of spontaneous local migrants from the same island taking the opportunity of the roads in the plains to have a better access in the foothills behind. In Sulawesi, Bugis are excellent at this game. It is especially the case in West-Bungku where they can combine low costs of land to well-developed roads and markets, despite the distance. This must be the dream of all migrants.

‘AIR DI BAWAH’. ‘DELAY’ IN IRRIGATION INFRASTRUCTURES

Even when they are successful, transmigration schemes bring labor, technology and capital to cocoa. All the more so if they are not successful. In Mangkutana region in South Sulawesi as well as in Central Sulawesi, both on the West and East coasts, we found several cases of recent transmigrants complaining that they waited for years for irrigation schemes to be completed. The irrigation and drainage network was never finished. “Air di bawah”, “literally water stayed below”.

For instance in Lewonu, close to Mangkutana, the irrigation canal should have been done where suddenly an oil palm estate took place. It was too late to dig any canal. Among 100 hectares planned for being sawah, only 30 were done. The Balinese decided to turn the other 70 hectares into cocoa. In Pangalasiang, on the West Coast of Central Sulawesi, it was still more simple. Before they migrated, Javanese were promised a ‘sawah’. They thus expected plain and irrigation. Instead they found no irrigation, hills and land conflicts with autochtons. After various failures in upland rice, it took two years to overcome these difficulties, by engaging themselves into cocoa.

In Kasimbar, on the east coast of Central Sulawesi, the Balinese were already on their own initiative there, having left official transmigration schemes to get more land here and with the idea to plant coconuts and cloves beside sawah. But they never managed to build an efficient irrigation system by themselves. There were sort of non-irrigated sawah until 1985. Since then, they converted all into cocoa farms. Balinese even totally forgot rice to the point they buy 100% of their food in 1998/1999.

CONCLUSION

Firstly, independently from policies, rice migrations before the 1980s would have accelerated cocoa migrations in the 1990s anyway. To a large extent, the paradox of rice policies turned by smallholders into ‘cocoa investment’ was unavoidable. Once self-sufficiency and surplus of rice seem to have been achieved, it made sense for farmers and even for local policy makers to look for

alternatives and concentrate on other objectives. However, government and smallholders did not find the same paths of 'diversification'. The government was not thinking to cocoa but rather to crops such as oil palm in the framework of contract arrangements between an estate with a plantation and a factory, supposed to be the 'nucleus' and transmigrant farmers called the 'plasma'. This is quite a symbolic and explicit terminology. Cocoa as an easy crop to grow individually and out of control was not considered by the central government. On the opposite, as a no-barrier sector, cocoa was rapidly adopted by smallholders.

The 'policy base' made of promotion of the green revolution and transmigration schemes (bottom of Fig.1) met the initiatives taken by local spontaneous migrants, mostly Bugis -upper line of Fig.1). This meeting accelerated the use of the capital and experience that was built on rice and helped to adapt both to a cocoa boom. This is a nice showcase of transfer of capital and information from one sector to another, a nice showcase of accumulation by smallholders. To a large extent, it was achieved despite the will of the central government in Jakarta and against its policy of rice self-sufficiency for Indonesia.

Secondly, policies of the central government involuntarily accelerated cocoa by underestimating capacities of migrants and transmigrants to overcome spoliation done by the Suharto regime and family. Whatever the evolution of government strategies regarding paddy, tree crops and transmigration, the switch from paddy to cocoa has been accelerated by 'spontaneous transmigrants' following the official transmigrants. This was non-expected by the central government in Jakarta and to a certain extent unavoidable.

However, it can be said that the 'iron hand' of the government to keep transmigrants on small pieces of land and food crops backfired. The first obvious option of transmigrants was to escape official schemes and look for land somewhere else.

There were success stories in transmigrations oriented to rice, but mostly due to the know-how of Balinese farmers. Then limits and constraints came by the corruption implemented in the schemes, by contradictory and personal interests, by the dishonesty of the whole system. The degradation of irrigation in transmigration sites suggest that policies of self-sufficiency in rice were made inefficient, not by mere complacency of apparent achievements but more by contradiction of personal interests and corruption. The fact that transmigration schemes were increasingly close to oil palm projects, sometimes mixed together, seem to be another sign of these contradictions. With less precipitation and more decentralized decision making, a better balance could have been achieved.

Basically, the 1998 monetary crisis helped to reveal that attempts of the Suharto regime and family to decide for Bugis and Balinese farmers, did not work as much as they hoped. Rather than suffering from political contradictions somewhat combined with dishonesty regarding the rice sector, many moved to freedom with cocoa. That, the Suharto family did not have time to harm, or it faced too much dynamism. As most cocoa booms in the past, the Sulawesi one owed its vital strength to farmers' self-help action.

Finally, coming back to the debate about diversification supposed to be seen by a government as an

objective and by an economist as a mere output of the relative incentives, the latter is especially right when government dishonesty goes too far. In that case, diversification is even a fighting strategy to escape central governments' objectives and too narrow policies. In that case, diversification is an outcome, often quite an unexpected outcome and this is one frequent case of farmers' self-help action.

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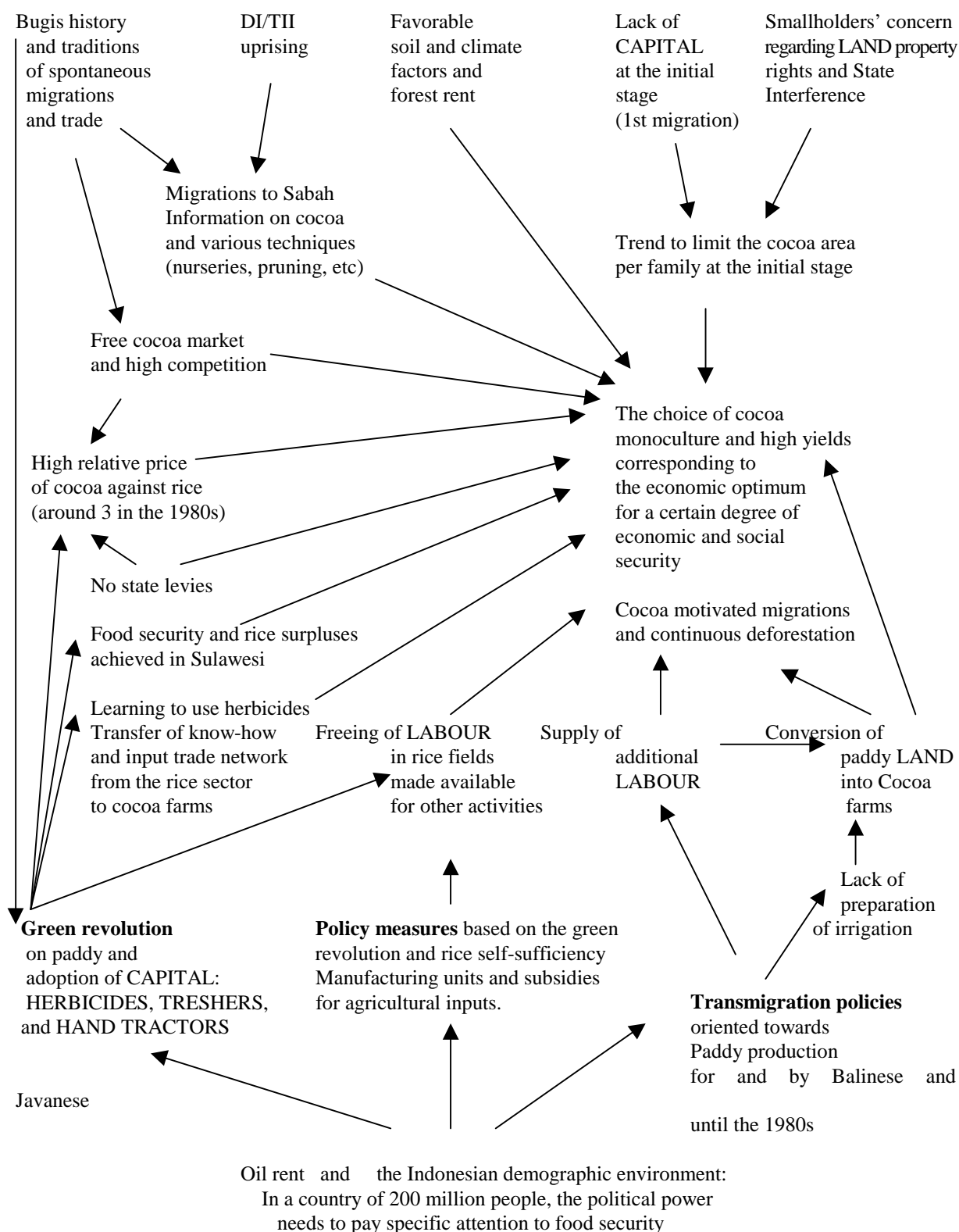


Fig. 1. Rice farming systems and policies helping to ... the rapid establishment of intensive cocoa pioneer fronts in Sulawesi in the 1980s and 1990s.

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Programmatic Theme

- 1. Small Farm Diversification and Competitiveness*
Farmer empowerment and self-help action