Cocoa Boom, Rice Subsistence and the Emergence of Exclusionary Labor Institutions in Central Sulawesi, Indonesia: Some Conclusions from Sintuwu

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Abstract

This paper analyses the effects of the Central Sulawesi cocoa boom and its associated patterns of migration on the rural labor market in the village of Sintuwu, Palolo valley. The domination of cocoa in the dry land sector and the subsequent conversion of wet rice fields into cocoa plantations caused a split between those with relative stable access to rice and work and those who have become almost excluded from agricultural work. Workers with "family-access" can rely on stable contracts with fix partners for many years, others instead have to look out for minimal contracts with many partners. The new institution of exclusionary work arrangements in wet rice cultivation is framed within a locally dominant ideology of kinship. Rather than being a local feature since times immemorial, an exclusive form of shared poverty has arisen as a result of capitalist penetration and a commodification of the land market. On the other hand, the "cocoa revolution" has not led to a commercialisation of relations of production, neither the dry land nor the wet rice sector, but it has contributed to an ever-increasing social polarisation in Sintuwu.

Introduction: "difference", "change" and the lowland-upland stereotypes in Indonesia

Informed by the impact of the "green revolution", studies on socio-economic change in rural Indonesia focused primarily on the wet rice growing lowlands. These studies were predominantly "quantitative" or "statistical" in nature, analysing first of all aspects of *agrarian change*, such as disparities in wealth and land ownership, technological and demographic issues, diversification of labour markets, problems of rural credit access etc.[1] On the contrary, the Indonesian uplands were mainly investigated in terms of either *environmental issues* such as forest and bio-diversity conservation, the ecological impacts of shifting cultivation, and community based resource management on the one hand, and in terms of *socio-cultural issues* such as indigenous rights, customary law, local knowledge, problems of marginality, and tribal identities on the other (Li 2002: 416). This division has far-reaching implications in that it implicitly relates the lowlands to the "agrarian" and the

[1] For an anthropological critique of this quantifying trend see Burkard 1999.

uplands to the "environmental" key questions of the social and natural sciences (popular upland-lowland trait characterisations and research topics are summarised in figure 1).

This contrast is also reflected in terms of Indonesian state control which is exercised first of all by the Agrarian Law (UU 5/1960) in the lowlands and by the Forestry Law (UU 41/1999) in the uplands. In Indonesia, the lowland-upland dichotomy is rather a cultural than a topographic or geographic distinction.[2] However, in representing upland societies, scientists, bureaucrats and environmental activists give a rather "diachronic" picture: On the one hand there is the notion of the backward and ignorant highland farmer whose inappropriate agricultural practices will inevitably deplete any upland resource, threaten environmental stability and who is therefore in special need of "guidance" and specific "hillside development". This is the general attitude adopted within the government's discourse of development and informs much of the national planning activities in the "outer islands". The other extreme is the image of the "moral economy" of upland communities which – in its emphasis on the sustainability and resilience of customary institutions and indigenous livelihood patterns – transforms upland farmers into environmental experts ingrained with ancestral wisdom. This is the dominant upland representation among many of the conservation, empowerment and indigenous rights NGOs in contemporary Indonesia. Both views tend to consider upland societies as isolated, bounded and territorially localised "micro-cultures", more or less closed systems which had evolved to be functionally stable.

Representations and Stereotypes of Lowlands and Uplands in Indonesia	
Lowland	**Upland**
commercialisation, market production	subsistence production
settled agriculture	shifting cultivation
individual land titles	ancestral lands / use rights
dominance of wet rice cultivation	dominance of non-rice annuals (maize)
agrarian structures ("green revolution")	nature conservation vs. degeneration
disparities in individual land ownership	community based resource management
agrarian change	environmental change

Figure 1. Representations and stereotypes of lowlands and uplands in Indonesia.

[2] According to Spencer (1949: 28, cited in Allen 1993: 226 and in Li 1999: xvi), uplands „could be defined as containing a core of hilly to mountainous landscapes of steeply inclined surfaces and the table lands and plateaus lying at higher elevations". That such an old and vague definition is still valid today shows that lowland-upland distinctions in Indonesia are indeed "constructions" rather than "physical facts". Terms like "interior" or "upriver" (in Kalimantan) are often used synonymously.

A major consequence of this tendency is the perpetuation of a long established stereotype which locates the lowlands at the centre and the uplands at the periphery of social and economic change. Thus, in his influential book "Agricultural Involution", Clifford Geertz speaks of the uplands as regions of "essentially unchanged swidden making", and a "monotonous expanse of enduring stability" (Geertz 1963: 116). In Indonesia, upland populations are often portrayed in terms of primordial loyalties and self-containing ethnic categories (e.g. the *Batak*, or the *Toraja*) with the effect that "what might otherwise be understood as inequalities in access to resources and/or power are read instead as problems in intercultural relations" (Kahn 1999: 81). This image of stable, bounded ethnic communities emphasises isolation and separation rather than relations and exchange and is thus quite at odds with the more dynamic understanding of group identities anthropologists developed in other SE-Asian upland settings.

Following Lehman´s theory of social systems (Lehman 1967), we reject the idea of primordial differences between lowlands and highlands. Rather, we believe that upland and lowland group categories are formally like roles and thus are "only very indirectly descriptive of the empirical characteristics of substantive groups of people" (ibid: 107). As exemplified by Barth (1969:15ff), an adequate understanding of upland (and any other minority) population must shift the focus from groups as culture-bearing units to the ethnic and social boundaries that define certain groups in relation to others (and the state), not the trait inventories and cultural characteristics a boundary encloses. The approach adopted by Lehman and Barth entails an important implication in the sense that it perceives of highland people not only as victims or recipients of outer forces of power (supposedly located in the lowlands), but as active agents who may well identify and position themselves as "uplanders" within a regionally defined system of inter-group relations (see Lehman 1969: 106). As pointed out by Li (1999, 2001), there is ample evidence that Central Sulawesi interior groups positioned themselves as subordinate uplanders in relational alliances with lowland powers on deliberate reasons of their own, such as evading feuding, famine and slavery (Li 2001: 43). In a similar vein, Reid (1997, cited in Li 2002) shows that in pre-colonial times the interior of the larger Indonesian islands were often important regions of production and population because coastal regions were more exposed to diseases (malaria, small pox, cholera) and floods. In the examples given by Reid and Li, people opted to become "uplanders" first of all for reasons of security. In a more actual example, Tsing (1993) shows how Meratus Dayak successfully use, manipulate and elaborate the notion of "marginality" in their interactions with state agencies in order to receive government attention.

Thus, within the last decade or so, the long established notion of uplanders as isolated cultures has become the subject of critical scrutiny and debate. The notion of upland societies, whose livelihood provides "subsistence, but little else" (Dove 1983: 93) becomes even more grotesque in regard to their economic activities. First, in contrast to the subsistence economy often ascribed to them, by trading forest products to the coast, uplanders have often been integrated into world markets long before their lowland counterparts. Exchange of forest products with coastal and foreign powers predates the arrival of modern "cash crops" such as rubber and cocoa in insular and opium in mainland SE-Asia (Dove 1983, Geddes 1976). Second, as already pointed out by Pelzer in the late seventies (Pelzer 1978, cited in Dove 1983), being embedded in inter-regional commercial networks, uplanders and swidden agriculturalists contribute more to the Indonesian export economy than the intensive wet rice cultivators of the Javanese agricultural heartland.

Whereas most of the literature cited so far deals with the general aspects of upland livelihoods as they relate to upland-lowland dichotomies and interactions, this paper pursues a slightly different purpose. In focusing on a specific feature of agrarian change which is usually associated with the "hard" facts of lowland wet rice cultivation, such as "population pressure", "agrarian commercialisation" and the "green revolution", namely the emergence of *exclusionary work arrangements*, it describes many of the aspects related to processes of socio-economic change in the lowlands such as social transformation, class polarisation and diversification of the labour market as being in full operation in the uplands. In Central Sulawesi however, the emergence of exclusionary work arrangements (*bapetak*) is not rooted in technological changes in wet rice cultivation or in imperfections of the regional market, but is shaped by global market forces beyond the wet rice sector. Here, changes in employment opportunities were induced by the Central Sulawesi "cocoa boom" and its concomitant waves of immigration which resulted in a large scale conversion of wet rice fields (*sawah*) into perennial stands. Within the processes of change observed, the transfer of agricultural land to outsiders and the subsequent changes in land use turned out to be the major lubricant by which local people became displaced from their land and simultaneously from access to work. In contrast to wet rice agriculture, cocoa cultivation is characterised by relatively low demands in labour with all major seasonal activities being almost exclusively performed by household members. With significant parts of the surrounding wet rice fields being converted into cocoa groves, local people found themselves confronted with an increasingly "involuted" labour market. This labour market is dominated by institutions which provide job security for a selected group of workers at the same time they are excluding others. Those excluded from

agricultural work are pushed into other activities with even lower returns to labour, as e.g. petty trade, clearing forest for others or rattan collection.

In contrast to lowland Java, where such institutions are known since at least since 1922 (Harjono 1993: 207), exclusionary work arrangements are a recent innovation in the Central Sulawesi uplands. Despite the "involuted" character of the agreements, references to notions of "shared poverty" or "moral economy" remain analytically problematic. Supported by a locally dominant ideology of kinship, exclusionary work opportunities are confined to certain types of relationships and do not operate at the level of the community as a whole. Thus, they are rather enhancing class polarisation than reducing it.

Sintuwu: The dynamics of a Central Sulawesi upland community

The village of Sintuwu is located on the Gumbasa river banks of the Palolo upland plateau, Central Sulawesi, Indonesia. Being a classical "frontier area", Palolo was gradually occupied by spontaneous as well as state directed immigration since the sixties and has meanwhile become one of the most densely populated micro-regions in Central Sulawesi. Palolo valley is located on the eastern fringes of the Lore Lindu National Park (LLNP), which was established in 1995. Sintuwu was founded in 1961 by several Kaili-Daá speaking families[3] who were resettled from their higher sloping terrain by the government via a regional transmigration scheme. The first Buginese migrants from South Sulawesi entered Sintuwu since the early seventies, after taking up wage work in a nearby logging company (P.T. Kebun Sari). The third category of early immigrants were rattan collectors from the so-called Kulawi valley, which is now forming the south western border of LLNP.[4] Whereas the regional Kaili and Kulawi population increased steadily through natural growth, population increase was fuelled first of all by the immigration of Buginese migrants who were attracted by the Central Sulawesi cocoa boom and the availability of cheap land reserves since the eighties.[5] Thus, the boom-bust cycles and migratory patterns usually associated with cocoa expansion predate the economic crisis which hit Indonesia in late 1997.[6]

[3] The different Kaili groups are generally believed to be the indigenous population of the Palolo valley.
[4] The term ´Kulawi´ is used as an ethnic as well as an geographic marker in addressing both, the Kulawi upland valley as well as its long established inhabitants.
[5] In mid 2001, the Bugis made up almost 1/3 f the population of Sintuwu (see Sitorus 2004: 107). Other onlvery marginally represented ethnic groups, such as one Toraja and some Sundanese families are not considered in the sample.
[6] During the currency crisis 1997/1998 the US dollar tied returns to cocoa increased seven fold (Ruf & Yoddang 1999: 248) leading to an unprecedented immigration of Buginese farmers to Central Sulawesi. With regard to cocoa, Li´s general remarks on upland cash crops that "even when prices are high, … the marketing chain reflects power imbalances which ensure that upland farmers receive only a small percentage of the gains" (Li

As can be observed all over Central Sulawesi, there is a tendency of the Buginese in Sintuwu to establish themselves as a large and economically powerful group in the Diaspora. In contrast to the various "mixed cropping strategies" and the delicate "subsistence-cash crop balance" adopted by the local population, the Buginese economy is dominated by the export sector with a preference for cacao production. Supported by high cacao prices, fertile forest soils (which may substitute for initial agrarian inputs) and the availability of cheap land, Buginese migrants became not only the most wealthy peasants in Sintuwu, but also the biggest landowners. Within our sample of 43 households, Buginese migrants owned 2,8 ha (SD =2,2) of land on average, of which 2,3 ha had been reserved for cocoa cultivation covered by an average number of 2031 (SD = 816) adult cocoa trees. Local Kaili and Kulawi people instead own 1,6 ha (SD = 1,5) on average[7], with an average of 1,1 ha (SD=1,2) being reserved for cocoa (accounting for a mean of 631 trees per household). In general, locals plant less perennials on a given unit of land and keep a slightly higher planting distance between the trees. Whether a household opts for "perennial specialization" or "mixed cropping" depends first of all on the household size. Migrant households are almost exclusively of the nuclear and regular extended types, whereas local households are dominated by irregular extended compositions resulting in a significantly higher household size (on average 5,3 persons in comparison to 3,2 among the migrants). There is a clear relationship between household size and the area of a holding that is devoted to annual-perennial mixed stands (r = 0, 59, statistically significant with 0,01). The more people per household have to be fed, the more are risks controlled by diversification of products and the more perennial (cocoa) specialisation decreases. It is important to keep in mind that in comparison to migrants, local people are much less experienced in cocoa cultivation. Having only recently embraced the new world crop, for local farmers planting cocoa the first time is a risk loaded exercise. The life cycle of cocoa is such that during the first years – as long as trees do not bear fruits – investment costs will probably be higher than the benefits of the first harvests Further, techniques to reduce the period before harvesting as e.g. extension of time in nurseries, polybag methods, preparation of planting holes, intensive fertilisation of young trees etc. are almost unknown by locals.

1999: 31), needs some rectification. Instead, the almost tax free Indonesian market system ensured that – at least during the economic crisis in 1997/98 - producer prices reached up to 85% of the export figure (Ruf 1999: 248).

[7] A great deal of these land areas have recently been cleared after significant parts of local plots and secondary forests have been sold to the migrants. Because many of the newly cleared plots are located within the prohibited area of LLNP and because the researcher was too times forced to leave the village because people feared that quarrels over land may become public, we regret that we cannot present reliable data on the real extend of actual forest conversion and encroachment.

Size of land holding	Local groups (Kaili, Kulawi)	Buginese migrants	Total
Land less	7 (25,9 %)	0 (0,0 %)	7 (16,2 %)
0,5 ha and less	4 (14,8 %)	2 (12,5 %)	6 (13,9 %)
0,5 - ≤ 1 ha	3 (11,2 %)	2 (12,5 %)	6 (13,9 %)
1 - ≤ 2 ha	7 (25,9 %)	5 (31,2 %)	12 (27,8 %)
2 - ≤ 3 ha	3 (11,1 %)	3 (18,8 %)	6 (13,9 %)
3 - ≤ 4 ha	2 (7,5 %)	1 (6,2 %)	3 (6,9 %)
> 4 ha	1 (3,7 %)	3 (18,8 %)	4 (9,3 %)
Total	**27**	**16**	**43**

Table 1. Land ownership in Sintuwu

One reason for the willingness to sell land is for sure the fact that agrarian arrangements such as share-cropping, renting out or pawning are highly underdeveloped among the local groups of Central Sulawesi. Thus, share-cropping occurs only in two out of 27 local households within the sample as against in five cases out of 19 migrants households. Among locals, such arrangements occurred only in the case of wet rice fields, but never in perennial cultivation, with input costs being fully covered by the tenant. This contrasts with the share-cropping of cocoa plantations among the Bugis, in which input costs are divided equally between owner and tenant. Thus, if the share rate of 50:50 is maintained, share-croppers may equally profit form price increases as land owners. Through a combination of continuous land accumulation and surplus production in cocoa cultivation, the Buginese migrants were able to establish domination over the village economy within less than 20 years. Fast land accumulation among the migrants is facilitated by the local predilection to sell land. The most frequently given reasons for the sale of land were payment of medical treatment and the purchase of basic necessities (see table 2). As a consequence of the combined effects of immigration, the closing down of the forest margin as a land reserve by the establishment of LLNP and the sale of land, two separate processes have occurred. Whereas migrants could consolidate and expand their holdings, part of the locals have become land less (or almost land less) labourers, dependent on relatives and neighbours to provide them with work. Some Bugis on the other hand function as “middlemen” between small local plantation operators and the city-based cocoa traders in Palu city (see Sitorus 2004: 113).

Reasons for sale of land	Number of cases	% in total
Daily consumption	7	36,8
Construction / repair of houses	2	10,5
Medical care	3	15,8
Weddings, funerals and other rituals	3	15,8
Repayment of debt	2	10,5
Plot too distant from home	2	10,5
Total	**19**	**100.0**

Table 2. reasons for sale of land in Sintuwu

Table 3 shows the important role of purchase as the major means to obtain land in current Sintuwu. It is important to note however, that purchase is meanwhile an important means of land acquisitions among the local population as well. Thus, in March 2005, parcels purchased by locals from locals (n = 21) did already slightly outnumber the number of plots obtained by forest clearing (n = 20). There exists a systematic relationship between the year plots were acquired and how they have been obtained. Table 3 reflects a continuos decrease of land clearings as well as a decreasing role of the village headman in land allocation at the same time it indicates a situation in which access to land becomes regulated by the market.

Origin of plots	Local groups (Kaili, Kulawi)	Buginese migrants	% in total
First clearer	20 (38,4 %)	3 (7,2 %)	23 (24,4 %)
Inherited land	5 (9,6 %)	5 (11,9 %)	10 (10,7 %)
Purchased land	21 (40,4 %)	34 (80,9 %)	55 (58,5 %)
Land grant from village headman (allocation)	6 (11,6 %)	0 (0,0 %)	6 (6,4 %)
Total	**52**	**42**	**94**

Table 3. Origins of plots operated by Sintuwu residents

It is clear that private ownership is the exclusive system of land ownership in Sintuwu at the moment. Is not absolutely clear however, if private ownership developed out of an *open access system* or if it developed from a *common property regime*. A strong argument for an open access system however lies the fact that traditional rules on forest resource use are almost absent, little restrictions on forest use were developed and no well defined traditional mechanisms to regulate resource use among community members could be found. Initially

established as a resettlement community, Sintuwu seems not to have developed communal land rights which could be collectively defended against immigrants and newcomers in an effective manner. Under the given abundance of forest resources, the "quasi natural right" (Fremerey 2002: 4) to convert forest into agricultural land was limited by personal industriousness rather than by local regulations. The lack of traditional security mechanisms which could safeguard that land remains within the local community is also reflected in the fact that there is no "ban" to sell wet rice fields (*sawah*) as in other communities surrounding the National Park. Usually, irrigated land may only be sold after all co-heirs have given their consent. Knowing this procedure to be a time-consuming and difficult one, farmers in other villages are rather reluctant to sell irrigated plots (see Burkard 2002: 11). However, such a "customary" security mechanism does not exist in Sintuwu. Thus, within the household sample, 44% (n = 17) of the plots purchased by migrants have been wet rice fields (*sawah*), the other 56% (n = 22) have been either dry land (*ladang*) or secondary forests (*belukar*).

The transfer of wet rice fields to the Buginese migrants did not only alter the distribution of land ownership within the village, but involved a radical change in land use and the agrarian structure. In contrast to their local counterparts, the economic orientation of Buginese migrants is dominated by the export sector. Given the higher productivity of their perennial plots and the smaller number of mouths to be fed, migrants owning exclusively perennial cocoa stands that are well cared for are still well endowed if only a part of the product can be harvested or sold. Thus cocoa has suffered several pod borer-attacks (*lepitoptera*) with harvest damages reaching up to max. 30%. With an average holding of 2 – 3 ha (equivalent to 2000 – 3000 trees) perennial farmers in Sintuwu could cope with this misfortune easily because the selling of 70% of their harvest was more than sufficient to keep their income stability. It is clear that this kind of income "stability" is intrinsically linked to the stability of the market as the major security provider.

Years of acquisitions (interval)	Types of Acquisition				
	First clearer	Inheritance	Purchase	Grant from village head	Total
before 1970	7	1	0	3	11
1971- 1975	3	1	3	1	8
1976- 1980	3	2	3	2	10
1981 – 1985	4	0	7	0	11
1986 – 1990	2	2	11	0	15
1991 – 1995	1	0	12	0	13
1996 – 2001	2	3	13	0	18
2002 -	1	1	6	0	8
Total	**23**	**10**	**55**	**6**	**94**

Table 4. Changes in types of land acquisitions in Sintuwu through time

Thus, the transfer of irrigated land involved a large-scale conversion of seasonal and permanent wet rice fields into perennial stands. For instance within the representative household sample, no Buginese farmer was involved in wet rice cultivation. Instead, rice was exclusively bought from local/regional producers at the market. In Indonesia, the logic of cocoa dependence is intrinsically linked to the cocoa/rice price ratio. Thus, from 1989 - 1995, one kg of cocoa was enough to buy more than two kg of rice. In late 1997, when cocoa prices rose up seven-fold, Indonesian farmers needed to sell one kg of cocoa to obtain eight (!) kg of rice (Ruf and Yoddang 1999:250). Empirical evidence suggests further that – given a significantly higher return to labor – perennial farmers give up cocoa only when the price ratio drops to one kg of rice to one kg of cocoa.

However, even then responses may be delayed due to "memories of boom times" (Li 2002: 431). Thus, according to official archives, during 1992-1998 nearly 72% of Sintuwu wet rice fields were converted into cocoa groves with the wet rice area declining from 270 ha in 1992 to 75 ha in 1998 (Sitorus 2004: 109). The combined effect of immigration, land transfers, accumulation and conversion has reduced the average household availability of wet rice plots in Sintuwu to less than 0,2 ha. In an official letter issued in June 1998, the District head (*Camat*) of Palolo prohibited any conversion of wet rice fields into plantations by government regulations in order to safeguard the food security of Palolo valley.[8]

[8] Decision Letter (*Surat Keputusan*) No. SK 525/0406/PMD/1998.

Area (in ha)	Type of land (conversion status)			
	irrigated land I (not converted)	**Irrigated land II (re-converted perennial stands)**	**dry – land I (not converted)**	**dry – land II (converted wet rice fields)**
	4,65	2,6	50,70	24,15
percentage of total land area	5,7%	3,1%	61,7%	29,5%
Mixed stands			7,35 (9,8%)	0,25 (3,4%)
Perennial stands			64,00 (85,5%)	23,00 (35,9%)
Grassland / secondary forest			3,50 (4,7%)	0,00 (0,0%)
Type of land according to major ethnic groups (in ha & percent)				
Kaili	2,9 (62,3%)	2,6 (100%)	15,50 (30,5%)	9,5 (39,3%)
Bugis	0,0 (0,0%)	0,0 (0,0%)	14,25 (28,1%)	13,50 (55,9%)
Kulawi	1,0 (21,5%)	0,0 (0,0%)	4,25 (8,3%)	0,50 (2,0%)

Table 5. Conversion of wet rice fields and distribution of irrigated and dry land in Sintuwu

After local people became increasingly displaced from their land by piecemeal transactions, the key question is in how far the Central Sulawesi cocoa boom has created new jobs or reduced job opportunities in Sintuwu. The process which transformed the migrants into the “new landed” and the locals into the “new land less” (Sitorus 2004: 111ff) implied not only changes in land distribution, but an increasing internal complexity in the distribution of labour opportunities. Ben White (White 1981: 141) made an important distinction in highlighting the difference between *resource scarcity* (the pressure of people on resources), which is a matter of demography on the one hand and differentials in the *access to resources* (the pressure of people on people) on the other, which is a matter of political economy. Given their low demand in labour, cocoa enterprises are almost exclusively managed by household and family members.

Table 6. reveals that extra-household labour is only recruited on a significant scale for field preparation and planting of cocoa, tasks which are usually done in a certain plantation only once in 20 to 25 years (either in establishing a new plantation or in the case of rejuvenation). Seasonal work peaks such as harvesting and weeding are in most cases accomplished by household members or with the help of nearby relatives. Routine activities linked to the maintenance of the plantation (cutting branches, burning leaves) or disease management (e.g. spraying pesticides or burying infected and removed fruit husks) on the other hand are almost

exclusively done by the household head himself. Compared to the high demand of work force generally associated with every stage in wet rice cultivation, labour demands in cacao cultivation can be almost neglected. The figures presented in table 6. indicate a situation where – at least in the case of perennial cultivation - access to work becomes "privatised" rather than being spread among the community as a whole. The combined effects of a migrant-dominated cocoa sector and a severely diminished wet rice area indicate a scenario where significant parts of the local population have not only been displaced from their land, but have simultaneously been displaced from access to work. Further agricultural expansion being impossible[9], local people find themselves increasingly in a situation where "one person's gain is always some other person's loss" (Harjono 1993: 110). Thus, via almost irreversible changes in the agrarian structure, perennial trees, often perceived as custodians and ideal security providers which protect peasants from ecological and agrarian adversities and risks (Chambers 1993, Ruthenberg 1980), turned out to be the major means by which local people in Sintuwu became displaced from their land and livelihoods.[10]

Activities	**Work force**			
	Self (head of household)	**Household members**	**Related persons (other household)**	**Neighbours**
Planting / Preparations	4	19	11	7
Maintenance of plantation	35	4	2	0
Thinning out of shadow trees	25	16	3	2
Weeding	23	12	3	3
Disease management	32	5	2	2
Harvesting	17	13	6	5

Table 6. Recruitment of work force in cocoa cultivation

[9] Until recently, encroachment into the National Park offered some relief for disinherited or land less people (see Sitorus 2004: 114). Much of the existing forest margin however is already located on slopes which are often less favourable for cultivation. In mid-2005, some plots had already been opened "behind" steep slopes in the forest interior making agrarian plots not only illegal, but also highly fragmented. Increasing pressure from the Park Authority and its NGO-allies on the village government to enter into a negotiated conservation agreement may further hamper clearing activities.

[10] This fact is also pointed out by Li (2002: 415) who deals with problems of displacement in Central Sulawesi in more general terms. In discussing changes in land control , Li does not address the question of work access and changes in employment opportunities.

The Past: Social organisation, land use and labour recruitment

Following Kahn (1985: 82, cited in Schrauwers 2000: 103) one must distinguish between the commodification of land, products an labour. As mentioned above, the introduction of a commodified product (cocoa) involved a subsequent commodification of land, but not necessarily a commodification of labour. Instead, relations of production seem often to correspond with relations of kinship. In the Central Sulawesi uplands, the concept of the "household" as a unit of production, reproduction and consumption is analytically problematic. The local term for household, *bantaya*, has its roots in the traditional longhouse organization where it referred to a compartment hosting a married couple (*soe tambi*). The *bantaya* was also the place where the mobile property (e.g. bronze gongs, *keris*-dagger) of the couple was stored. The longhouse (*banua*) consisted of several *bantaya*, with each of them having its own "seating place" (*palongku*) in front. Surrounding the common hearth, these "seating places" formed the "inner gallery" which was used for common meals and for meetings held by the longhouse community (see figure 2).

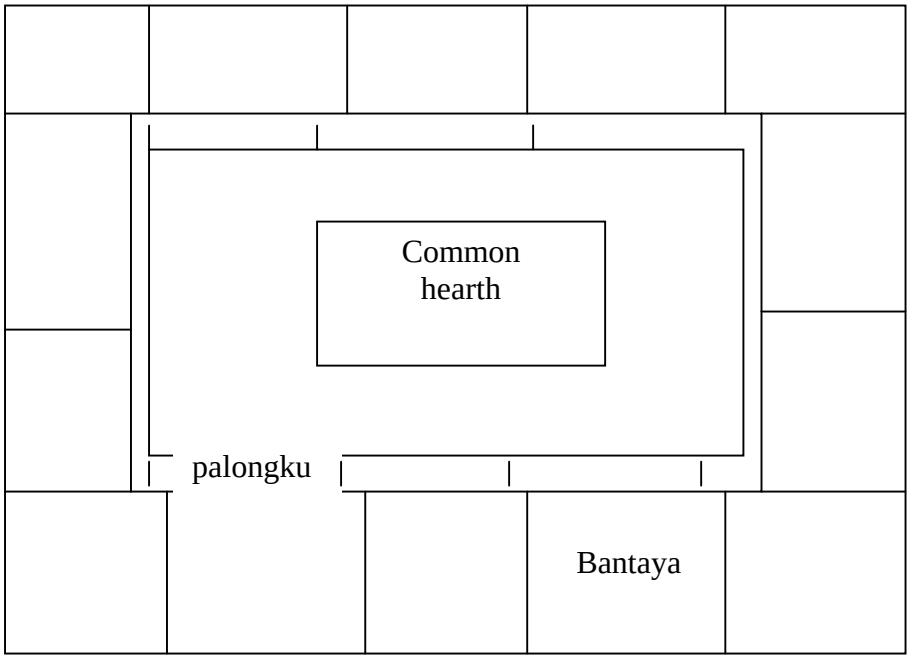

Figure 2. The Banua longhouse community.

Usually, the *banua* members consisted of several *soe tambi* which belonged to the same *hantina*, that is a cognate descent group including third cousins.[11] Albeit there was never a *banua* in Sintuwu since longhouses were forbidden by the Dutch in 1908 (see Schrauwers

[11] As among most Malayo-Polynesian societies, the kinship terminology within the extended kinship group is of the Hawaiian type and stresses differences in generation rather than in lineality (Fox 1967: 256-259).

2000: 99), it is important to keep in mind that much aspects of the social and economic relationships to be found in Palolo today are derived from the former longhouse organization. Within the *banua*, each *soe tambi* owned its own plots. Couples worked their plots not only on their own responsibility, but also transferred them to their offspring by inheritance. Food however, was indirectly redistributed by common meals in the longhouse. Children lived not in their parents` *bantaya*, but in a separate compartments and were cared for rather by the *hantina* members as a whole as by their parents alone. Thus, much of the domestic functions that are usually associated with the individual family, were actually vested within the extended kinship group. As known from other Central Sulawesi settings (Schrauwers 1998), the social and economic core unit was the married couple (*soe tambi*), not the nuclear household as such. The tendency to transfer domestic responsibilities to the wider kin group is still reflected in the high numbers of fosterage[12] within the village. Thus, within our sample of 103 local households in four villages, 19,4 percent (n = 20) had fostered children (*anak tinggal*) of poorer relatives.[13]

Forest resources surrounding a village were divided into tracts, each of them being claimed by a certain shifting cultivation group (*horobo*). Whereas a rough correspondence between social (*horobo*) and physical (resource) boundaries did exist, the *horobo* were not very closed groups and the *soe tambi* could join and leave its *horobo* freely. Within the *horobo,* each couple lived from and consumed the products of its own fields. There was neither a system of communal labour, nor a pooling of harvests. Instead, the *soe tambi* cultivated its fields with the help of strict labour exchanges. The prototype of the current working groups in the villages was the *morambanga* (literally "walking together to perform a task"), which has meanwhile become extinct. These work-sharing groups worked on the basis of "exact reciprocity", with members moving from one field to the next during agricultural peak seasons. Within the working group, the labour input of each *soe tambi* was reckoned separately. The *morambanga* is meanwhile replaced by the so-called *palus*-groups which differ not only in terms of membership recruitment, but also with regard to their activities. The *palus* is not restricted to agrarian production, but includes also mutual assistance in the preparation and arrangements of life cycle rituals and religious festivities. Whereas the *palus*

[12] For the sake of anthropological accuracy, it should be noted that in contradiction to `adoption`, `fosterage` does not involve rights to inheritance (Schrauwers 2000: 119). Central Sulawesi villagers differentiate clearly between `anak angkat` (adopted children) and `anak tinggal` (fostered children). Numbers and accounts in this paper relate only to children who were reported as `anak tinggal` during our survey.

[13] This figure is even higher than the 8 to 15 percent reported by Schrauwers in the Central Sulawesi district of Tentena (2000: 105).

may also be rented by outsiders against cash; a principle of exact reciprocity however is still applied among its members.

Thus, rather than by membership in a certain *horobo* and the resulting "closeness of fields", (as in the case of *morambanga*), membership in the *palus*-groups is determined by residential neighbourhood and religious affiliation. According to Savitri (2006:59), *palus*-groups are characterised first of all by their gendered division of labour, a feature they preserved from former work groups. Based on his observations in the neighbouring district of Tentena, Schrauwers (2000: 105) points out to the fact that "unmarried individuals were unable to cultivate their own fields since they could not participate in the exchange of opposite-sex labour required for certain tasks". The finding that under past conditions access to labour was determined by marriage is confirmed by our respondents. Returning to the principle of strict exchange in agricultural labour, it follows that large land owners may not be able to reciprocate the labour provided by the *palus* and other *soe tambi*. Here, local practice offers two major strategies. A landowner may either lend out part of his plots to others (*pinjam garap*) or he may enlarge the number of household members (and his labour force) by fostering children of poorer kin. Thus, the rather blurred conception of household boundary and composition and a kinship ideology that delegates a great deal of domestic functions to the extended kin group (*hantina*), provide local people with the flexibility to redistribute kin (and free kin labour) according to economic circumstances.[14] One must keep in mind however, that this rather flexible local social organisation and its peculiarities developed under conditions when land was freely available. In contrast to past conditions which forced people to marry in order to gain access to the external labour required to cultivate their fields – as a consequence of the processes described in the last chapter - the present situation is rather one in which married couples (*soe tambi*) may have neither access to sufficient land, nor to sufficient labour opportunities. Consequently, issues of kinship solidarity and the free use of kin labour are not at all exhausted with the phenomenon of fosterage but are played out first of all in the context of agrarian relations.

"Bapetak": The evolution of exclusionary work arrangements

Irrespective of the changes in land ownership observed, an adequate analysis of agrarian change is not exhausted with a description of a dichotomy of "landed" and "landless". White and Wiradi (1989) remind us that agrarian differentiation is not so much about whether some

[14] It should be pointed out that local conditions reflect more or le ss a perfect reversion of the *Chayanov*-model of peasant economics.

farmers own more or become richer than others, but first of all about the changing relationship between them. Similarly, Hart points out that "a unidimensional measure like landownership is narrow and may produce a distorted picture of patterns of control over resources…. agrarian class structure cannot be understood simply in terms of distribution of resources, but must take account of relations among people" (Hart 1986: 102). These arguments are vital for the understanding of the following analysis.

Exclusionary work arrangements are well documented for the rice growing heartland of Java (Hart 1986, Harjono 1995, Naylor 1991); their appearance in the outer islands however is hardly noticed. Known as *kedokan* or *ceblokan* in Java,[15] exclusionary arrangements are based on the principle of deferred gratification: a tenant/worker plants a defined parcel of a wet rice fields (*sawah*) of a land owner under the promise of an exclusive harvesting right, receiving a defined share of the product. The worker receives no compensation for the period between planting and harvesting and harvest shares are in most cases lower than those obtained from share tenancy arrangements. In general, a system like this occurs only when access to land and outside employment opportunities are limited. The worker's right to harvest the parcel is exclusive, participation of others being strictly forbidden by the arrangement. Thus, the major feature of the arrangement in comparison to other, more open agreements is that it provides *job security* to a selected group of workers at the same time it is excluding others (Hart 1986). It is inherent in such arrangements that the more crucial is job security, the greater the effort workers make in order to renew their contact which in turn may once again enhance the value of job security (see Hart 1986: 180).

The local term for the arrangements, *bapetak*, stems from the term *petak* which refers to a dyked-off section of a wet rice field (*sawah*). The allotment of the harvest is done by using the *blek*, a local beaker equivalent to 10-12kg of milled rice. According to negotiation and the relationship between landowner and worker, the worker may receive either one or two out of every five *blek.* The arrangement occurred in the early 90ties and is reported to have been first introduced by a landless Javanese migrant who offered his labour to local *sawah* owners before the system was embraced by the local population. At that point of time not only a significant part of *sawah*, but also the loin's share of annual dry fields (*ladang*) had already been converted into cocoa plantations which – once established – could be easily managed by household labour. Thus, the work sharing groups (*palus*) become increasingly ineffective as collective work actions were not anymore crucial in dry field cultivation. Owners of wet rice fields on the other hand could no longer rely on a stable work force formerly provided by the

[15] In difference to the *ceblokan* system which is limited to planting and harvesting, *kedokan* usually includes other tasks such as weeding.

palus-groups as an increasing number of "free riders" withdraw their involvement in transplanting and harvesting, especially during rainfall. Given the high costs of delay, reliability of labour is of primary concern for *sawah* owners / operators[16], especially in the case of transplanting. When rice seedlings reach the proper state of development, they must be transplanted immediately, otherwise they will be lost. Under the given circumstances, there was not sufficient labour available for exchange at the same time access to work for land-poor people was severely limited so that *bapetak* provided an appropriate means of recruiting and disciplining cheap labour. Thus, its emergence is not linked to market imperfections, but is based on the need to discipline the labour force and to enhance social control in a situation of rapid changes in the agrarian structure caused by the "cocoa boom".

In Sintuwu, the value of job security was not only enhanced by large scale conversion of wet rice fields into cocoa stands, but also by public sector investments in irrigation which transformed almost all of Sintuwu´s *sawah* from rain fed into irrigated plots. This allowed for *staged planting* in wet rice cultivation (in Sintuwu every stage in rice cultivation can be observed throughout the year) as opposed to the former practice of *simultaneous planting*. Thus, cultivation tasks are spread out over longer periods and peaks in demand are considerably less sharp. This implies that at a certain point of time only a limited number of job opportunities in planting and harvesting can be provided. Thus, it is through manipulation of cropping sequences and planting times that farmers achieve the best use of labour. This situation, in turn, enhances the value of job security.

Out of the 162 arrangements in our sample[17], 115 involve *sawah* plots cropped twice a year, whereas 47 contracts relate to plots where three crops of rice are cultivated per year. In 2005 the type of rice most frequently planted was the hybrid HYV-variety *cimandi* which matures about three months after transplanting. Despite the fact that the shorter growing periods of HYV-varieties increase demand in labour, this does not compensate for the loss of work demand that was caused by the large scale conversion of *sawah* into perennial stands.

[16] It should be noted that not all plots worked via *bapetak* are owned by those practising *bapetak out*. Within the sample, 119 plots (73,5%) have been owned by the contractor, 33 plots (20,3%) are plots owned by his/her parents and in 10 cases (6,2%) it was a tenant whose sharecropped-in land is planted and harvested by *bapetak*.
[17] The unit of analysis was the *bapetak-contract*, not the individual farmers or plots involved in the arrangement.

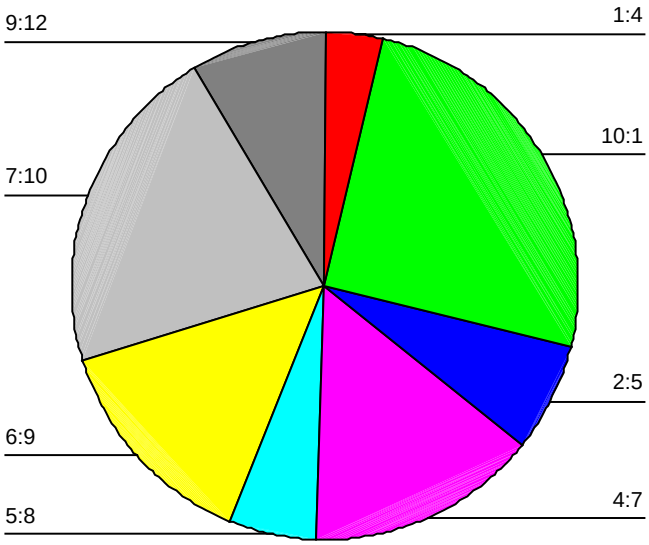

Figure 3. Months of planting and harvesting in *bapetak*-arrangements (e. g. 7:10 = planting in July, harvesting in October).

There is a strong tendency for sawah operators to limit contracts to members of their own ethnic group. Within the sample, 44,4% (n = 72) of all contracts are between Kaili operators and Kaili workers. In 37,0% (n = 60) of the contracts both parties involved are Kulawi whereas only 5,6% (n = 9) of all arrangements considered are between Kaili and Kulawi partners (in four of them Kulawi and Kaili partner are related). Interestingly, Kaili land owners have more contracts (n = 17) with partners of other ethnic groups (partly living in adjacent villages) than with Kulawi workers living in Sintuwu. In 13 out of these inter-ethnic contracts however, sawah owner and bapetak-worker have also kinship relations. Thus, a high degree of ethnic rivalry between the two groups is obvious. It would be misleading however to assume that only landless people or people with no access to sawah at all are entering into bapetak-contracts as workers. Out of the 71 respondents in our sample who are working the fields of others via bapetak, 11 (15,4%) are landless, 28 (39,4%) own/operate dry fields only, 29 (40,9%) own/operate dry fields plus sawah and three (4,3%) own/operate wet rice fields only.

It is important to note that 13 out of these 71 respondents who practise *bapetak-in* recruit labour for the planting and harvesting of their own *sawah* also via *bapetak-out*-arrangements with others. In eight cases there exists even reciprocity between households with members of household `A` transplanting and harvesting the fields of household `B` on the *bapetak-*

premise and vice versa. This is of special value when planting and harvesting times differ, so that access to rice can be spread over longer periods which means that there is less need for storing. Of course, it is tempting to interpret *bapetak* in terms of *shared poverty* or as a *moral economy*. Thus, Sitorus, with special reference to the same village, speaks of *bapetak* as an "equalization mechanism" in order to guarantee the "fulfilment of subsistence" (Sitorus 2004: 114). The most obvious trait of *bapetak*-contracts, its tendency to appear within the confines of ethnic boundaries, indicates already that this "equalization mechanism" is not open for everybody. As Shrauwers (2000: 116) reminds us, "morality" cannot be separated from the relationships within which it is enacted. In contrast to an all-encompassing conception of *shared poverty* as a welfare principle working on an abstract level, our analysis revealed that there is not only differentiation between those with access to *bapetak*-arrangements and those without, but also differentiation between those who have stable contracts with fix partners over longer periods as opposed to those who have to rely on short-term contracts with changing employees. As will be exemplified below, this differentiation is enshrined within a locally dominant ideology of kinship. Despite the area devoted to wet rice has diminished continuously, since their appearance in the early-mid nineties, the number of *bapetak*-agreements has risen steadily. Figure 4. shows the year when individual *sawah* parcels have been worked by a *bapetak*-contract for the *first time* based on the information of the present or former owners of the plots. Because of the limited time span of many of the present contracts, the year a plot became involved in exclusionary arrangements was chosen as a measure instead of the year the present contracts were made. The most striking fact is the sharp drop in 1997/98 where almost no new contracts were made. This phenomenon is inseparably linked to the economic crisis and the sevenfold increase in cocoa prices from 1997 to 1998 in Sulawesi (Ruf and Yoddang 1999: 248). Thus, during the crisis cocoa prices in Palolo rose from Rp 2500/kg up to Rp 18000/kg, whereas rice prices rose only from Rp 2300/kg to Rp 3500/kg. This means that in Sintuwu before the crisis one had to sell one kg of cocoa in order to buy 1,1 kg of rice whereas during the crisis selling one kg of cocoa was enough to buy 5,1 kg of rice.[18]

Given the fact that even the smallest landowners own at least some hundreds of cocoa trees, the wind fall effect of cocoa production led to higher incomes also for land-poor villagers making them less dependent on *bapetak*-agreements for their living. On the other hand, *sawah*-owners preferred to complement existing contracts with hired labour rather than

[18] Rice and cocoa prices as remembered by our respondents. That the rice/cocoa ratio of 1: 5 in Sintuwu is lower than the one of 1 : 8 reported by Ruf and Yoddang for South Sulawesi, is related to the fact that Central Sulawesi cocoa is of minor quality (see Abbate 2006).

giving out new (or renewing existing) contracts. Given a local standard of a day's work of Rp 10000 (including meal), it took only 0,5 kg of cocoa to cover the cost of a full day's work. This changed rapidly when cocoa prices fell to Rp 8000/kg in 1999. Meanwhile however, the labour department (*Departemen Tenaga Kerja*) had formalised daily wages with the minimal standard of Rp 15000 per day made obligatory with the effect that local wages could not anymore be adjusted to the macro-economic situation. Consequently, from 1999 on Sintuwu witnessed a steady rise in *bapetak*-arrangements again with now almost 90% of all *sawah* being planted/harvested by *bapetak*-workers. At the same time concerns for food security seemed to re-emerge as some farmers started to re-convert parts of their cocoa stands into *sawah* fields again (as indicated in table 5).

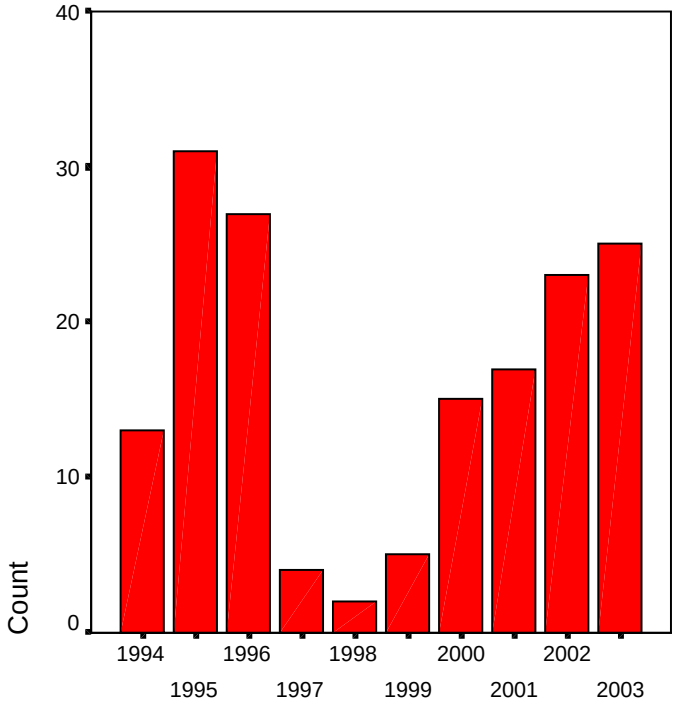

Figure 4. First involvement of *sawah* plots into *bapetak*-arrangements according to year

This significant decline in the number of new contracts during the crisis and the subsequent, not less significant re-emergence of new arrangements since 1999 conforms with findings in rural Java where "a notable feature of these exclusionary arrangements is their tendency to disappear and reappear, sometimes with astonishing speed" (Hart 1986: 15).

Out of 162 contracts effective in March/April 2004, in 82% (n = 133) of all cases, the partners involved belonged to the same *hantina*. In 24,7% (n = 40) of the arrangements, relationships between partners have been defined as "close kin" (*keluarga dekat*), that is contracts between parents and children, between in-laws and between siblings. In these cases

the partners may share the same hearth either as nuclear families (e.g. an unmarried daughter works on the fields of her parents who live in the same house) or as extended families (e.g. a daughter-in-law works the plots of her co-resident parents-in-law) or the partners may live in different houses or even different neighbourhoods and hamlets. Because there is often a limited family pool left to equip only one heir, bapetak-contracts are first of all granted to younger siblings by their elder fellows. Thus, *bapetak* is first of all an arrangement between people, or between kin, not between households. That the agreements also occur between members of one and the same households shows that there are often overlapping units of production and accumulation within residential units and that functions of production, reproduction and consumption are not at all congruent with household boundaries. Despite that *bapetak*-contracts are made between individuals, in practice the land owner gains implicitly access to the labour of the workers´ family members. Land owners/operators asserted that in granting *bapetak*-contracts to kin one must be generous and that one is not allowed to use calculation (*ledo mobareke*). Schrauwers (2000, 2001) has pointed out to the central function of the extended kin group in upland Sulawesi in providing bride wealth because only through marriage one could assure access to the labour networks required to cultivate ones fields. Under conditions of shifting cultivation and free access to land, this conclusion is certainly true. The responsibility of the wider kin group however does not include the transfer of land which is only inherited within the nuclear family; even co-resident *anak tinggal* are excluded from inheritance. Since land is not anymore freely available, nor are work exchange groups between *soe tambi* anymore vital in agrarian production, *bapetak* is not only a recruitment institution to secure quick and ready availability of labour, but also a mechanism through which the local kinship ideology of the caring extended family based on solidarity among its members (*shared poverty*) may be maintained. On first glance, statistic analysis seems to support the relevance of the locally dominant kinship ideology. Thus, the area of *sawah* operated correlates with the number of *bapetak*-out contracts ($r = 0,81$, statistically significant with 0,01) as well as the number of workers contracted ($r = 0,88$, statistically significant with 0,01). The preference among landowners for *bapetak*-contracts however is not as altruistic as they assert or as the quantitative data make us believe. Besides providing quick and ready availability of labour, *bapetak*-arrangements contribute substantially to the reduction of production costs. As the changes in arrangement preferences during the economic crisis and its aftermath have shown, farmers are quite flexible in reducing or expanding the number of contracts according to outer circumstances. Thus, after

the relative costs of wage work rose rapidly since 1999 as a consequence of declining incomes, farmers resumed the well-tried *bapetak* very promptly.

Unfortunately for the adherents of neo-classic theory and moral economists alike, the use of free kin labour via *bapetak*-agreements – albeit enshrined in notions of kin-based charity – may well be a function of individual profit-maximisation. This can also be seen in the preference to contract other landowners at the cost of landless workers. The reason given is that landless people are more difficult to rely on when ready availability of labour is at stake. This is because of their engagement in a variety of other (non-agrarian) income generating activities, especially rattan collection among men and petty trade among women.. This is especially crucial in the case of rattan collection where advances (*panjar*) are paid by city-based rattan traders before the collectors enter the forest often for weeks, thus creating a debt-relationship between the rattan collector and his boss often resulting in tied labour. This, in turn, enhances the difficulty to enter into *bapetak*-arrangements. The category of people most affected by this logic are regional immigrants from within Central Sulawesi, especially those from the poverty-striven Behoa and Bada valleys - located some 100-200 km to the south of Palolo - who lack both, capital and access to land as well as social capital in the form of kin relations and ethnic affiliation.[19] Far from being pulled out of agriculture by new opportunities outside the agricultural sector (a model assuming that rural labour markets fulfil more or less the competitive norm), these people have definitively been pushed out of agriculture by the processes of change induced by market (cocoa) penetration and large-scale conversion. People without family relations however have sometimes entered *bapetak*-arrangements by incidence when a related *bapetak*-partner could not do the job for reasons of sickness, absence, mourning periods, other activities etc. and a substitute had to be found for one season. Interestingly, some of these substitutes are now claiming contracts for plots they once worked by pointing out to the village welfare principles of work sharing! This paper is committed to a scientific understanding as advocated by James Scott, according to which the objective of social analysis "is not to tease out a consensus of agreed-upon rules but rather to understand how divergent constructions of those rules are related to class interests" (Scott 1985: 310). Thus, the rural institution of *bapetak* serves to maintain solidarity among the extended kin group while simultaneously it provides a profit-maximising (or at least cost reducing) tool for individual farmers at the same time it is re-constructed as a community

[19] Characteristically, all five members of this category of people in our representative household sample are landless. Respondents of Behoa and Bada origin were very difficult to encounter because most of the time they stayed in the forest.

wide, moral welfare mechanism by those who feel themselves deprived of a stable participation in its benefits.

Differentiation is neither exhausted with a division into landowners and landless, nor with a division into workers with access to *bapetak*-arrangements and those without access. A more rigid analysis of the arrangements revealed that their individual conditions are far from homogenous. Individual contracts differed in terms of their duration and reliability, in terms of the size of the dyked-off *petak*-sections involved, in the number of harvests/year involved in the contact and in the shares rates included in the arrangement. The only stable element in the contracts seemed to be the principles of exclusion and deferred gratification. If we divide the relationship between the two parties involved in each contract into (1) related I / close family, (2) related II / member of same extended (*hantina*-) kin group and (3) not related, 57,4% of the contacts (n = 93) are within the extended family, 24,7% (n = 40) within close family (*keluarga dekat*) and 17,9% (n = 29) between non-related partners. However, there is a statistically significant relationship between type of kinship / non-kinship and the area a landowner provides for his worker (s = 0,47, significant on the 0,01 level). If we compare the mean size of the each dyked-off *petak* in dependence from the type of relationship of the actors involved, there is only a minimal difference between the average area affected in contracts between non-kin (8,3 are, SD = 3,4) and between partners of the same *hantina* (9,4 are, SD = 4,3) on the one hand, but a significant difference of both in contrast to the mean area involved in contracts between close kin (19,9 are, SD = 8,5) on the other hand. Since, on average, sawah operators control only 0,49 ha of wet rice fields per household, the mean size of almost 0,2 ha involved in each contract which is granted to close kin is quite considerable. In terms of the total area affected, the area of 7,9 ha involved in only 40 contracts between close kin almost equals the area of 8,7 ha involved in 93 contracts between members of the extended kin group. There is a tendency of declining plot sizes within the contracts among all categories of workers. If we take the median of the year the contracts were made, that is the point in the distribution above and below there are an equal number of contracts, this is the year 2002, plot sizes involved in *bapetak*-arrangements dropped to 8,8 are among non-kin, to 8,2 are in contracts between extended kin and to 15,0 are in contracts between close kin. Because borders of dyked *sawah* plots (*petak*) are drawn anew every season, owners enjoy a certain degree of freedom in how much land to grant to a certain worker in order to fulfil their social obligations and secure own subsistence needs which have become more pronounced since saleable surpluses have become smaller.

Family relation	Actual number of *bapetak-in*-contracts with same partner			Seasonal extension		Share rates	
	1	**2**	**3 or more**	**full**	**partly**	**1 blek**	**2 blek**
Not related	18	10	1	9	20	22	7
Ext. kin	40	38	2	44	49	50	43
Close rel.	7	7	24	29	11	8	32

Table 7. Distribution of key defining security conditions of *bapetak*-arrangements

On average, workers have 2,4 (SD = 2,1) contracts with 1,7 (SD = 1,3) *sawah* providers. The number of contracts per worker ranges from one to 11 plots, which are provided by 1 to maximal five *sawah* operators. Whereas some people may work a fix number of plots for the whole year (up to three harvests) and may thus count on an albeit small, but stable access to rice, others instead may have to look out for new contracts with changing providers every season. Albeit it is impossible to quantify, the fact that there are variations in the degree of contract security cannot be obscured. The distributions of the differentiating key conditions of the contracts are presented in table 7. Looking at the number of contracts workers have with a fixed partner, it can easily be seen that a close family relationship with a *sawah* owner is the best guarantee for a stable access to *bapetak*-arrangements. In case of less close kin relations instead, as a rule owners seem to restrict their generosity to one or two plots. In the case of *bapetak*-relations between non-kin access to work arrangements becomes even more confined. This finding supports the complaints of some *sawah* owners, that nowadays too many kinsmen are requesting (*minta*) for *bapetak*-contracts. Thus, whereas during the mid-nineties, when *bapetak* was adopted, it was first of all the landowners who searched for a *bapetak*-worker in order to secure their harvest labour, it is now usually the workers who are in search for arrangements. The same pattern applies to the "seasonal extension" of the agreements. As pointed out above, all *petak* involved in exclusionary arrangements can be harvested two or three times a year. Because one contract allowing access to one plot for three cropping periods may equal three limited arrangements that are valid for only one season, it seemed interesting to know in how far the contracts apply to all or only a part of the cropping periods. Once again, the findings show a clear privilege of close kin at the cost of competing workers. Besides the larger areas per *petak* involved, the higher number of contracts granted, and the longer seasonal extension, share rates are also higher when close kin is contracted. In minimal contracts, a worker transplants a *petak* and receives a share of one out of every five *blek* after harvest. In case of close kin however (and to a lesser extend in the case of extended kin), workers often receive two *blek* out of every five *blek*. Whereas among non-kin two *blek*

are usually given out if additional tasks such as weeding are included, among kin the higher share rate is best described as a kind of bonus. There are no specified rules in regard to the tasks that are added or in regard to the manner the favour is returned. Instead, it is a way of sharing of one's own limited assets among the circle of one's closer kin. As indicated by table 8., the willingness of *sawah* operators to let their plots work by others who do not operate *sawah* themselves (landless, dry land farmers) is higher among close kin than in contracts with other partners. Thus, in most cases three contracts have been given to close, non-*sawah*-operating kin. On the other hand, having more than two contracts with a non-wet-rice-farmer of one's extended kin group is very seldom and does not at all occur if a non-kin worker is contracted. This indicates that one may speak of *bapetak* as a welfare mechanism providing one's fellows with a minimal access to rice only when close kin is affected. One effect of the large-scale conversion and the subsequent reduction of wet rice reserves is that inheritance is significantly delayed. Young couples (*soe tambi*) now often work the plots of their parents whom they have to sustain as well. Because there is often a severely limited family pool left, sufficient to equip often one heir only, *bapetak*-contracts are first of all granted to younger siblings by their elder fellows.

Family / kin relation	**Number of contracts with same partner**	**Agricultural farming type of *bapetak*-in**			**total**
		Landless	**Dry land farmer / no sawah**	**Sawah owner / operator**	
Non-kin	1	9	7	2	18
	2	2	4	5	11
	3	0	0	0	0
	total	**11**	**11**	**7**	**29**
Ext. kin	1	11	12	17	40
(*hantina*)	2	1	23	25	49
	3	0	3	1	4
	total	**12**	**38**	**43**	**93**
Close kin	1	3	4	0	7
(*keluarga*	2	0	1	8	9
dekat)	3	6	9	9	24
	total	**9**	**14**	**17**	**40**

Table 8. Number of contracts according to family / kin relation and farming type

As pointed out above, the major reason for the emergence and fast acceptance of *bapetak* as the major labour recruitment institution was the crisis of the reciprocal work-sharing groups (*palus*) and the ensuing unpredictability of reliable labour. Given the dominance of perennials and the high returns to labour in cocoa, there is little prospect for the *palus* to re-emerge in the dry land sector, or to be re-installed as a work organising institution on the community level. All the more it is worth to note that during our survey, a new kind of *palus* had been introduced among the *bapetak*-workers. Within our sample, 53,7% (n = 38) out of 71 *bapetak*-workers have been members of the recently organised *palus bapetak*. Similarly to its predecessor, the groups work on the basis of strict reciprocity. There is no systematic relationship between farming type and membership in *palus bapetak*, but – as one would assume – membership correlates significantly with the total number of *bapetak*-in arrangements into which a worker is involved (s = 0,62, sign. on the 0,01-level). Far from equalising *bapetak*-workers however, what takes the form of a renaissance of a traditional peasant institution is actually working in the direction of further differentiating the villagers.

Total number of *bapetak*-in contracts	***palus bapetak*-members**	**Non-members**
1	5	20
2	18	7
3	8	2
4 and more	6	3

Table 9. Membership in *palus bapetak* according to total number of contracts

First, given the reciprocal nature of its organisation, it is usually those who have more than one contract who join the groups (see table 9). Those having most contracts are those who are in possession of the most important social capital in obtaining job opportunities: close family relations with *sawah* owners or *sawah* operators. Second, given the unpredictability of timing due to weather dependence and the high costs of delay in agricultural production, for *sawah* operators quick and ready availability of labour is of primary concern. In recruiting a *palus bapetak*-member, the *sawah* owner/operator gains access to the labour of additional group members which accelerates the process of planting and harvesting. Because of their reciprocal duty with a certain worker, *palus bapetak*-members show up automatically and do not have to be called or invited by the landowner. As Bardhan (1979) points out “the employer is usually keen on entering into some explicit or implicit contracts with workers about a dependable supply of labor at the right time or, at least, is aware of the significant hiring or recruitment

costs to be incurred as and when such recruitment needs arise" (ibid: 488, cited in Hart 1986: 171). Thus, when in search for a new *bapetak*-worker, a land owner may always prefer someone who is already member of a working group instead of someone who is not, thus preferring those who are already in a privileged position anyway. Third, as pointed out above, it lies in the nature of the *palus*-groups that they an be rented by non-members against cash. This – albeit in indirect manners – may once again enhance access to extra income for those who are involved in the groups.

Given these findings, the processes of change in current Sintuwu have little to do with the stereotype of the timeless, socio-culturally homogenous upland community. Instead, they reflect some of the most pronounced features usually associated with the changing livelihoods in the lowlands. These features include an increasing polarisation in land ownership, the commodification of agrarian products, the prominent role of the market in access to land, and more rigid mechanisms in the allocation of work opportunities. The difference is thus less in terms of the patterns of agrarian change, but in their respective causes. Whereas in the lowlands, it is first of all the introduction of hybrid rice varieties, their dependence on external inputs (fertiliser, pesticides) and the concomitant technological changes (e.g. the substitution of the hand knife by the sickle in harvesting) as well as access to credits which work as the lubricants of polarisation (Collier 1979, Hansen 1981, Harjono 1995, Hart 1986, Naylor 1995, Stoler 1977), in Sintuwu a similar reconfiguration of the agrarian structure was not caused by changes in the rice sector, but by the combined effects of immigration and changes of land use "usually associated with every cocoa boom throughout history" (Ruf and Yoddang 1999: 248).

Summary and Conclusion

The Sintuwu case challenges not only some established stereotypes in regard to upland-lowland dichotomies, but also some well known assumptions about peasant societies and socio-economic change in general. There are two major approaches in explaining peasant economic behaviour, that is (1) the neo-classical theory of farm production, (2) the so-called "risk aversion-approach" and (3) Neo-Marxian political economy. Neo-classical theory perceives of the peasant as an individual decision maker exclusively concerned with questions of individual profit maximisation. Thus, it is based on the assumption that farmers can always vary the level of kind and farm inputs and outputs (Ellis 1988: 17). It thus does not take account of the varying quality of spatial and temporal information flows. The major short-

coming of this conception however is that profit maximisation is perceived as the one and only variable in peasant decision making. It thus overlooks that in peasant societies, land functions not only as a production factor, but is more often than not an important subsistence insurance. Besides, peasants often prefer non-market, reciprocal transactions which are not measured by market prices (Burkard 1999: 37). Such reciprocal arrangements often ensure survival for all community members, irrespective of their individual economic performance (Ellis 1988: 11). For an influential part of researchers, the principle of reciprocity is even the key distinctive feature of peasant societies in general. According them, a high level of uncertainty in peasant livelihoods (natural hazards, market fluctuations, social uncertainty, tenure insecurity) implicates that peasant decisions aim first of all at survival, not at profit-maximisation. Thus, so the argument, under conditions of climatic instabilities and fluctuations in yields and prices, "survival in bad years" is always given priority over "maximum profit in average years" (Eijkemans 1995). Slogans like "Shared Poverty" (Geertz 1963), "Moral Economy" (Scott 1976) and "The Economy of Affection" (Hyden 1980) are some of the more prominent variations of this theme.

Although both, Neo-classical and Neo-Marxian political economy claim to analyse the role of market economy / capitalism in peasant development, their starting point is quite different. Whereas the former starts from the individual economic unit, the starting point of the latter is society as a whole. Of special relevance for our analysis is the Neo-Marxian concern with relations of production; especially the question of the persistence of peasant forms of agrarian relations within a dominant capitalist mode of production. The classic Marxist reasoning is that capitalist pressures will inevitably result in disintegration and social differentiation, dividing rural societies into capitalist farmers / landowners on the hand and an underprivileged class of wage workers on the other. Others instead believe that their reciprocal traditions, their flexibility in regard with cropping patterns and labour use as well as their tendency to self exploitation (e.g. an unlimited increase of labour in the production process) may help peasants to resist the pressures of capitalist relations of production and to sustain a distinctive peasant form of livelihood (Ellis 1988: 52).

The socio-economic processes of change underway in current Sintuwu have been labelled as the "cocoa revolution" (*revolusi cokelat*, Sitorus 2004). Albeit a successive process and less abrupt than the term might suggest, the fundamental changes of the agrarian structure it implies may justify to describe the cocoa boom in terms of a *revolution*. The term *involution* on the other hand, as popularised by Geertz (1963: 98), describes a process by which economic benefits are divided into minute shares, resulting in a society of "just-enoughs" and

"not-quite-enoughs". Given an average ownership of 0,2 ha *sawah* and 0,4 ha dry fields among *bapetak*-workers as against 0,5 ha *sawah* and 0,6 ha dry land among *sawah*-providers, it is tempting to interpret the innovation of *bapetak* in terms of an "equalisation mechanism" (Sitorus 2004: 114) informed by an ideology of "shared poverty". The notion of "shared poverty" however remains analytically problematic. First, in contrast to the Geerzian theory, the labour institution of *bapetak* is not a relict of a past, risk and benefit sharing "folk society", but is itself a product of a relatively recent market penetration and its concomitant processes of agrarian change.[20] Second, as pointed out above, any morality of sharing cannot be understood in isolation from the social relationships into which it is embedded. The previous discussion has made explicitly clear that far from spreading work equally within the community, *bapetak* instead is enshrined within a locally dominant ideology of kinship. Whereas this ideology is derived from a kinship system which pronounces solidarity within the extended kin group (*hantina*), in practice solidarity in form of providing access to work and rice is most significantly pronounced between close kin (*keluarga dekat*). The result is a "division between those incorporated in secure contractual arrangements and those whose position in the labour market is far more tenuous" (Hart 1986: 15). The key question related to the emergence of exclusionary arrangements in the lowlands, if labour has been pushed or pulled out of agriculture (ibid: 8), is easy to answer in the case of Sintuwu. Given an average population density of 79 persons per square mile in Palolo sub-district (Sitorus 2004: 107), it is obvious that the problem faced by Sintuwu villagers is less a problem of "pressure of people on resources" as such, but a problem of "pressure of people on people" caused by differential access to those resources (see White 1981: 141). This means that a part of local rural society is pushed out of wet rice cultivation into other activities (forest clearing, rattan collection) with even lower returns to labour. In creating job security for a part of the local community at the same time it is creating insecurity for others, *bapetak* represents a rather exclusive form of "shared poverty".

It is within this web of kin obligations and responsibilities local farmers make their decisions. The mix of considerations - at the one hand one wants to minimise production costs by the use of free kin labour (profit-maximising farmer), on the other hand the number of *bapetak*-workers as well as the size of plots worked by them should not be unlimited in order to secure one's own subsistence needs (risk averse farmer) at the same time one has to share

[20] In another Central Sulawesi setting, under quite different circumstances (no immigration) , a different pattern of land use (dominance of wet rice cultivation, no conversion), in focusing on different issues (development cycles of households, traditional exchange and fosterage), Schrauwers (2000: 103) comes to a similar conclusion.

the limited assets one has with one's kin (moral economic farmer) - makes the abstract ideal types of neo-classical and moral economic theories of peasant decision become a farce. As McPherson points out: "The view of the person as a clear-headed maximizer over clearly defined preferences must give way to the image of a more complicated and less certain actor, attempting to sort out what is worth doing and what sort of person to be" (1983: 111). In regard to the (often) reductionist assumptions of Neo-Marxian political economy, it has to be pointed out that the effects of capitalist penetration are anything else than uniform. Thus, the most strongest capitalist pressure one can imagine, the Central Sulawesi cocoa boom, had a totally diachronic effect on the commodification of the local village economy. Whereas agrarian products have been partly fully commodisised (cocoa), and are partly produced for subsistence and sale (rice), the land market on the other hand has been commodified completely. In no case however, neither in the export crop sector (cocoa production), nor in the domestic sector (rice production), have relations of production been commodified. Either based on household labour (cocoa) or based on deliberate arrangements of access and exclusion (rice), in both agricultural spheres have relations of production been organised personally. Wage work instead is confined to renting the *palus*-groups for field preparation, land clearing or in paying individuals for ploughing the *sawah* according to local wages. This persistence of the peasant mode of production is not motivated by a concern for counterbalancing the impacts or the pressure of capitalism, but by a need to enhance social control, to discipline the labour force and to secure a ready availability of labour in transplanting and harvesting.

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