

Illegal Logging in Chome Forest Reserve: The Situation as of June 2003
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Multiple pit-saw sites at a single location in southern Chome Forest Reserve. This picture is representative of the intense logging situation in the southern part of the forest.

Chome Forest Reserve, a 14,000ha Catchment Forest Reserve in the South Pare Mountains, is under severe threat by illegal logging. CBBP fieldwork conducted over the past year has indicated that the illegal logging situation in Chome has gotten much worse in 2002-2003 compared to earlier in the project lifetime. Indeed, despite its links to FBD and forest-adjacent communities, CBBP has had very little success in changing the logging situation in Chome Forest Reserve since this integrated conservation and development project began in 1998. As plans to draw up a participatory Forest Management Plan for Chome continue to evolve, stakeholders must be aware of the current state of the forest, and how the logging situation affects FMP process (Chome is a catchment forest, where logging activities are strictly banned). A brief summary of information about logging in Chome is presented here in order to shed light on the gravity of the situation, and with the hopes of encouraging the necessary action to stop the destruction of Chome Forest Reserve.

What is the current logging situation in Chome?

The most comprehensive picture of the overall logging situation in Chome came from an aerial survey conducted by CBBP in April 2003. During this survey, 255 pit-saw sites were observed and geo-referenced from the air, of which 26 sites were actively in progress on the day of the survey (i.e. had planks on the ground, people working at the site, or a trunk on a pedestal for cutting). People were observed to be visibly working on 7 sites, and probably more sites had people at them who were not seen from the air. Using a weighted counting system that estimated 25% of sites in heavily logged areas would be missed by the observers, there are at least 310 pit-saw sites in Chome¹. This number

¹ 219 sites were counted in “heavily logged areas”. This number was increased by 25% to account for “missed” sites, adding 55 additional sites (25% of 219). 55 + 255 = 310 total sites.

represents an extremely conservative estimate of the actual number of pit-saw sites in the forest reserve.

Prior fieldwork in Chome has shown that an average of 2 to 5 trees are cut for timber at each site. This average was used to generate an estimated range of 620 – 1550 trees logged out of the 310 pit-saw sites in Chome Forest Reserve. Ground surveys repeatedly show that Camphor (*Ocotea usambarensis*) and Podo (*Afrocarpus falcatus*; *Podocarpus latifolius*; *Afrocarpus usambarensis*) are the most heavily exploited species. The removal of hardwood from the forest is inefficient and wasteful, with pit-sawyers taking a small portion of the felled tree and leaving the majority of the trunk and harvestable wood untouched (see photo on p. 4). Up to 30 smaller trees are cut at each pit-saw site to support the logging camp (these smaller trees are chopped down to create an open workspace and to make the platform for sawing). This creates large canopy gaps in the forest that are probably too sunny for forest species to recolonise, turning the area into a degraded habitat of tangled weeds. Logging of the Eucalyptus boundary trees is a more recent and less common situation, but has also been observed in at least three areas along the reserve boundary.

Results from the aerial survey indicate that pit-sawing is rampant throughout Chome Forest Reserve, but is most intense in the southern half of the reserve. On two 10km long transects in the south-central part of the reserve, observers counted a pit-saw site every 260 - 380 meters on average across the length of each transect. Pit-saw sites were much less frequent in the northern part of the reserve, though still present. Follow-up data collection on the ground at 4 of the hardest hit sites in the southern part of the reserve showed that the number of stumps cut for timber within a hectare radius ranged from 22 to 35.

On a recent trip to eastern Chome, this author counted 8 active pit-saw sites along a 2.6km stretch of the forest, in full view of a major footpath and within 3km from the forest edge. At one site, pit-sawyers did not even stop to look up or melt into the trees while the author walked past! A visit to the western side of the reserve turned up 3 recent pit-saw sites along the road cutting through the forest from Bwambo to Mhero, again in full view. That pit-sawyers choose to fell trees in such open and well-traveled areas speaks volumes about their perceived risk of being arrested or fined for their illegal activities – in short, they do not feel threatened. The situation also lends credence to the double-edged sword of progress. The recent arrival of electricity and phone lines in surrounding villages (certainly a positive step for development), has also made it much easier for village middlemen to communicate with timber dealers in towns and arrange for timber to be transported down the mountain. Anecdotal evidence from villagers and visitors familiar with the area points to things being worse now than ever before in recent memory.

What is being done about this?

CBBP, together with Forest Department staff (DFO, DCFO, Forest Rangers), conduct patrols with Village Environment Committee members, both inside the forest and in villages; destroy logging camps in the forest; make use of village informants with tips on when timber is being transported; confiscate timber and prosecute individuals; and confiscate saws in the forest if pitsawyers run away without being apprehended. Recent raids by a mixed team of Forest Rangers and Game Scouts from Mkomazi Game Reserve in April and May 2003 raised the level of patrolling a few notches and netted at least 6 individual arrests and about 400 pieces of timber. But while CBBP has been actively trying to bring this serious problem under control, the project has seen little improvement despite its efforts. This may be due in part to the sporadic presence of the project in the forest – at times the project supports a slew of activities over a 1-2 month span, and at other times the place is quiet for months on end. And without outside support, the single Forest Ranger tasked with patrolling hundreds of hectares of forest on foot, armed with a panga, is little deterrence to groups of pit-sawyers working the forest with poisoned arrows and dogs.

Village rankings based on forest health

There are about 22 forest-adjacent villages surrounding Chome FR, and some villages have much greater impact on the forest than others. Most villagers around Chome define each other by the way

each village takes care of their part of the forest, with some villages commonly referred to as “forest destructors” by other communities because pit-sawing is more rampant in those areas. Villages can be roughly grouped by the responsibility of the Forest Ranger in Charge as follows:

- Mhero-Gwang’a-Marieni (West)
- Tae-Suji-Malindi (Southwest)
- Bwambo-Mpinji (South)
- Ndolwa-Vujee-Mbakweni (North)
- Ntenga-Mvango-Mvaa (Northeast)
- Myombo-Mtii (East)
- Kanza-Gonja (East)
- Lugulu-Vushanje-Kirore (Southeast)

Villages on the East, Southeast, South and Southwestern side of Chome are the most problematic. 4 village groupings can be ranked by the health of their adjacent forest areas (rankings based on the author’s familiarity with and frequency visiting these areas). The following ranking can help focus intervention in appropriate areas (1 = worst protected / most degraded forest, thus in greatest need of intervention):

1. Kanza – Gonja (rampant logging, no attempts to conceal illegal activity, very degraded forest, much timber industry in the village, ineffective and possibly corrupt Forest Ranger²)
2. Tae – Suji (quite a lot of logging, little attempts to conceal illegal activities)
3. Bwambo – Mpinji (some logging, though much of the area is burned and degraded)
4. Chome (little logging, but also has very little accessible forest compared to the other areas)

How to change the situation?

Clearly, villagers around Chome and the timber businessmen supporting their illegal work view the removal of timber from Chome Forest Reserve to be their right. The logging business in Chome is a complex institution which provides income from a few hundred shillings per plank going to the village woman who ferries the plank out of the forest, to increasingly large profits up through the chain of middlemen dealers to the top businessmen in Dar, Kenya, Moshi, Arusha and (possibly) Arab States whose demand for hardwoods drives the process. The logging situation can only be eradicated via a twofold system of increased hard-hitting enforcement of the logging ban and provision of alternative sources of income for villagers who take part in illegal logging to meet subsistence livelihood needs. Better enforcement of the ban involves forging a stronger friendship between FD and villagers surrounding Chome, but also means bigger fines, heavier jail sentences and more numerous and effective patrols – perhaps by para-military teams such as Game Scouts and the Field Force Unit, who are trained and equipped to apprehend antagonistic offenders.

Provision of alternative incomes is more difficult, but can be met through partnership with development NGOs to infuse the limited economy with new business opportunities. This has already started in two forms: 1. Road improvement in the area has already raised many people’s hopes for better access to markets and the opportunity to sell their produce elsewhere (however better roads also allows easier timber transport). 2. A new private secondary school in Mhero village has brought a number of goods and services to the area that were not seen before (computers, teachers from all over Tanzania, more vehicles and expanded flow of money in the village). However, it should be noted that the eastern side of Chome (Gonja, Kanza, Lugulu, Mtii, Myombo, etc.) is poorer than the western side, less accessible, more ensconced with illegal logging, and probably offers less opportunities for alternative income development.

Greater empowerment of village governments in enforcing forest rules also has good potential to reduce logging in Chome. Village by-laws are currently in preparation in 9 forest-adjacent villages surrounding Chome FR. These by-laws set out broad rules and regulations, and fines for particular forest offences, although they do not specify villager responsibilities in protecting the forest. If they are approved in their current form, the by-laws would give villagers the right to collect fines directly for forest offences, and they would legalize the process of returning 100% of the money collected

² In June 2003, the author met the Kanza Forest Ranger on the road, and informed the Forest Ranger that she had seen 8 active pitsaw sites that day, all within 1 km from the FR boundary. The Forest Ranger showed no interest in acting on this information, instead attempting to excuse himself from responsibility by saying that he had not been able to conduct patrols in the forest for over 2 months due to a motorbike accident. He then invited the author to drink beer with him at a local bar!

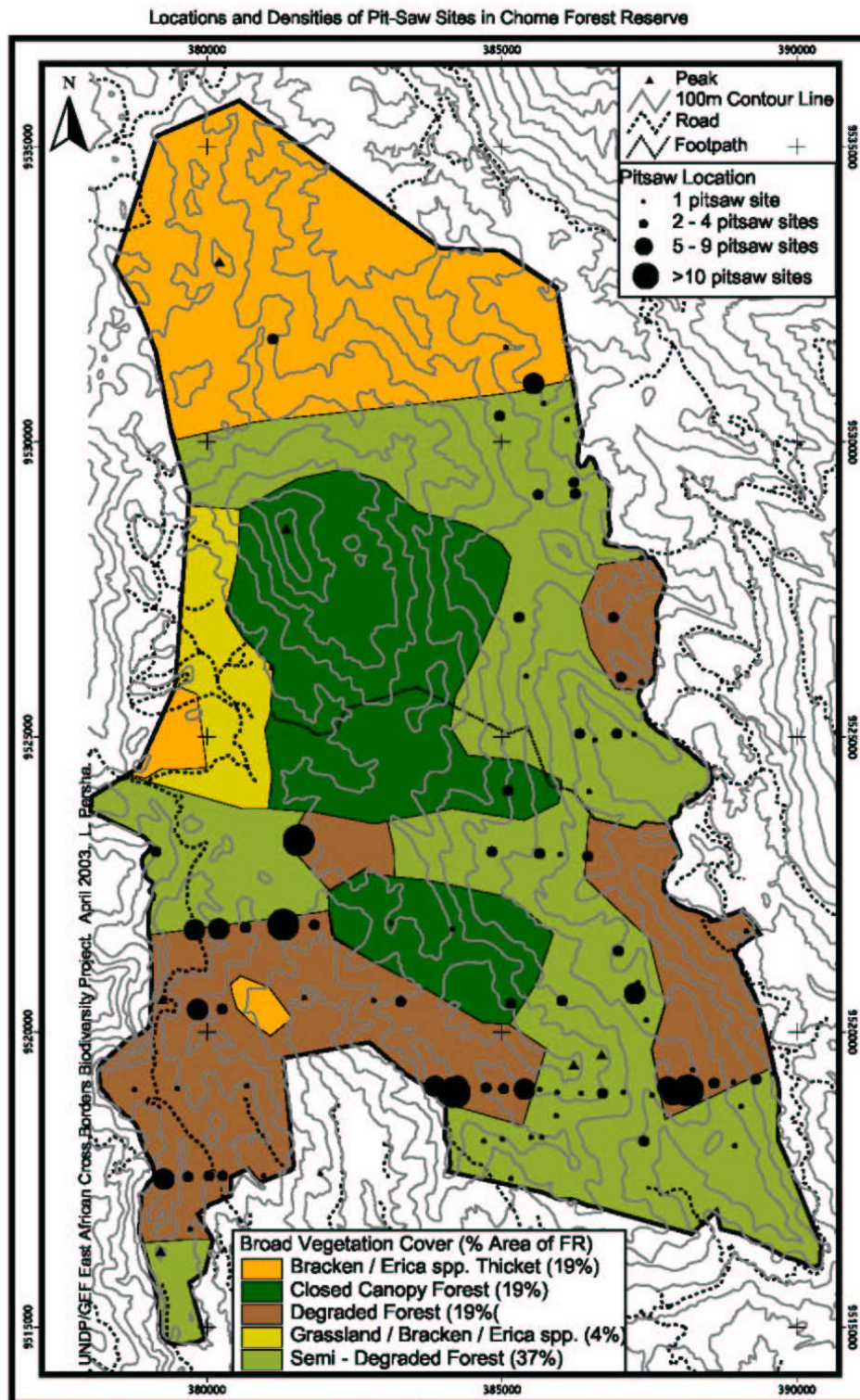
back to the village. Under this provision, fine money would go straight back to the village rather than to the Same District Office, thus providing incentive for villages to catch forest offenders and follow through with fines. The money would go to a Village Environmental Fund bank account, with VEC and Village Government signatories to the account. Under the draft by-laws, the VEC would elect how the money will be spent, and could be used to pay VEC members for patrols, to transport offenders to Same for prosecution, to buy fire-fighting equipment, etc (K.S. Kalage, pers. comm.). However, getting the by-laws passed is a lengthy process, and ultimately depends on the District Council's approval. The lynchpin is getting the District Council – generally strapped for cash - to agree to 100% of revenues returned to the village, rather than requiring a portion of the income to go to the District.

On the business side of things, the robbing of Chome's hardwood needs to be made more visible in the media, so that the ensuing negative effects on biodiversity (Chome is in the South Pare Mountains and houses many Eastern Arc endemic species) and water (most villagers around Chome agree that water coming out of this Catchment Forest is less now than in the past) are heard. And the policing should not stop at the forest boundaries. Perhaps the national Police Force could be brought into the loop so that trucks loaded with hardwood along main roads are subject to inspection and confiscation unless proper documents showing the origin and legality of the timber are produced.



**A 61cm diameter
Camphor tree cut in
June 2003.**

Pit-sawyers cut planks from a 6 ft long section of the trunk, but left the rest of the harvestable timber - essentially creating a large forest gap and cutting over 30 smaller trees to support the logging camp – all for only a few planks of timber.



Note that the data shown here was collected during the Chome aerial survey of 04 April 2003. Pitsaw locations on the map represent the vicinity in which pitsaw sites were observed, rather than the exact location of each site.