## C E P F Process Framework for Involuntary restrictions

Project Title: Grassland and shola research and restoration at Palni Hills

Dindigul District, Tamil Nadu

Implementing agency: PHCC, Kodaikanal

Project Back ground: The project is to find suitable species of High altitude grasses and methods to propagate these in lands that are under plantations of forest department. There is no community resident at the eucalyptus and wattle plantations that were introduced here as part of pulp wood supply for industries located at the plains, about 250 km away. This was done during the early sixties when forest conservation awareness was at a low level.

The plantations were started during colonial times and have their origins in eradicating malaria by draining the swamps by using eucalyptus. The wattle was planted as raw material for the tanning of leather industry located at Dindigul about 60 km distance. There was also a large factory at Erode in the erstwhile Salem district that was manufacturing tannins for supply or export, the company was called Tan India and has since 1990 stopped buying of the wattle bark for extraction of tannins.

The pulp wood industry was wound up by an order of the Supreme court due to pollution of river Bhavani in Coimbatore district. The tanning industry has moved to chemical tanning compounds instead of natural tannins.

Thus there is no demand for these two raw materials plantations now occupying an area of 40 000 ha as per working plan of Kodai forest Department. The Conservator of Forest in the Palni Hills Watershed Committee meetings has officially announced that the F D and T N government in principle are now researching ways to replace the defunct plantations with native grass and shola species. But their efforts are limited to an area of 50 ha per annum due to paucity of funds and suggested that N G O;s can join in the efforts as well.

### Contemporary issues:

## 1..Landownership and access to natural resources

The project area is not protected area in the proposed project area or anywhere at Palni Hills. The forest lands are under the control of Tamil Nadu Forest Department .The farm land is owned by many small farmers who pay land tax to the Revenue Department.

The P H C C proposal is in response partly to the above suggestion and partly due to the invasiveness of wattle species that are now almost completely destroying the grassland ecosystem with resultant loss of biodiversity.

# .Survey of mountain communities for their opinion on wattle

A survey was undertaken with Dr.Haripriya Rangan of the Monash University ,Australia for learning how useful or otherwise the wattle is to local folks. During which it was found that some members of community expressed concern about the ever spreading nature of wattle in to farmlands if the land was laid waste or fallowed due to various reasons.

2.Research work on grasses suitable for restoration of wattle infested lands was initiated in consultation with lead farmers who are in need of an alternative for income from fallow

#### 3. Human wild life conflicts

Thus there is no settlement that will be affected by the limited research work on plantations. The results if successful will help the farming and land owning community with species to reclaim the lands lost to wattle in the Upper Hills. This will enhance their livelihood opportunities as income from land which is nil now will increase with new grass varieties that may help in biomass availability.

The re-introduction of **Sino-arundinaria bambusae** if carried out successfully can help poor people with raw materials for many vocations. As there are no bamboos worthwhile in Upper Palni Hills for use by local farming community.

Access to plantations areas: The forest department have previously restricted access to motor vehicles through the only road that leads to Berijam and to Munnar from there, a road built during WW II times for an escape route to Cochin Port for British troops!!

There are no settlements in this 120 km stretch of road, but recently the FD have given unlimited access to any one to go up to the 40<sup>th</sup> Km that is Berijam lake for sight seeing, Hence the question of restricting access in project areas or due to project activities does not arise.

<u>Alternative livelihood</u>: The land owning community at Upper Palnis are losing grazing lands to Wattle that is encroaching on their traditional grazing lands. This leads them to use more chemical fertilizers in growing temperate vegetables. Introduction of suitable grass specie to replace invasive wattle will help in more biomass availability for organic manure production.

The research component to improve the stock of Hive bee colonies *Apis cerana indica* will provide another new opportunity for livelihood enhancement for the land owners at the Upper Hills settlements.

The List of settlements where Open meetings will be held prior to start of the project works

1.Poomparai 2.Mannavanur 3.Kavunji 4.Poondi 5.Polur.6.Gundupatti 7.Puduputhoor

These upper hills community is composed of farmers and landless labour, most of them belong to following castes

1.Pillai 2. Chettiar and 3.Manaradiars .There are a group of Paliyar tribes living at the Polur settlement, working part time in Kerala and residing at Tamil Nadu as the border is close and they can easily find work at tea estates at Munnar, which is easily accessible through bus from Polur

### Land use pattern

All of the settlements are dependent on agriculture and growing of temperate vegetables for their sustenance. These lands are private patta lands with irrigation..All of the irrigated land is cropped twice a year with intense application of fertilizers and pesticides. The land owners are taking advance funds from vendors of the vegetables at big Cities like Madurai and Coimbatore.

At the upper reaches where there is no water for irrigation the farmers do a seasonal one time rainfed cropping, but due to uncertain rains over the year these have become unviable. These lands are used for grazing cattle but are prone to invasion by wattle.

The proposed Public meetings at these villages will be conducted to listen to the views of the community on the extent of invasion by wattle and consequent loss of water from the mountain streams. As more land is taken up by wattle up stream, the water available for lower irrigated lands gets scarce. There is in our opinion a genuine need for controlling the wattle. But we shall wait for the public hearing in the coming months and then come to a conclusion, as wattle offers one consolation, that is, it provides for the biomass needs of the local community, who need the wood for warmth as well as cooking needs.

There are at present <u>no restrictions</u> on collecting of wattle as there is simply too much of the same all over the hill top.

### Human Wild Life conflict

The increasing population of gaur are now a major nuisance at the vegetable gardens as well as in the village. The guar are now straying in to towns with thick human populations and the Upper Hills villages are no exception. One prime reason for this behavior is the colonizing of the grasslands by invasive shrubs like Eupatorium sp and trees like wattle.

Where as the cultivated lands these weeds that are not palatable are absent. And in most instances there is plenty of grass varieties for grazing as well as sweet materials like peas and bananas that are tasty due to nitrogen fertilizers.

## Alternative livelihood plans:

The Upper Hills community of Mandradiars have been keeping bees in terraces where the temperate vegetable cultivation is taking places. These are holes made in to the walls of the terraces and bees comes to nest in them during the swarming seasons,

Due to the large scale loss of colonies in the early nineties due to the Thai Sac brood virus the bees have never recovered to their previous levels of productivity of honey. The project aims to improve the alternative vocation through quee rearing and hives to suit the skills of the farming community.

<u>Conclusion</u>: The six public meetings will be for the mountain community for expressing their experience of the wattle – grassland and farming ecosystem. Our aim is to provide for small interventions with proven species for improving the availability of water, grazing land and income for these mountain communities.

## Indigenous people of the Palni Hills.

The Palni Hills are peopled by three class of folks, the plain Tamil landowners; who acquired lands for mixed coffee farming with title deeds. The early settlers who got their title of Kings from the ancient time before the colonizing of the hills by British, these were the Mannradiars and Chettiars who migrated to the hills during the Vijayanagar empire's expansion in to the plains of Madras but are basically Tamils and made the hill tribes persons their serfs.

The Pulayan and Paliyan are the indigenous tribes persons of the Palni Hills, who are residing at nearly 40 settlement practicing part time wage earner at coffee farms as well as *Hunter gatherer* at forest and shola patches that are within the Middle Palnis range. i.e below altitudes of 1500 mts.

Though the Pulayar were denotified as Scheduled tribes by government in the eighties we still consider them as such. But as the proposal deals primarily with the Upper Hills and wet temperate forests and plantations the indigenous population areas are not affected by the proposed activities, as they reside at much lower altitudes.

The information for making an indigenous peoples' plan requires more consultation and hearing from these folks at the villages Upper Hills. Where as the 6 Upper Hills villages, where there will be consultation and hearings on issues of Human Animal Conflict will throw much light on the need for such a Peoples Plan, the participating folks will be majority land owning class, who suffer frequent incursions by Gaur in to their cropping fields. As soon as these six consultation meets are held we will be in a clear position to make plan that will mitigate any adverse impacts on the Indigenous people who may reside in any of the Upper Hill villages.