

People's Involvement in Protection of Forests-
Case Study of Uttarkannada district(Karnataka)

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A Study done by Pandurang Hegde and Bharat Dogra for the workshop on People's Participation in Environmental Management to be held at the Indian Institute of Public Administration, New Delhi from 26th April to 2nd May, 1984.

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During the last decade efforts made in some villages of India (specially in the hills of Uttar Pradesh and more recently in the Uttarkannada district of Karnataka) to oppose tree felling operations in forests near these villages have attracted considerable attention. This statement immediately evokes the mention of the well-known chipko (hug the trees) movement, and the more recent but less well know appiko (which means the same thing in Kannada) movement. However we are not even remotely attempting a comprehensive study or/our study is a limited one.

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One of us (pandurang Umayya) is an activist of the appiko movement who has also made a study of the chipko movement in Garhwal in the course of studying for his master's degree in social work from Delhi University and by independent field work later. The Co-author of this study (Bharat Dogra) is a free lance journalist who has visited some of the Chipko movement areas, when the movement to save trees was in progress.

On the basis of this experience we first describe events at six places where the movement took place-four in Uttar Kannada district and two in Tehri Garhwal district. Protests to stop felling of trees were made in several other villages, but in this study we confine ourselves to these six sites. In the second part of this study, we examine the arguments advanced by those who have objected to these protest movements.

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As the village level protests in Uttar Kannada were, in some respects at least, inspired by the similar earlier events in Garhwal, we first describe the protests at two sites in Garhwal, and then follow up this with four examples from Uttarkannada.

(a) Protest at Henvalghati- (1977-78) In this region the movement started with protests against the excessive exploitation of pine trees for obtaining resin. The pine tree is not liked by the villagers because it does not provide them fodder. Instead its fallen leaves are known to harm the fertility of agricultural fields. Still in the context of protecting Himalayan ecology and promoting conservation of soil and water in this area it is necessary that the existing pine trees which cover a substantial part of the forest area should be protected.

To start with processions of villagers went to forests, shouting slogans regarding their determination to protect these trees. Several villagers taking part in these processions also tied mud-plasters on the 'wounds' (caused by excessive extraction of resin) of the pine trees, symbolising their determination to protect these trees.

At the same time requests were made to forest officials to stop further extraction of resin in this area so that the pines can be provided a 'rest period' to recover from the excessive exploitation of earlier years. It is a well known fact that excessive tapping of resin, such as had been taking place in these forests, can weaken these trees considerably and they fall down even in storms of mild intensity. At some places it has been seen that excessive extraction of resin causes even more loss of trees in forests than commercial felling.

However, when the complaints and requests to the authorities brought no response the protesting people started plucking out the iron bars inserted into the pines to 'bleed' them (yield resin). Small groups of 8 or 10 would march into a forest shouting slogans and singing songs, and pull out as many bars as possible using their hands and simple tools. Village women going to fetch fuel and fodder also pulled out iron bars on their way to the forest and back.

This action finally brought the forest officials to inspect the affected forest area, and the response of one of them was that the villagers were only doing what the department officials should have done a long time back. Finally the contract for obtaining resin from these forests was cancelled.

Meanwhile about 640 trees in the Advani forest and 273 trees in the Salet forest of the Hemvalghati region had been auctioned. These included pine trees as well as trees of the broad leaf species. The Chipko activists already working among the people on the issue of resin - extraction decided to mobilise people for protecting these trees as well.

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A group of village women were threatened with dire consequences if they joined this movement but such threats did not succeed in checking their participation in the movement. As a first step, several women marched into a forest to tie sacred threads on the trees which had been marked for felling. Then in the bitter cold of December, the villagers of Hemvalghati assembled in a meeting to issue a 'Declaration of Rights'. This declaration emphasised that the demand for the/basic right of living as these forests were an essential part of the village life in these hills. Even the normally shy hill-women spoke at this gathering and said that they did not understand the economics of felling trees-the revenue this fetched the government or the profits obtained by the contractor-they only knew that they experienced extreme difficulties in meeting their daily needs of fuel, fodder and water, sometimes losing their life while treading difficult paths and carrying heavy loads.

In Salet forest the contractor smuggled in labourers brought all the way from Kashmir for the axing of trees. However as soon as the local people came to know of this they rushed to the forest and saved the trees from being axed. This was repeated on several occasions. The hide and seek game between the contractor and his labourers on the one hand and the Chipko activists on the other hand continued for several days but the contractors were unable to cut more than a few trees.

The same scene was enacted time and again in the forest of Advani also. As soon as the villagers came to know that the labourers were going to the forest to axe the trees they used to rush from their houses and fields

to hug the trees to save them. Finally the contractor asked the district officials to send a police force to keep away the villagers from the felling site. A police force of about 100 men was sent. Villagers also gathered in a large number on the day the police came.

The contractor, after hurried consultations with the forestry and police officials, asked his men to pick up axes and saws. But as soon as the labourers moved towards the forest the assembled villagers formed themselves into groups of three and four and each group surrounded a marked tree. Whenever some labourers advanced towards one of these trees, they immediately hugged the tree, clasping their arms firmly around its thick trunk. Women and children were enthusiastic participants in this tree hugging. For more than an hour the frustrated contractor's men went around the forest with axes and saws but did not succeed in felling any trees. Even the police could not decide how to break this unique form of opposition to the felling of trees. After waiting for over an hour, the officials consulted each other and decided to go back.

After some days the auctions of trees in Salet and Advani forests were officially cancelled.

(b) Badiyargad In 1978-79, 2365 trees were to be felled in the Malgaddi forest of Badiyargad region. Unlike in the Henvalghati region, this area had no previous exposure to the message of the Chipko movement, though some villagers had heard about the movement. They managed to obtain the address of some Chipko activists, and wrote to them about the tree felling work being planned in their area.

Two chipko activists, Kunwar Prasun and Vijay Jardhari, managed to reach this area some days before the contractor. They started visiting the interior to spread the message of opposition to felling of trees. Initially the response of the villagers was good, specially as this area had been the site of a disastrous landslide due to which five persons had died in the village of Dhaldhung.

Problems arose for the Chipko activists however, when some officials took steps to discourage people from joining the movement. On the one hand they held out the threat of legal action against those who participated in the movement. Such threats specially affected the military personnel on leave in the village. On the other hand these officials offered better jobs and education and drinking water facilities if they did not participate in the movement. The house of an influential local person was rented by them at a high rate. This policy of officials met with some success and the warm reception accorded initially to chipko activists soon changed into an attitude of aloofness on the part of the villagers.

The result was that when the contractor started his work in the forest, the two chipko activists who had camped in the forest to save these trees frequently had to remain hungry, and did not also get any shelter to protect them from the biting cold of the Himalayan winter.

However, it did not take long for the situation to again change for the better for the activists. Ironically their first support came from among the forest labourers who had been brought here to axe the trees. These labourers came into close contact with the chipko activists during their stay in the forest. These labourers were from hill -

villages of Himachal Pradesh, and were quite familiar with the problems that large scale felling of trees can cause in these villages. Often these labour offered food to the Chipko activists and on one occasion even said (asking them at the same time to keep this a secret for the time being) that when they go back to their villages to Himachal Pradesh they will start a similar movement there also. Later on one occasion when the forest ranger ordered some labourers to fetch ropes for tying the activists to trees that they were so fond of hugging, the labourers evaded the order. On another occasion they were ordered by the ranger to continue sawing the trees irrespective of the fact that an activist was hugging it. When the saw finally struck the activist on his leg, the labourers refused to do this work any further.

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Gradually some other Chipko activists who had protested successfully at Henvalghati and other places also gathered here. Despite the official efforts to keep away the villagers from them, the activists kept on going to villages to spread their message. When they went to villages, they tried to collect one roti from each family to obtain their food. This brought them in touch with all families in the villages, specially the youths. All this combined with the basic fact that the villagers knew that these activists were here for something that was in their long term interest helped to gradually change the situation in favour of the chipko activists and the villagers started joining the chipko processions and also participated in the hugging of trees. Students played an important role, and enthusiastically participated in the movement despite being forbidden to do so by the principal of one school. Village women were also enthusiastic participants.

Meanwhile Sunder Lal Bahuguna went on an indefinite fast at Badiyar Gad to express his distress at the felling of trees and demanded a moratorium on the felling of green trees. People from far off villages started coming to his meetings. Subsequently he was arrested. His fast continued for 64 days.

No felling of trees took place after January 15. Chipko activists continued to camp here. On January 31 it was announced on radio that the tree felling work in Badiyar Gad has been cancelled.

[C] (o) Kalase forest In some villages of Uttar Kannada district youths or clubs are active in fighting against social evils. One such youth club in Balagadde village had become active in drawing attention to the excess felling in forests and opposing it. They also declared that they will launch chipko movement to save the forests. On August 15, 1983, Sunder Lal Bahuguna visited these forests and also addressed the villagers in Balagadde. In this well attended meeting people pledged their determination to protect the trees.

These people were in turn contacted by the youths of Salkani village. They also went to Salkani and held discussions. The attention of Salkani villager had already been drawn to the felling work in Kalare forest. This forest is known locally as 'Amman/Vara Kanu' (meaning Goddess forest). On a holy day in March every year the villagers gather here and worship this Goddess of forests. They also cook and eat food here, This is known as 'vanabhojana'. This is an occasion of great joy and happiness.

Last year, however the villagers found that much of this joy and happiness was missing as was the coolness and shade of the forest. Trees were being felled and taken away for a ply-wood factory. It was in the context of this distress over the felling of trees in Kalase forests that the

contacts of the villagers of Salkani with Balagadde youths proved important and they started discussing possibilities of stopping this tree-felling work. They went to the forest, and met the tribals living adjacent to the forest.

The youths of Salkani village had read about the new, widely publicized rule according to which only two trees were to be felled in an acre of land. However in a forest about 5 miles from the village they saw 35 trees being felled in two acres. Next day a procession of villagers, including several women, walked this rugged path of 5 miles, combating rains and traversing rivulets, to stop the felling of trees. They succeeded in stopping the felling work for the time being. This was September 1983. The next day the villagers sent a memorandum to the forest department. The reply they got was that this rule was applicable only in the case of evergreen forests. However in the publicity campaign the villagers had seen this rule being mentioned generally without making this specification clear.

On September 22, 1983, the District Forest Officer (DFO), the Range Officer and a scientist Dr. Madhav Gadgil (who is working on a government sponsored environmental research project in this area) visited the village and the site of the felling operations. An agreement was reached with the villagers according to which (1) Dr. Gadgil will submit a report and everyone should abide by this report, (2) felling should be stopped till the report is submitted, (3) people will be informed in advance if and when cutting of trees is resumed.

However tree cutting began (on September 29) before the report was submitted, and without any advance information having been given to villagers. This was a great shock for villagers. They lost confidence in official assurances and launched chipko (appiko). This time their determination was much greater than before. Every day (from September 29 to October 19, 1983) 30 to 40 village youths would go and hug the trees. They stayed in the forest from 8 AM. to 6PM.

At such gatherings various ecological issues, other ecological movements in India and elsewhere, condition of soil and forest etc. were discussed. Songs on the relationship of man and nature were sung. Areas where felling operations had been carried out earlier were surveyed. Contacts were also established with the labourers. One of them said, "Yes, we understand your problem. If trees are removed you may have to migrate from this place after 10 years-as there will be no rain and no crop."

Ultimately the labourers were taken away. The news of this first success of Appiko spread fast and the movement spread rapidly to several other sites in the Uttar Kannada district.

(4) Pharsi Forest:- (1983-84) is the only mixed forest existing near villages of Kallakaradi, Andagi, Pharsi, Ramapur, Hobbotti, Santolli, Kirwathi, Vaddal, Hosakoppa and Sonapur. On 4th December, 1983, the Karnataka State Forest Industries Corporation started felling trees in this forest near Malanji village. The people had heard about Chipko movement but did not know the full details. However they decided to protect the green trees in this forest and launched appiko. The people from the above mentioned village gathered on 7th December 1983. There was no political manoeuvring no place for leaders, it got started by simple village men.

About 50 people marched from Hebbothi village to the forest beating drums. They walked 3 kms from their village to reach the spot where felling was going on. By that time about 300 people had gathered in the forest. People told the labourers not to fell trees. The labourers said they would bring the forest officer and people should discuss with this officer. The people agreed. Then one person (from the labourers group) was sent to bring the officer.

The forest officer came after 3 hours. Till then people were discussing the consequences of destruction of natural forests and planting teak and eucalyptus around their villages. The people had seen the forest being clear felled from that area. They got fuel, fodder and fertilisers from the forest. No one used chemical fertilisers. As the forest disappeared, they had to face shortages of items basic for their livelihood. In addition to this the rainfall became erratic. Now the only forest left is Pharsi Aduvi (forest in Kannada) They got wood for agricultural implements and for house building from here. All these villagers depend on this forest for fuelwood.

The forest officer came to the spot and tried to persuade people. He said, "We need wood for cities. If you are so adamant the city people will suffer." One man replied "How long can you get fuelwood. Once you cut down this forest there will no trees to be felled for the future." Another man said, "You city people have Kerosene, gas and electricity as fuel. But what do we have? We depend on this forest for fuelwood. Where will we go for fuelwood if this forest is cut down?" At first the forest officer had no answer, then he tried to convince "Look, we cut only grown up and dry trees. So why do you not allow us to fell these

trees." One old man replied, "Do you know what these old trees do? They are the big trees which attract rain. If we allow you to fell these then this will affect rain. And as regards dry trees where will we go if you take away dry trees? One person said, "There would be no trees even to burn the dead body "Another", yes." Then we have to fell green trees and forest officials will show that people are destroying forests."

One man asked "We supply food grain to cities. This forest gives us rain. If you fell forests we cannot grow grain. So you need grain or firewood? Butter decide now". The officer tried to tell people that the government policy is to fell only 2 trees per acre. But people were standing in a spot where 10 trees were felled in 1/4th of an acre. People showed him those 10 trees and said "we know you are fooling us. We have said we won't allow you to fell trees."

The officer was helpless and he left the place. The labourers were in a dilem. They did not want that people should watch them regularly. But it was decided that each villager will come and watch these labourers every day till they leave the place.

The villagers who came to watch the labourers had work in their fields. This was harvesting season. So they asked these labourers to accompany them into the fields. The labourers sat in front of people who were working in fields. This continued for 2-3 days. And then the officer come and took away the labourers. The people got assurance from labourers that they will not come again for felling trees in that area. This was said at parting time with folded hands.

After that the labourers have not come. The people are keeping a regular watch and the forest corporation has decided to put off cutting of trees. People are determined to save forests at any cost.

(5) Husri 1983-84. Background: Husri is a small village with 45 families mainly depending on agriculture. Most of them are small farmers depending on paddy crop. The forest nearby is being cut down to supply fuelwood and timber. About 12 years back an area of 900 acres mixed forests was clearfelled to make way for teak and eucalyptus plantations. This plantation is adjacent to agricultural land. This, the villagers say, has caused great problems for them. The moisture in the fields has come down, sowing has become a problem. There is no fodder as nothing grows under teak. They are deprived of green leaves for manure for their fields. Even the fuelwood has become a great problem as eucalyptus and teak are least used for fuelwood. They are finding it difficult to get wood for their agricultural implements. The honey trees on which honey bees lived have been totally cut down for planting monocultures. The medicinal trees have also disappeared. Wild pigs have increased as there is no balance among animal species. These pigs destroy the crop causing great damage. In addition to all this they have suffered from erratic rainfall, sometimes heavy and then scanty, affecting agricultural yields.

Now the forest department is cutting even a small patch of mixed forest left near this village in the name of scientific management. People protested against this and stopped felling of trees. The contractor asked the DFO to visit this place.

About 200-250 people have gathered in forest. People in groups are near trees to prevent felling. Axemen (labourers) are standing helplessly. The forest officer's jeep is seen about 2 furlongs away. But no body goes there. The jeep stops near the road. The DFO with Range Officer and contractor walks towards the people. As he reaches near the gathered people, people give respect to the officer. Returning their greetings he asks what are young people doing?

One man: Hugging trees to save them from axemen.

DFO: We also take care of trees. But there is a need for fuel wood. The trees cut here will be used as fuelwood in Sirsi town. If you stop felling then there will be fuelwood shortage in Sirsi and grave problems.

Villager: you can take dead and dry trees but not green ones.

Another person: Once you cut down this forest there will be no trees left. What will you do once the total forest is gone? From where will you bring fuelwood?

Villager: (an old man) : Yes? You plant teak and eucalyptus (He moves his hand towards eucalyptus plantations). This is what you are going to plant? And will this be used for firewood

DFO: (little Puzzled) That was done previously. But here we will plant trees which will yield firewood.

Villager: (a middleaged man) This is good. But where will we get green leaves for manure and wood for agricultural implements?

Another man:- We cannot use eucalyptus and teak for green manure nor for manufacturing agricultural implements.

DFO: (Does not answer these questions). You see there is urgent need for fuelwood. Allow us to cut trees otherwise problems will be created in town. Dead and dry trees as you suggested is good idea. But it takes time. So allow us at least a years time.

Villager: If we allow you a year our only forest near the village will be cut down. Then? where are we to go? Can you get us back these forests? The trees which are useful for us?

DFO: Forests are not just for villagers. There are people in other areas too. They also need fuelwood, timber. As you get grains from outside, we also have to give forest products.

A young man speaks: Sir, when we have enough then whatever is left we will give to others. If we are hungry can we give out food to others.

DFO: (No answer. Diverts the topic) Look if you want to solve these problems why don't you go and meet the minister?

The elderly person: Sir, as you came here in the midst of forest and saw the situation, we can make you understand our problems. What use is it to go to a minister in Bangalore? He is too busy to understand. And moreover he will not know any of our problems without visiting this place. We have already sent memorandum. Like you have come, minister should also come here to understand the situation.

DFO: The order to fell trees has been signed by the governor. I cannot do anything. I can not order to stop cutting of trees.

Villager: We agree you cannot change the order. But if trees are felled we will not allow a single tree to be harmed by an axe-man. We will hug the trees.

Another person: We want forests which give us rain, manure, fuelwood and wood for agricultural implements. We will not allow it to be used for fuelwood and timber. Forest is ours we need, it for our survival. They produce soil, water and fertilisers.

(As the forest officer tries to go away, a part of the crowd discusses about 'gherao' ^{ing} him for the whole day. However the organisers of the movement persuade them and make them understand that this is different from any political movement. Gherao is expressing anger. It does not lead us anywhere. Our goal is to change forest policy. This officer is an individual and not able to change policy. So it is of no use harassing any individual.

The DFO goes away on jeep. The villagers hold a meeting and take a pledge to protect the forest at any cost, even at the cost of their lives.

(This is actual reporting on the proceedings in Husri forest 6 kms from Sirsi in North Kanara, Karnataka on 17 Oct 1983).

(6) Benagaon Forest

Benagaon village is situated in midst of thick evergreen forest of Western Ghats, amidst picturesque surroundings. There are about 70-75 house holds of thatched butts situated near paddy fields. Perennial streams and pipes made from trees (a kind of palm tree) supply drinking water. Paddy and cereals are main crops. The off season is is utilised for manufacturing cane items. Most of them are tribals who migrated to this part of western Ghat.

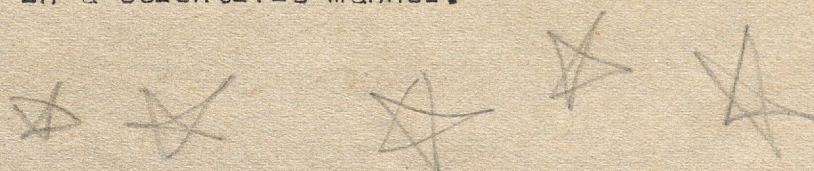
The felling of forests started 3 years back with WIMCO and ply wood factories outting trees in midst of thick forest. The villagers looked on helplessly as big roads were made in the forest.

The wild pigs increased, destroying the paddy crops. All this contributed to the sponstaneous upcoming of chipko to protect the trees.

Again here the contractor brought the DFO on 31-10-83. The DFO with Range Officer visited the spot. They sat down in one of the tribal houses. The owner, an eldersly Adivasi Ganapu served the people with gur and water. About 80 people gathered to hear the DFO talk and to express their opinion. A young person was asking questions Supporting questions were being out by others.

Young man (named Krishna)- Why do you out forests in such a devastating manner? What will remain in future?

DFO: We have to supply now materials for forest based industries like plywood, and match industries. We manage forests according to working plan in a scientific manner.



Q: Last year plywood factory extracted timber but it has left the trunks etc. of a huge quantity. Why is there such a huge wastage.? DFO Plywood factories have to supply 50% of fuelwood to our Depot. Other 50% can be taken by them. May be they have left their share, Let us see. I will look into the matter.

Q: What is the situation of forests which was cut down 20-15 years back. What is the rate of regeneration?

DFO- In some parts there is ^{natural} regeneration

There is loud laugh and strong protest by people. The person (calms them down) asks them to be quiet)

DFO Now with a long term interest in mind we are felling very few trees (2 trees per acre).

Q. The contractors destroy as many trees during logging. How does the forest department compensate for this?

DFO: There is a provision for 50% damage while felling marked trees. If it is more than this limit then a fine of Rs 10/- per tree is put on the contractor. That tree is brought to our depot. A man from audience: That fine business is very good. Will you please tell us how a fine can be equal to a tree? If tree is fallen/ damaged it takes years to grow. The fine will go to your depot. But what about the forest? It is deprived of trees, fines are of no help.

Q. Why dont you remove dead trees for fuelwood?

DFO From this year ^{we} will try this.

Q. What is the situation of plantations that have been brought up by your department?

DFO It is good. (There is a big laugh from people.)

(DFO is puzzled).

One member: Come to this area, we will show you there is not a single tree. It is just epitorium weed. We brought to your notice a smuggling case of wood. Your people came and filed a case only for 9 trees. But actually 16 trees were felled. What is this. Seems your department is involved with smugglers?

DFO: I'll enquire into the matter.

The DFO is taken to the forest and shown how trees are felled on slopes of more than 45. People show him how the removal of tree cover has caused damage to soil. Erosion has weakened soil and created apitorium weed. The DFO is shown a large number of dead and drywood trees. The DFO has no answer to several questions.

Appiko chaluvali has three important objectives. The first and foremost objective is to save the remaining forests by using the peaceful approach of appiko- hug the trees to save them. The second objective is to grow trees in the denuded lands. The last but not the least important objective is to spread education and consciousness regarding proper utilisation of forests.

To achieve these objectives several 'Parisara Sanrakshna Kendra' or Environment Protection Centres have been set up. One centre consists of two representatives from a group of 5 to 10 villages in the geographical vicinity. This centre takes decisions on matters relating to the strategy of the movement, and the implementation of its programme. In Appiko movement equal emphasis is being placed on the rights of the people as well as their duties in protecting forests.

At most place where protest actions of the kind described above have taken place, the villagers' participation in them has been closely related to their experience of the sufferings caused by the destruction of forests and their perception of how these suffering will be aggravated if more trees are axed. To a lesser or greater extent, the problems faced in getting regular supplies of fuel and fodder are accentuated and water sources start drying or thinning. Less visible problems which are never the less stressed by villages relate to the reduced fertility of land and rainfall becoming more erratic. Damage done

by wild animals in villages also increases. Supply of various fibres, fruits, nuts, oilseeds, honey and medicinal plants also decreases. Sometimes the incidence of pests which damage crops increases.

✓ However according to critics of these village level actions to stop felling of trees, these actions are not justified because all felling take place according to the principles of scientific forestry management. According to these critics, reserved forests are well managed according to scientific norms while it is the village forests which have been badly denuded. The overall disturbing trend of deforestation is on account of village forests. Therefore ecological movements should strive to save village forests and there is no rationale for these movements to protest against the felling of trees.] stop

✓ As an example of this view point, Appendix 1 contains a letter by a senior forestry official of Karnataka regarding the appiko movement.

How correct is this viewpoint? We try to answer this question from several points of view, giving examples from Garhwal and Uttarkannada districts.

Firstly, we may ask, without questioning the norms of scientific management that have been laid down, to what extent are these norms practised in reality?

Earlier in this study we mentioned a struggle in Garhwal in which the violagers pucked out the iron bars inserted in trees for extraction of resin. This is what KM Tiwari Committee (an official committee) has said regarding the tapping of resin from the pines in UP Himalayas, "In the Chakrata, Yamuna and Tons Forest Division gendrally irrogularitics were detected in cent per cent of the cuts made in the pines for tapping resin. Either in terms of the width, length and depth of the cuts made, rules were not followed in any of these contents. Whichever area

we visited the concerned forest officials were not able to point out even a single cut made according to the established rules. Some irregularities were of such a nature that we could not even have thought of these.... Specifically on the conditions of the Rama Block of Yamuna Forest Divisional this report said, "Last year 1200 trees were uprooted here mainly because of the excessive cuts made in them.... I would not be an exaggeration to call this reckless tapping the rape of forests."

Under the terms of contract with the forest department its senior officials were empowered to remove the contractor if he persisted in illegal tapping, but these terms were conveniently ignored.

In 1971 in Yamuna Forest Division a fine of only 3 paise was imposed per irregular channel, in Tons Division a fine of only 14 paise was imposed per channel and in Chakrata a fine of only 21 paise was imposed per channel. In other words, the contractor was given all the incentive to indulge in illegal methods, even if he was caught he could get away by paying a negligible amount of fine.

According to official figures on felling in Tehri circle during 1976-77 which were included in a note submitted to the Central Government by the UP Forestry Department in 1977 it was admitted that excess felling had been carried out in four out of the five divisions of this circle. To quote from this note, "In Chakrata Division against the prescribed annual yield of 16,000 volume units in PBI the annual removal by way of thinnings in the regenerated areas ranged from 20,000 to 53,000 volume units. Similarly in Yamuna Division also, against the prescribed yield of 64,000 volume units, in quarter blue areas the removal from these areas was of the order of about one lakh volume units.... In Tehri Division there are excessive fellings to the tune of 62,000 q.um."

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Chir working circle... In Tons Division there has been considerable excess felling in chir areas. The precise extent is still being worked out."

Matli village near Uttarkashi district was badly damaged by landslides and floods in 1971. Subsequently an official committee strongly recommended that no further felling should be permitted at this site. Yet felling was started here in the auctioned lots, and even when orders were issued to stop this felling, 126 trees were cut illegally. Despite the strict instructions not to carry out rolling operations on these already badly damaged slopes, many logs were rolled on them causing heavy damage to soil.

In Kelagin Jaddi forest, Siddapur taluk of Uttar Kannada district, recently trees were being axed for a plywood factory. The village youths approached the contractor and asked him how many trees had been cut. The contractor replied that so far 51 trees had been cut. The youths then extensively surveyed the forest to find out the reality. They obtained the following figures:

| | |
|----------------------------|--------|
| Trees marked for felling.. | 87 |
| † Trees felled | .. 51 |
| Trees damaged | .. 547 |

A scientist who had been called in to comment on the felling in Kalse forest area (see earlier account) also commented, "We agree that excessive damage in the course of felling and excessive concentration of trees marked for felling were in fact true. The people should be complimented for having brought this to the notice of the authorities."

Reliable statistics of forestry are difficult to obtain in most parts of the country. However officials often use the statistics which originate from them to show the people's point of view in a bad light without questioning the reliability of these statistics. It is not surprising that while these official notes appear to be well argued on the surface . . . on close scrutiny they often reveal fallacies and contradictions (see appendix 2).

Now let us look at another aspect of ' scientific forestry, Often the norms of 'scientific forestry' are themselves changed arbitrarily to suit the convenience of official policies.

In 1965 only pine trees of the growth of 135 years were considered mature enough to be felled. Some years later this age was reduced to 120 years and then to 100 years. Since the scientific principles underlying the felling of trees remained the same, why was the age of tree curtailed downwards so rapidly?

The National Forestry Policy, 1952, had specifically mentioned that the forests in ecologically crucial areas should be managed as protection forests. According to the definition of ' protection forests' used then and later in official reports most of the forests to protect which chipko and appiko movements were lanuched should have been classified all along as protection forests. To quote the National Forestry Policy of 1952, "Protection forests denote forests found, or required, on hill slopes, river banks, sea shores, erodible localities, In such sites, the need for forest cover is dictated by purely protective physical considerations, such as prevention of erosion, conservation of moisture, and control of rushing torrents and floods."

According to the Report of the National Committee of Agriculture (1976), "Such areas where even the slightest disturbance of the forest cover is undesirable should be classified as protection forests- no felling should generally be permitted in these forests."

and Western Ghats. The existence of dense and adequate forest cover

Both in Garhwal/ cover is essential not only for the survival of the villagers living there but also for the more numerous villagers living in the downstream areas. Most of the forests in this area according to the officialy laid down precepts, should have been managed as protected forests, not allowing exploitation beyo nd the essential requirements of local people.

Thus it appears that not all is well with the so scientific management of reserved forets, specially in the ecologically crucial areas like Garhwal and Western Ghats, and there is a certainly a justification for the villagers to question the existing forestry practices, and protest against them. We may now examine the next part of the argument of the critics of these protest actions which states that as villagers have not been able to take proper care of the forests vested with them, the people's ecological movements should concentrate all of their attention on the rehabilitation of these forests. This argument, however, ignores, the historical roots of the classification of forests.

In India, forests were classified during the colonial times in an arbitrary way without any significant say of the people in this classification. In many cases the forests which were given to them were already in quite a degraded state, and in any case not capable of supporting the needs of the growing village population on a sustainable basis. Even when the size of the village forest initially was adequate it was not increased proportionately in later years as the requirements of villagers grew.

In any case it is not true that efforts have not been made by village communities to protect the village forests (see appendix 3 for description of one such effort).

Despite all this, it is certainly true that much remains to be done in mobilising the people for protecting and rehabilitating the village forests. At times, however, this may not make much progress until some overall changes in forestry policy are made, including those relating to the arbitrary classification of forests in colonial times.

It makes some sense to say that social workers should try to rehabilitate village forests. However it makes no sense when someone gives unasked for advice to social workers to keep away from reserved forests and devote attention only to village forests. When such advice comes from forestry officials, at a time when a movement to check irregularities in its felling operations had been launched, then such advice becomes all the more suspicious.

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① which villagers to slave - unpaal
system?

②

Letter by a senior forest official on appiko movement
Published in the Indian Express

Sir, Mr Sunderlal Bahuguna's 'Chipko reaches Karnataka' (IE Dec 12) has focussed the need for conservation of forests and how this is sought to be achieved through the chipko movement. Unfortunately, however instead of propagating this through the love for trees, it is being developed by building up hatred for the establishment the forester.

The forester is described as the king pin in the contractor-politician Industry-forester nexus. The banner 'environment in danger' is raised when scientific tree felling is taken up. Where is this taking place? In the sreserve forests, the only forests of grandeur one comes across in the country. In the Himalayas and in the Western Ghats these reserve forests cover less than 40 percent of the land area and are intact. In the rest of the area, denudation of tree growth is complete or continuing. It is these lands—essentially meeting the firewood needs of the surrounding populace, without protection or invesment which should invite the concern of the environmentalist. But then educating crores of people through unplatable advice is difficult and thankless. It is easier to become a hero if you have a villain. If there is none, create one.

During the last 100 years, in the interest of conserving the reserve forests, several privileges and concessions have been offered to the people of North Kanara district. One such is the minor forest. In Sirsi

and Siddapur talukas where the Chipko movement has commenced while the extent of reserve forests is 834 sq kms the area under minor forests is 454 sq kms. This area is now totally degraded. The second concession is the individual privilege area termed as 'betta', legally classified as protected forests. In these two talukas its extent is 403sq kms. Though largely mismanaged there is tree growth of poor quality in this area. You can imagine its condition when according to Mr. Bahuguna nine acres of such land which if under proper forest condition should yield about 12 tonnes of dry leaves per year now does not meet the mulch requirement of one acre of agricultural land.

Who is to blame for this? The forester? In these two talukas with 857 sq kms of degraded and open land, you would expect the environmentalists to concentrate on their improvement but this is not the case. Instead they are concerned about the felling of two trees in a cycle of 40 years in a forest of more than 100 trees per acre.

Another concession has been the strip grant, according to which forests 100 yards wide all around a cultivated area are cleared of tree growth. This is necessary to keep wildlife away but there is provision for planting of fruit trees with usufructory rights to the cultivator. None has taken advantage of this. I would have expected the chipko organisers to advise the people in this aspect, but that is not their cup of tea.

One more concession is the provision to supply fire wood to the public in this district at a concessional rate. The departmental firewood depots make available firewood to the public in this district at Rs. 80 per tonne while if sold on a no loss no gain basis, the cost would work out to Rs. 160 per tonne.

The article refers to the cruel hands of axemen working for contractors and industries. Axemen are axemen, but who are these contractors and which are the industries? There is no system of sale of standing trees or coupes in Karnataka. Logged material comes to departmental timber or firewood depots only. Logging is done either through the State Forest Industries Corporation or when they cannot cope with it, through logging contractors appointed on the basis of tender cum-auction. If any labour societies secure the tender they are given an additional 12 per cent as incentive.

Logging work in all the 10 coupes in Sirsi forest Division comprising the two talukas of Sirsi and Siddapur has now been stopped by ardent followers of Chipko. These are the coupes which should have yielded firewood for running the depot during 1984. With not a stick arriving so far, the only result will be the cartmen's indiscriminate removal from the forests.

Two other coupes where work has been stopped were allotted to a plywood industry. In these two coupes of 430 hectare areas 361 trees above six feet in girth have been marked for felling. Plywood improves the utilisation by 300 per cent. What would be secured by 3 cms of wood in raw form will be achieved by 1 cm of wood when converted into plywood.

I had met the local chipko leaders and explained to them how they could achieve their objective of eco-development. Seedlings of the indigenous species are being raised by the Forest Department in millions for free distribution. It was suggested that they should educate people for planting these. Lopping of trees in 'betta' lands was being done unscientifically, not one twig being spared. It was suggested that the people could be advised on these aspects. Cattle grazing in forests is free. But now it is five times the carrying capacity of the forests. People need to be educated in these aspects, People are setting fire to the forests year after year to get a new flush of grass with the early rains. This is detrimental both to the forests and the quality of the grass. Some local people have appreciated these aspects and are doing good work. But the chipko Jatha will have no truck with this. Hugging trees is not only their means but the end as well.

Shyam Sunder
Chief Conservator of Forests
(Gent)

Aranya Bhavana
18th Cross Malleswaram,
Bangalore- 560003
December 19, 1983.

Appendix 2 Letter in the Indian Express
in reply to the letter contained in Appendix 1

It is sad that Mr. Shyam Sunder has taken Appiko's action as a personal feud between him and its leaders. (IE Dec 31).!

According to the Annual Administration Report 1981 82 (Kanara circle) of the Forest Department, Page 63, the Reserve Forest area of Sirsi Division is 1304 sq km and not 834 sq km, the figure quoted in Mr. Shyam Sunder's letter. This either means that the Forest Department has its figures confused or that 834 sq kms is the Reserved Forest area for 1983-84. If the latter is the case, then it means that 470 sq kms of Reserve Forest area has been cleaned in just two years time which makes Appikô all the more relevant.

By 1982, the Forest Department had planted teak, matchwood, bamboo etc. Which are of importance to industry, in 72 per cent of the plantations but had allotted less than 28 per cent for the firewood varieties. According to Mr. Shyam Sunder, the load on the forests is essentially due to the firewood demand. Why does not the Forest Department plant more firewood species and reduce the felling of the already vanishing forests? Also unlike teak etc. cultivating firewood species does not require clear felling.

My Shyam Sunder says that Appiko is raising a hue and cry about scientific felling of trees which is two trees per acre in 40 years. What he omits to say is that this rule applies only to 15 per cent of the forest area (evergreen and semi-ever green). What the Appiko activists

are concerned about is the utter disregard with which the Forest Department is clearing the forests. In Bellakkai forest in Sirsi (Hulekal rang), the department has marked 3675 to be trees felled, and 3675 trees in 85 acres in nowhere near the ratio of two trees per acre.

A visit to the Sirse forest area would enable any unbiased observer to see the denudation being brought about by the wrong policies of the Forest Department. This is what Appiko is trying to resist. It is an acknowledged fact that clear felling on the hill slopes results in problems like erosion of top soil, which could mean a loss of Rs. 20 crores per year. The State Forest Minister has spoken about the have created by the Forest Department in the Sirsi area.

S. Aavikanth

P.S. Sastry

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patriotic and People oriented
Science and Technology
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Bangalore
January 25

Protecting Village Forests

It is a pleasant Sunday afternoon, and the women of Silwal village have gathered for their weekly meeting. After some pleasantries have been exchanged, feeling run high as a case of excess collection of fodder from a protected forest near the village is brought forward for discussion. The guilty woman tries feebly to defend herself, but she is soon overwhelmed by the all round condemnation she faces from other women.

This is a familiar scene in silwal village, as also in the neighbouring villages of Pratapgagar region in Tehri Garhwal district of Uttar Pradesh.

Faced with the crippling shortages of fuel and fodder about three years ago women of Silwal village organised themselves in a 'mahila mandal'. The women decided to impose several regulations governing their use of forest produce, specially fodder. Each family's share was fixed on an egalitarian basis. Even a chowkidar-watchman has been appointed on the basis of monthly contributions made by each family in the village. Fines are imposed on those who violate the regulations.

This 'forest management' by the villages like Lakhwar and Saur (Bhadura area) and Sukri (Aun area) has been going on for nearly a hundred years. In some other villages such as Rawat, Paniyala, Lavarkha and Punar (Rona areas) this started after 1939-40 a response in most cases to severe fodder shortages and others to the fury of landslides. After 1950 the spread of these practices by more and more villages of Pratapnagar region have become more rapid.

Despite this, however, it has not been possible to prevent the deforestation of these ecologically crucial hills to a significant extent. While it has been possible to organise the people of a village to protect the forest, 'adopted' by them, this has not prevented the people of some neighbouring villages to violate the regulations laid down for the protection of this forest. Secondly while some villagers may follow all regulations, for instance taking only dry wood for fuel, in the context of the 'adopted' forest, they may not be so careful with regard to trees outside the 'adopted' area.

To a significant extent the practices of the forestry department have also contributed to this continuing ruin. For instance the forestry department not only here but in most parts of the Uttar Pradesh Himalayas is known to have encouraged the growth of coniferous trees like the Chir-pine at the cost of the broad leaf species like the oak. The reason is that the pine yields commercially valuable resin. When forest formation is changed by such harmful practices, people's attitude towards forests also changes. For instance, villagers are likely to be more involved in protecting the banj which provides them not only fodder but also invaluable soil and water conservation services, rather than chir-pine whose needle like leaves are known to impede the fertility of agricultural land.

It is only in the context of these practices of forestry department that the inability of this people's movement to achieve better success in protecting forests should be judged.

Further the forestry officials are themselves responsible for destruction of a large number of pine trees as they allow excessive cuts to be made in the pine for the extraction of resin. This weakens the trees and they are uprooted even by storms of relatively mild intensity. Last but not the least, the forestry department cannot also escape the blame for the glaring failure its afforestation schemes. At most of the plantations sites in Pratapnagar region the survival rate of the plants has been extremely low.

The experience of the isolated efforts in Pratapnagar region appears to be that while united action within a village community is without doubt extremely important, efforts will have to be made to integrate these various efforts into a wider ecological movement if deforestation has to be successfully checked. Secondly, it is equally important that the forestry department follows a policy which is in keeping with the objective of ecological rehabilitation and secures the involvement of the villagers in its programmes.

Lakhwar village has experienced protective forest management by the villagers for a long time, and the result is that today it has a 2 km x 1.5 km dense forest which contribute substantially to alleviating the fodder shortage of the villagers. However this forest cannot meet the year long needs of the villagers and during some months the villagers depend on Unda Khal forests located nearby 4 kms away. This forest has been badly destroyed in recent years. It is such mixed stories of success and failure, protection and destruction, that a one here frequently in this region.

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Thus while the success here in protecting forests is far from complete, one cannot understate the good work done by women at the village level in saving the trees near these villages. For instance when the motor road was extended to Silwal village some time back this also started attracting smugglers of fuel wood and timber with their eyes on the forest near the village. One day the women of Silwal caught them red handed and stopped the truck in which they were carrying away the wood.

20/10

Secretary
PRARRUTI

Secretary
PRARRUTI

We will sacrifice our lives but not Gandhamardhan

1.00 Introduction to Gandhamardhan

Gandhamardhan hill range in Orissa is wellknown all over India due to its mythological legacy. It is from the herbs and medicinal plants of this hills that the life of Laxman was saved in the battle of Ramayana. This life saving quality of the Gandhamardhan is deeprooted in the minds of people. To tove sanctity to this aspect, two famous pilgrimage centres have sprung up on either side of this mountain range. In the northern foot-hill, the famous temple of Nursingnath is situated near a river stream and on the southern side is the temple of Harishankar. Both these pilgrimage centres are connected by a footpath in midst of numerous waterfalls and thick forest areas. The people walked through this forest route and realised the richness of nature.

1.2 Gandhamardhan hills is apread over a distance of 96 kilometers in length and about 20 kms in breadth. It is on the border of Sambalpur, Bolangir and Kalahandi districts. The altitude ranges from 100 meters to 1000 meters above sea level. The hills are covered with dense mixed tropical moist decedious forests. The total forest area of Gandhamardhan is 2000 hectares. In addition to these forests these hill ranges are well known for its medicinal plants. Dr. Gopinath Panigrahi, from Botanical Survey of India, "Gandhamardhan has 2700 medicinal plants of which 225 plants are ~~rare~~ rarely available in India". He made a detailed study of these valuable medicinal plants and suggested to the Orissa government to set up an Ayurvedic College near Gandhamardhan. The richness of the variety of plant species can be gauged from the fact that the

root of a creeper TILAI KAND is said to have the qualities of melting the iron. This was tested and verified recently.

2.00 BALCO / agent of development (?)

Bharat Aluminium Company is a Government of India undertaking incharge of manufacturing aluminium. Balco has established a plant in Korba in Madhya Pradesh. The Korba plant got raw material from mines in Amarkantak. The bauxite in Amarkantak is exploited totally and the mines have to be closed. In the search for alternate bauxite sites, Geological Survey of India discovered the presence of Bauxite in Gandhamardhan. The Government of India declared in 1971 the availability of bauxite in Gandhamardhan. In 1976 Balco applied for the lease and in 1981 the government accepted the lease application. The State government gave lease of 950 hectares in the beginning and then reduced this to 300 hectares. ~~BALCO proposes to mine 60~~ million tons of bauxite in Gandhamardhan. It proposes to remove 6 lakh tonnes of bauxite every year costing 6 crore rupees. On the completion of works BALCO will provide employment for 500 people of which 200 will be the ones who are already trained in Amarkantak. BALCO, by opening up the Gandhamardhan hills proposes to bring a network of infrastructure like roads and dams for the benefit of villagers. The State government claims that BALCO is going to open new areas for developing this backward area.

3.00 Initial attempts of organising people

A formal opening ceremony of BALCO was held at Paikmal by Chief Minister Patnak in May 1983. The student community of Padampur protested against the Chief Minister ~~whilst~~ while he was going to Paikmal. The students demanded that the project would cause damage to Gandhamardhan. As the protest turned out violent, the police inter-

vened and arrested some students. This incident did not attract the attention of villagers who were to be affected by BALCO operations. In fact the police intervention and arrests created fear among tribals living along foot hills of Gandhamardhan.

3.1 The lawyers from Padampur, who belonged to religious organisation, Vishwa Hindu Parishad filed a petition in the Orissa High Court against BALCO. Their contention was that, the mining activities will affect the pilgrimage centres of Nursingnath and Harishankar. The lawyers were more concerned about the religious aspects of the temple than with the real issue of the lives of tribal people, who were affected at large.

4.00 Destruction of Gandhamardhan

In 1983 the BALCO started construction work in Paikmal. The road construction work across Gandhamardhan was given to State Forest department. The government publicised that this road is being built to connect two pilgrimage centres, Nursingnath and Harishankar. Simultaneously the irrigation department started constructing a reservoir at Manbhang. The village people were told that this reservoir would irrigate the land. Both these works went on without any opposition from the people. The government befooled the people, ~~the~~ by deceiving them about real purpose behind these projects. In reality the road was to link the mining of bauxite area and the reservoir was to provide water to BALCO colony in ~~Paik~~ Paikmal. These real purpose was withheld from public, anticipating that people may 'start agitation.

4.1 The road construction work in midst of thick forest area and on steep slopes of mountain led to destruction of forests and creation of debris. In addition to this, BALCO started excavating in

an area of two hectares on the top of the mountain to establish crusher plant. This created enormous amount of debris spread over an area of 4 sq. kms. The ~~over~~ debris of this excavation work and road construction choked the streams originating from these hills. The effect of these activities on the hill slopes was experienced by the people in Khandijaran. The government has recently built a Minor Irrigation Project in Khandijaran, across a stream that originates from Gandhamardhan. The people observed that during monsoon rains the stream was full of silt, brought down from the construction sites. Similarly the construction of reservoir at Mambhang destroyed a community owned orchard that provided fruits all through the year. These aftereffects of the construction activities of BALCO created doubts in the minds of tribal population.

4.2 In the middle of 1985 the teachers from Sambalpur University organised a National Service Scheme camp at Nursingnath, in Gandhamardhan. It was an interstate camp, organised basically to spread the environmental awareness among villagers. The participants had to visit villages to understand the reality. When these students went to villages and started preaching on environment conservation, the tribals said, "You are teaching us about preservation of environment but our Gandhamardhan is getting destroyed by BALCO. So why do not you go and tell BALCO to stop the destruction?"

5.00 People's Movement

The inter-University Camp at Nursingarh created special interest among two young students. Niranjan Vidhrohi and Asu Patnaik felt that they have a responsibility towards the people, to make them conscious of the dangers of mining. They saw that the tribals had experienced the damage due to the construction activities and were thinking of how to stop this damage. After the camp, instead of

going back to University, they went from village to village explaining to people about the dangers of destruction of forests. The tribals around Gandhamardhan are dependent on forests for basic needs.

5.1 The initial stage :

After organising the villagers these youths gave a call of direct action. A demonstration meeting was held in front of Block Development Office at Paikmal. When the demonstration started, there were only 15 people. The village people who came to see what was happening were very much afraid of police and government office. The rumour was spread that police will arrest people and bombs will explode in demonstration place. Simple villagers feared that these things will happen and due to the fear, they kept themselves at a distance from demonstration. Gradually, people gained strength and joined the demonstration. The number of people increased gradually when the fear gave way to strength. In December 1986, the police arrested 100 people including women and children. They were retained in custody for full day and were released unconditionally. People realised that the police has also a limited role, if they are organised together.

5.2 Direct Action

The resentment among tribal people was piling up and eventually they decided to stop the vehicles that were plying on the road to Gandhamardhan hills. In order to stop the vehicles they built road blockade near Nursingnath temple, on the edge of the mountain. The newly built forest road was blocked by peoples gate. Hundreds of people including oldwomen and children started picketing at this point. They called it "Gandhamardhan Gate". Trucks belonging to BAILO were coming down from hills loaded with bauxite ore. People stopped it at Gandhamardhan Gate, they stood up in front of the truck, some laid themselves before it. The police came to the spot and tried to persuade people. Ghashiram Mallik, an adivasi said, "We will not move unless

which gives us all that we need".

Similarly in Peepal Kanta on Paikmal-Khariar Road, villagers blocked a truck loaded with cement. They even blocked the vehicle of local MLA, Satyabhooshan Sahu, who was a supporter of BALCO. They compelled him to spend few hours in cold night.

The main blockade gate was Gandhamardhan Gate, that opened tourists and the district collector had to take permission from people to on this road. The people were in fact doing the work of forest department, trying to protect the ~~xxxxx~~ greenery of the hill.

All these blockades created a psychological feeling among tribals that they can resist government's anti-people project. Gradually hundreds of people of different caste, of different tribal groups assembled in the blockade point. The government had to stop the activities of BALCO due to this unprecedented protest. Since June 1986 the activities of BALCO on Gandhamardhan hills has come to a halt.

5.4 Government attempt to distract movement

A number of committees were appointed to go into the details of the project. The Orissa government appointed a committee under the chairmanship of Shri Rawat. This committee gave a favourable report, claiming that BALCO will bring 'development' to this area. The people challenged this report. The Central government appointed a committee under the chairmanship of B.D.Nag Chowdhary. This committee visited twice. During its first visit about 20,000 people gathered to submit their view. Chowdhry committee gave the clearance to BALCO, claiming that the mining of bauxite is possible without damaging ~~xxxxx~~ flora and fauna of Gandhamardhan. The people questioned this report and asked whether it is "practical". When Nag Chowdhry visited Gandhamardhan for second time, people boycotted

the government stops the destruction of Gandhamardhan". The enthusiasm of the people was so high that the success at Gandhamardhan Gate aroused the feelings of villagers surrounding Gandhamardhan. Various gates for blocading the vehicles belonging to BALCO were set up by people. The non-violent struggle was so popular that tribal men, women and children were arrested and put behind the bars. This action by the government strengthened the determination of people. Raidhar Lohar stayed in Jail for 37 days and Alek Babu for 71 days. The people filed a suit against the government for arresting the people illegally. The district judge of Sambalpur gave the judgement in favour of people and declared that the arrests were illegal, without any ground. This judgement gave a moral boost to movement and people flocked everywhere, ready to sacrifice their life to save Gandhamardhan.

5.3 Blocade

Salepali is a small village on Sambalpur-Paikmal road. The villagers erected a wooden barrier across the road. They enforced the blocade on all BALCO vehicles. All vehicles passing through the route had to stop, and the people examined the vehicles. A truck carrying steel for construction work of BALCO colony was withheld in Salepali for 10 days. The villagers sat on the metalled road and kept vigil for 24 hours. They spent time singing folk songs and bhajans. The whole village slept on the road during night. Once the police officer came on BALCO vehicle. The people asked him to get down from the vehicle and walk. The vehicle was not allowed to pass through blocade. Dhanmati, a seventy year old woman said, "we will sacrifice our lives but not Gandhamardhan. We want to save this hill

in protest. Interestingly, the team from Centre's Department of Environment has submitted its report concluding that BAIKO will destroy the local ecosystem. Now the people are not bothered about committees, they are determined to save the hills on people's strength.

6.00 People's dependence on forests :

6.1 Dokni Bai of Salepali village, participated in picketing. She said, "All the village people get food from the forests in Gandhamardhan. We get Peetha Kanda, Karu Kanda, Kevu Kanda and fresh bamboo shoots. We get Mahua, Dul, Char, Narangi, Citrus, Jackfruit, Mango, Maya, Bhadela and Sitaphal". She said that these different fruits are available throughout the year. The Kana or tuber is one of the staple diet of tribals around Gandhamardhan.

Another old woman Poornawasi Bhoi of Khandijaran village said, "Gandhamardhan gives ~~us food~~ us food. If it is destroyed, then how can we live?" She said that in addition to tubers and fruits, the bamboo provides them an employment all throughout the year.

Khankijaran, Manbhang or any other village on the foothills of Gandhamardhan has community owned orchards. The people are dependent on forests for employment and food. The collection of minor forest produce and medicinal herbs gives them employment. They make rope from the forest product.

Almost 40,000 tribals depend on Gandhamardhan for survival. Their daily life revolves round this hill. It is interesting to note that even after using this forest resource for centuries, there is continuous renewal of forests. The impact of severe drought in Kalahandi is not visible in the foothills of these tribal villages.

As Kuldhar Sabar, a tribal from Khandijaran said, "The Gandhamardhan can support the total population of India for one full year". Yes, he was speaking from his experience base.

All these basic issues of survival of tribals linked to the forests of Gandhamardhan is the main cause for launching a wide based people's movement against BALCO.

7.00 The struggle continues.....

The tribals from about 80 villages in and around Gandhamardhan are determined to continue the struggle to save their living resource. They are linked together by Gandhamardhan Surakhya Yuva Parishad (GSYP) a group of young people organising the struggle. This struggle is the only people's movement launched in Orissa to save forests. The political parties and ideological groups are kept away from intervening in the struggle. The fate of the project is still undecided and the government seems to be determined to go ahead with the project to open BALCO. The people will carry on the struggle. They have put down on the walls of Nursingnath temple, "Our Prime Minister calls for mass movement for the preservation of environment. Is our movement not for protecting environment?" Their movement reveals the hollowness of the statements made by Prime Minister.

September 28, 1987.

PANDURANG HEGDE

PEOPLE'S PARTICIPATION AND ENVIRONMENT

Much has been written about the depletion of non renewable resources of the Planet Earth and about the ecocide man is propagating through the so called development based on industrialisation. The after effects of these development policies has already started showing in the west and in recent times there is a serious concern all over the world to tackle the issues related to environment. In India the famous Chipko Movement set an example of people's involvement in saving the natural resource such as forest. In South India the Silent Valley controversy led to a general awareness among the laymen and paved way for starting the anti Bedthi agitation in Uttara Kannada. Recently the people of Karnataka have shown a concern towards these ecological issues and in some cases they have acted upon some of these issues. The uprooting of eucalyptus saplings in Tumkur district and the revolt of villagers suffering from the pollution problem of Harihar Polyfibre and in recent months the Appiko(Chipko) movement to save the forest wealth are the indicators of people trying to tackle the environmental issues. Especially in 1983-84 these issues were hotly debated in the press and at the governmental level. The heat generated through these debates has had a cumulative effect on the national scene, particularly in case of eucalyptus. Thus in brief we can say that the people of Karnataka have not only shown an awareness to environmental problems but they have acted upon it achieving some success, in changing the government policies.

It is very interesting to trace the history of ~~the~~ people's participation in environmental issues. The fisherman community in Binaga village near Karwar were the first to start a movemnet

against the water pollution. This was in 1980, the Caustic Soda Factory at Binaga started discharging effluents into the open sea. Within days the fish mortality increased to such an alarming extent that it was impossible for the fisherman to carry on their age old profession. They got organised and led an movement forcing the Factory to set up a affluent treatment plant and to install a three mile pipe line in the sea to take the effluents deep into the sea water.

In the same way the villagers effected in the down streams of Tungabhadra due to Harihar Polyfibre protested ~~xx xxx~~ against the pollution. The Polyfibre factory released toxic substances in the river which affected the human and the cattle population. The press gave a wide coverage to this problem and as a result of this kind of pressure the factory agreed to put up a affluent treatment plant.

The movement of uprooting eucalyptus saplings in some villages of Tumkur and Kolar district is the outcome of people's experience in regard to the demerits of this particular species. Large areas of land near the agricultural land was planted with eucalyptus. In subsequent years the villagers realised that the moisture in their field had dissapered and the perennial water sources dried up. Nothing grew under these plantations and the availability of fodder for the cattle dwindled. As the price of eucalypts went up, the farmers with large land holdings started swithing over to this species. This also solved some of the labour and management problems related to agriculture sector. Thus this increased the rural unemployoment in the countryside adding to the already

to the vast army of the unemployed. It is the Peasant's organisation which took the lead in activising the pent up feelings of rural folk.

In a similar fashion and through the inspiration of Chipko of North India the people of Uttara Kannada started Appiko Chaluvalli opposing the forest policy. The forest policy was instrumental in bringing the forest cover from 80 percent in 1952 to a meagre of 24 percent in 1982. Large areas of the western ghat forest was clearfelled to make way for commercially viable species like teak and eucalyptus. In addition to this the West Coast Paper Mill and the Plywood factory established in Dandeli consumed the forest resources. The huge hydro electric projects of Kali submerged large tracts of forests. These changes in the ecosystems led a series of chain effects, particularly on the rainfall pattern and the agricultural yield. This effected the lives of people in many ways and in order to save the forest wealth they started a non violent movement of hugging trees to save them from the axeman.

All the ~~fx~~ cases cited above represent a common phenomenon. The ~~estabkishment~~ ~~of~~ the Harihar Polyfibre and the Caustic Soda in Binaga were established with the objective of removing the backwardness of certain regions and to provide employment of the people. However these have gone against the objective, ~~as~~ instead of creating employment the Caustic Soda factory has thrown out the traditional fishreman from their age old profession. This factory in Binaga has employed about 800 workers and has displaced 5000 fishreman. Only 15 of these displaced fishreman have been provided job in the factory. In the same way the Polyfibre factory has affected the lives of the villagers due to the pllution of water. Pölluting one of the

the basic resources, i.e. Water they have affected the lives of many people in the countryside. The threat ~~of the~~ to the life supporting system forced the people to fight for their survival. In the same way the denudation of the forest wealth has had a deep effect on the lives of the people. Peoples' participation in all these cases has come after they have experienced the difficulties. However it is mainly against the policies of the government of planting eucalypts or felling of trees for meeting the demands of the industries. In both these cases the interest of the villagers has been jettisoned. These opposition or the People's movement represent the disregard of government policies in evolving a viable development alternative involving the people.

The kind of people's participation ~~xxxxx~~ mentioned above stems out as a result of negative aspects of a particular policy. The need of the hour is how to channelise the awareness in a constructive way. Based on the Chipko experience the Appiko movement in Karnataka has taken up the task of environmental education among the public. Accepting that the forest cover is denuded, it is very important to see how we can grow the tree cover on these denuded land. If we want to conserve the forest wealth, it is necessary that the pressure on the existing forests is reduced through alternatives to the forest based raw materials. People were motivated to use new chulas which saved half of the wood consumed. In the same way alternative sources of energy like gohar gas and solar energy is propagated to save the fuelwood. These kind of positive approaches are ~~xx~~ crucial ~~xx~~ to motivate the people to contribute positively. This kind of work is being done only by the non governmental agencies and the government departments has to learn a lot from them. To raise the forest

it is very essential that the people residing near these area also taken into confidence. It is impossible to grow trees in the area with barbed wire. In the same way it is important to consider the choices of local people in deciding what kind of trees or species is suitable to the local conditions. The eucalypts may not be a suitable species, but can we leave the barren land for further degradation? Thus accepting the need to grow some or the other kind of trees in the barren land it should be left to the local people to choose among the fast growing species.

In case of water and air pollution it is very necessary that the people should be allowed to see the affluent treatment plants. In many cases these treatment plants is just a show piece to escape the legal complications. They are rarely switched on and the people are fooled. These industries rarely recognise the social costs involved in this kind of pollutants which affect the ~~xxx~~ society in various ways. Unless the people are taken into consideration the problem of pollution is difficult to solve. At times it may lead to a greater conflict between the factory and the people.

At governmental level there is lack of co ordination between various departments. At one place the forest department tries to raise the forest and the tribal welfare department distributes goats and buffaloes. It is the people who suffer due to this kind of ill conceived policies and schemes.

The motivation part in people's involvement is very important. At times it is spontaneous and in other cases we may have to take initiative to encourage the people. But it is more important to see that the spontaneous or other

kind of movements is not limited to a short period. In order to sustain it is necessary to introduce positive elements and give thee responsibility to people.

In conclusion it should be mentioned that the problem of conserving the natural resources and that of alleviating poverty is co related. In the countryside the common villager is more worried about his next meal and if no alternative is provided he will chop the tree to earn his living. So it is essential to see that he is provided with an alternative source of livelyhood. The vast stretch of barren land in our country provides an opportunity to utilise the unused human capital. The Chipko experience in Himalayas has shown that by involving the women in regenerating the forest it is possible to give employment to many people. The villagers have opted for a Caretaker who looks after the regenerated forest area, and heix is paid by the village contributing from each family. The policy makers should learn from such experiences and gear the governmental machiney towards such practical solution. The development ploicies practiced till now has left a vast number of people unemployed. In addition to it there are numerous side affects of such development programme. In order to utilise this vast human capital, it is necessary to develop the basic resources land, water and soil through involving the people.

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CONSERVING AGRICULTURAL BIODIVERSITY AND PEOPLE'S KNOWLEDGE

- Pandurang Hegde

India is one among those regions wellknown for its biodiversity. The people living in the region have put in efforts to harvest the wild biodiversity and have domesticated the plants and seeds for growing agricultural crops. For many centuries the farmers have carefully looked after the soil and harvested crops to support the population. They have struggled hard to evolve seeds that are suitable to particular agro economic situation. The seed husbandry practices of the farmer has led to numerous varieties in staple crops like rice, wheat and millets. The most important characteristic of these varieties is the utility value of each variety to a particular farmer in different ecozones. The diverse climatic zones has also motivated the farmer to evolve those varieties that are suitable to specific agro-climatic conditions.

The farmer has developed these varieties in collabaration with the available natural resources. The farming system was closely linked to the livestock keeping, which provided the inputs for agriculture. The holistic concept was the basis of agricultural biodiversity.

EROSION OF AGRICULTURAL DIVERSITY

The introduction of plant breeding techniques into agriculture has placed greater emphases on developing superior varieties that increase the grain yield. These varieties were responsive to chemical inputs and use of pesticides. The propagation of such superior HYV (or High Responsive Varieties) through government

extension department and provision of subsidies in the initial stages has attracted the farmers towards chemical agriculture. In this process the numerous varieties that the farmer cultivated has been abandoned. Many varieties have become extinct and there are many other varieties on the verge of extinction. Reliance on a narrow genetic base has threatened the food security of country. Farmers have stopped growing the varieties that evolved over centuries. The emphasis on HRV (High Responsive Varieties) were short lived.

The farmers realised the futility of depending on few varieties as the incidence of pests and disease attack increased forcing him to use more chemicals. The extensive use of chemicals in agriculture has had adverse effect on the soil, water and health of people.

There are many instances wherein the farmer wants to revert back to traditional varieties, but they are not available in the region. The farmer and the soils are addicted to the chemical inputs. The agricultural scientists assure that the biotechnology will provide answers to this question of excessive use of chemical inputs by developing strains that are resistant to pests and disease.

EROSION OF PEOPLES KNOWLEDGE

The farmers have developed crop varieties that are suitable to their soil. In evolving such varieties they have imbibed a knowledge base that meets the requirements of their needs for food and fodder. However there has been a systematic process of suppressing such knowledge as 'traditional and 'unscientific'. The agricultural practices propagated by Agricultural Universities and government extension agents is the only 'Scientific' knowledge.

This so called scientific knowledge has been responsible for erosion of peoples knowledge. With the constant propaganda, farmers started doubting the wisdom of their own knowledge base which has evolved through trial and error methods over centuries. The present education system has also been responsible for erosion of peoples knowledge as they stressed the need to be more 'scientific'. The combined effect of government propaganda and undue importance given to chemical agriculture has forced the farmer to feel that their knowledge is inferior and his practices are not 'scientific'.

The consumer culture has also led to creation of demand for standardised products. The present trend of processing agricultural and horticultural products is forcing the farmer to grow specific crop varieties/fruits to suit the needs agricultural processing industries. The standardisation to meet the needs of the market has also reduced the agricultural diversity on the farm. The consumer is not aware of the diverse characteristics of the varieties grown by farmers. This has narrowed the choices of farmers and consumers.

The onslaught of chemical agriculture has caused the erosion of agricultural diversity by limiting the choice of farmers. The farmers right to choose a particular variety is replaced by those varieties which are developed by MNC's (Multi National Companies). The self reliance of the farmer in owning and sowing the seed of his choice is replaced by reliance on seeds of private companies. The choice to sow a particular seed is no more with the farmer.

PATENT ON SEEDS

The present situation of implementing the GATT agreement permits patenting on seeds and plants. The efforts of centuries by the farmers in evolving a particular crop variety is hijacked by profit motive of companies, who can patent on genetic code of the plants developed by farmers. The patenting of seeds and plants will accelerate the process of erosion of diversity in the agriculture sector. The concept of owning seeds or patenting on seeds is ethically not acceptable to the farming community in India. In India the seed is the property of the community and not an individual. The patenting will lead to destruction of the self-reliance of farming community and denying their right over the seeds. Farmers rights is being replaced by patents, destroying the basis of agricultural biodiversity.

CONSERVING AGRICULTURAL DIVERSITY

In this moment of crisis, a unique effort to conserve the agricultural diversity has been initiated by a group of concerned individuals through 'Navadanya'. Navadanya literally means nine seeds, that represents diversity in the agriculture, with emphasis on staple crops and oil seeds to meet the requirement of family and livestock.

In order to conserve agricultural diversity Navdanya has initiated a series of insitu conservation of indigenous varieties grown by farmers. These varieties are regrown and effort is made to reintroduce the varieties in the areas where it has become extinct. By this method the agricultural diversity can be maintained in the fields of farmers. This live interaction of farmer with the

seed and creating awareness about the importance of the varieties is one of the main activities of Navdanya in motivating farmers to conserve agricultural biodiversity.

Conservation of agricultural biodiversity is not restricted to insitu conservation of indegenious varieties. The Navdanya interaction is spread in different ecological zones of Gorhwal H^{imalayas}, Deccan plain and Western ghats. The experience has shown that the work has to be combined with creating awareness at consumer level. The agricultural diversity has to be conserved with the utility value and not just for conserving the varieties. It is only when the utility factor becomes prominent, the farmer takes keen interest in conserving the indegenious varieties. Again the approach has to be holistic. We need to tackle the issue of biodiversity through holistic farming system approach, including livestock and water management.

The forces of erosion of agricultural diversity are numerous and the implementation of GATT will further accelerate the process of erosion. Under such circumstances it is essential to formulate a sound practice to conserve the biodiversity to help the farmers to maintain their self reliance.

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FUEL-WOOD OR PULP-WOOD ?

(Part- I)

Nargund is one of the interior villages of Dharwad District in Karnataka. It is on the edge of Western Ghats with vast areas of revenue land utilised by villagers to collect fuelwood and fodder. This common property is one of the main resource of 4000 people residing in the village. Through constant overuse the land is degraded but still it provided resource to landless labourers and marginal farmers. In the rainy season of 1989 a private undertaking Karnataka Pulp-Wood Limited (KPL) encroached upon this common property resource in Nagund and bulldozed the area. They wanted to plant eucalyptus. The villagers organised themselves and opposed taking over of village land. The villagers planted indegenious saplings of fodder trees.

As the rainy season approached in 1990 the villagers became active and organised themselves to protect the village land. Surrounding villagers near Nagund had already lost their common property to KPL as the latter succeeded in planting eucalyptus. There were sproadic opposition from villagers but the KPL managed to win over the village leaders and Mandal Panchayat Pradhans. However, in Nagund the villagers decided to protect their common property. The villagers formed "Nagarjun Parisara Samithi", a village level conservation Committee to organise the struggle. This committee established contact with many other organisations in the district and sought their assistance in the struggle. Citizens Environment Committee, Ranebennur and Samaja Parivarthan Samudaya, a voluntary organisation took active part in the struggle.

On 15th August, 1990 the villagers from Nagund launched a campaign to plant trees on the common land. Dr. Shivaram Karanth, the eminent literary figure and environmentalist addressed the people. He called upon the people to protect their resource from being snatched away by industrial interests. Chandi Prasad Bhatt of Chipko Movement was present to support the action of villagers. In addition to it Jyoti-Bhai Desai, a veteran Gandhian emphasised the need to organise the struggle in a non-violent way. The Sarvodaya leader from Karnataka Santosh Kaulgi was also present in the meeting.

As the villagers took saplings and started proceeding towards the common land the KPL representative came and showed the injunction order issued by local court prohibiting entry of villagers into common land. The representative brought a lawyer and police force with him to enforce the order. The injunction was basically against the members of Nagarjuna Parisara Samiti. These Orders were not served to people.

The spokesman of village challenged the validity of court Order. He showed the record of rights issued by the Revenue authorities issued on 14th August, 1990, i.e. previous day stating that Survey Number 217 and 291 of 320 acres was a revenue land and that it was never handed over to KPL. Obviously, the court has issued an order that has no validity because the land belonged to Revenue Authorities. The ~~px~~ representative of KPL insisted that they got the land from forest department. But he could not produce any document. The villagers told them that the land belongs to the village and they will protect it at any cost.

The police said that they will arrest people who would venture to plant saplings on the common land. There were women, elders and children in hundreds who were ready for the arrests. The women went ahead and led other people. Breaking police order the villagers planted 1500 saplings of indigenious species in the common land. While planting they chanted slogans and songs to protect the village property.

The struggle was on and the police wanted to arrest people for planting trees. At that moment Assistant Superintendent of Police came with more police force. The police officer expressed the intention of arresting only 20-30 people, especially the memers of village conservation committee. But the village women came forward and volunteered for arrest. They questioned the police officer "we collect fuelwood from this land. It belongs to the village, it is the KPL which has voilated law by snatching our property. But you are on the side of KPL. Are you protecting and supporting those who break the law?". The Police had to confront such questions and they realised that all the villagers were volunteering for arrest including children and women. The people said "If you want to arrest, then arrest all of us. We will not allow you to arrest only few villagers". The Chipko leader Chandi Prasad Bhatt asked "on what grounds are you arresting us? For protecting our land? For having planted trees?". The police officer realised the strength of people and instead of arresting he bowed down to peoples pressure and left the village.

The victory of Navgund has enhanced the confidence of villagers in Hirekerur taluka in Dharwad District, Karnataka. The people have showed a way to fight the industrial lobby. The KPL has been allotted 35000 hectares of land by Karnataka government to plant eucalyptus. This eucalyptus will help the private industry Harinar Polyfibers. In order to help one single industry the government has ignored the interests of thousands of villagers who utilise this land in various ways. They collect fuelwood, they get fodder and graze their cattle on it. But now at many places it is taken away by KPL and planted with eucalyptus. The government is for helping to grow pulpwood one single industry. It is not interested in helping lakhs of villagers who need fuelwood. pulpwood is important than fuelwood, the industrial interest triumphs over villagers need.

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