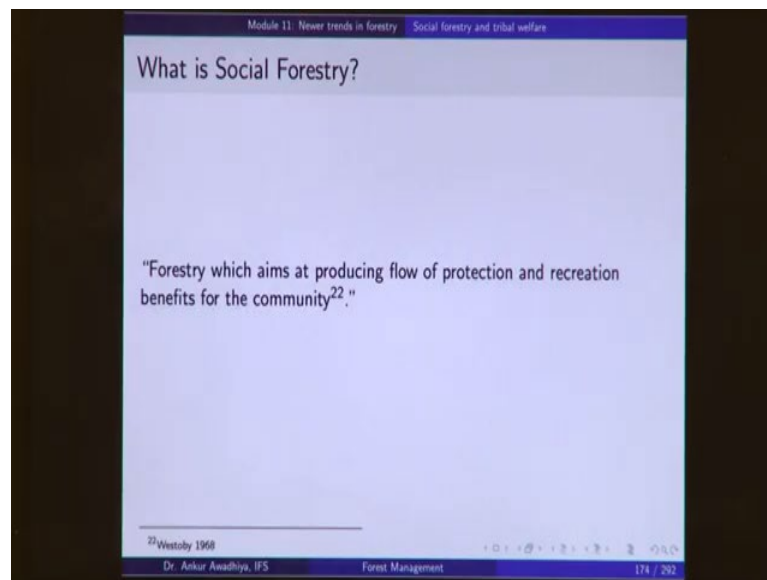


Forests and Their Management
Dr. Ankur Awadhiya
Department of Biotechnology
Indian Institute of Technology, Kanpur

Module – 11
Newer Trends in Forestry
Lecture – 32
Social Forestry and Tribal Welfare

[FL]. We carry forward our discussion on the Newer Trends in Forestry. And, in today's lecture, we will have a look at Social Forestry and Tribal Welfare.

(Refer Slide Time: 00:26)



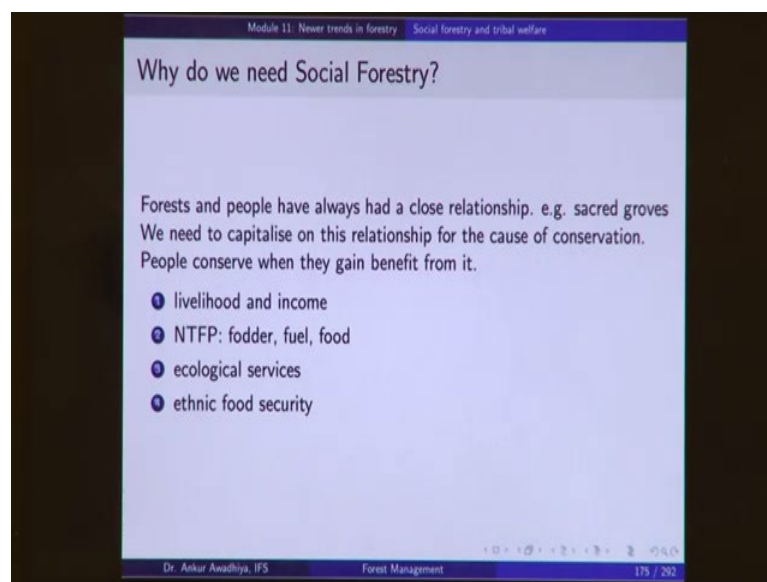
So, what is social forestry? Social forestry is defined as forestry, which aims at producing flow of protection and recreation benefits for the community. Now, earlier we have seen that whenever we were talking about forestry, we were only talking about the production of wood, the production of timber; so, that is conventional forestry. Conventional forestry aims to maximize the production of timber; so, that is the sole aim.

But, in the case of social forestry, the aim is not maximization of timber production, but it aims at producing flow of protection and recreation benefits, for the community. So, here the focus changes from the production of timber to getting benefits for the community. And, what are these kinds of benefits? The protection benefits and the recreation benefits.

Now, what is that? Protection benefit means that, if you have a forest nearby, then probably your rivers will flow for much longer. Probably, your rivers will be much more perennial; you will be getting other ecosystem service benefits based out of biodiverse, such as clean air, clean water, protection against food and security and so on. And, at the same time, the other benefits are the recreation benefits.

So, when we talk about recreation benefits, we are talking about say jobs through tourism sector or provisioning of entertainment avenues to the community. So, here, the focus of forestry has changed; we are no longer looking at maximization of timber production, but we are looking at community.

(Refer Slide Time: 02:16)



Now, why do we need to have this approach? Now, this approach is essential because historically, people and forests have always had a close relationship with each other. This is because people have been dependent on forest. So, if we talk about benefits such as medicinal herbs; if you talk about the Ayurveda system; so, a number of medicinal herbs have been collected from the forest since antiquity.

Similarly, if we talk about the benefits of biodiversity, people have been dependent on these forests. If we talk about the availability of fuel for household purposes, people used to go to the forest, collect the twigs and branches that fell down probably, even chop a few trees and the forest used to meet their needs.

If you talk about timber requirement, people were dependent on the forest for timber, for construction purposes, for furniture and so on. And, even our community life and our culture has been very much connected with the forest. So, for instance, even in even a number of our religious figures have lived in the forest. We worship a number of trees; we worship a number of animals. And, when we worship these then there is also an impetus for people to conserve them.

So, there was a one to one relationship between people and forest; people were dependent on forest and people also protected the forest. A good example is sacred groves. Now, sacred groves are those forests that were protected as being religious forest; as being sacred forest. So, nobody would go into those forests to cut the trees. So, this protection was being provided by the people. So, there was there were no laws that such in such area has been declared as a sacred grove by the government; there was no such notification. But just because of their cultural values, people protected these forests. A number of forests around temples have been protected by people. Now, when forests and people have always had a close relationship, then if we say that people are only interested in cutting down the trees in; destroying the forest that is not a correct perspective.

And so, if we could leverage the relationship between people and forests, then we could capitalize on this relationship for the cause of conservation, and a good way out is to provide people with benefits. So, when people derive benefits from forest, there is an impetus to conserve those forest. So, for instance, if you have a forest and if you have a community right next to it, and you want to conserve that forest. So, there are two approaches. The classical approaches you tell people, “no, this is our forest; this is government forest. Nobody can enter inside.”

And, the other way out is that you tell people these are your forests and you are deriving such and such benefits out of it. And if, you cut down these forests, you will no longer derive those benefits. So, if you can convince people that the forests are important for them; if you give them the ownership of the forest, then probably, they will be playing a much better role in protecting the forest. And, this is where social forestry has its say.

So, what kind of benefits can you give to the people from the forest? Now, remember we cannot give a very large benefit of timber, because, if we were to do that, then a lot of

timber would be extracted perhaps unsustainably, and the forest would be gone; but you can at least give them livelihood in income. So, if the livelihood of a community; the income that people are deriving out of their livelihood is intricately related to the forest. If people derive their jobs from the forest, then it will be in their vested interest to conserve the forest.

So, social forestry tries to maximize the provisioning of livelihood and income to the people. How can you do that? Well you can do that by giving them jobs in maintenance and management of the forest, including protection.

So, if you have to have certain people to protect the forest; if you want to hire forest guards, why not hire them from the local communities. So, in that case, if say every two every family has one or two members that are working for the forest department, they will have a much better perspective of the forest department and they will be having a much better vested interest to conserve that forest.

Another livelihood benefit is through directly giving of jobs. So, for instance, if you want to do a management operation and most of our management operations are highly labor intensive. So, you want people to dig holes and to dig pits in which we will be doing the plantation. Now, this pit digging could be done using a machine, but it can also be done using labor.

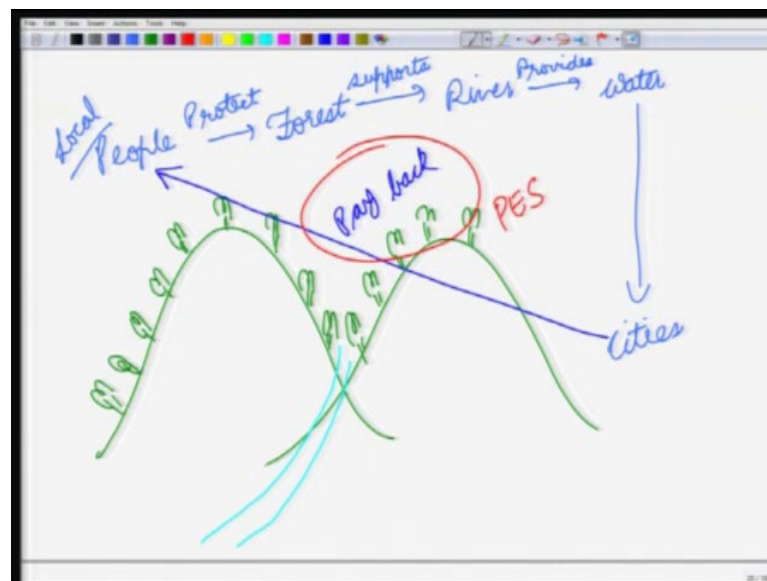
Now, as a policy we prefer to have our pits dug by the local people; by the local community, so that any expenses that the department makes in making of these pits is directly channelized to these people. So, this gives them a source of livelihood; this gives them income. Other benefits could be things like NTFP, fodder, fuel and food. So, you can permit people to collect the NTFPs from the forest.

So, if there is a community that is collecting; say tendu leaves from the forest, they are selling those tendu leaves; they are they are getting income out of those tendu leaves, then it will become a vested interest of that community to conserve the forest. Because, if the forests are gone, then they will not be able to collect these tendu leaves. And similarly, for a number of other herbs, a number of other minor forest produce or non-timber forest produce.

Another benefit that you can give to the people is the benefit of ecological services. Now, people who live near the forest also derive the benefits of the ecological services. But people who live far off from the forest also derive the benefits of the ecological services. Whereas, only the people who are near the forest have to bear the brunt of conservation; because, if you have a forest nearby, then probably the wild animals will also be entering into your fields and probably destroying the crops.

So, only those people who are living near the forest have to be at this brunt. People who are living far off from the forest do not have to suffer any damage from the wild animals. But then, if you talk about the benefits; the benefits the benefits are enjoyed by the whole of the society. So, could you derive a mechanism that people can gain benefit because of this conservation; and a good example is that suppose, you have these hills, these hills have forest and the local community is preserving these forest.

(Refer Slide Time: 09:58)



And, there is a river flowing between these hills; and because of these forest, the river is maintaining a perennial nature. So, there is water available in this river throughout the year.

Now, this water is available only because the local community is conserving the forest that is they are supporting this river. So, we can write it as people protect forest; so, because of which you have the forest and the forest supports the river; because of which

you have the river, and the river provides water; because of which you are able to get this water.

Now, this the benefit of this water is not being used only by the local community; it is also being used by people who are living far off. For example, the people who are living in the cities. Now, the question is, all of us pay certain charges for the use of for the consumption of water. Now, suppose we are paying say 10 paisa per liter of water, when it comes into our municipal supplies.

Now, out of that 10 paisa can be channelize say, 1 paisa or 2 paisa to the local community. If we do that, and if we emphasize that, you are that if you emphasize to the local community that you are getting this money, because you are conserving the forest. So, in that case, they will have a much greater interest in conserving the forest, as compared to a situation where they were not getting any money out of it.

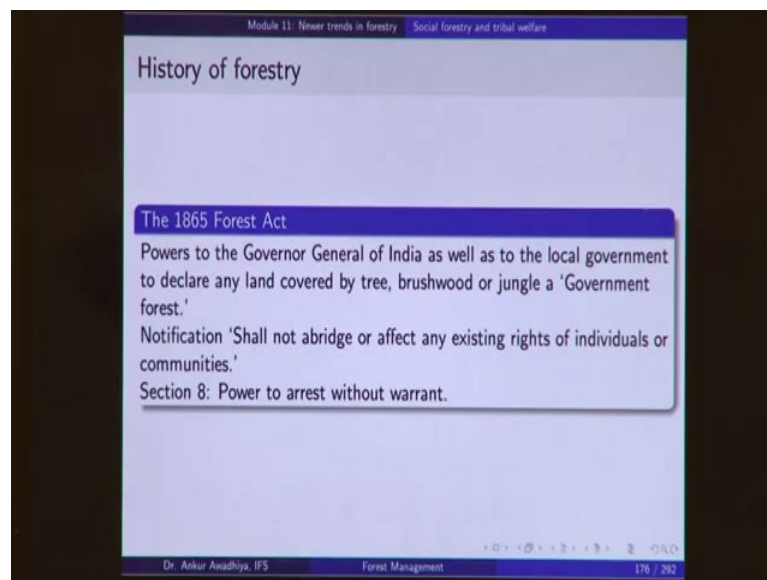
So, what we are saying here is that, because these cities are getting water due to these people; these cities should also pay back to the local people. So, here, the people are the local people. And, when we do that, then this payment this paying back is known as PES or Payment for Ecological Services. So, the forests are giving us the ecological services and the forests are able to do that because they are conserved by the local people. And so, the local people should also be able to derive certain benefit, so that it becomes more incentivizing for them to conserve these forests. And, this incentive can be created through the model of payment for ecological services or payment for ecosystem services.

Another benefit that we can give is that of the ethnic food security. So, if we talk about the people who are living next to a forest, then in their culture, in their food items there would probably be certain items that are derived from the forest. So, for example, if we talk about people in Andhra Pradesh, then there is a pickle that is known as Gongura pickle, which is made from the leaves of a certain tree.

Now, if this Gongura were to were to be highlighted as an ethnic product; if we could create a market for it, then it would make much more sense for the local people to conserve this tree. In Bastar areas also, people make certain specific chutneys. In Balaghat people make delicacies out of a mushroom that is known as Pahari.

Now, if we could create a market for such an ethnic product, then the local community will be gaining benefit out of conserving the forest that is making these ethnic products possible. So, the main aim in social forestry is to give benefits to the community, so that they work towards conservation; so, that is the bottom line.

(Refer Slide Time: 14:28)



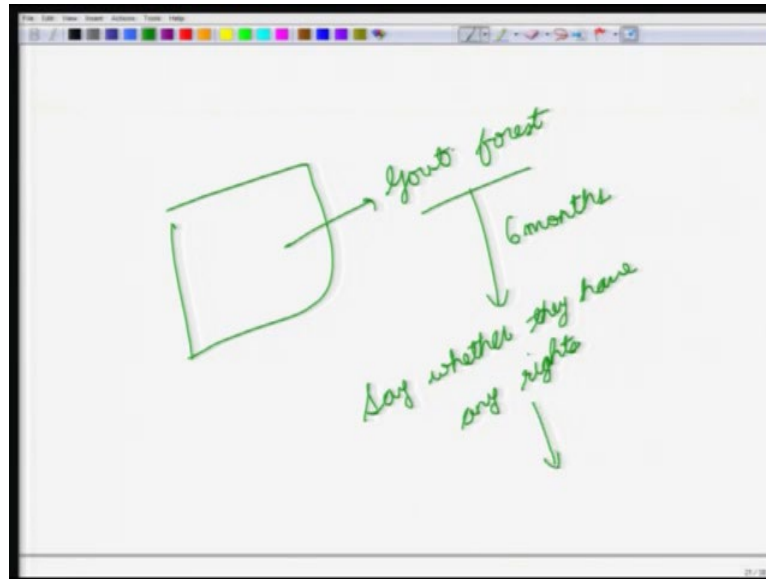
Now, how did we come to this concept? So, let us have a look at a short history of forestry. Let us begin with the 1865 Forest Act. Now, the scientific forestry in our country began around 1860s, with a German person who is name as Dietrich Brandis.

Now, he first of all gave this idea to the government that the forest need to be maintained in a or managed in a scientific manner, because of which the 1865 Forest Act came into being. Now, the 1865 Forest Act said, it gave the powers to the Governor General of India as well as to the local government to declare any land covered by tree, brushwood or jungle as a Government forest.

So, this was the first time that the government said that these areas are Government properties; these are government forest. But then, it also put up a rider that the notification shall not abridge or affect any existing rights of individuals or communities, which means that a community that was having rights over a particular forest could not be alienated from those rights, in the process of declaring a forest as a government forest.

But now, if you consider in the period of 1860s, hardly anybody in India was literate. The literacy rate was very less it was less than 10 percent, and especially so, in the case of those communities that were living close to the forest; because they hardly had any purpose in knowing say English or Farsi; now, in those periods, if a notification was made stating that this piece of land is going to become a government forest.

(Refer Slide Time: 16:26)



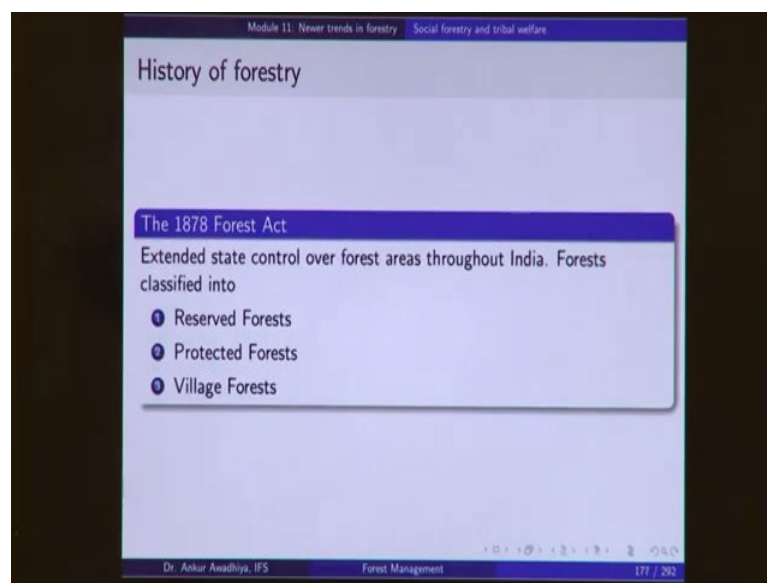
So, there if the if in those days there was a notification, that this land will be made a government forest. And so, now, people should come up with an application saying if a whether or not they are having any rights over it, because the rights cannot be alienated as, per law. So, if this land has to be made into a government forest, suppose a time limit of 6 months is given to the local community to say, whether they have any rights; and, only if there are no rights, then this area will be converted into a government forest.

Now, it looks good in theory; but in practice, a number of people in these communities did not have access to information. They did not know that such a notification has come up. In a number of cases, it was not made in the vernacular languages. Two; even if this notification was translated to a vernacular language, a number of people could not read. Three; even if people could read, they did not have access to the newspapers; this was not a time of internet; this was not a time of mass media.

And, four; even if people knew that this land is going to be converted to a government forest, they did not know how to draft a letter; they could not advocate their rights and say that this is our forest, and you cannot convert it into a government forest.

Now, in such scenarios, a number of forests of the local communities got converted to government forests. And, if there was any attempt to take these forests back, then we also had Section 8, which gave the officials power to arrest without warrant. So, the beginning of forestry in our country was having of these few lacunas.

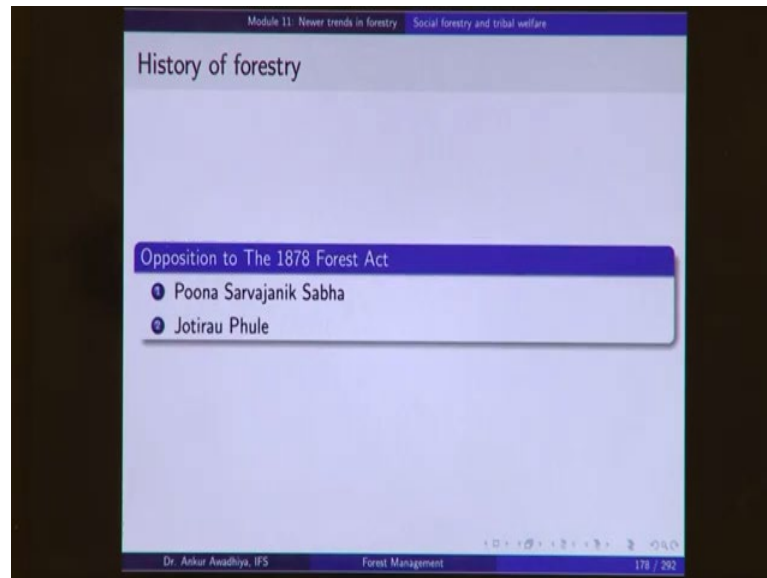
(Refer Slide Time: 18:37)



Now, this 1865 Forest Act was further extended by the Indian forest act of 1878. Now, this forest act extended the state control over forest areas throughout India, and it classified forest into reserved forest, protected forest, and village forest.

Now, this is something we have even today, but even in the 1870s, people were not that literate. And, because of the shortcomings of these acts; because of the shortcomings in the practical field implementation of these acts, people lost their rights which led to heavy amount of opposition to these acts.

(Refer Slide Time: 19:13)

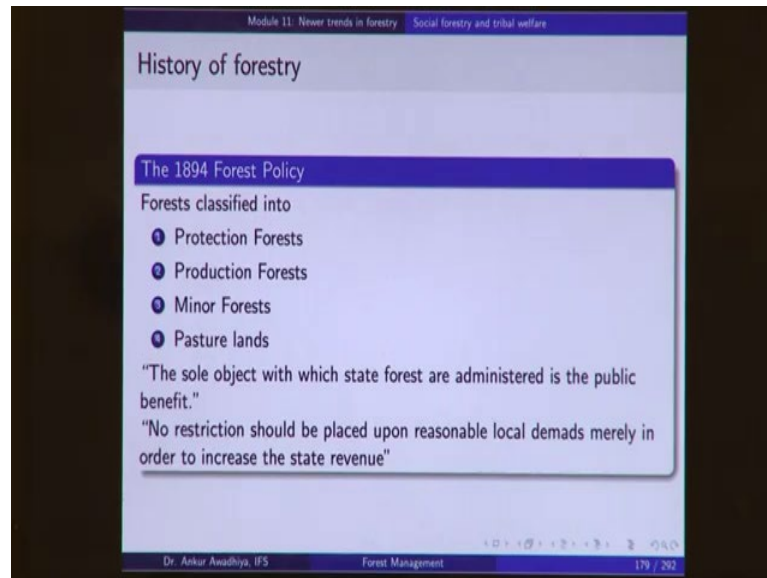


And, a lot of opposition was put up by the Poona Sarvajanik Sabha and Jotirau Phule. So, here, we are seeing how we are able to create a descent in people.

Now, the main problem with these acts is that these acts are made from the perspective that people and forests cannot exist together; people are not good for forests and so, people and forests have to be kept separate. Forests should be managed by the government and people should not have any rights on them.

So, this is the premise in which these acts were made. Now, because of this heavy opposition, the government came up with the 1894 forest policy.

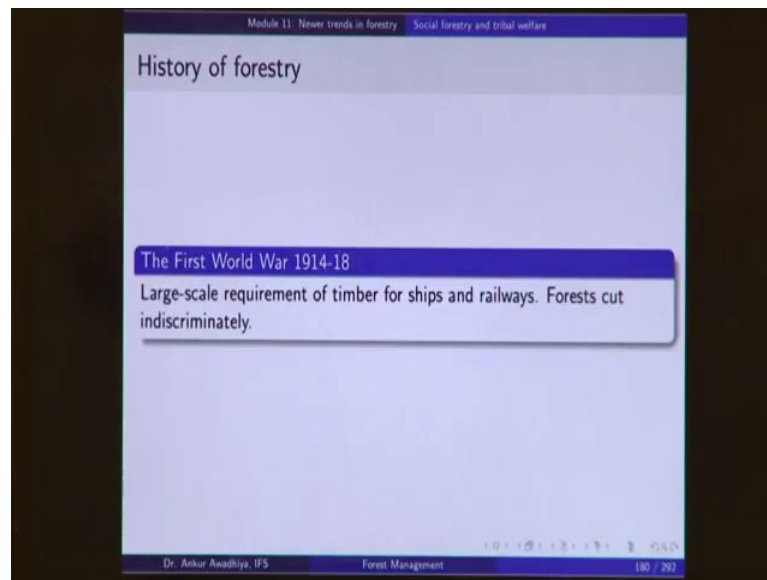
(Refer Slide Time: 20:04)



Now, the forest policy classified the forest into protection forest, production forest, minor forest and pasture lands. It said that the sole object with which the state forests are administered is the public benefit.

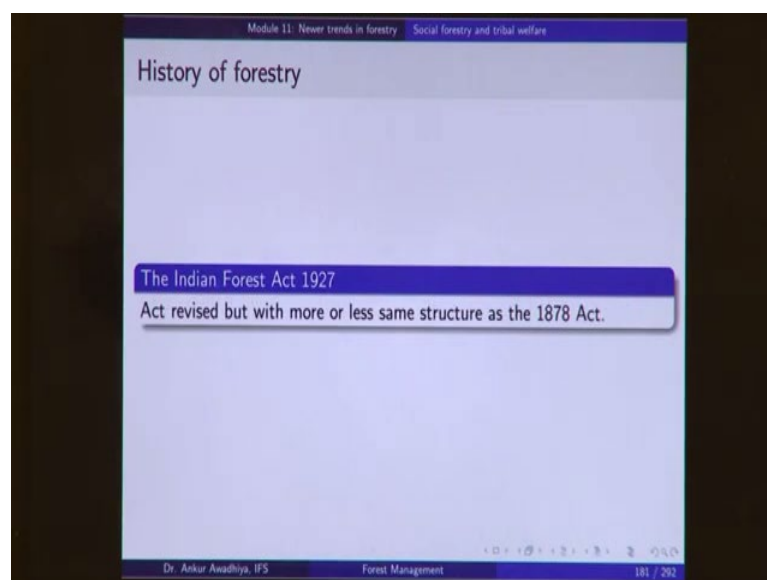
Now, this policy in 1894; it is now talking about some amount of benefit giving to the community, because it is saying that we are not managing these forest for timber; it says that we are managing them, in the public interest. And then, it also said that no restriction should be placed upon reasonable local demands merely in order to increase the state revenue. So, it said that, if people required access to certain resources, and primarily these resources were those of fuel, wood, fodder some food plants, some fiber plants and some medicinal herbs; so, it said that, if there are there is a local demand for these resources, then these demands will be met; we are not going to put a restriction on these demands. So, that the government is able to get more and more revenue, but then this was just a policy, it was not converted into an act. Now, an act is legally enforceable; a policy is not.

(Refer Slide Time: 21:34)



Then, we had the First World War in between 1914 and 1918. Now, in those days, the ships were primarily made out of timber for the railway wagons, and also for the railway sleepers, we required huge quantities of timber. And, this period from 1914 to 1918 saw heavy destruction of forests. So, there was a large-scale requirement of timber for ships and railways, and the forests were cut indiscriminately.

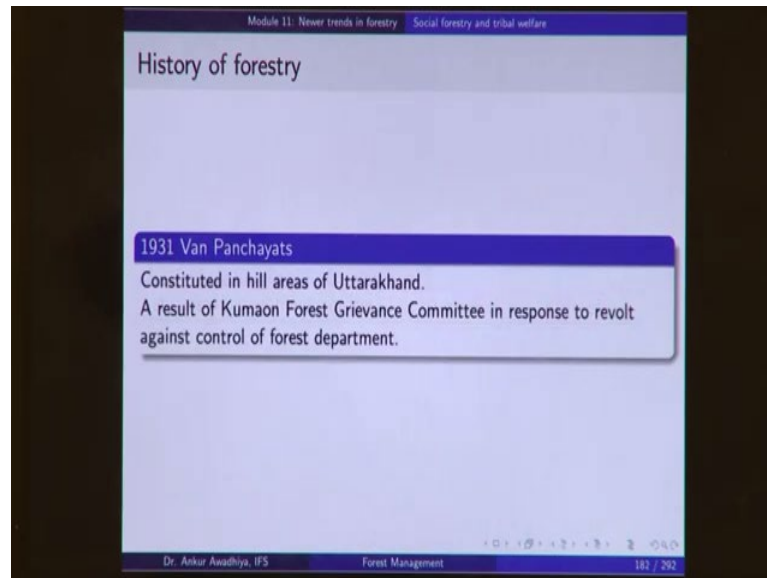
(Refer Slide Time: 22:03)



And, then we came to the Indian forest act of 1927. Now, Indian people had been thinking that this Indian forest act of 1927 would rectify the shortcomings that were there

in the previous act, but what did this Indian forest act of 1927 do? It revised the provisions, but more or less the structure was kept the same as that in the 1878 act.

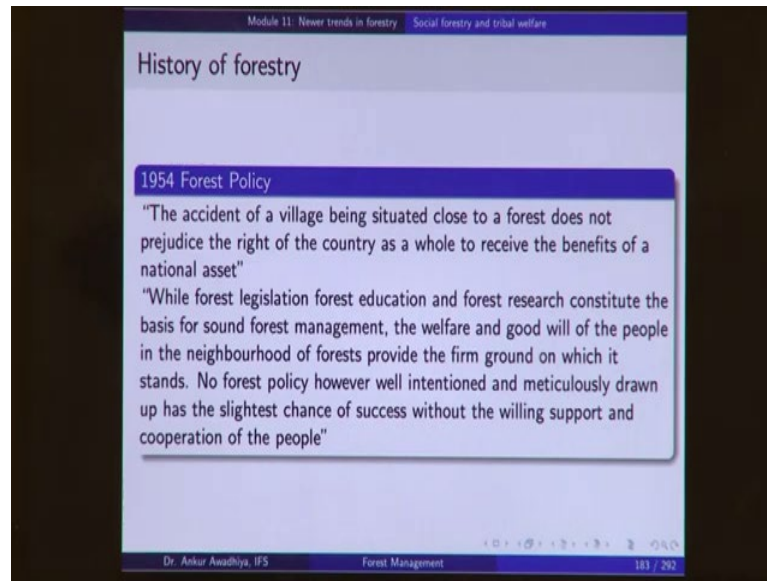
(Refer Slide Time: 22:33)



So, when this came up again, there was a heavy opposition. And, when there was this opposition then, in the Kumaon districts of Uttarakhand; there was a Kumaon Forest Grievance Committee set up, in response of the revolt against the control of the forest department. The locals were rising against the forest department and so, this Grievance Committee was set up.

Now, this Grievance Committee gave recommendations on the basis of which in 1931 Van Panchayats were set up. Now, in the case of Van Panchayats, the local community has much more control over the forest. And, they play a much larger influence in protecting the forest; they play a much larger role in protecting the forest. So, now, people were our getting these rights through these revolts.

(Refer Slide Time: 23:29)



Then, our country became independent in 1947. And, in 1954, we had a new Forest Policy. Now, this forest policy said, “the accident of a village being situated close to a forest does not prejudice the right of the country as a whole to receive the benefits of a national asset.”

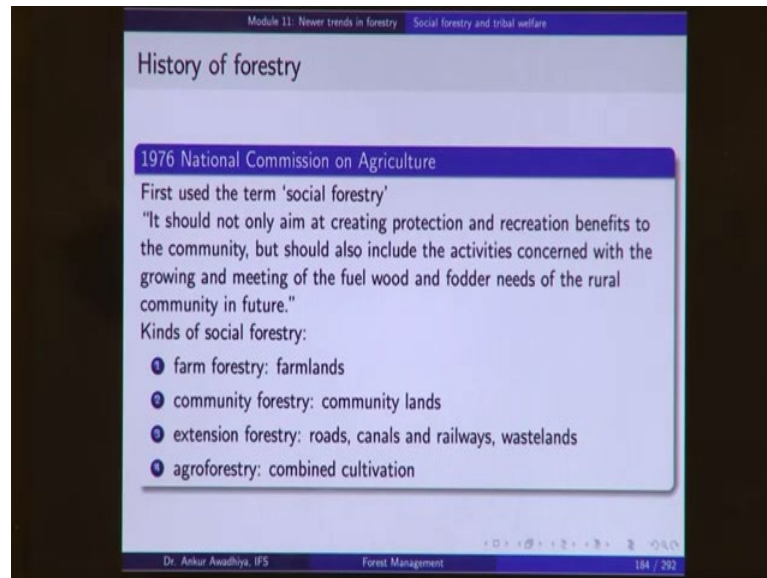
Now, here again, what we are seeing is that the focus has again shifted from the local communities to the national interest. But then, it also said that, “while forest legislation, forest education and forest research constitute the basis for sound forest management.” So, you require good legislation, education and research, but then the welfare and goodwill of the people in the neighborhood of forests provide the firm ground on which it stands. “No forest policy; however, will intentioned and meticulously drawn up has the slightest chance of success without the willing support and cooperation of the people.”

So, now that India became independent, now the policy-makers started to look at the active participation of the local community. So, they said that even though the forests are not meant for meant just for the local community, they are meant for the whole of the nation; but to manage to maintain these forests, we require an active support of the local people.

So, here we are seeing the beginnings of the social forestry. In 1931, people started taking these rights; they started managing the forest on their own. And, in 1954,

officially it was stated that you need to have the cooperation of the local people to manage the forest.

(Refer Slide Time: 23:22)



And then, in 1976, the national commission on agriculture was set up and this was the first one in our country to use the term social forestry.

So, now, we are seeing that slowly and slowly the concept of social forestry is gaining popular currently, and now the policy makers are not only tolerating social forestry, but they are also actively encouraging social forestry. So, the 1976 agricultural commission said that, "it should not only aim at creating protection and recreation benefits to the community;" but now this protection and recreation benefits is coming from the definition of social forestry. But it is saying that, it "should also include the activities concerned with the growing and meeting of the fuel wood and fodder needs of the rural community in future."

So, what it is saying now, is that even though the 1954 forest policy said that the forests are primarily to meet the national demands; but this 1976 committee is now saying that, the forest have to be managed in such a way that they are able to meet the requirements of the local people.

So, now the perspective has changed; it has shifted from national needs to also incorporate the local needs. And, how did it propose that we are going to meet these

local needs? It said through four different kinds of social forestry; the first one is farm forestry. Now, farm forestry says that, if you have a farm land, then you can at least raise a few trees on your farm land.

Now, a farm land is a private resource; it is a private land. But, if you grow a few trees as well together with your crops without putting a negative influence on your crops, then the trees that will be there on the farmland will also fulfill your requirements of say fodder or firewood or timber. So, it said that we need to encourage farm forestry. Then, it said we need to encourage community forestry, which is doing forestry or extending forestry to the community lands, such as pasture lands.

So, every village has a pasture land why not put a few trees there as well; preferably the fodder trees or the fruit trees. Then, it said the third kind of social forestry is - extension forestry; we need to extend the forest to our roads, canals, railways, and wastelands. So, it is said that on both sides of the roads or on both sides of the railway line we can use the land that we have to grow trees. And, all of these trees will not be raised to meet the needs of the nation; but primarily to meet the needs of the local community.

Also, agroforestry. Now, in the case of agroforestry, there is a combined cultivation of the agricultural crops as well as the forestry crops. So, you can have say, a pastoral system together with a silvicultural system or an agricultural system together; with a silvicultural system or agricultural pastoral as well as silvicultural system together. So, a combination of these factors, it is different from the farm forestry; because in the case of farm forestry, the primary aim is agriculture and growing of a few trees is a very secondary aim.

But in the case of agroforestry, agriculture and silviculture together are the aims. So, it has a joint aim. So, in the 1976 National Commission on Agriculture, it is saying that we need to extend the forestry to meet the needs of the local community and this extension will be done through these different four kinds of social forestry.

(Refer Slide Time: 29:40)

Module 11: Newer trends in forestry Social forestry and tribal welfare

Differences

Table: Differences between conventional forestry and social forestry

Conventional Forestry	Social Forestry
Long rotation	Short rotation
Done by department	Done in collaboration with society
Based on single use (timber)	Based on multiple uses (including NTFPs)

Dr. Ankur Awadhya, IFS Forest Management 185 / 292

So, what are the differences between conventional forestry and social forestry? what sorts of plants are you going to raise in the case of a social forestry? Now, in the case of conventional forestry, we go for typically long rotation crops, because we want to have timber crops things like teak. Now, a teak stand will be ready for harvesting say after 80 or 90 years. But then, if you want to give benefits to the local community, then you cannot ask the local community to wait for 80 or 90 years.

So, you need to have those crops that are short rotation crops. So, you need to have things such as babool, which can give you we can start giving you returns in say 3 or 4 years; because then, it will be much more incentivizing to the local community, and it will also be fulfilling the needs of the local community. So, we go for shorter rotation crops in social forestry.

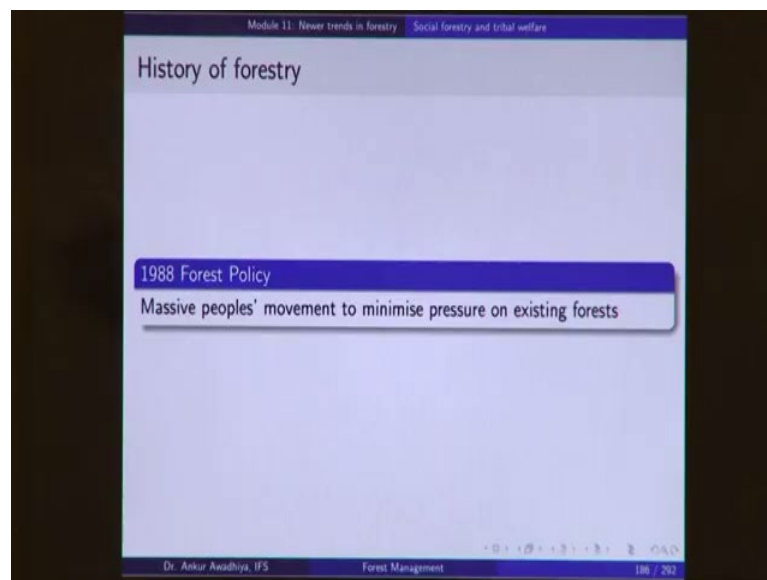
Conventional forestry is done by the department, but social forestry is done in collaboration with the society. So, you tell the local community that this is your land; these are your forest; you have to manage them. We are going to give you all the support, but you need to take ownership of these forests. These are not our forest; these are your forests.

Conventional forestry is based on a single use; that of timber. So, conventional forestry only says that you need to maximize the production of timber. But social forestry says that you, but social forestry is based on multiple users including NTFPs. So, when you

are talking about social forestry, you will be raising those trees that are able to give you fuel; that are able to give you fodder; that are able to give you food; that are able to give you fibers; that are able to give you medicines; that are able to give you shade. So, the context of the forestry changes completely. You are going for those species that are not timber species, but those species that are of more use to the local community.

Primarily those species that have a short rotation period, so that the community can gain benefits as soon as possible. And, you manage those stands by taking an active help and support of the local community; so, that is social forestry.

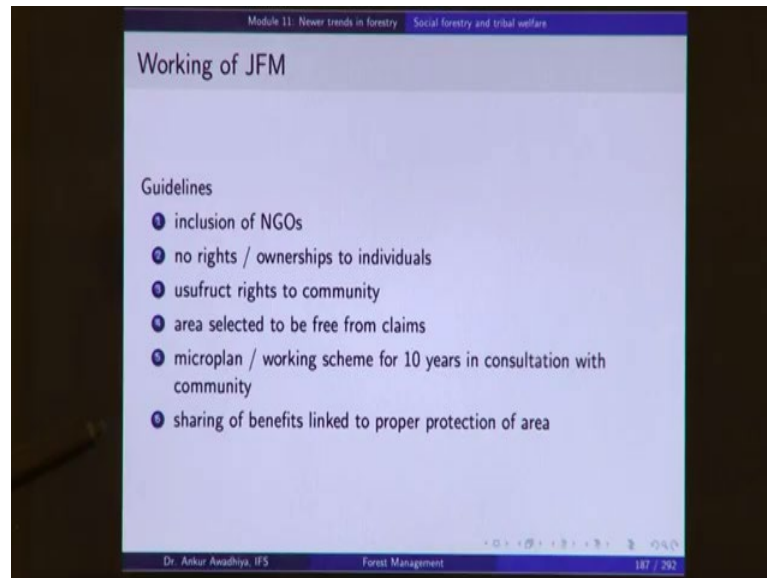
(Refer Slide Time: 32:08)



And, this social forestry was then firmly put on place through the 1988 Forest Policy which asked for massive peoples' movement to minimize pressure on existing forests.

So, this is our current forest policy and it says that, if you want to minimize the pressure on the forest, it will be done through a mass movement of people. So, based on this forest policy, a number of acts were made; a number of resolutions were passed; and these days, this is our primary objective. So, we are doing all or the majority of our forestry is being done through an active participation and support and cooperation of the local community.

(Refer Slide Time: 32:58)



So, how is this being done? This is done; this is being done through JFM. Now, JFM stands for Joint Forest Management. So, the forest management is not being done by the department; it is done jointly with active support of the local community. So, what are the guidelines? how do we do a joint forest management?

One there is inclusion of the non-government organizations (NGOs).

So, the management is not only being done only by the government, but also the non-government organizations. Now, our model of JFM does not give rights or ownerships to the individuals, but it gives usufruct rights to the community. So, it says that these are not your private forests; these are these are forests in which the benefits will be shared with the local community. So, it will not be shared with a single person, but with all the people who are there in that particular community. The areas that are selected are to be free from claims.

So, when we when we talk about joint forest management, we do not take those areas that belong to private people; we only take those areas which are free from all the claims, essentially meaning that we gave them the government owned forest. Then, a microplan or working scheme for 10 years is made in consultation with the community. Now, this microplan; when you may when you are making a micro plan, you have to go to the community and you have to ask them what do you want.

So, the community might say that we want say fuel wood species. Now, if the community says that we want fuel wood species, then in your microplan you will incorporate certain areas where you will be growing these fuel wood species. In such numbers, as will be able to meet the requirements of the local community. If the local community says “no, we do not want fuel wood species! we want fodder species; because here we have a very good market for milk and we want to raise milk cattle.”

So, if the local community says, we want milk cattle; we want fodder trees, then your microplan, would incorporate the fodder trees. If the local community says that our area is getting very dry and so, in the forest management, we should be having more and more number of check dams; so that more and more amount of water is gets recharged into the groundwater. If they say so, we will make more and more number of check dams.

So, in this model, the department does not say that you should make you should do this and that. The department asks from the people what do you want. Probably, the community would say that that in place of these usufruct, we want to have a school made for our community. So, in that case, the department will aid the community in the setting up of a school.

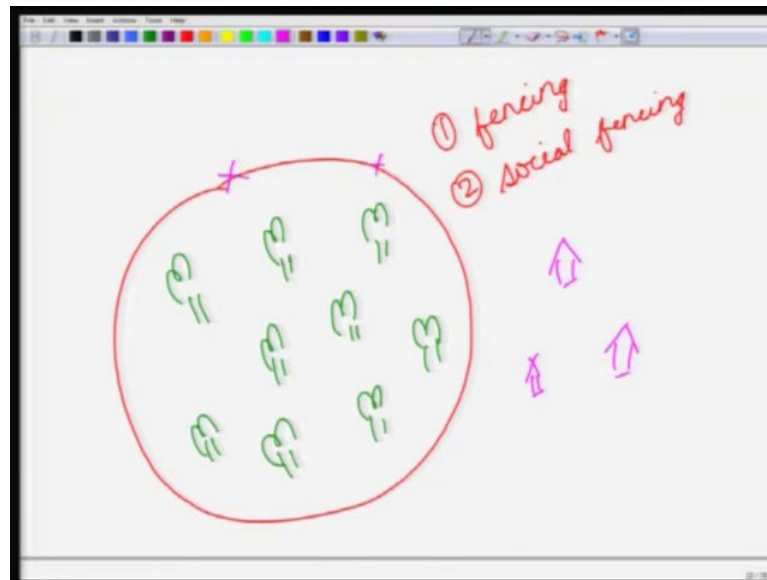
So, the microplan or the working scheme. And, these are prepared for 10 years and these are done in consultation with the community. And, then there is also a sharing of benefits linked to proper protection of the area. Now, this sharing of benefits can be in different modes. So, in certain states, we say that, “Ok, if you are able to protect this forest, then whenever there is a felling of coupe, then say all hundred percent of the bamboo will go to the local community.”

Now, when we say that it means that we are doing a scientific management, but 100 percent of the benefits of bamboo will go to the local community. Although government may say, “Ok, x percentage of the timber revenue will directly be channelized to the local community.” Or the government might say that “ok, we will take this timber, but we will give you all the fuel wood.”

So, there is a profit-sharing mechanism; there is a benefit sharing mechanism between the government and the community. In a number of cases, 100 percent of the benefits are given back or ploughed back to the local community. But, in certain cases, a percentage

of the benefits are ploughed back to the local community. So, this dip; this varies from state to state. So, there is a sharing of benefits which is linked to the proper protection of the area. Now, one good model of getting this protection done is that, you can tell a community that here you have these forest and here, we have the village.

(Refer Slide Time: 37:36)



Now, you can the forest department can go to the local community, and the forest department can say, “ok, we need to protect this forest, but we have got two options. Option number 1, is that we are going to put a fencing around whole of this forest.”

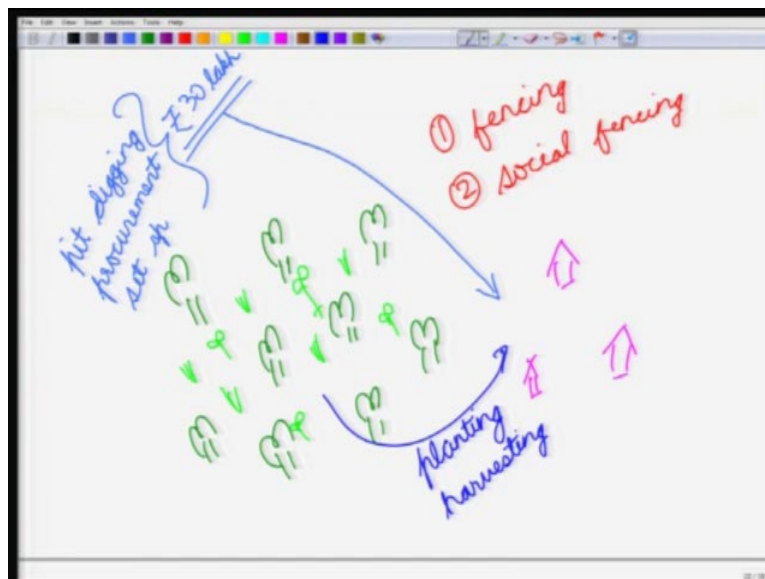
Now, when we are putting this fencing, we will be digging pits; we will be procuring the poles; we will be putting those poles inside using concrete; and we will be putting a chain link fencing so that any nefarious element is unable to get into this forest and cut out this timber, or is unable to or to take their cattle inside for grazing. Because, this area has recently been failed, and so the regeneration has to be ensured.

So, this is the first option. The first option is that of fencing, but then the department can say, but then we also have a second option, why do not we you do one thing. So, you as a community; this is your forest; you protect this forest. So, you ensure that no person from your village goes into this particular section, which is due for regeneration; where you have the young plants, because if people take cattle into this area with the young plants, the cattle will browse or graze over these young plants and the regeneration will be destroyed.

So, you ensure through your social practices, through social policing, that no person takes their cattle inside. And, you also ensure that there is nobody who is coming from outside to cut away this timber. Now, how will the local community ensure this? In a number of cases, they make use of things like social boycotts. So, if somebody goes and cuts trees, they are going to boycott that person, or the this local community may employ a few chowkidars who will be interested with going through this forest, and ensuring that not a single tree is getting cut.

And, if they catch hold of any offender, they will bring it to the bring him to the police or to the forest department. So, this sort of a fencing is known as a social fencing. Now, even in the case of the social fencing, your requirements are getting met. So, your trees are protected the regeneration is protected. But in the case of the social fencing; now, you can let go of this fence that were that you were trying to put in. So, now, this fence is no more required because people are willing people are capable and people are willing to go into these forests and ensure the protection.

(Refer Slide Time: 40:55)



But then, you had allocated certain money to create this fence. So, the money for the pit digging there was money for procurement of cement, of sand, of the poles, of the chain link fencing. So, there was there was money that was allocated for this, then there was also the money to set up the fence. Now, what will you do with that money? Let us

say that this money was say 30 lakh rupees. Now, what do you do with that money, and you had made this plan that your fence is going to last for say 10 years.

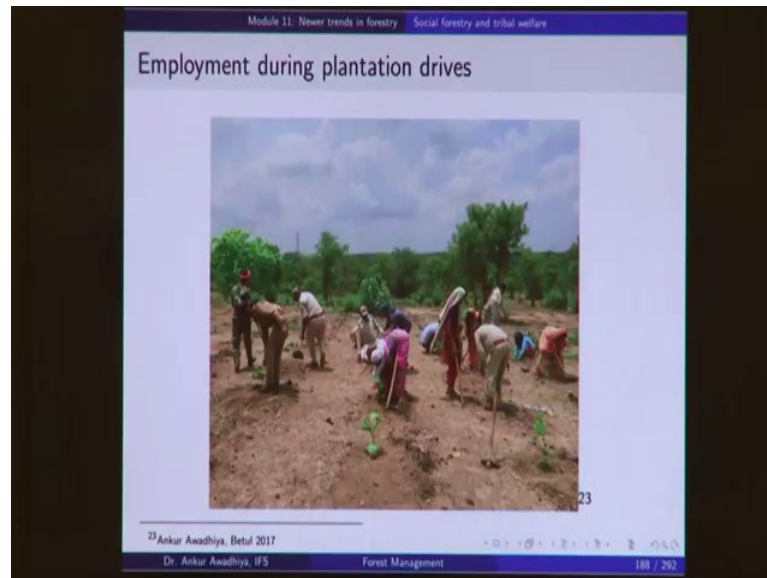
So, when you are asking people to do the social fencing, and you are saving this amount of 30 lakhs. What you can do is, you can tell the community that this 30 lakh we are going to channelize to you. So, this plan was for 10 years. So, we will give you 3 lakhs of rupees every year, if you are able to ensure the protection of the forest. So, in that case, the local community is deriving a benefit out of the protection. It now becomes their own vested interest; it is in their own interest to protect this forest; because if they protect the forest, they will be getting these 3 lakhs of rupees every year.

So, these sorts of profit-sharing mechanisms; these sorts of benefits sharing mechanisms can be set up. And, in that case the sharing of benefits linked to proper protection of the area, will make the JFM run. Another way in which we give people benefits is through employment.

So, we can say that, in this case when we are doing the regeneration; suppose you need to plant a few saplings in this forest; so, you can tell the local community that we need to plant these saplings. Why do not you do it for us, because in any case the department would have hired a contractor to plant these saplings; why do not you do it, and the money that we would have given to a contractor, we will give to this local community.

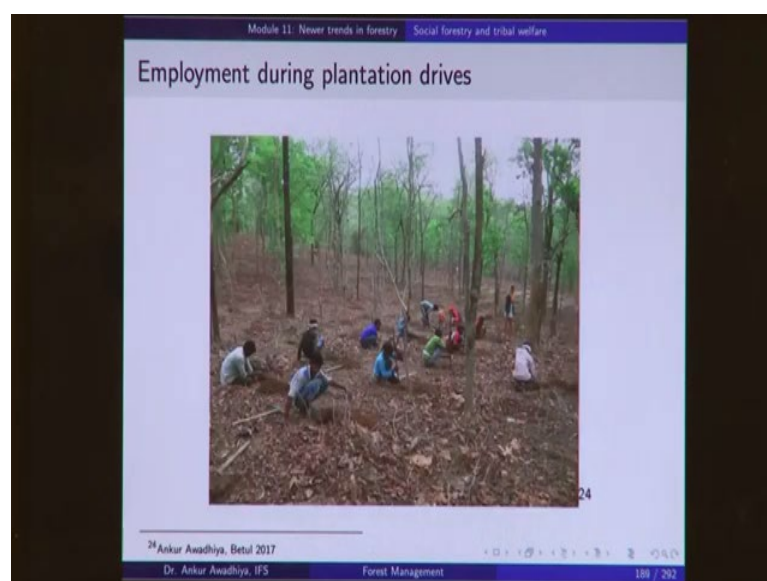
So, we will be giving this money for planting operations; we will be giving money for harvesting operations. So, in the earlier mode, the forest department used to employ contractors; these days we do not make use of any contractor, we give all this money to the local community. And, we tell these people that this is your forest, why do not you manage it and we are going to pay you for your services, so that there is an incentive.

(Refer Slide Time: 43:51)



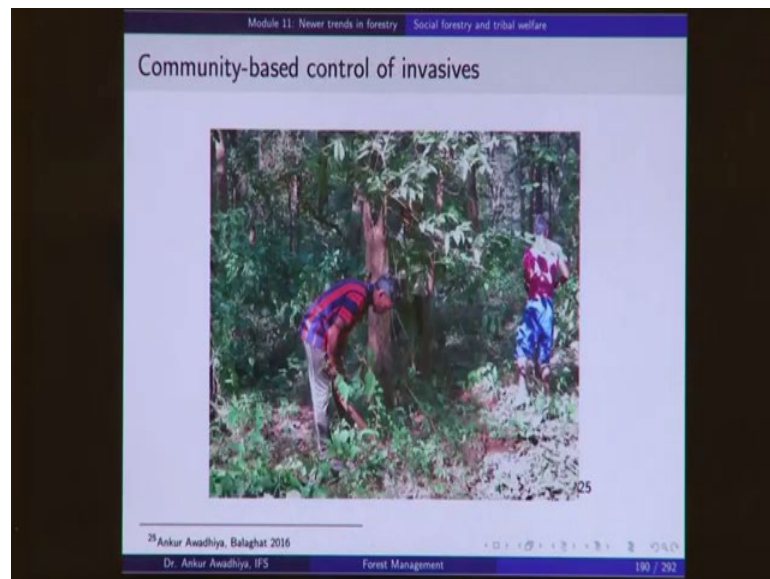
So, what sorts of activities, what sorts of benefits do we give to them? One, there is a huge amount of employment that is given during the plantation drives. So, whenever there is a plantation drive, we try to ensure that most of the people or say all of the people who are employed for digging of pits, for transportation of material, for plant for doing the actual plantation; they are taken from the JFM committees, so that when they are doing the when they are planting the plants themselves, they have a much greater emotional attachment to these plants. And, after all why are we doing this forestry? we are doing it for them only. So, we give them employment during plantation drives.

(Refer Slide Time: 44:33)



So, you can see these pictures for the management.

(Refer Slide Time: 44:35)



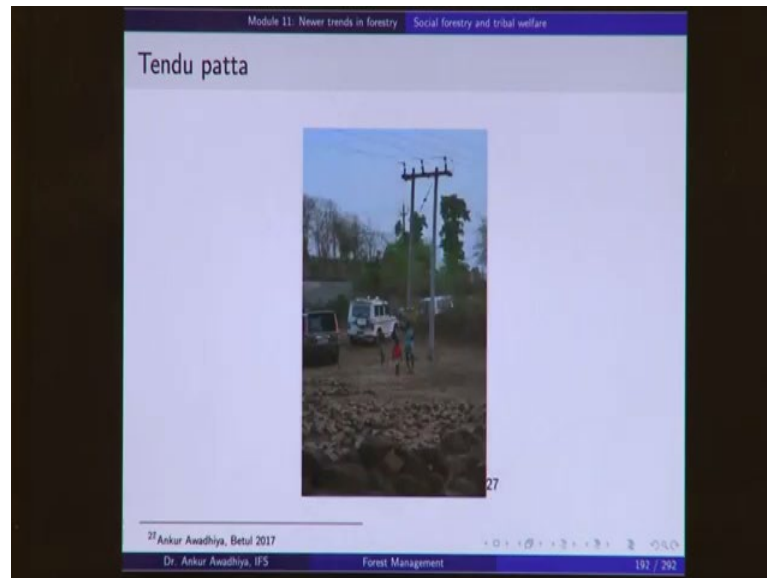
So, if there is if we need to control certain invasive plants, we do not give it to a contractor; we give it to the local society. So, the local community will employ their people to get rid of these invasives.

(Refer Slide Time: 44:53)



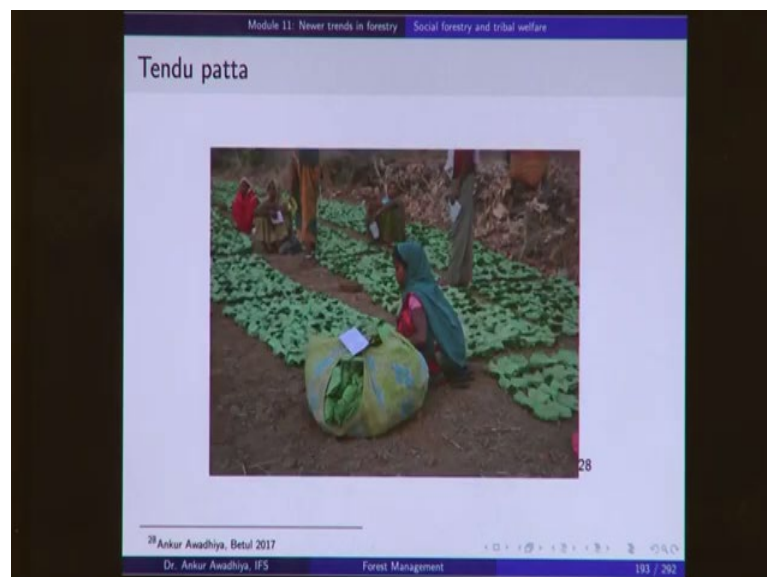
Tendu patta in Madhya Pradesh is specifically, and Maharashtra and Chhattisgarh, happens to be a very big source of employment and livelihood to the local people.

(Refer Slide Time: 45:09)



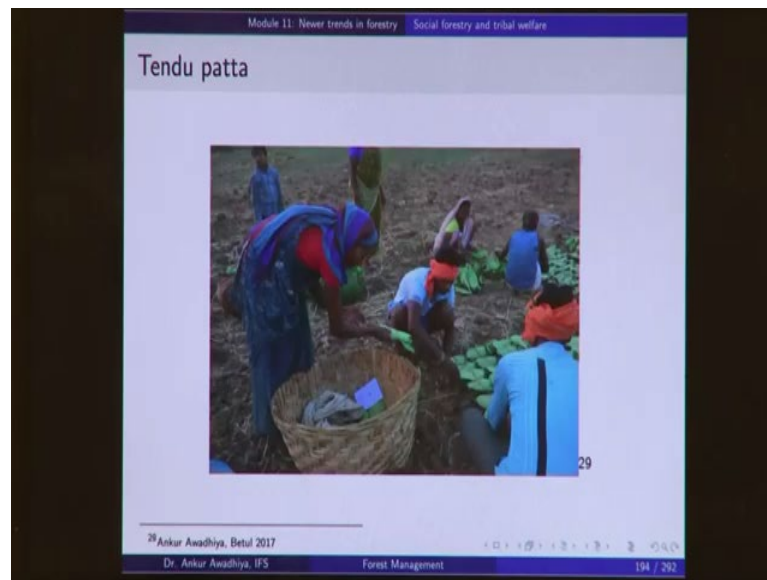
So, during the Tendu patta collection season, we will see that people will be bringing, and in this case, you will see that a number of women are also involved.

(Refer Slide Time: 45:20)



So, they will be collecting this NTFP from the forest; they will be bringing it to a centralized location that we call as Fahd. So, like this woman has brought these many tendu pattas, and here she is mean she is also carrying a record of how many tendu pattas she has brought. So, there is a very good documentation that is done, so that every person gets his or her dues.

(Refer Slide Time: 45:44)



So, once these tendu pattas are brought to the Fahd, they are then taken out and they are arranged.

(Refer Slide Time: 45:46)



Now, you can see from these images that women play a very big role in joint forest management.

(Refer Slide Time: 45:57)



So, now these tendu pattas are being spread, and in the beginning these tendu leaves look green in color. But then when they are left out to dry, the color changes and they become pinkish in color.

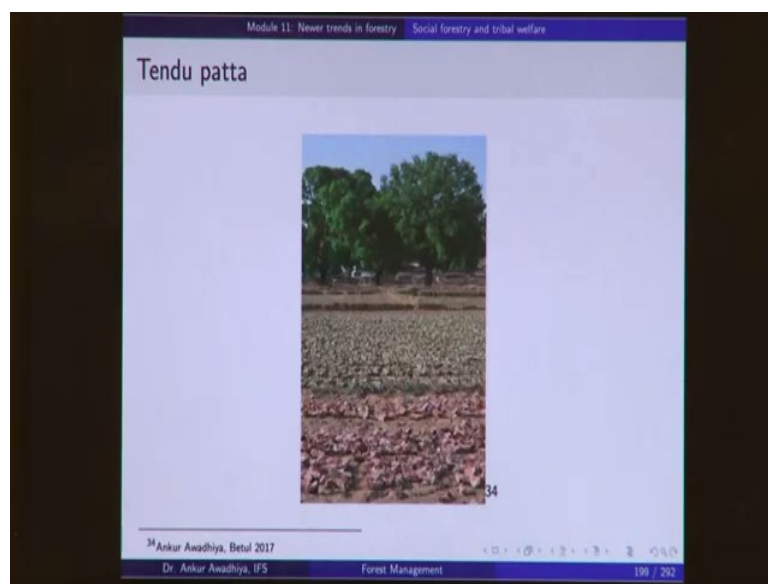
(Refer Slide Time: 45:59)



(Refer Slide Time: 47:07)

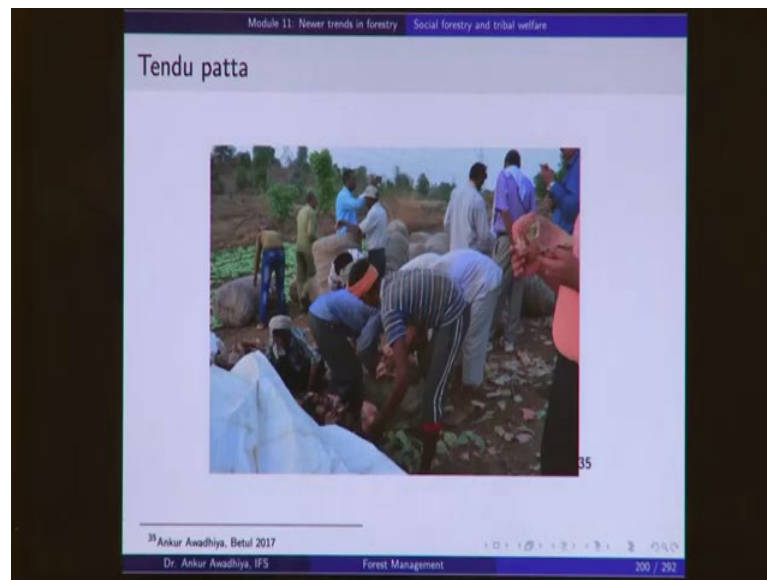


(Refer Slide Time: 46:10)



So, in a Fahd, you will see that there are so many Tendu leaves; some of them are green in color, some of them are have turned pink. And, when it has turned pink, it means that now it is ready for storage. The moisture content has gone down and so, it can now be stored.

(Refer Slide Time: 46:28)



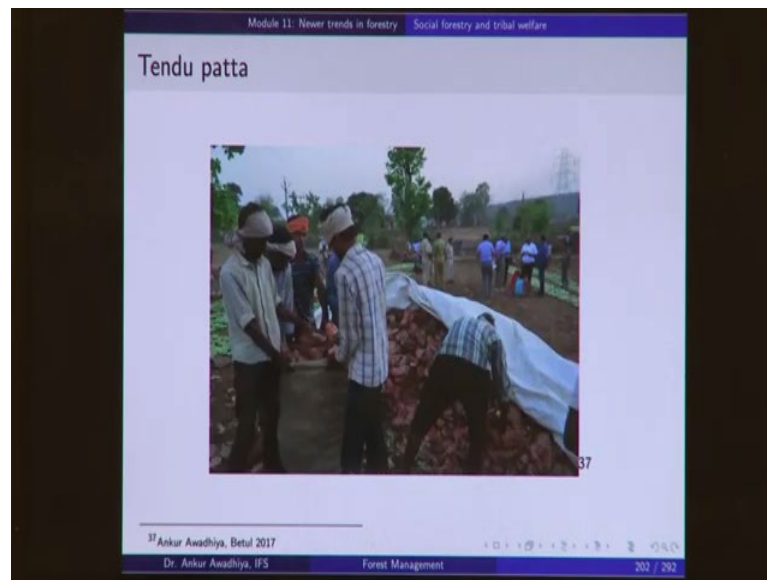
So, when it has turned pink; next, we this local community will do the packaging of these tendu leaves.

(Refer Slide Time: 46:37)



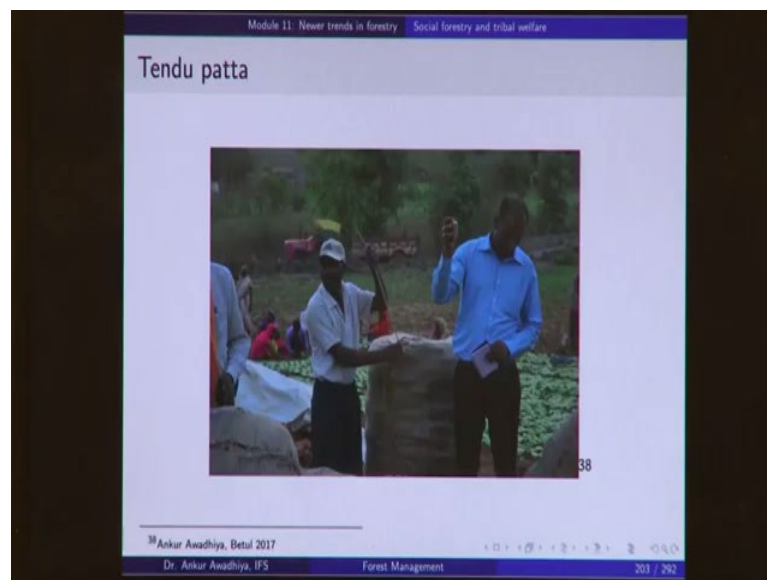
So, these will be put into gunny bags.

(Refer Slide Time: 46:39)



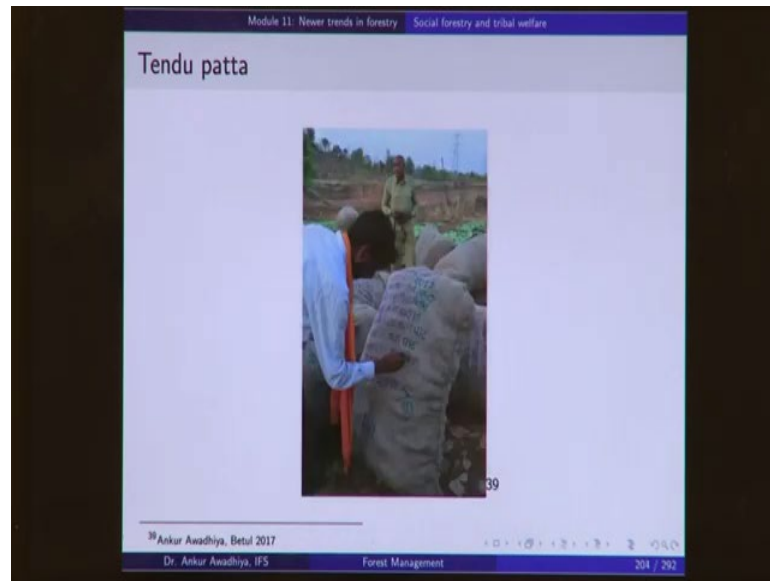
And so, here you can see that here we have this big pile of tendu leaves, and these people are putting it into a gunny bag.

(Refer Slide Time: 46:50)



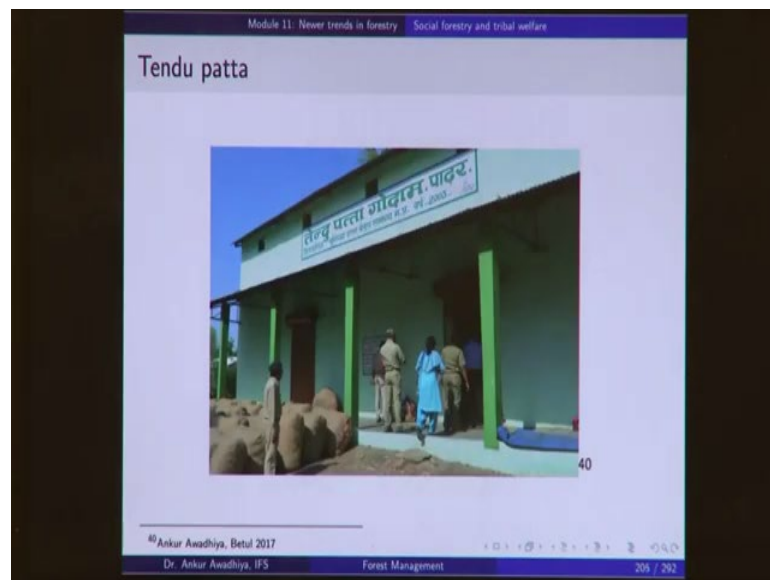
Then, these gunny bags are sewn.

(Refer Slide Time: 46:53)

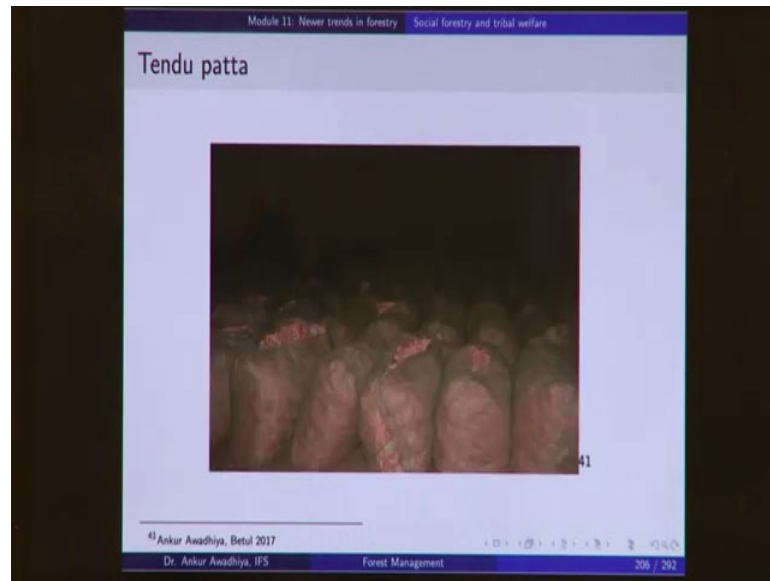


And, they are marked with the location, the year of collection, the samiti that was doing all this work. So, all those records are kept, and then it is shifted to a godown, where it is kept.

(Refer Slide Time: 47:03)



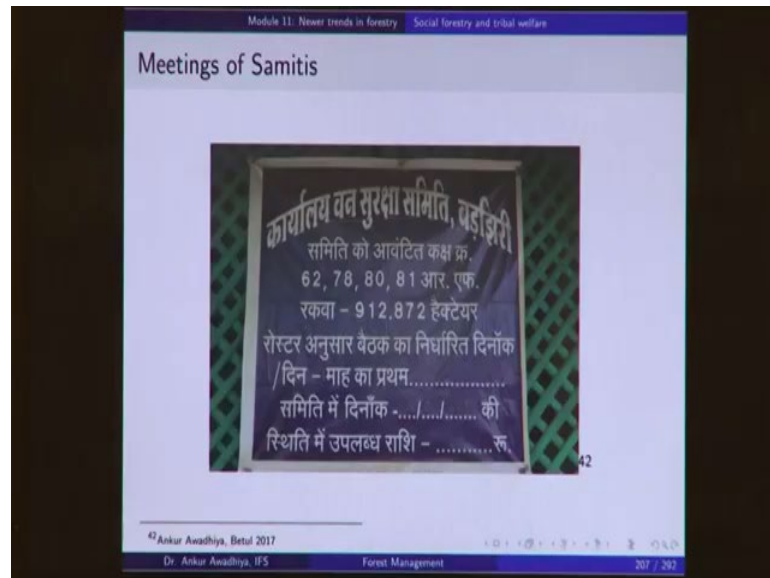
(Refer Slide Time: 47:06)



Now, when these tendu leaves are auctioned, in the case of Madhya Pradesh, we do it through a federation of these collectors. So, who is a member of this federation? All the people who are doing this collection work are a member. Now, these members are paid on the basis of the number of tendu leaves that they have brought. So, every year, there is a rate decided at which we will be paying to these people for collection.

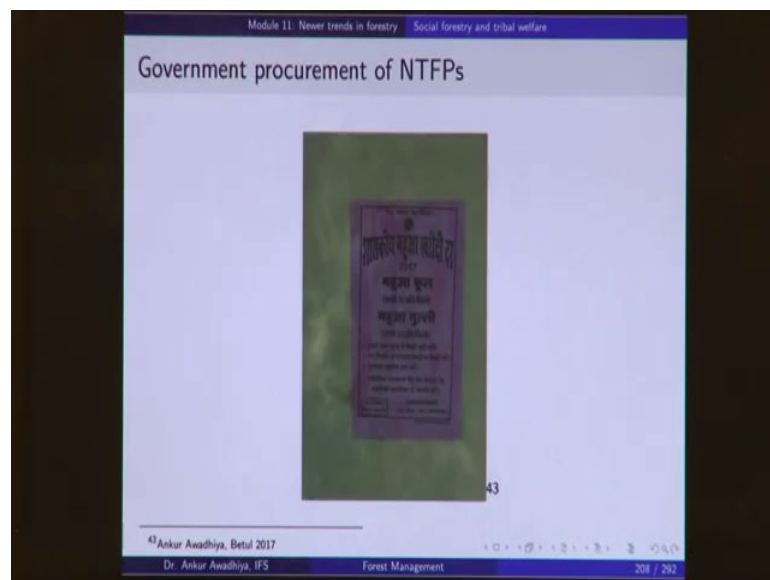
Now, once this collection has been done, these tendu leaves will then be auctioned off and all the money that that is received through this auctioning process; all of it is channelize back to these communities through the federation. And, in this way, they are able to derive benefit from the forest. So, this is one big way in which we incentivize the local community to protect the forest, because, if we if these people do not have a forest, they will not be able to collect these tendu leaves, and in a short while their incomes will go down.

(Refer Slide Time: 48:15)



Now, these committees; these local samitis, they also have their own meetings. They also have their own bylaws; they are doing all these managements by themselves.

(Refer Slide Time: 48:32)



At times, the government also puts up drives to facilitate the collection of certain other NTFPs. So, like here we can see an advertisement for the collection of Mahua; Mahua flowers and the Mahua seeds.

(Refer Slide Time: 48:52)



Here, we can see the Mahua seeds that are collected. Now, the point is why should government be facilitating this. Now, this is being done because the local community probably; because they are living in a very very interior area; they do not have access to the actual market rates and so, it becomes difficult for them themselves to negotiate the proper rates with the people who will be purchasing these products.

But then, if we combine them together as a federation; so, the federation has a much better position to denominate the rates and so, everybody will be able to get the proper rates. So, the government facilitates these so that more and more benefits are channelized to the local people.

So, the middlemen are removed from the system; the produce is collected by the by the people in the community, and it is sold directly to the final purchaser by removing all the middlemen; at higher rates mostly through auctions, and all these money is in channelized back to the people.

(Refer Slide Time: 50:15)



So, what we are trying to do here is to maximize the benefits that the local people will receive by conserving and by protecting the forest. Now, a number of these samitis have also set up local shops. So, here we are seeing a samiti from Punjab. So, this joint forest management samiti; what they have done is that, when they collect these NTFPs, they do they do processing of the NTFPs by themselves. So, they convert these NTFPs into things like Achar and Murabba, and these pickles are then sold by these communities directly to the tourists.

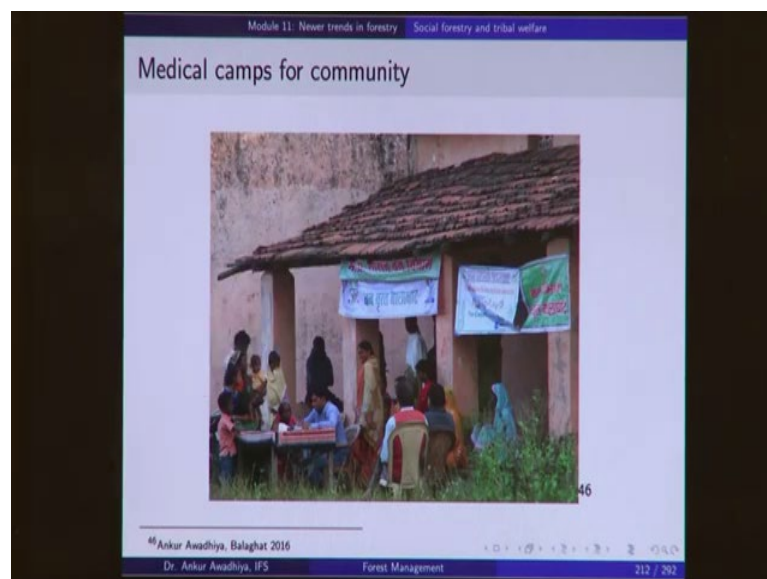
So, in this way, there is a value addition that is being done in the value chain and so, the profits of the community's increase. Now, the more the money a community gets out of the these forests; the more results interest to conserve these forests.

(Refer Slide Time: 51:04)



At times, we also outsource things like construction and management of forest nurseries to these samitis. So, here is a Van Suraksha Samiti or a forest protection committee in Harda district, who is managing their own nurseries.

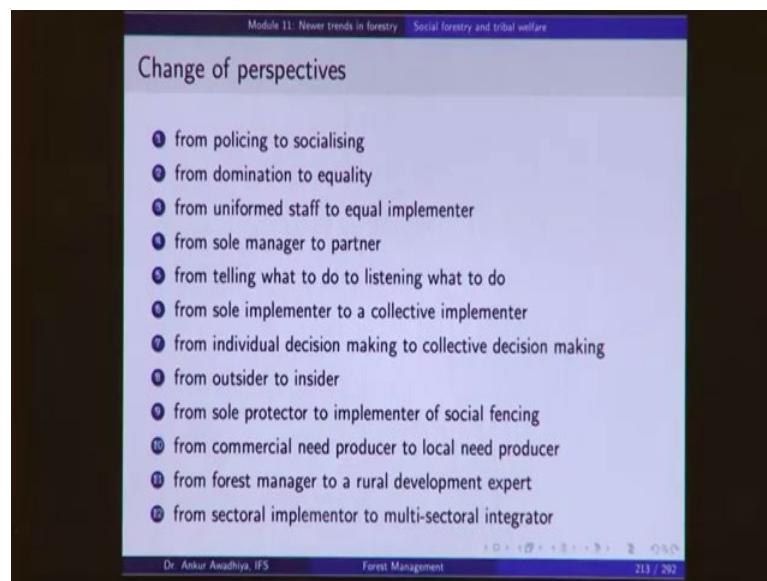
(Refer Slide Time: 51:27)



Then, in the joint forest management, we saw that in the making of the microplans; we ask people what do they want. And that times, people come up with these demands that we want to have a health camp.

So, if there is such a demand, what do we do? We facilitate the happening of a health camp through the government. So, in this case, we are seeing that there is this health camp that has been organized in consultation or with cooperation of the forest department in Balaghat district. So, the local people who belong to the samitis; they are now getting access to a doctor, which would have been very difficult otherwise. So, just because these people are organized in the name of joint forest management.

(Refer Slide Time: 52:34)



So, now, they have a much better voice; they have a much better say in their own lives. So, they have a much better control over their own lives. So, this is a very positive aspect of joint forest management; but in doing this, there has to be a change in perspective. So, we saw that in the traditional forest management, we were only concerned with timber and we used to say that forests belong to the government and we are going to do all the protection and people are bad for the forest.

When we talk about joint forest management, the things have changed completely; things have changed drastically. So, earlier we were doing policing, but in this era of joint forest management, we are doing socializing; we talk to the community; we do not punish this community; but we talk to them, we are a part of their joys and sorrows. And, we convince people that that they should not be cutting these trees, and people also enforce these regulations by themselves through their samitis. So, there is a change in perspective from policing of forest to socializing with the community.

From domination to equality. So, earlier the forest department used to dominate and say this thing has to be done; but these days in JFM era, the department and the local people are now equals, and both can say what needs to be done. From uniformed staff to an equal implementer of the policies; from a sole manager to a partner.

So, earlier, we were the - forest department was a sole manager of the forest, but now it is a partner together with the local community. From telling what to do to listening what to do. So, these days the community tells the forest department what needs to be done. So, if in a community, there is a huge demand for say fodder trees. So, the community will say that we have got two options; one you either plant the fodder trees so that our fodder requirements are met, or otherwise we will have no option, but to go into a forest and cut those trees that are providing the fodder.

So, in this case, the if you plant the fodder trees that are fast growing; that have that have large number of leaves, then that will also help in protecting the forest. So, these days the department is told what needs to be done depending on the local conditions, because the local community is the best judge of what is required in any area.

From sole implementer to a collective implementer; from individual decision making to collective decision making. So, it is possible that in the earlier era, one DFO or one forest officer would have said that this area requires say check dams, but the local community might say that we require check dams. But check dams are not that great a need for our community, but the provisioning of fuel wood is a much greater need. So, check dams can wait, but a fuel wood plantation is urgently required.

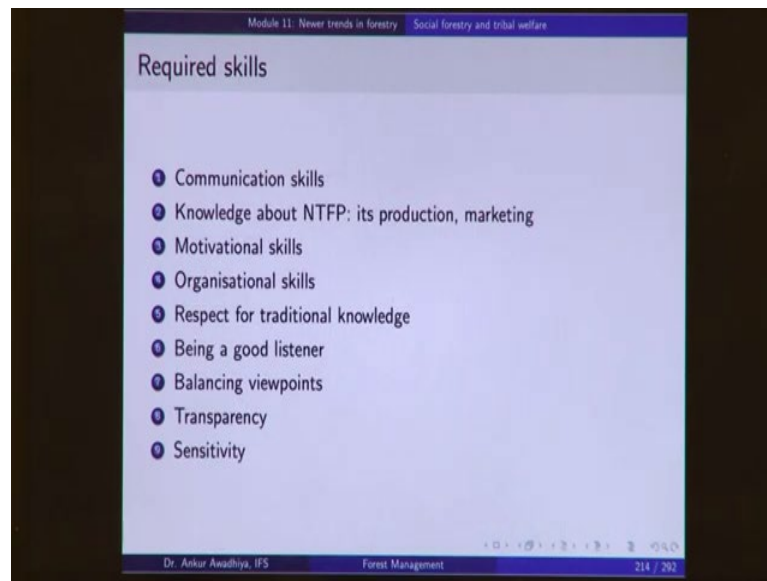
So, we have shifted from this individual decision making to a collective decision making. We also make use of PRA exercises which is Participative Rural Appraisal, in which we ask people to write down what are their needs and also to prioritize their needs. So, those needs that are high up in the list will be implemented this year, and those that are lower in their priority list will be implemented later on.

From an outsider to an insider. So, these days the forest department is an insider in every village; they are not looked upon as outsiders, from sole protector to implementer of social fencing, from commercial need product producer to local need producer. Earlier we were only looking at timber which was having commercial value, but these days in

JFM era, we are looking at the local needs; we are we are prioritizing the local needs; from forest manager to a to a rural development expert.

From sectoral implementer to a multi-sectoral integrator. Because as you have seen the forest department is now playing a big role in multi sectoral activities; such as provisioning of health camps, provisioning of education, provisioning of livelihoods and so, our role has become a multi-sectoral integrator.

(Refer Slide Time: 57:21)



Now of course, well-functioning JFM requires the department staff to acquire certain skills, such as communication skills; because in this era of joint forest management, you have to tell people, you have to ask people.

So, you have to tell them why conservation is important, and you have to ask them about their ideas about their priorities. So, a lot of communication is required; you need to have a knowledge about the NTFPs, production marketing, because it is primarily through NTFPs that you can provide benefits to the local community.

You require motivational skills to people; because you have to ask people to come sit in one place, and decide what their priority is; so for that you need to motivate them. You need to organize them organizational skills are required; you need to have a respect for traditional knowledge.

So, you cannot just go there and say, “ok! I have read so and so of things, and this is what is going to be implemented.” Because the local people might be having certain other information that you do not know; certain site is specific informations, for instance, there could be a village in which apart from the normal rains we also get certain rains in say the month of November.

So, this is an information that you as an outsider would not be able to get, but this is an information that the local people know; so, that can be made use of when you are planning the silvicultural operations. Being a good listener; balancing the viewpoints, transparency sensitivity; now, these are the skills that are very important when we talk about the forest management in this era.

So, in this lecture, we started with what of what do we mean by social forestry; why do we need social forestry, and how has this concept evolved through times. So, we saw that earlier in the 1960s, when we started with scientific management of forests, even in those days, we said in our acts that the rights of people will not be alienated; but then, the field implementation was not that good. And, because of which there was certain amount of resistance; there were certain revolts, by the local people against the department.

And, there was a demand that the local people should also be made a partner in the management of forests, in the administration of forests. Then, in 1931, the Van Panchayats came up. And, looking at the wonderful performance of those Van Panchayats, in the 1954, forest policy; and primarily in the 1988 forest policy, we changed our policy and we said that we are going to do a protection of the forest through a massive involvement of the local people. And, we are going to cater to their local needs as well.

So, in this era, we try to maximize the benefits that people can derive out of the forest primarily through payment for ecosystem services; provisioning of employment and NTFPs. And so far, the experience in joint forest management has been extremely wonderful. So, that is all for today.

Thank you for your attention [FL].