

SEMINAR

'RELATIONSHIP OF FOREST ECOLOGICAL AND GOVERNMENT STATUS WITH WILD FOOD DIVERSITY AND QUANTITY'

DATE

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VENUE

SURYANSH HOTEL, BHUBANESWAR

SUMMARY

Traditional hunter/gatherer and shifting cultivator communities consider their identities to be an integral part of the forest on which they depend for subsistence and survival. This indigenous worldview, in which the value of the forest is beyond its use value as 'resource base', is reflected in the people's reverence towards the forest and its biotic components, which are sanctified and conserved through a set of cultural-religious practices.

Forests and tree-based systems play an important role in the lives of these communities by complementing agricultural production by providing better and more nutritionally-balanced diets and contributing to dietary diversity. The wild foods from the forest show a viable alternative to the conventional calorie-centric metric of food value by quantitative nutritive dietary value, in addition to a broad set of ecosystem services that enhance and support crop production in farm fields.

There is adequate scientific evidence to show that diversity provides a natural insurance against major environmental vagaries, both in the wild ecosystems and agricultural farms. It is also known that genetic diversity is crucially important for building resilience in highly variable environments, especially in areas experiencing rapid human-induced climate change.

However, field experiences and official records in the districts of Southern Odisha show that forests have become denuded, and their indigenous species diversity getting truncated as a result of commercial plantations of exotic trees. As a result, the forest physiognomy and composition are changing rapidly. When the food provisioning service of biodiverse forests is destroyed, a critical source of food and nutrition security for the local populations is lost forever. The negative consequences of the shrinking of forest biodiversity is particularly experienced by women who gather all non-timber forest produce (NTFP), including uncultivated foods.

It is in this context that Living Farms in collaboration with Rosa-Luxemburg-Stiftung has been conducting an action research on the relationship of forest structure and biodiversity with wild food diversity and availability.

The action research has already (1) generated a set of benchmark data to reveal the forest ecological determinants of food diversity and availability; (2) estimated the quantity of food biomass flow from the forest into the villages; (3) indicated the influence of the mode of forest governance and management on the forest ecosystem properties, and subsequently, on the food provisioning services of the forest; and (4) assessed the nutritional value of different items of wild food.

The seminar aimed at sharing the findings of our action research and having a meaningful dialogue with concerned stakeholders to explore policy support mechanisms in order to re-align our forest policy with food and nutrition security as a principal objective.

DAY 1

WELCOME REMARKS

Debeet Sarangi of Living Farms and Tauqueer Sabri of Rosa-Luxemburg-Stiftung (RLS) welcomed the dignitaries and guests to the two-day seminar.

In his opening address, Debeet Sarangi said the food system of Kondh community is being termed by many in the mainstream as non-economic and non-viable. As a result, their food culture and ecology are being threatened and enforced extinction. We understood now and many of who have visited them would know that this food system has multi-dimensional benefits in terms ecological, environmental, socio-cultural services and the resilience of the whole community to the crisis we are all facing. So, what do we do and how do we respond and therefore, the thought of a dialogue process with their children going to school, NGOs operating there and different parts of the state, the media and the government. Many of our friends within the media think of their food as something that humans should not consume and that is how they had covered about them in 2011-2012. It is that direction that we conducted a study, Forests as Food Producing Habitats, to understand the extent of dependence of Adivasis and other traditional forest dwellers on forest food.

This study has been complemented by continuing activism that begun in 2016, Dr Debal Deb is the principal contributor in the findings of this study.

Tauqueer Sabri said RLS works in India, Sri Lanka, Nepal and Bangladesh. In India, we are working on three issues – transformation and issues related to labour, agriculture and how food system of indigenous community and how they are managing it and challenging the dominant trend the rejects the food. He said Living Farms has done good work for the research study, visiting forest sites and collecting information and his organisation is looking forward to working on this issue, which will help the indigenous community reclaim their food sovereignty.

OPENING REMARKS

Executive Director of Gramya Resource Centre for Women and Co-author of the report

‘Forest as Food Producing Habitats’ Dr Vijay Rukmini Rao said there is awareness that forest community survive because they have access to forest. The British had even acknowledged this. The study that was done 2014-15 in 24 villages of Rayagada and Sundargarh districts documented the type of food still available and used by the community dependent on forests. The study found that the Adivasis consumed 121 varieties of food and it formed a significant part of their diet, when food was scarce or ran out of their PDS rice. This food was readily available and free of cost. They would go and collect it from the forest. The most beautiful aspect of the finding was that they shared the food with others in the community. It is kept in the open and everyone has a bite of it. The forest is endowed with leafy vegetables, which they fed on. Against the backdrop of 47% women malnourished, 42% children stunted and the rising anaemic cases, it can be easily concluded that the greens if found in adequate amount can address all these problems. They ate Berries, which are oxidants and healthy. As we know, Adivasis didn't suffer from obesity and diabetes. While a variety of food was available in some forests, it was not the case in others. We felt the need for a study to understand the governance system and what has helped a village to maintain the diversity and why in some areas that diversity has disappeared, which the concurrent study looked into. Therefore, we should continue to learn and debate about what more can be done in this regard. The most important question is climate change. We all know that nature is much more resilient to mainstream crop. We found that millet, which is a traditional food crop of the continent, was much more resilient than the hybrid varieties. Exchanging traditional varieties of seeds also keeps things going.

Food basket included leafy vegetables, fruits and berries, mushroom. Government policies hamper survival of the diversity of the forests. The study showed that despite government schemes, forest communities collect 50% of food from forest, especially during scarcity.

Food security has gone to a different level that is food sovereignty. Forest people are exerting pressure and asking for control over food system, they are consuming and like to consume. There are foods of medicinal value, which needs to be explored in the future.

The study also showed that not only government, which neglected and attacked Adivasis way of life, but also the civil society never really looked at the community and the forest as food producing environment, serving a very important function. Even NGOs see forest

produce as a source of increasing income. The focus has only been on income instead of health.

The previous study highlighted the mainstream society is blind to what is available out there and we don't have respectful conversation with Adivasis to learn from them. It helped us to understand what community felt about its food and how they are using their habitat for improving their living conditions.

Now, 42,000 cr is available with the forest departments to green the environment, but it is done without consulting the locals. Eucalyptus and other timber-producing trees are planted but felling the indigenous varieties without understanding how these would affect the community settled there.

We hope to come up with strong recommendations, which we can give to the government and try to change direction. We will look for a mechanism and methods to enrich the forests again, make it available to the communities while making them part of the whole enterprise.

Fortunately, Odisha is one state that has given common property right in Odisha. But the moot question is how to maintain and improve the ecological balance.

Dr Prasant Kumar Das of Odisha Biodiversity Board spoke about the Board, which was formed in 2009 but actually started working in 2014 after the rules were framed in 2012. The Board's mandate is to advise the state government in any matter related to conservation of biological diversity and its sustainable use and on equitable sharing of these resources. This study is important for us. We want to know what the study was carried out and its findings as we engage in similar research works.

Odisha has around around 3,000 species of plant and 2,000 species of animal. Besides the protected areas, 1,000 of communities are protecting and engaged in conservation forests. These communities need to be supported and their effort acknowledged. The Biodiversity Act is implemented basically to respect the traditional knowledge eroding rapidly. To support the cause, Biodiversity Management Committees are being constituted in 22 districts of Odisha. They are required to prepare people' biodiversity registers and collect data on biological resources in the local area at Gram Panchayat level. Once the information collected is validated by the Board, these will be as baseline documents based on which the committees will monitor changes in the coming days. We are working on Biodiversity Heritage Site. The draft guidelines have been prepared and sent to the Commerce Department.

Training programmes are being conducted for people engaged in collecting food from forests on legal provisions and ayurvedic firms. To sensitise them, programmes are being broadcast through different media, including radio.

He concluded by saying that this is the only Act, where there is no restriction on collection if for personal use. There are different provisions for those collected for commercial use.

FINDINGS OF AN ACTION RESEARCH

The study of 2015 was first of its kind in the country to highlight the quantitative relationship between management and governance status of a forest. It is common understanding that when there is a good forest, rich in biodiversity, then large varieties of foods. Though it was qualitatively accepted, there was not hard data to substantiate as to how much actually go to the households in villages and the proportions of types of foods.

What the previous study didn't show was what type of forest could provide a wide variety of food. We wanted study as to which forest was rich in diversity as government agencies made a caricature of it by opting for monoculture, planting Eucalyptus on hectares and hectares of land. After quantification of forest food, we wanted to address that issue in this study carried out between January 2016 and March 2017.

Objectives and Plan of Work

1. To understand the link between forest biodiversity and ecological features with availability of food items.
2. To assess the diversity and quantity of food items from forests under different management regimes, CFM (entirely managed by the user community), JFM (co-managed by the community and the Forest Department), and RF (entirely by the Forest Department).

Two forest areas, one under CFM and the other under JFM, each in the districts of Rayagada and Bolangir were selected for the study. The aim was to assess the status of forest (basal area, density, canopy cover) and biodiversity (species diversity and abundances, evenness and dominance), and relate these indices to the diversity and amounts of forest foods harvested by the villagers.

In Rayagada, forest adjacent to Sikabanda and Sindhupunk in Bissamcuttack Block were picked. Both the villages comprise Kondh households. Sikabanda villagers began managing the forest in 2009, disallowing the Forest Department from undertaking plantations and

felling of trees. The Sindhupunka villagers are members of Van Suraksha Samiti under Joint Forest Management with the District Forest Department.

The forests in both Sikabanda and Sindhupunka are Moist Deciduous Type. In Sindhupunka forest under JFM, a few patches are planted to teak interspersed those of native plants

In Bolangir, Kutasingha (CFM) and Singjuri (Reserved Forest) in Loisinga Forest Range were selected. Villagers of Kantapali, comprising Brahmins, Scheduled Caste and Other Backward Castes, had been managing Singjuri forest since 1984. They protect the forest from wood theft and NTFP collection by people from other villages, and stopped the Forest Department from undertaking plantations of exotics as well as clear felling. The Singjuri Reserve Forest is entirely protected by the Forest Department, but its porosity allows people from different villages, including Kantapali, to collect NTFP.

The forests of Kutasingha and Singjuri are contiguous, located on either side of a highway, which marks a boundary between the two forests. Both are Dry Deciduous Type.

For assessment of the biodiversity and structural status, standard forest mensuration methods (West 2009) were adopted. For quantification of harvest of wild food, the day's harvest by household members was sorted and measurement of wet food biomass taken. All edible fruits, mushrooms, tubers, flowers, leafy vegetables, and animals and animal products (like honey) were weighed using a spring balance on every occasion of collection from the forest.

For nutritional quantification, all biochemical analyses were performed at Basudha Biotechnological Laboratory for Conservation.

Major Findings about Forest Ecology (April 2016 –March 2017)

Forests of Rayagada District

Tree density of trees in Sikabandha forest is 736 *per* ha, compared to 548/ha in Sindhipanga forest.

The tree diversity, density and basal area in the Sikabanda forest under CFM appear to be greater than that of the Reserve Forest of Sindhipanka. The total basal area seems to occupy less area where relatively older trees are numerically dominant.

The number of tree species in Sikabandha forest is 41 as against 33 in Sindhipanka forest. Both the tree species number and diversity are significantly higher in Sikabandha than in Sindhipanga forest.

The greater uniformity of species abundances in Sikabandha accounts for its greater diversity indices than that of Sindhipanga forest. The predominance of *Cassia siamea* in the plantation accounts for a narrow range of tree species in the forest under statutory protection. Conversely, owing to maintaining a greater number of species through community protection, the overall ENS for Sikabandha is about double that of Sindhipanga.

The diversity of forest food biota seems to be greater in Sikabandha forest than in Sindhipanga. The range of forest food flora includes edible flowers, tubers, fruits, leaves, and mushrooms. In addition, leaf stitching ants (*Oecophyla smaragdina*) snails and crabs constitute the repertoire of edible fauna periodically harvested from the forest.

The repertoire of forest food items from the Sikabandha forest under CFM far exceeds those from Sindhipanga forest under statutory management. In the case of Sikabandha, the maximum number of wild food species collected from the forest is 28 (in the month of June), while the maximum number of food items from Sindhipanga forest is 6 (in the month of July). The mean number of food items gathered from Sikabandha forest is more than 4 times that from Sindhipanga forest

Forests of Bolangir District

The number of tree species in the Kutasinga forest under CFM is 45, while that in the Singihuri Reserve Forest 34. However, the density of mature trees in the Singjuri RF is 1365 *per ha*, which is greater than that in the CFM forest, where it is 1311/ *ha*.

The number of tree species in Kutasinga forest is 45 while that Singihuri 34. Though tree species number is significantly higher in Kantapalli CFM forest than in Reserve forest, the Shannon-Wiener diversity is greater in the latter. The relatively greater diversity in the RF is due to the fact that plantations of teak and *Eucalyptus* accounts for greater uniformity of species distribution than in the Kantapalli forest, where there is only one patch of eucalypt plantation.

The diversity of forest food biota seems to be greater in Katapali forest than in Singhuri Reserve Forest of Bolangir. The range of forest food flora includes edible flowers, tubers, fruits, leaves, and mushrooms. In contrast with the forests of Rayagada, leaf stitching ants (*Oecophyla smaragdina*) and snails are not harvested from the forests of Bolangir. Clearly, local food culture of the villagers depending on the forest is an important determinant of the diversity and quantity of wild food influx into the villagers.

In the case of Kantapali forest under community management, the maximum number of wild food species collected from the forest is 7, which is almost the same as the number of wild food species from Singhuri RF.

While the number of wild food biota gathered from the forest is roughly the same for both Kantapali and Singhuri forests, the quantity of food biomass harvested from the two forests is widely different. The highest amount of these food species harvested from Kantapali forest is 748 kg, whereas that harvested from the RF does not exceed 87.6 kg. The total annual harvest of wild foods from Kantapali is 2544.7 kg, whereas the annual quantity of food biomass harvested from Singhuri forest is 345.3 kg.

Findings

The study revealed that the number of food species, including mushrooms and tubers, directly dependent on the ecological status of the forest. Clearly, if a forest has a poor stock of biodiversity, the number of food species, being a subset of biodiversity, will obviously be scanty. However, even when there may be a considerable number of food species, the biomass of the items may be too inadequate for consumption by the villagers.

It also showed standing tree diversity as a strong indicator of food biomass available in the forest. In addition, basal area is a strong determinant of greater food biomass available in the forest. However, tree density seems to be a weak indicator of food species diversity and biomass

The Nutritional Value of Wild Foods from the Forest

The nutraceutical analysis of the samples of wild foods collected from the forest indicates that the forest villagers obtain a rich supply of carbohydrates, vitamins and anti-oxidants from the forest. It is not yet complete, and is being carried out in the Biotechnology Laboratory for Conservation, Kolkata.

The analysis showed presence of a large range of B vitamins and pro-vitamin A (*beta* carotene), metals, in addition to diverse ranges of macronutrients in the wild food items. Biochemical parameters like anti-oxidant activities and metals like Fe confer specific medicinal properties on the food items. Regular consumption of these nutrient-rich food items may help to eliminate anaemia and malnutrition from the population. One reason for almost no incidence of cardiovascular diseases and cancer among the community is the periodical consumption of wild food items rich in iron, vitamins and anti-oxidants.

Results of nutraceutical analyses are given below.

1. Gandhiri sag contains a huge amount (68 µg/g) of beta carotene, and three mushrooms examined also contain considerable amount of beta carotene.
2. Mundi kanda and Langala kanda contain immense quantities of iron and zinc.
3. Ambli sag and Gandhiri sag have high concentrations of Mn, Fe and Zn.
4. Very high anti-oxidant activity is recorded in Putkel chhatu, Ambili sag, Gandhiri sag and Phanji sag.
5. Baunsho chhatu and Gandhiri sag contain considerably higher levels of soluble protein than many pulses.

Q&A SESSION

Q1. Most forests in India are controlled by government system with Bio Diversity Management Committees involved in protection of bio diversity. So, how can we study CFMs isolated from government system? **(Subhransu Nayak, Biodiversity Board of Odisha)**

A **(Debal Deb)**: Before the first forest law was enacted, all forests of the world were in the hands of the people. These were snatched by the colonial rulers and then the first Act of 1865 ensured that forests belonged to the government. Except for the 10 Royal Reserves for hunting, the forests were with people and not even the kings. These CFMs came into being after the passage of the Forest Rights Act. But 50 years prior to that, management and governance of the forest, what trees to be planted and which among these would be harvested for the benefit of the people, was determined through participatory decision-making process of the community, which was similar to what we call today CFM. This arrangement existed for centuries and was unfortunately bypassed by governments and policy makers.

In this study, the community-managed forests don't enjoy the legal status of CFM but doesn't interfere with their management. They are de facto CFMs as for the last 12 years no forest beat officer has ever visited these patches of land. The others are being actively managed by the state with regard to felling and plantation of trees.

Q2. How difference would have the findings if it was a CMF or non-CMF study. What is the next step after the study as in what do we do with these issues and how do we engaged at the next level? **(Sanjoy Patnaik, Independent Researcher on Forestry)**

A **(Debal Deb)**: The study not only throws light on bio diversity of a forest but also co-relate it to the density and basal area, which determined by the management and governance. Suppose, we take a forest, where there are 10 varieties of trees. Local people decide to plant Mango and Mahua trees while retaining the number of species. On the other hand, the forest department decides to do away with Mango and Mahua trees as these have no timber value and instead plants teak and eucalyptus. The number of species in both cases is the same. Therefore, it is not only diversity but also density and evenness index depend on the management.

Essentially, we started the study in 2014 and followed it up in 2016 with two objectives: Scientific, peer-viewed publication which can form benchmark status with regard to classification of forests and its governance status linking with forest food availability. Also to convince the policy markers that forest it is not about carbon fixation and timber, it is also a direct source of food. Communities depend on forests for their daily requirement of food and nutrition irrespective of availability and prices of food items in the market. We have already this nutritional security build into the forests, which people have been using for

centuries without acknowledgement. This seminar is the first step towards the second that is convincing the policy makers. And I am that the gathering appreciated the study and also questioning the rationale behind it.

(Debjeet Sarangi): The findings of the 2014 study was used to reach out to the villages, celebrating this food culture by organising food festivals across the panchayats and brining in the youth into such dialogues, thereby reassert the habitat. Some women are regenerating degraded forests with locally appropriate plant species and resistance against monoculture plantation is happening at the village level. The other focus area is nutrition-sensitive interventions, how do we can reorient our food system and agriculture. Such experiments are going on at Bastar in Chhattisgarh and Angul and Korput in Odisha with the support of government and other NGOs.

Q3 (Suggestion). I do see a good progression in this study being taken up and what is possible in terms of getting an outcome from such research, in continuation of that in 2014. It basically established that in food security discourse, forests are being ignored. Organisations working with forest dependent communities saw forest food gathering in the livelihood context as an income generation source and not necessarily as food and nutrition security of the communities. The 2014 study has helped in recognising forest as an important component of food security. This is the natural progression from the earlier effort in trying to see if you recognise forest as food producing entity and an important component of food security, then what kind of forest support it. To that extent, it has compared two different types of forests and governance structures and what is available and what is being harvested is an important measure. But what I found by bringing in a mixed community, the study concluded that where availability is there, communities are not sensitive to the use of the species as food. Moreover, in SFM mode several plants are non-food species and we should have had a slide on it. So, the real difference in these forests doesn't get hidden in the number of species. The focus should have instead been on the food harvested to show dependence of the community on the forest. It would have shed light on whether communities have to be sensitised on food availability and their nutritional value as eating culture influence the food harvested quantity. **(Kavitha Kuruganti, Trustee, Living Farms)**

A (Debal Deb): The trees species stand as an indicator of diversity and not necessarily food species as the communities also consumed mushrooms and red ants found in the forests. Though the food harvested in Bolangir and Rayagada was different, it can't take away from the fact that there exists a difference between CMF and JMF, and former is better managed of the two in term of food availability and those harvested.

Q4 (Suggestion): There is a common allegation that people harvest too much from forests. Therefore, the government took these under its control. The common and community-

managed forests are very different. Common land includes grassland and grazing land. In community-managed forests deliberate decisions were what trees to be planted and who can use these. This was a good practice when 2/3rd of the total area was forest. When talking about diversity, we should not confine it to forests alone. The Bio Diversity Board should also look into wetland, grassland and watershed management. Bio diversity should be brought into the farm and agriculture practices. Today, if we are only talking about diversity in forests, it is not good enough. The question that is being raised is not only about government-controlled forests, but also compensatory afforestation by mining companies. Here, we don't follow the agro-forestry approach, instead go for eucalyptus approach. Therefore, the problem is with the approach. We follow the culture of destruction instead of appreciation. The role of local knowledge should be appreciated. All tree species cannot be harvested, but the practices involved in harvesting a species or getting juice from Salap tree should be protected. We need to appreciate the thought that has gone into management of a forest. The trees are not the only food source. There are insects that are also consumed. Therefore, it is important to know how much density of forest can sustain them. These should be, therefore, included in the subsequent studies. **(Ardhendu S. Chatterjee, DRCSC)**

Q5. Any plantation was done in community forest or was there any system for managing tree species? The gatherers in the study were Advivasis and mixed community. I feel it unnecessarily complicated the studies since their food habits are different. To maintain the balance, should further study include two tribal communities? **(Dr Rukmini Rao, Gramya Resource Centre for Women)**

Q6. Did the study show any trend in decrease or increase of the varieties/species of trees? **(Mithun)**

Q7. The Government focuses on revenue generation and timber products instead of regeneration and protection of community forests. Therefore, there a need to have a dialogue with the policy makers, so the findings can be incorporated while making policies. Diversity is attained mostly through protection and regeneration. **(Dr. Sricharan Behera, Independent Researcher on Forestry)**

Q8. How much of the harvested food was for household consumed and how much sold? **(Sonali, Spread)**

A (**Debal Deb**): It is definitely complicated (tribal and non-tribal) as realities are. The objective was to show whether was low or high dependence on forest. The study showed the difference in the management system. In community-managed forests, quality of biomass is significantly higher.

As far as trend is concerned, those managed by state has witnessed rise in plantation of timber-producing trees, especially in the last 10 years. In reserve forests, the focus should be on conservation and not felling of trees.

In CFM, there also has been a decline in a few species. It is because of loss of traditional knowledge system about forest maintenance. The art and science of managing trees is somewhat lost in Rayagada, where it is more random. In Bolangir, trees are harvest and selected depending on surrounding density. Gandiri sag is depleting and trees, especially Kendu, are pruned to have perpetual flow of leaves for commercial purpose. By not allowing Kendu to grow, trees of other species are depleting. This is because of lack of knowledge about relationship between different species. There has a rise in some species of trees too. This can be attributed to protection or lack of intervention and no rotational harvest.

We role is not confined to conducting studies. We are actively intervening and training the villagers (hands-on training) on how to sustainably harvest the trees species. In case of tubers, the practice is to leave a few of them behind for the next season.

Food habits, dependence on forest more among tribals. The biggest issue confronting us today is how to regenerate our food against the backdrop of loss of knowledge and practices. A massive mass movement needed for protection of forests.

Questions were also asked on the types of forests taken

No single study can address all issues. There are political and industrial pressure and violation laws. The objective of the study was very clear that was to find the relationship between ecological and government status of the forest with the quantity of food produced. There are ethnic differences among same tribes and their food system. I am convinced that to maintain natural resource base, illiteracy is not necessary as it doesn't mean ignorance. Tribals were considered non-literate community.

We were not concerned about the commercial aspect of the food harvested. We are focussing on food. It is for NTFP like Sal and Kendu leaves, which is for commercial purpose, and these are not consumed. We have taken into consideration the biomass flow into the village, influx into village and correlated it with status of the forest.

Kavita Kuruganti mentioned how food inflow was calculated in the previous study.

Q9. Did you undertake anti-nutritional study, loss traditional knowledge and non-use of these produce? (**Dr.Hemanta Kumar Sahoo, Vasundhara**)

A (Debal Deb): The study did not include which species have been lost because of loss of knowledge, though these have. There are food items that they stopped eating because of loss of knowledge. We have quantified the food consumed and therefore, there is no room for misinformation.

Q10 **(Suggestion)**. Something must have motivated or elicited the communities to take up protection of the forests. At the end of the study, we should be able to give the forest departments the factors that will lead to better nutrition security. **(Kavita Kuruganti)**

A **(Debal Deb)**: CFM is much better in enhancing the ecological status/ bio diversity of any forest. Combined with the study, it gives better services with regard to food. Our focus was on food. The influx of food into households depends on the ecological status. Better CFM means better access and harvest of biomass, regardless of the cultural practices and food habits among the communities. Within the same milieu, we found that CMF means more harvest. The nutritional supply was also better, though I was not able to show it since the analysis of food is still on. When we related it to biomass of each food, we can give a comprehensive picture of the nutritional intake. It, however, showed that biomass flow of Vitamin-rich or Iron-rich food was much more from these forests.

To enhance and maintain bio diversity, we have to hand over management of forests to community in term of effective number of species. As government does not take into account food choice of the community and instead denotifies reserve forest for industries. If this practice continues, there is no point in conducting such studies and preparing registers about bio diversity.

Q11. **(Suggestion)** Govt should redefine nutrition? **(Sanjoy Patnaik, Independent Researcher on Forestry)**

Q12. **(Suggestion)** There should study on food consumed, nutritional status and effects? **(Mr. Soumen Sarangi, PhD Scholar)**

A **(Kavita Kuruganti)**: Nutritional study would require a lot of resources and years of research work.

(Debjeet Sarangi): We need to do a few more critical works.

(Debal Deb): This seminar might form the platform for launching further studies. I also request other organisations to replicate it in other districts.

'We Are As Much A Part Of The Forest As The Forest Is Part Of Us'

Kondh Community: Jagannath Majhi, Kandi Sikaka, Sukamati Sikaka And Surjamani Kadraka

Jagannath Majhi

We share an intimate relationship with forests. People think of forest as a piece of land with flora and fauna. But we may not be able to count the food species available in a forest. Forest is not just a food source, it is intertwined with our life. A good forest is the one that hosts all types of animals, birds and tree species. Our connection with the forest is deep. From some plants, we get fruits and flowers, which are consumed, and they are also used them for preparing beverages, oil and for worshipping purpose. That is how entrenched forests are in our life. We are what we are because of forest and forest is for us. It is the root of our existence. I am what I am because of forest. We don't look at forest as a commercial entity or a profit-making venture. It is our mother and we consider it a duty to take care of her. We cannot sell her for money. The forest and its species are part of us. We care for them as they take care of our food and nutritional needs. We, therefore, plant seeds that are useful for us. Forest teaches us the way of life, where there is space for all without any discrimination. We understand forest and the traditional practices, which has kept it alive. The collection process helps in regeneration of forests. The food consumed is as per the season. We don't want anything from the government.

Debjee Sarangi: This something we have to communicate to the actors, including NGOs. There is another world, another world view and their relationship with forest need to be understood while designing our programmes and that of the government. During one of my visits to a Kondh village in 2014, a frail looking woman said stop meddling with our forest and land, we don't want your Rs 2-a-kg rice. We need to recognise the relationship of the communities with forest. When we will draft our asks, this will be one of them.

Debal Deb: Time and again, people and media has looked down upon the food system of the Advivasis. Mango kernel, an uncultivated food, has been attributed to starvation deaths. However, no famine situation has been reported in the recent past. Food scarcity is more in the plains than the hill, where millet and beans are supplemented by forest produce. The quantity of sale of forest produce has increased in the recent past, which shows that the forests are still good. Forest provides them much more than their need. Khond food system is rich and diverse.

Kavita Kuruganti: When government didn't exist, no PDS exit. They mean to say, you came along only now while we have survived all these years by growing and gathering food in the forest. The traditional practices are the key for survival of forests. Since what we eat is rich in nutrients, there is a need to preserve these before they are forgotten. Bamboo rice is a sign of distress and not mango kernel, which becomes controversial when it gets contaminated (storage fungi).

Rukmini Rao: Not all forest foods are highly nutritious and many among them are poisonous. We really need a study to assess nutritional quality of forest produce. If we have to challenge the government, we need to study the nutritional menu. Using certain food,

which can be poisonous, is a sign of distress. We need to classify what is distress, whether it is normal food and what are the nutritional characters, these three will decide for us what position we take.

Tribal women:

We are apprehensive. The outsiders are eyeing our forest and trying to harm it. We grow a variety of crop in the forest. We sow the seeds for our community and family. It is for all my fellow beings. The cultivated/harvested crop is not just for us humans, but also the animals, insects and birds living in the forest. We also gather different types of leafy vegetables, fruits and mushrooms from the forest and these take care of our every day needs. Rice is the staple diet of Odias. It is not our food. We savour Kosala, Mandia. The forest provides us with a variety of food, which the foresters do not understand. They plant trees, which are of no use for us. We want indigenous plants, adaptable to local climatic conditions. We have fought with the government over this issue. We have been resisting all attempts to destroy our forests with commercial plantation. Nevertheless, we are saddened by the threat to our forests.

We follow the tradition way of farming which is in sync with the season. We know exactly what, how and when to grow. We have food on our table all year round. The food, including red ants, sag, tuber, we get from the forest is provided to us my Mother Earth. We toil hard to keep these alive. Except for kerosene and salt, we get everything we need from the forest.

POST LUNCH SESSION

Panel Discussion

Topic: Contribution of Forest and Non-forest Vegetations To Supplement Agro-based Nutrition and Conduce Climate Change Adaptation.

Panellists:

- Mr. Ardhendu S Chatterjee, DRCSC
- Dr. Hemanta Kumar Sahoo, Vasundhara
- Ms. Vibha Varshney, CSE
- Mr. Soumen Sarangi, Research Scholar
- Dr. Debal Deb, Centre for Interdisciplinary Studies (CIS)

Moderator: Ms. Madhu Sarin, Campaign for Survival

The panellist presented different studies during the course of their discussion and fielded questions from the audience on the issues discussed, pertaining to the topic.

Ardhendu S Chatterjee, DRCSC: Ecology is a holistic science. We should use as a guide while designing water bodies and forests. We have to understand the importance of maintaining a balance. In the context of India, hunger is there but soil erosion is the bigger problem. Therefore, we need a system where ecological value is put first, then own use and lastly, for revenue generation if surplus. Jackfruit is one such tree species, which takes care of food and satisfy social, economic and environmental needs. We need to design accordingly, where all needs are taken care of. We feel the need to convert farms into forests by planting perennial trees.

Soumen Sarangi, Research Scholar, discussed his study (2014-15) on how forest impacts food security and support communities. Besides expenditure survey, the study included income from forest and reliance on forest during lean agriculture season. Agriculture and forests were the major livelihood sources of the villages, where the study was conducted. Proximity to forest determined the level of dependence on it. 60% of households in villages closer to forest depended on it for food and services. The barter system was more prevalent and DDS higher in villages closer to forests as they consumed a wide range of leafy vegetables. Consumption of non-veg was less among communities staying closer to forest. Access to PDS was low in these interior villages.

Dr. Hemanta Kumar Sahoo, Vasundhara: Forested habitats are balanced. In Similipal, the tribal communities (PVTG) have acquired lots of knowledge about wild edible plants. In context of food security, this knowledge allows us the scope to carry out an in-depth study on the same and discuss with policy makers on how to secure food habitats. The foods have both traditional and economic value. Socio-environmental changes are affecting such habitats, but these are not being taken into consideration while drafting forest policies. Before colonial ear, people used forests as their own and sustained them. The restrictions over resources created a lot of problems and the forest laws impacted tribal communities and their way of life. We need to extensively study their food habits and the species (222) consumed by them, which make up for balanced diet, to be able bring about a change about a change in the mindset of policy makers.

He spoke about challenges of overharvesting a food species. The transfer of knowledge takes place when children accompany their mother to gather food items from forests. In most cases, it is the women who gathering food from forest, followed by children. He also touched upon commercial/forcible plantation in forest and it impact 9degradation of bio diversity). And how the habitats would change these are handed over to the local people. The study also included the implication of restriction on traditional agricultural practices like shifting cultivation and promotion of tissue culture.

Vibha Varshney, CSE: The NIN study, after a gap of 30 years, shows that food we eat does not provide us the nutrition we need as there has been a drop in the nutrient content of the food, besides use of pesticides and antibiotic which impacts our health. Proteins have

decreased in dal for instance. The same goes for vegetables. There is a link between health, bad food and lifestyle. Junk food is responsible for a lot of non-communicable diseases and these have been created and sold by industry as convenience food/processed food rich in fat, sugar and salt. Through our studies, we have tried to find alternatives. Since all foods are bad, what do we do now? There is a need to explore foods that are rich in nutrition and safe. Similarly, monoculture is not very conducive for bio diversity, so what do we do about this. If we want to maintain and sustain bio diversity, there is a need to consume more forest produce so that there is a market for it. It will give us reason for protecting the biodiversity, while providing the locals livelihood options. We did a long study (since 2000) and all over years we have come with two publications. The first one talk about common foods consumed and their health/nutritional benefits and if there are model research that substantiate the claims made by the communities. We saw that communities barely linked food with its nutritive value, while medicinal value of a plant more often than not influenced food habits and pattern.

Through slides, she presented food used by communities for its medicinal value, which is consumed in different seasons.

Dr. Debal Deb, Centre for Interdisciplinary Studies (CIS): All indigenous societies have an in-built mechanism to give importance to non-use value (in economic context). These are revered and considered sacred. No one goes to scared grooves to cultivate, but the entire community agrees to conserve them. Forest is not just about plants, there are fungi, angiosperm, tubers, fodder and those with medicinal properties and of religious significance. Those consumed also have a market price. With also have non-forest vegetation zones. There are a plenty of vegetation outside the lands demarcated by the government as forests. Homestead land (orchards), palm plantation in villages, roadside plantation, not always by PWD or forest department as even villagers plant trees along the roads and sacred grooves (ancient forest parks customarily protected by village people for centuries). In Odisha, oldest sacred groove is in Mayurbhanj and it is at least 1,000 years old. Most of these were structured and maintained by indigenous sects or tribal people, who consider the entire habitat as abode of a deity. Lingaraj Temple is an example of temple grooves, but it is dilapidated. A large number species are found in such grooves, which are equally dense. Some villages, which saw roadside plantation and that on homestead lands, had as many as 12 species not found in nearby forests managed by state machineries. This was possible because they were either protected by culture or planted in homestead lands. Since these had no timber value, they were not found in forests. Two among were endangered species. A study found that carbon storage capacity of scared grooves was much more than state-managed forests, though it couldn't explain the reason. In 1990s, scientists found that the 2-meter top soil of Amazonian Rain Forest, most diverse in the world, was black and they attributed it to bio-charcoal, which was a result of 10,000 years of shifting cultivation. This proves that no forest in the world is pristine or virgin. Therefore, unused forest is a myth. Bio-char is used in agriculture and this is available only because of forests.

Q&A SESSION

Q1. How did distance from market and urban centre influence dependence on forests?

Q2. What are the restrictions on collection and storage of forest food?

CONCLUSION (MADHU JAIN)

While promoting traditional crops, the dangers have to be kept in mind as forest may be destroyed for large-scale commercial production. The line dividing forest from non-forest is an artificial one. In Northeast, there is no line dividing these two and there is rotation cultivation. There are viewpoints of foresters, who see it as destruction of forests, and the other view is that foresters are destroying forests. By replacing shifting cultivation with monoculture, you are destroying all local bio diversity.

Kavita Kuruganti stressed the need for more coordinated effort of collecting data in a systematic manner across Odisha. She said the new thrust should be on forest protection from food angle, essentially by collecting more data. We are aware of the gaps and the studies that need to be taken up and we should flag it.

PANEL DISCUSSION II

Topic:

Exploring policy support mechanisms in order to re-align our forest policy with food and nutrition security as a principal objective

Panellists:

- Ms. Madhu Sarin, Campaign for Survival and Dignity (CSD)
- Mr. Pranab Ranjan Choudhury, Practicing Researcher & Consultant, Land/Forest/ Livelihood/Water
- Dr. Vijay Rukmini Rao, PhD, Executive Director, Gramya Resource Centre for Women
- Mr. Raghu Prasad (IFS), Director , Department of ST&SC, GoO
- Mr. Sisir Pradhan, Team Leader (Programme) - UNDP

Moderator:

Prof. Rajesh Bhattacharya, Public Policy and Management, Indian Institute of Management Calcutta

Madhu Sarin, Campaign for Survival and Dignity (CSD): For last two decades, I have worked very closely with the forest department. We would ask them to involve people in protection and conservation of forests. When World Bank pumped in money, JMF soon became a forest department's controlled thing, where the idea of participatory forest management was lost. Under JFM, tribals were forcefully removed from their land. Houses of villagers, who said forest was ours, were burnt down. Four persons were killed in this

tussle as their food and water were poisoned. Then we found, not a single forest, which government said was under its control, was notified. The structure is so powerful that it behaves as if it owns forests. Food security of people, both cultivated and uncultivated forest produce, were destroyed and replaced with monoculture farming by planting timber-producing trees. With two line notification, all forests in scheduled areas were converted into state forests. There was no settlement of rights. That is where Forest Rights Act came. This is for the first time since the British regime; we have a law which can change forest policy. This can be changed by persuading Ministry of Environment. A land lord will never give up on his land. It holds true for forest department. When a decision was taken in the PMO in 2005, the act rattled a lot of forest officers. A lot of grasslands, pasture land have been classified as forests and destroyed. Therefore, Forest Rights Act came out of two things:

1. A lot of it is not legal forests. There is no recognition of rights of the people and they were declared as illegal occupants of their ancestral land overnight. The settlement which was done prior to Independence, lands were given to non-tribals as the rest were all considered tribal land. In the later settlements, the tribals were denied their own land.
2. Senior secretaries recognised it. I was one of proponents of the argument that most of these lands are Scheduled 5 land in tribal areas. So why not the Ministry of Tribals Affairs as the nodal agency of the Forest Rights Act. Unfortunately, the Ministry is not able to push through with it. At least, there are two institutional bodies, Tribal Affairs and Environment Ministries, which have protect their own turf.

If we are talking of exploring policy change under the existing set-up, best people are the forest officers. The challenge is to change the way people look at forest from revenue generation to food security. To understand its significance, one needs to see the wide variety of cultivated and uncultivated foods grown in forests in Adivasi areas.

However, these forests are being slowly destroyed. The only way to save them is through the FRA, where there is a provision for community rights on resources that empowers the gram sabhas to protect, conserve and manage forests. They have to prepare management plans; these have to be integrated in the forest department working plan. Therefore, the focus should be on empowering the gram sabhas to assert their rights, which are no longer participatory but statutory, to conserve and protect bio diversity and food security.

Dr. Vijay Rukmini Rao, PhD, Executive Director, Gramya Resource Centre for

Women: We have to do away with the forest department as it will not support communities and recognise its rights over forests. During our research work, we realised the need for a comprehensive plan as to what are the different kind of studies that need to be taken up and government should invest in it. We will then have scientific information so that we have common information base, which can be taken up with the Ministry of Environment and that of

Panchyati Raj. The studies need to identify the types of uncultivated foods in the forest and also how to conserve and increase their use. As part of it, we need to understand the habitats that are producing different kinds of foods and how we can conserve. As we got to know from the two studies discussed today, some habitats have rich and diverse varieties, while others are poor in content. Planting of cashew has displaced food crops and other uncultivated foods. In some cases, NGOs too have been very happy to promote cashew. The productivity of cashew in some areas is so low now that it is of no value to the community. These kinds of planned interventions need to be looked at in a particular way. On how we activate the panchayats, which is essential to bring about the change. Communities have the knowledge, so how do we capture it. Communities that are far away from mainstream are saying we want nothing from the government and just leave us alone. Is that what we will be asking from the government? If we decided to leave them, what type of mechanism should be put in place? These are some of the challenges that we need to address.

The demand for nutritional security should also come from other ministries. Besides the Ministry of Environment, we were thinking of the Ministry of Women and Child Welfare since one of our demands was to include millets in anganwadi centres. The minister had said that she was willing to do that but there was not enough production to make it happen. Can ask the ministry to buy millets and other alternative food items, which needs to be introduced to the food basket, especially in Adivasi areas? It is a matter of working out the economics and will be equally challenging when we think of making uncultivated food as part of our nutrition and diet. It is worth reflecting on how other departments and ministries can add to our policy.

The Biodiversity Boards can also play a very important role. First, identifying the mode of conservation and finding ways for increasing bio diversity through conservation.

Mr. Sisir Pradhan, Team Leader (Programme) – UNDP: Forest is the direct as well as indirect source of food and nutrition. There are talks about loss of nutrients in food and therefore, the need for interventions to make a landscape function better to be able to serve of purpose of food and nutrition source. This requires a policy push and inter-department coordination. We have to build on forests through programming around such resources and converging institutional architecture, which can bring all programmes together and deliver them at household/farm level. This is a critical area, where we need to work a little more so as to be able to translate different policy action in a coherent way.

Food utilisation is the other area of concern. An interesting observation is that when food quality is improved and branding is done, it becomes rich man's food. As market takes over, poor man doesn't have access to it. It is a catch-22 situation. Therefore, branding should aim at making people appreciate a food items for its nutritional value.

An analysis of forest food showed that they were high in nutritional value and the tribals consumed these. On the other hand, we have come with a list of 13,700 villages, where nutritional indices are very poor despite being dense forested areas. That is also a reality. These are inaccessible villages with dense forest having all sorts of food species and where PDS system doesn't work.

Then we come to food stability, where we talk of protection of ecosystem. Watershed has made an effort to bring various players together in the country and thereafter, all states, especially Odisha, are talking of convergence of efforts. Our planning and coordination department has been renamed as planning and convergence department. The convergence is aimed at adding value to a household's well being. The policy framework should explicitly mention about household well being rather than talking of an area/infrastructural development approach. We need to bring in this critical shift.

There is a need to work on Farmers Producers Organisations and creating a market for the poor. This is a challenge as there is no market for many NTP. Even if there is a market, it is very poor with only one or two players. Health products are selling. So, we need that type of branding and institutional interactions, along with investment. We can also look at value addition and processing, besides incentivising players, for better returns.

We also need to track the inputs and outputs at household level. Therefore, that information system has to be relevant.

Concerns Raised

Ardhendu S. Chatterjee said we should focus on common resources. Agriculture is for reducing hunger but all poor people foods are being destroyed in the process both by forest department and agriculture department. Therefore, when we are talking about coordination it should not be only about forests but all common property resources and how to utilise these.

Debal Deb: I am slightly uncomfortable with marketing of forest foods. Take for instance amla, there is demand for this product and therefore, people want to harvest it. But there are only 50 trees in the forest. So, how will we ensure sustainability through marketing? We will be functionally depleting the forest by focussing on amla and other income-generating trees like Kendu and Sal at the expense of all other species.

Mr. Raghu Prasad (IFS), Director, Department of ST&SC, GoO: Forestry is of relevance to various people in various ways, whether for tribals, non-tribals, foresters, wildlife and general public. Here, we are talking about minor forest produce that are also on display here. Dependence on forest varies with time, community and level of poverty. There are reports on how the forest department stopped people from genuine and bona fide use of forest. The FRA is a turning point, guaranteeing ownership and access to forest resources. Odisha has been a pioneer in implementation of FRA, despite the challenges with regard to demarcation of land. Four lakh beneficiaries have been given pattas. However, we still have a long way to go with regards to community rights over forests. This can be achieved by strengthening and empowering panchayats and gram sabhas for proper implementation of the Act. Prior to 2000, MFPs were controlled by the government. Some of these have been denationalised and handed over to gram sabhas. We now have MSPs for MFP. Generally, MSP is fixed for produces that involve cultivation cost. But here we have an amla tree on a forest land, which villagers collect and no labour cost is involved. The benefits actually go to the traders. Millets is another classical example. It is a health food. We are reinventing it and farmers can for more cultivation to meet the market demand. While we here are talking in terms forest produce, as a forester my concern is adequate habitat for wildlife, which can be achieved through protection and conservation.

Pranab Ranjan Choudhury, Practicing Researcher & Consultant, Land/Forest/Livelihood/Water: Nowhere in forestry, food is mentioned as an important ingredient of forest. When we are talking about forest food policy, three things are important: Food Policy, Forest Policy and Tribal Policy. Hunger is growing in India. The poverty and forest patches, almost overlap each other. With regard to stunting and wasting, the map shows central India tribal belt. While mapping districts in India where 40% land will come under Forest Rights based on the census of India data,

we see that these are Naxal areas. Unfortunately, when we talk of food security, we talk of calorific value and ignore forest food.

Forest has never been linked to food. In food policy debate, forest is seen as a source of ecosystem services providing food. While forest as food is common in tribal hinterland of Odisha has never made it to the mainstream discourse. In Koraput, 145 food species were documented in 30 minutes with their usages and name. Culturally, banaprastha talks about living on food that comes from forest. Our culture and communities talk about forest as food. These forest foods (wild berries) are now being served as breakfast in Europe and the USA. These are more in demand and have taken up space in the mainstream food basket. However, following commercialisation of food production, biodiversity is going down.

When we look at Malnutrition, things are better in areas close dense forests. Forest management history shows that we have never promoted food crops. Forest department has instead cleaned up these species for commercial plantation of timber with the aim of improving bio diversity. Under Odia Khadya o Bana Ra Punaar Udhara, the department in 2012 started talking about food and livelihood forest regeneration. It was done in around 1000 villages and SHGs was given the rights. But it was not very successful following resistance at village level. However, a start has been made and options are being explored. The forest food festivals, which Living Farms is organising, can be integrated with the department. What is changing globally is control of communities on forests, which is a good sign. It is a trend which the forest department has to accept. A new discourse is coming up where community will own and manage the forests. In Nagaland, DFO goes to community and seek their permission for JFM in their village. There are 250 million people and 40 million hectares of forests. With regard to PESA, Odisha has failed miserably. While BMCs are one legal step in that direction, we should also go for PVR studies on integrating forest food in forest policy, which the forest department has to respect it.

These have to be integrated in the Rights to Food also. In short, we have to look at a win-win situation for the state, community and market.

Q&A SESSION

Besides raising concern over different issues, the informed gathering asked pertinent questions to the panellist. The discussion touched upon

1. Road blocks faced by Gram Sabhas in Kalahandi with regards to sell in Kendu leaves, which stressed the need to fine tune the governance system as rights are yet to vested on empowered local institutions
2. Reduction in MSP of MPF, introduction of tradition food practices in residential schools
3. Relevance of MSP for forest produce and its impact with regard to Mahua flowers
4. Govt creating support groups for doing business in forest produce, need for a cooperative movement
5. The connection between flora and fauna and how these sustain each other

6. Semantic imperialism, forest eco-system as we cannot consumed Sal and Teak replacing local species
7. Need for inter-departmental coordination, taking it up on a mission mode with financial outlay, health and nutrition as a plank
8. Maintain the food chain
9. Significance of Odisha Nutrition Action Department, efforts at household level, interplay between institutions
10. Community forest resource rights

DAY II

The session began with a recap of the previous day's discussion with Kavya Chowdhry of Living Farms.

Group work session

Group 1: Re-aligning forest policy with food and nutrition security objectives- challenges and support needs

Group2: Re-prioritizing agricultural policies for forest-communities

Group 3: Recognizing Forest People, their way of living and their rights

The seminar decided to go for open discussion while touching upon all the three topics.

Madhu Jain: The FRA is there, but we need more when it comes to non-forest lands.

Nikita Mishra, PhD Scholar, TISS: What is the motive and objective behind formulation of FRA? Dilution of suggested provisions over the past ten years even as the government is still confused about how to define OTFD, forest dwellers and committees, which is mandatory under the Act, are still not formed in the villages. The community rights are yet to be settled as the entire power now rests with the Gram Sabhas. Are such Acts and institutions good enough for recognising people's rights and meting out justice to people as envisioned?

Manas Misra, Vasundhara: We need to first decide the rationale behind this discussion, Is it because we want to take up certain issues with the government or keen on working together towards a common objective. If it's for both, talking to the government is just 20 to 25% of the work. Among the OTFD, Dalits are in a state worse than tribals at many places as they don't have land. So, how do we work together with regard to OTFD? The other issue is forced plantation and how it has changed food production. With monoculture is of non-food species, it even more problematic. Restraints and constraints placed before people in protected areas. The Forest Management Plan, I feel, will be a solution towards this, apart from the claim process. At more and more places, people should be allowed to take charge of forest management. The idea is if every bit of forest should go to people, they should also have a forest management plan and the government should accept it. Even at the Gram Sabha level, there may be a tendency to push for non-food species/timber. This needs to be taken care of. Whatever may be our primary task, we should devote 10% of our time for conservation of indigenous species.

Debjee Sarangi: Manas raised a very important point as we here are not only discussing what all we need to communicate to the government but what we together need to do with regards large-scale monoculture on food growing land and revenue land. Firstly, we need to recognise the rights of people and their practices and food culture.

Kavita Kuruganti: Voices of the forest people and their world view/ethos should reach those in the mainstream by documenting these. The world needs to understand that something else is being said by a set of people. We have to communicate without excessive romanticism about the richness of their wisdom, practices and beliefs. We need to find a way to capture these.

Jagannath Majhi: People in villages are not aware of the laws regarding forest rights and their entitlements. Is the government or NGOs taking any step to educate the Adivasis on the rights?

Dr. Mihir Jena of ST&SC Research and Training Institute: We need to elevate ourselves from customary rights to law to avoid confrontation on land use. Different dynamics come into play when we are not able accommodate customary rights within the framework of main law. There is a need identify the confrontations and spaces in the state/central law.

Madhu Jain: As far as inter-community issues are concerned, these can be solved through negotiations. Customary law is constantly evolving and changing and it's not static. There can disputes and disagreement between villages while demarcating a forest, but the there is provisions where they can collectively claim and continue with the custom.

Mihir Jena: In Article 13 (3) of FRA, the emphasis is on the custom part.

Manas Misra: Such clashes will be there, but my experience I can say resolving these is not very difficult. There have been instances where three to four villages have claimed rights over a single forest.

Dr. Hemanta Kumar Sahoo: In such cases, where two to three claim rights over a forest, problem arises while preparing management plan. In Ranapur, five villages divided 30 days a month among themselves for protecting the forest. When FRA came into being, they went to claim the forest keeping intact the earlier pact. Problems areas with regard to management and they sit down to sort those out. They just need someone to facilitate it and make them to sit down and discuss.

Mihir Jena: What about cases where such an arrangement didn't exist before FRA?

Dr. Hemanta Kumar Sahoo: Through facilitation such issues can be tackled.

Manas Misra: The problem exists, but there is also a solution. It will be easier where community forest management already in practice. Through skill training, we can create resource persons in villages for conflict resolution.

Sonali: I am trying to divert the attention of the gathering towards PVTG as we currently focus only on those groups on which data is available. There are others living beyond the micro project areas and involved in forest management process. What is being done to ensure that they too get their rights over habitats they are living in? They are mostly ignored and not available to avail the benefits. Can the house think of a solution to this issue?

Mr. Pradeep Patra, Living Farms: In Jigidi, inhabitants of three villages had applied for community claim over 100 acres, but were given only 7.5 acres. In the same villages, individuals have been hand over pattas measuring 6 to 6.5 acres. The villagers have again put forth their claim and also gheraoed WEO and Tehsildar office over the issue. What can be done if such situation arises?

Kavita Kuruganti: Is there a state-level forum and is it functional?

Manas Misra: The forum exists, but we have to push it and make it run a little better. What we really need to strengthen the process at block and district level. To be able to push the government, we need district-level forums of people groups with NGOs providing the support and federate it upward to the state level.

Madhu Jain: We need to jot down our asks.

Answering the above questions, I would like to say there has been no dilution of FRA. Rules have been amended and improved. The problem is non-implementation with the state and central government's passing the buck. It is central Act, but it is for the state governments to implement it. If the state is ruled by opposition parties, the central Ministry is very reluctant to push them.

We fought to get the law passed both in LS and RS. Now, we need to decide what can be done to put pressure on the government to implement it. First, there should be awareness about the law and the rights, especially in the forest areas as it is for them. Second, the authorities (forest department) are not ready to give away power to community. These officials should not be involved in the process.

Manas Misra: There is a conflict of interest. Foresters need not be involved in the implementation process.

Madhu Jain: What has the ST/SC department to spread awareness about the act? There cannot be a deadline for its implementation. The tribal affair ministry has clarified that there is no deadline in recognition of rights. There will be an attempt in this regard.

Dr Rukmini Rao: We should demand the National Commission (Tribal Affairs) to spread awareness about it. Radio/TV should be used for this purpose. The publicity department in states should be tasked to put out the law. NGOs should also come together and create teams to produce publicity materials and pass it on to the government agencies.

Madhu Jain: The government has a better reach and it should be asked to create awareness.

The state-level forum, comprising NGOs and People Movement, should sit with the government and discuss the issues.

Mr. Manohar Chauhan, Campaign for Survival and Dignity: Civil Society has played a major role in bringing the law and putting forth the claims (individual) through Gram Sabhas, besides publicity. However, not much has been with regard to community claims. The state government, which claims to have distributed highest number of land pattas in the country, too acknowledges the role of Civil Society with which interacted closely in all these years. Training modules were prepared in association with ST/SC Department. OTLT also gave importance to FRA. Coordination was good and there were many positive circulars from the government. Challenges pertain to community

claims as forest department is rigid in its stand on the issue while revenue department and welfare department don't have much understanding about it. After 2012, community claims were taken up on a priority basis. However, except for Sundargarh, Nayagarh and some parts of Dhenkanal, the demarcation has been a problem with people not getting land as per their claims. In Scheduled 5 areas, titles have been distributed without any proper verification and demarcation. Pattas have also been distributed among PVTGs, though they have made no claims and also don't engage in agriculture activities.

Madhu Jain: There are several issues regarding claims and demarcation. People are also not aware of the law and rights. There was suggestion for forming state level and district level forum of NGOs and People Movement, where such issues can be discussed every month and future course of action charted out. Will this work in the present scenario?

Manohar Chauhan: We hold regular meetings even now, but the number of participants has come down over the years. We are also in constant dialogue with the government agencies, but they are not very forthcoming on VSS or community claims. It is the same even in the issue of demarcation for individual claims.

Kavita Kuruganti: The suggestion is for taking it up in a systematic manner through a Specific Joint Forum.

Mr. Bijay kumar Nayak, PATANG: When we talk about FRA, why only tribals and NGOs should fight for it? Why shouldn't it take the shape of a national movement? Recently, we analysed books in government-run schools and found contents on Adivasi missing from them. When we talk about food, it only those consumed in mainstream. Their food system finds no mention anywhere. So, when we go to the government with my demands, including tribal culture and way of life in the school curriculum should be one of them. Their foods are not just for exhibits, it also has an influence in our food habits, this needs to be acknowledged. With FRA, we are not only protecting tribal culture but also that of ours. Junk food has reached every village, but our food has been left out. We have to create a demand for the same through a system, culture or education

Dr Rukmini Rao: We have been successful in introducing Advivasi way of life in school text books. It can be done by sitting with experts and when are introduced, we can include one or two lessons. Most importantly, we have to be respectful towards them and understand their importance in our lives. If forests are saved, we will be saved from climate change.

Sachidananda Mishra, PATANG: The government is making no attempt to make tribal kids feel proud of their culture and food system. Instead, they are being made to feel ashamed of all that they belong to. We need to fight this mindset. Through lessons on tribals in text books, we should introduce this identity and food pattern and its richness. . I was talking to Jagannath Majhi, he was of the opinion that college-going tribal children no longer participate in discussion. When their silence was questioned, they said we have been taught discipline and how to behave like others. This is a practice and it can be stopped only people get to know the richness of tribal culture and way of life.

Manas Misra: This is very good idea. During Kandhamal communal riots, we have seen how books stroke such extremes emotions. Mention of some food has become a prestige issue. In this regards, lessons on tribals in text books will help.

With regards to what Monoranjan said: When a new law comes, the funders show interest for a few years. But any big change takes 20 to 30 years. So the meetings which were attended by 30 people came down to 3. Therefore, we cannot completely depend on them to run the show. People in Odisha know Living Farms for organic farming, but today's session is on forest rights, which shows they too are concerned about the issue. Our strength is that we get food from forest. There is a connection between works being done by different NGOs and we need to tap the inter-sectionalist for long-term results.

Kavita Kuruganti: People tend to get tired in such long fights. People, who helped bring law and fought long for it, they get tired at the time of implementation. While organisation is taking up forest rights issue, another exploring what agriculture can sustain it. In such a scenario, infusion of new blood will be of great help.

Prof Rajesh Bhattacharya, IIM Kolkata: One way to push the government is to take it up on a mission mode. While eradicating Polio, you do it in a certain way. The government, therefore, need to go to the villages.

Kavita Kurugaanti: But what political mileage will the government get out such an activity? The government either has to be pressurised or incentivised to do it.

Prof Rajesh Bhattacharya: We have to pressure the government.

Madhu Jain: I got to know that the Prime Minister is now in support of FRA because of 2019 elections. Therefore, this is right time to take it up. But how do we go about it?

Prof Rajesh Bhattacharya: If all organisations, working on FRA, organic farming, food and nutrition, can raise this demand simultaneously. Put it up on the social media or newspapers and then have series of discussions. So, it is out there.

Dr Rukmini Rao: You should also propose a structure for the government, as to what departments should be included in the process. It may not be perfect, but we have to keep pressurising. In women movement, our experience says that the government never really gives what we ask for but we are also fighting it on an equal footage. This should be put in writing on how to go about it. If a government wants to do something, it will achieve it. Here, we know the forest doesn't want FRA to be implemented. As per the law, they are not supposed to have any say in it. But nobody is following the law. We also know that laws take 10 to 15 years to become effective.

Madhu Jain: We can map the MPs' and MLAs' constituencies for forest land, in how many rights have been recognised and in which it has not been done. We can use prepare such maps and approach them. During election time, this mechanism can work.

Manas had raised a point on how to integrate forest plan being taken up by one NGO with natural and forest food pursued by another. It was a wise suggestion to put in 10% of time and energy to integrate such issues.

Kavita Kuruganti: There was another suggestion from Manas about creating resource persons at community level to facilitate meeting to resolve conflicting issues.

Madhu Jain: There was also a question on customary law and formal law. The challenge is how many teams should be formed for conflict resolution. It can be achieved only at local level. The tribal groups have to be strengthened to resolve such issues. It has happened in Gujarat, where people have land among themselves under informal understanding.

Conflict will arise with PVTGs, which practice shifting cultivation. The law says Gram Sabhas should include Nomadic tribes, but who will ensure their presence in the meetings. They have not been given any rights. In Odisha's context, the conflicts can be resolved at local level.

Kavita Kuruganti: There should be a collective effort in influencing the government on these issues.

Debjee Sarangi: One way of doing it is to recognise Adivasi way of life and world view. With the experience generated from field and villages, we have to do a lot among ourselves before we go to government. We have to resolve issues among ourselves. We use terms like Adivasis are poor. These are so deep-seated orientations. The type of development projects, which are being implemented today, show disrespect to the community. This is a big challenge as we get other projects based on these, which leads to violence. Once we resolve issues among ourselves, then we can go to the government.

Mihir Jena: The government has formed special development councils in nine tribal-dominated districts of Odisha and in this context, we can engage with them. It is also acting on identity issue.

Manohar Chauhan: Tribal areas, systematically discouraged Podu farming. There are national parks, where NTFP collection is banned. Plantation under JFM is also being done in this region. In some districts, 50% of lands belong to the government. In Kandhamal, it is 85%. The regions, where forests are being destroyed in name of regeneration through plantation, are inhabited by tribals. The FRA is very clear on forest protection and management. It says the villagers will take a call with respect to these while JFM are totally under government control and here lies the contradiction. Can we have a stand on such plantations?

The government in Odisha is run by bureaucrats and many among them are from the forest departments, who are putting impediments in implementation of FRA. Forest people are sitting on FRA desk. We are running a campaign against it.

Dr. Sricharan Behera, Independent Researcher on Forestry: Can we have this resolution as recommendation to the government?

Plantation (monoculture) being made by destroying natural forests should be stopped. It should be left to the Gram Sabhas to decide on plantation and management of forests.

Manohar Chauhan: Close down VSS, funds for forest development, wildlife protection should directly go to the Gram Sabhas, which will prepare the plan as per the law.

Dr Rukmini Rao: There should be ban on use of pesticides to prevent negative impact on environment and pollution of water bodies, collapse of bee colonies and causing other harm to flora and fauna. When agri-forestry is promoted, agriculture and forest departments need to pay attention to grow millets and ensure diversity of cropping pattern to meet nutritional needs. Even closer to villages, people have stopped growing food and instead going for BT cotton, which requires

extensive use of pesticides and other synthetic chemicals. This trend is being promoted by the agriculture department. The department should look at forest areas and change its policies.

Kavita Kuruganti: The concern is for both pesticides and GMOs.

Manas Misra: There is also maize mono-cropping. Such practices should be stopped.

Debjeet Sarangi: Many areas have been categorised as forest, but it is only a piece of land. What can be done at these places to ensure regeneration of natural forest opposed to monoculture?

Kavita Kuruganti: Agriculture policy should be reoriented towards securing food and nutrition. Spread of cotton in tribal belt is extremely scary. There must be some regulation even with regard to land lease tenure.

Debjeet Sarangi: Shifting cultivation should be allowed where it is being done in a sustainable way and fallow cycle is adequate for forests to regenerate.

Mihir Jena: Recognition for tribal heritage agriculture system through proper documentation, then the government will not interfere.

Dr. Hemanta Kumar Sahoo: This has already started in five states. In Odisha, it is being done in Similipal Biosphere. It promotes green/good agriculture to facilitate forest conservation. It will start in 2018.

Debal Deb narrated the story on Lapanga forest created by tribal community.

The house also discussed about compensation mechanism for loss of MFP.

Manas Misra: Can Living Farms anchor this cause for disaster compensation for forest foods? Prepare a proposal and take it up with the government.

Mr. Y Giri Rao, Vasundhara: This issue (crop insurance) has been discussed several times with government. They argued that there is no investment and labour with regards to forest foods as is the case with agriculture. We had run a postcard campaign seeking compensation, but nothing came off it. It requires political mobilisation.

IMF is drafting national forest policy and we understand it too has nothing in this regard in it. We can take it up with them too and include food in forest policies.

Conclusion

Debjeet Sarangi: We will prepare a report and share it among ourselves. Let's see what all joint action plans, joint research, community actions, community exchanges and advocacy strategies will emerge from here. Advivasi way of life, looking at change process, their views on forest and food should be discussed in workshops. There is a need for monitoring the types of projects that we are getting, the funders and how they are destroying people.

Jagannath Majhi: NGOs have destroyed our life. They look down upon us and our food habits. Educated youths of the community are cut off from our habitation and life style since they stay in

hotels. The NGOs catch hold of them to enter the villages and promote cotton cultivation, replacing food crops. They gave away packets of seeds in villages. They were later chased away by villagers.

Manas Misra: Some responsibility should be assigned to organisations present here. We are ready to help PATANG in development books on tribals.

Bijay Kumar Nayak: We can develop a module on it and on which prospective we can take it forward.

Dr Rukmini Rao: We need to understand in which subjects we can introduce tribal life, as in social science, environment etc. We cannot introduce it in school by developing one book instead incorporate as lessons in different subjects. It can also be introduced in university education.

Debjeet Sarangi: We are planning to go to different ministries and make a presentation of the study conducted by Debal Da. It will be done in the next two to three months.

He then thanked everyone present and RLS for supporting the seminar.