

## **THE IMPORTANCE OF INDIGENOUS KNOWLEDGE AND THE RIGHTS OF LOCAL COMMUNITIES: WORK IN ASSAM AND THE NORTH EAST**

The North Eastern region of India is recognised as one of the 12 megabiodiversity centres of the world. It is time that we begin to understand and acknowledge that much of the importance of biodiversity is based on the fact that local communities have the knowledge of these bioresources, their properties and their use. Ownership of the bioresources is an automatic question. This is easily answered.

Local communities own the bioresources in their region since it is they who maintain them and it is they who possess the knowledge of their properties and their use. This indigenous knowledge automatically confers on them certain rights including the right to share the benefits derived from the commercial exploitation of bioresources. It is known that it is the women rather than the men in rural and more so in adivasi communities that have the knowledge about bioresources. In that sense this technology is specially theirs.

The importance of indigenous knowledge can be understood when one realises that there are no rice or wheat plants nor cotton or mustard found lying around in the forest. What are found in the forest are wild plants out of which communities of men and women over generations have bred races of several food and cash crops. These communities have bred out of the wild plants of the forests, the thousands of land races which are the basis of the world's agriculture. The crop varieties bred by farming communities are the foundation material of modern plant breeding and global food security.

If credit had to be apportioned for the breeding of a new crop variety, then it could be shared perhaps as 80:20 or at least 70:30 between the farming and scientific communities. One could say quite easily that if the breeding of a crop variety entailed 100 steps, then indigenous knowledge contributed the first 80 or 70 steps and laboratory science contributed the next 20 or 30 steps. It stands to reason therefore that credit, reward and recognition for a new variety should be shared in the same proportion. No company has the right to patent a crop variety because the effort has largely been made by farmers.

The role of indigenous knowledge in the realm of medicinal plants is even more obvious than in the case of crop varieties. Knowledge about the characteristics of a particular plant and its properties as a healing substance is what gives medicinal plants their social and economic value. This knowledge has been acquired through a few thousand years of experience, trial and error and incremental refinement. As a result of this, communities have developed the knowledge of the plant, animal and mineral world to a mature and scientifically sound technology which exists in several forms, the best known of which is perhaps Ayurveda.

If a pharmaceutical company like Merck were to show interest in the production of medicines based on Ayurvedic or tribal knowledge, it would explore the forest wealth of regions like India and Costa Rica via the local vaid or shamams. The scientist from Merck cannot make head or tail of medicinal flora when he is exploring, if he does not have information from the vaid or the tribal healer. Merck will begin to look for a cure for stomach ulcers in plants that local vaid uses for stomach ailments, and not in plants that they use for ailments of the eye. The scientist from Merck could not enter a tropical forest on his own and choose random plants, saying for example, the creeper with blue flowers could yield drugs against cancer or the shrub with yellow flowers could contain ingredients effective against diabetes. The plants in the forest or in the field, or for that matter along the banks of rivers or on the roadside, have value only because people have the special knowledge about their characteristics and the range of their utility. It is clear that Merck must pay for this technological know-how.

Gene Campaign, an NGO engaged for several years in the struggle to establish Farmer and Community Rights over biological resources, has teamed up with the North East Network for its work in Assam and other north eastern states. Gene Campaign which has been working on awareness generation and advocacy on issues related to bioresources will be working together with the North East Network (NEN) on documenting indigenous knowledge, establishing gardens of medicinal plants which will serve as resource centres of medicinal plants and which will help to revive the indigenous systems of medicine.

We will work on generating awareness about the rights of local communities and encourage them to articulate these rights, specially in national policy. Gene Campaign and NEN hope to develop conservation strategies as also develop sustainable models of income generation based on bioresources. We seek the support of local people and concerned citizens to help us in our work to create a system that will give the legitimate rights due to the tribal and farming communities of our country, especially the rich and diverse regions of the north east.

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