DOCUMENTING INDIGENOUS KNOWLEDGE ABOUT BIOLOGICAL RESOURCES IN THE CHOTANAGPUR REGION OF BIHAR

Study area

The survey was conducted in the villages in the forest belt near the Betla Tiger sanctuary in district Palamau. The survey was conducted in the 3 Blocks of Mahuadanr, Garu and Chandwa. The 20 villages chosen for the study were Banskarcha, Sarnadih, Mayapur, Gauna, Barahi, Hanu, Mirghi, Pakri Pat, Mahuadanr, Barwadih, Orsa Pat (on the Madhya Pradesh border), Kujrum (inside the protected core area of the tiger sanctaury), Baresand, Ramsaili, Kuru, Champi Pat, Rampur, Chormunda, Chipadohar and Chandwa

Methodology

Adivasi boys and girls who had finished school were selected for training to conduct the survey. Five teams of two each (a boy and a girl) were trained in an orientation program. They were to go to villages and do the questioning as teams of two.

Along with the training , awareness generation programs were held in various villages of the region about the new national and international developments in the field of biodiversity, about biopiracy and how this violated the rights of communities. Information was also imparted about the rights of local communities to share in the benefits derived from the commercial use of biological resources using indigenous knowledge.

Questioning in villages was done in groups as well as in individual homes. In addition to the general questions, the boys asked men about treatments pertaining to sexual organs or fertility. Likewise the girls individually questioned women about sexual problems and those related to pregnancy and pre and post natal care. Wherever possible, the adivasivaids were questioned at length.

Subsequent to training lectures and discussions, a survey form in Hindi was prepared after consultations with experts and forest department officials .

Background

The Oraon are the dominant tribe in this region. The Oraon were originally forest dwellers and later engaged in Jhoom[shifting] cultivation. They prefer to live reasonably close to the forest where they graze their cattle and from where they get timber, fire wood, fodder and plants and animals for use as medicine. The Oraon co-exist with other tribals of which there are some 30 of them. The larger tribes living with the Oraon are the Munda, Lohara, Parahia ,Bhumiji, Korwa, Mahali, Kharia, AsurBedia, Birhor, Chikbarik, Gond, Gorait, Birjia, Ho, etc. There are also the backward and schedule castes living in these areas.

The Oraon villages are called Gaon or Padda. The Oraon build their houses in clusters in the villages. The region has a strong presence of the Christian Missionaries. They have provided education but have not been able to provide jobs so the level of dissatisfaction among the youth is high.

Local vegetation consists mostly of bamboo groves and varieties of trees including Mango, Mahua, Tamarind, Jackfruit etc. Poultry, pigs cattle and goats are found in almost every home.

Nutritional status amongst these people is better than in most comparable rural areas. This is because of the wide variety of food they obtain from their Tanr and Don lands, ridges and hedges, wastelands and riverine and aquatic zones and the forest. Apart from cereals, pulses, oil-seeds and vegetables from their fields, fruits and vegetables from the forest, they collect an assortment of pot-herbs from watery places and wastelands. Added to this, their diet includes fish, crab, snails, snakes, birds, and any wild animals they can catch.

The irrigation is almost entirely based on monsoon rains hece failure of monsoon means crop failure also. Minor grains or seeds are also eaten in times of scarcity, such as Pasera, Savanghas [Pennisetumtyphodieum]. Such famine foods, mostly from the forests are the tuberous root of Udal [Sterculiavillosa], the fruit of Tatalgo {O=Khaksikanda], the vegetable Penarar [Randiauliginosa], the flowers of Kathchacha [Calonyctionmuricatus], Macmedo [Ardisiasolanacea], leaves of Sarla ach [Vangueriaspinosa], Delaara [Melochiacorchorifolia]. They eat a large number of tubers, roots, bulbs, yams, etc including many species of Dioscorea. The forest yields several kinds of mushrooms whivh are available for food.

The Handia or rice bear is a great tradition here and is offered to guests as a token of welcome. It is considered both drink and food and is consumed by men and women , young and old, from an early age.

The Forest: With the passing of the Bihar Forest Act 1947 and the Bihar Land Reforms Act , about 80% percent of the forest areas in Bihar belong to the Government. In the whole State of Bihar there are only 5050.sq. km. of reserved forests where the public or tribals have no rights. The rest 24,176 sq. km.is protected forests. In these protected forests rights and concessions are granted to the local population as recorded rights and customary rights. Concessions include free grazing outside regeneration area, the right to collect leaves , flowers, fruits, roots, bark, gum, etc. for their own use and for sale or barter, obtain free house- building materials and agricultural implements for personal use, collect fallen fire wood, harvest green bamboo for basket making etc. on concessional rates and also the right to hunt animals as a part of religious ritual once a year . This is not allowed in sanctuaries and national parks.

The most important feature of every village is the Sarna or sacred grove. This is a collection of old trees. Usually each grove has at least one tree of Sal (Shorearobusta). The grove is a sacred place and here poojas or religious rites and rituals are performed by the priests who are called Pahun. Another old tradition with conservation overtones is the conservation of the totem animal or plant of a tribe which is protected and must not be harmed.

Results:

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The data on the precise use of flora and fauna were culled from all the survey forms (25 per village; a total of 500 questionnaires). The information on use of bioresources has been organized in a table under various heads as Human Disease, Animal disease, Plant Disease, Colouring agents, Miscellaneous.

Healing Practices: Healing with herbs and plats are done by using trees that have similar symptoms as the disease for. Eg. even today, the large gland like swelling on the Gathra (Artocarpusintegrifolia) tree, is scraped and applied to the swelling on the head of children. For several diseases the Vaidyas prescribe parts of plants to be tied around the patient's neck, waist or hand and same methods are used to ward evil spirits that may cause the disease: an example is Chirchitti [Acbyrenthusaspera] -tied to ward off the evil eye and danger from ghosts and spirits and witchcraft.

The Vaidya sometimes prescribes not the plant but the parasite on it. These are considered to have some particular chemical action different from the plant on which it grows. Similarly, the insects associated with different trees called the *Gandhi* of that particular tree are also prescribed for different diseases.

The people of this region have certain other beliefs: they use male bears sex organs to cure impotence, panther/tiger milk or soil where theyrest that may contain the milk is prescribed for mothers milk flow, feeding tiger / panther meat to cattle is supposed to strengthen them. Whenever a poisonous snake is killed, it is buried in an earthen vessel and the decomposed body is administered as an antidote.

Mantras are also chanted for diseases like snake bite, epilepsy, madness, delirious fever, cholera, dog bite etc.

Vaidyas and the older people are dying away and with them is dying a whole body of knowledge. This generation not only knows the economically useful plants but also where they are found, the parts to be used, method of collecting it, and the particular season for collection. This knowledge needs to be documented urgently

Local people mentioned the difficulty of obtaining many plants, specially those from the forests, due to the receding forest-cover, over-grazing, over-exploitation etc. They said that many species have become extinct or are endangered and in short supply.

The tribal system of medicine is maintained orally. It is not written down. Usually there is no professional or full time Vaidya. Vaidyas learned from their Gurus by word of mouth. Sometimes their knowledge, experience and prescriptions are lost with them .However in recent years, there is a resurgence of the Tribal System of Medicine . A retired forest officer, Sri P.P. Hembrom and Rev. Gabriel Hembrom have done much to revive tribal medicine as an effective healing tradition. However such efforts need to be strongly supported and enhanced if we are to save the knowledge base of these communities.**Birth Control Measures:**

Rural and adivasi communities usually have a deep understanding of fertility and birth control. This enables them to avoid pregnancies despite a liberal and emancipated tradition of sexuality. Some plants used in birth control are Newa (Anonasquamosa), Papita (Carica papaya), Jambu (Eugenia jambolana); Anar (Punicagranatum), Sonarki (Casia Fistula), Erendi (Riciniscommunis), Patal Konhra (Peuremiatuberosa), Kera (Musa paradisiaca), Pan (Piper Betel)

Veterinary Medicine

Animals are usually treated by separate specialists but some Vaidyas have knowledge to treat both, humans and animals. Apart from medicinal uses, the Oraon uses the bones and other parts of the wild animals in ritual to ward off the evil eye. The feathers of some birds are used for decorative purposes. With very few exceptions, the meat of most of these animals including rats, squirrel and porcupine is eaten.

The report lists various Birds and Animals used in healing: these include 6 birds like bones of hornbill for langhan disease, 12 insects like cheenk for migraines, 24 animals and 7 snakes including cobra for indigestion, weakness and to stimulate appetite.