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Studies on ethno medicinal aspects and zoo therapeutic knowledge of Tai- Ahom people of Upper Brahmaputra Valley

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Abstract

Assam is a part of Eastern Himalayan region and is endowed with rich biodiversity. The Upper Brahmaputra Valley is a homeland of various tribes and they are enriched with own tradition. The study of the use of the faunal resources in various purposes of ethnic people is considered as ethno zoology. Ethno zoological or traditional knowledge of the community includes edible, medicinal, ceremonial, ritual activities since ancient times. The knowledge is inherited from generation to generation through secret manuscripts or orally. Among the indigenous communities Tai-Ahom people utilized the faunal resources for treatment of various ailments. These people used about 8 species of non –chordates and 13 species of chordates as ethno-medicine. The present paper attempts to highlight the identification of animal resources used in health –care practices by the Tai-Ahom people.

Keywords: Ethno zoology, Faunal resources, Tai –Ahom people, ethno medicine, Upper Brahmaputra Valley.

1. Introduction

Assam is endowed with rich biodiversity. The Upper Brahmaputra Valley Agro–Climatic Region consists of Tinsukia, Dibrugarh, Sivasagar, and Jorhat Districts. The climate of the region is damp and cool with relative humidity 86%. The annual rainfall is more than 2600mm.

A rich diversity of natural resources specially the animal resources of the valley is well known from time immemorial. These resources interact and provide services in all the aspects of human life. The role of faunal resources in the present context is very relevant. The varied forestlands of the valley constitute unique habitats for a wide range of wildlife including large and endemic mammals, resident and migratory birds, reptiles, amphibians, fishes and invertebrates. But some of these resources are at the verge of extinction due to some anthropogenic activities to a certain level.

The region is a homeland of diverse ethnic communities since time immemorial. The traditional or ethno-zoological knowledge of these indigenous communities ranges from edible, medicinal, ceremonial, ritual and therapeutic use. Among these indigenous communities Tai-Ahom people utilize the natural resources specially faunal resources in health –care practices and that has greatly affected the socio-economic condition of the community as well as status of animals and natural balance of the local ecosystem.

The World Health Organization estimates that more than six billion people rely primarily on animals and plant based medicines. The healing of human ailments by using therapeutics based on medicines obtained from animals or ultimately derived from them is known as Zootherapy. (Costa-Netu EM. 2005).

The present paper attempts to highlight the identification of animal resources used in health – care practices by the Tai-Ahom people of Sivasagar district of Upper Brahmaputra Valley. Ethnic communities have a historical continuity of resource use practices and some of them still rely on animal resources for various ailments. The Tai –Ahom is one of the major ethnic group of Assam having approximately 40, 00,000 population. About 70% of Tai –Ahom population inhabit in Sivasagar district. The time tested ethno –zoological knowledge is now at the threshold of extinction for most of the practices are no more in vogue. The Tai– Ahom people use diverse animals according to their belief, healing properties for various ailments. Plants and animals have been used as medicinal sources since ancient times.

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(Alves and Rosa 2005; 2007. Anyinam, 1995; Chivian, 1997; Lev, 2003;)^[1, 2, 3] According to Millennium Ecosystem Assessment the total number of species on earth ranges from five to thirty million and only 1.7-2 million species have been formally identified. IUCN has access to different kinds of information on species. As per latest reports species extinction are observed at an alarming rate. Today, there is an increasing desire to unravel the role of ethno-biological studies in trapping the centuries-old traditional folk knowledge as well as in searching new resources of food, drugs etc. (Jain, 1987, 1991)^[6]. The vast store of information on indigenous knowledge practices technologies is being eroded as a result of fast urbanization, over exploitation of resources, injudicious human activities besides modern life –styles. Recently some ethno –botanical works have been carried out by some researchers in Dibrugarh districts of Assam but still Tai – Ahoms remained excluded in their study. Although quite a relevant contribution in the ethno-zoological drugs of vertebrate origin has been made by Azmi (1990)^[4]. Azmi *et al.* (1999), no authentic report is available from Assam except for the tribal communities of Arunachal Pradesh (Solanki and Chutia, 2004).

The animal based health care practices play a significant role among Tai Ahom people. Therefore it is endeavored to record the animal use in health –care practices for sustainable utilization of these resources by Tai –Ahom people.

2. Methodology

The ethno –zoological survey have been. Conducted in the Sivasagar district of Upper Brahmaputra Valley following appropriate method during November 2014 –January 2015 Both qualitative and quantitative techniques were applied for the study. For the quantitative data analysis standard questionnaires had been used for collecting proper information relating to endemic city and utility of certain domestic and wild animals. Qualitative data on zootherapeutic remedies were gathered by participant observation, semi structured interview, participatory rural appraisal (PRA), key informant’s interview. Moreover, secondary data regarding zootherapeutic aspects of animals were collected from published works of Mukhopadhyay (2002)^[8]. Ghose (2009)^[9]. And Baruah & Gogoi (2010)^[10]. Most of the specimens were identified and confirmed by comparing with the specimens in the departmental museum of the Sivasagar Girls’ College and Guwahati University.

3. Results and Discussion

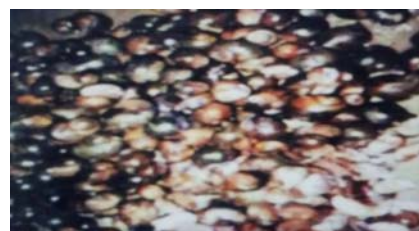
During the survey, ethno–zoological information of 21 animal species belonging to non-chordate and chordate fauna have been gathered from various spots of the study area. It was ascertained that Tai –Ahom communities usually had preferred the chordate species as ethno medicine



(i) Collection of cocoon



(ii) Emergence from cocoon



(iii) Collection of Apple Snails

Table 1: List of Non Chordates used by Tai- Ahom Community

Zoological name	Family	English name	Parts used	Disease treated	Mode of use
<i>Pheretima posthuma</i>	Megascolecidae	Earthworm	Whole animal	Constipation & piles	The animal is boiled and the extract is taken
<i>Hirudinaria granulosa</i>	Hirudinae	Leech	Whole animal	Blood clotting	The extract is applied on the wound
<i>Pila globosa</i>	Pilidae	Apple snail	Body flesh	Asthma & Tuberculosis, stomach disorder	Cooked or roasted meat is taken
<i>Apis spp.</i>	Apidae	Honeybee	Whole animal	Cough, Snakebite, Skin disease,	Honey is taken and applied. Powder of the roasted animal is mixed with honey and applied locally
<i>Cancer spp.</i>	Canceridae	Crab	Whole animal	Jaundice, Stomach disorder	Grinded animal is boiled and the extract is taken
<i>Periplaneta americana</i>	Blattidae	Cockroach	Whole animal	Asthma & Tuberculosis	Extract of the roasted insect with water is consumed
<i>Philosomia ricini</i>	Saturnidae	Silk worm, pupa/ larvae	Whole animal	Weakness, Anemia, Stomach disorder	Boiled and fried animal is consumed
<i>Antharea assama</i>	Saturnidae	Muga silk worm	Whole animal	Weakness, Anemia	Boiled and fried animal is consumed

The table 1 shows that among the non-chordates 8 families are used for medicinal purposes. The faunal resources were collected by capturing, hunting, killing, farming and some manual techniques.

Table 2: List of Chordates used by Tai- Ahom Community

Zoological name	Family	English Name	Parts used	Disease treated	Mode of use
<i>Anabus spp</i>	Anabantidae	Climbing perch	Whole body	post-operative care, anemia, weakness	The animal is cooked or boiled and consumed
<i>Clarius batracus</i>	Claridae	Magur	Whole body	pox, asthma, anemia, weakness	The animal is cooked and consumed
<i>Labeo rohita</i>	Cyprinidae	Rohu	whole body	weakness, stomach disorder	The animal is cooked and Consumed
<i>Puntius spp</i>	Cyprinidae	<i>Puthi</i>	whole body	weakness, stomach disorder	The animal is cooked and Consumed
<i>Naja spp</i>	Elapidae	Cobra	flesh, bile, fat	snake bite, rheumatic pain, body ache	Cooked meat is consumed, bile and fat is applied
<i>Corvus splendens</i>	Corvidae	Crow	fat, feather, meat	Dysentery, typhoid. Malaria	cooked meat is Consumed, fat and feather ash applied locally
<i>Anas platyrhynchos</i>	Anatidae	Duck	flesh and fat	nasal congestion, weakness	cooked meat is Consumed
<i>Gallus gallus</i>	Gallidae	Red jungle fowl	flesh and fat	nasal congestion, weakness	cooked meat is Consumed
<i>Hystrix brachyura</i>	Hystriidae	Porcupine	flesh and fat	weakness, body ache	cooked meat is consumed, fat is applied locally
<i>Sus scrofa</i>	Suidae	pig	flesh and fat	weakness, typhoid	cooked meat is consumed, fat is applied locally
<i>Capra aegargrus hircus</i>	Bovidae	goat	Meat, milk, urine	pox, asthma, anemia, weakness	Cooked meat is consumed, urine is applied locally
<i>Cynopterus</i>	Vespertilionidae	fruit bat	flesh	Dysentery, typhoid. Malaria	cooked meat is consumed
<i>Herpestes javanicus</i>	Herpestidae	Mongoose	Meat, fat, and bone	Dysentery, typhoid. Rheumatic pain, Malaria	Cooked meat is taken, fat is used for massage locally. powdered bone is applied locally

The table 2 analyses that most of the chordate animals serve as traditional medicines of the local rural communities. The rural people specially the Tai-Ahom people uses meat of ethno-faunal species in their traditional medicine system besides for the ritual or such other purposes. Modes of administration vary among the traditional healers. Although traditional knowledge indirectly helps in conservation of the natural resources, but over exploitation of the resources leads to a major threat to the species. Since the exploration of ethno-zoology in this state is very less, a detailed scientific investigation, proper traditional management strategy is urgently sought to keep the natural resource intact before the population of species dwindle.

4. Conclusion

The Tai –Ahom traditional Health- Care practice and system of treating diseases are mainly based on deep observation and to a certain extent superstition. There is an erosion of ethno-zoological knowledge among the Tai–Ahom community these days as younger people harbour less knowledge than the older ones. So the most urgent need is to rescue and record the traditional knowledge on faunal resources in the form of digitized database before its extinction. It is also suggested to create awareness among these people about conservation as well as sustainable development of the natural resources. Emphasis should be laid on scientific management and alternative resource use practices.

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