

With the fall of the ancient kingdom of Kamarupa towards the close of the twelfth century, there emerged in the Brahmaputra valley a number of tribal states, all of which covered roughly the area from the present Sadiya region in the east to Koch Behar in the west. The most prominent of these states were those of the Chutiyas, the Kacharis, the Ahoms and the Koches. The first two kingdoms covered the north-east and the southern part of the Brahmaputra valley. The Ahoms, who were a branch of the Shan race, settled in the eastern most part of the valley and gradually extended their sway towards the west and by the 16th century occupied the whole of the Chutiya kingdom and a major part of the Kacharis. These Ahoms, having ruled for about six hundred years till their kingdom was annexed to the British Indian Empire in the first quarter of the 19th century, left a permanent socio-economic legacy in the valley. In the lower region of the valley there emerged another powerful tribal state, namely that of the Koches, called Koch Behar, in the first half of the 16th century. Besides these states, there were a large number of tribal and non-tribal local chiefs or Zamindars, having their own system of administration in their own area, but always under the sovereign power either of the Ahoms or of the Koches. The neighbouring hill tribes like the Miris (Mishings), Daflas (Nichis) and the Abors (Adis) also accepted either Ahom or Koch Suzereignty. These states covered roughly the areas from the Sino-Burmese border in the North-east to present day North Bengal in the west and the Bhutan Border in the north, and North Cachar hills in the south-ranging over a major part of present north-east India. Tripura, which lay to the south-west of Assam, was ruled by a line of Hindu kings. The Mizos in the extreme south had their own tribal organisation. The Khasi and the Jaintia hills which bordered Ahom kingdom in the south-west were divided into a number of principalities, each governed by its Syiem or Chief. The Garos in the west and the Nagas in the south-east also had their own tribal systems of government. Manipur, lying in the south above the Mizo hills, although a tribal state, had a systematic government. The tribes in Arunachal Pradesh like the Akas (Hrussos), Mishings, Daflas and Mishimis pursued their own tribal way of life.

Agriculture has been the main occupation of the people of

the north-east India. As a matter of fact rulers of this region throughout the ancient and medieval ages undertook policies of agricultural expansion. Inversely the process of tribal state formations in this region is a result of agricultural innovations and economic developments. For surplus production is always necessary to run the affairs of the states. The topography of the region which is much suited for agricultural production, has throughout the ages, played a major role in the fields of this region's agrarian economy.

Thus population in the north-east in medieval times primarily consisted of the tribals who were either in the process of Hinduisation or almost outside its pale. As a matter of fact, the agriculture system as a whole was mostly carried on in their own primitive way. A handful of cultured non-tribals of the valley e.g. the Bhuyans, and also the Ahoms who had a developed agricultural tradition, only adopted to high yielding process and varieties of cultivation. The period, therefore, witnessed a tribal-non-tribal methods of cultivation, the one of age-old less productive system carried on by vast masses, the other comparatively modern and high-yielding carried on by smaller sections.

Although fruits and vegetables as well formed a part of this region's agricultural crops, we shall discuss here the methods of rice cultivation only which constituted the staple item of food of all the sections of people. Contemporary literary records refer to various kinds of rice grown in the north-eastern region. The *Yogni Tantra*¹ and the *Katha Guru Carrit*,² referring to the transplanted *Sali* rice of the time mentioned among others *raja*, *briha*, *soma*, *sighna*, *banga*, *rakta*, *keteki*, *asok*, *bara*, *jaha*, *mathanga maigutiya*, *bar*, *lahi*, *phapari* etc. Besides, the latter work also refers to *Ahu* and *Bao* rice³. As such it had three main varieties - *Sali*, *Ahu* and *Bao*.

Sali was a transplanted variety of rice. Besides it is being a long maturing type, this rice's cultivation involved a complicated process. Such fields which could retain water or could be artificially irrigated from adjacent streams were necessary for its cultivation. This needed vast and levelled lands so that "eye cannot find the least elevation in it..."⁴. A vivid description of wet-rice method as existed till the 19th century, is found in the *Statistical Account of Manipur*. "In June the rains having set in, the field is brought by successive ploughings and barrowings into a state of liquid mud, and in this the 'pung-hul' (seed) is cast. The seed for the 'pung-hul' is first quickened by being moistened with water and kept in a covered basket until it shoots. As this seed floats on the

surface of the mud, it has to be carefully watched until it takes root, and three or four leaves spring up, in order to protect it from wild duck and other birds. After this comes . . . transplanting. The seeds for the plants, which are destined to be transplanted, are usually sown very close, in plots carefully prepared for the purpose. When the transplanting season arrives, the plants are pulled in handfuls out of the ground ; the roots are by washing divested of all the earth attached to them, and having been taken to the field, they are one by one separately inserted in the mud . . . they soon spring up and afford an excellent crop.”⁵ Some of the tribes of the hills e.g. the Khasis and the Jaintias had a slight different type of wet-rice culture being done on the slopes and the plains of the hill areas. Although transplantation does not take place in such process, the method of clearing lands, leveling, creating irrigation channels to supply water from the hill streams, some times from a long distance, weeding⁶ – all the process is a labour consuming one. It is interesting to note that exactly such a form of wet-rice culture is still prevalent in Majuli under Jorhat district of Assam, where people do not transplant the seedlings, but sow the seeds very thinly.

Almost all the tribes Hinduised or otherwise, adapted to shifting agriculture which primarily constituted Ahu and Bao - the latter, a long maturing variety. With a comparatively less consumption of labour and use of very simple implements this method is carried on. A vivid description of the technique is found in Major John Butler's *A Sketch of Assam* :

The natives set fire in the jungle to clear the land of cultivation and to open the throughfares between the different villages, and the awful roar and rapidity with which the flame spread cannot be conceived. A space of many miles of grass jungles twenty feet high is cleared in a few hours The jungle is burnt down and for three successive years two crops are annually realised from it. In February, mustered seed is gathered in, and in June the spring rice 'sown broad cast' is reaped. After the land has been thus impoverished, it is allowed to remain fallow for three years and fresh jungle land is prepared in the same primitive way and with most simple implements of husbandry.⁷

In this method of slash and burn, either plough or hoe, or even a stake is used. But the process properly called *jhum* carried on entirely in the hills involves making of some irregular holes and a few seeds planted in each.⁸ Almost all the tribes of present

Arunachal Pradesh were accustomed to such process. While the process of cultivation in this method had been universal amongst all the tribes of the north-eastern region, the difference was only in periods of lying the lands once cultivated fallow. For example, while the Garos left it unclutivated for seven years,⁹ the Kacharis for three years, the Khasi and the Jaintias leave it after two successive years,¹⁰ and the various Aruanchal tribes leave it fallow from a minimum of 3-4 years to 10 years.¹¹ It appears that the period of fallowing lands depended upon certain factors - e.g. availability and fertility of lands and density of population.

The system of irrigation was in a way prevalent for wet rice culture both among the tribes and non-tribes. The *Katha Guru Carit* records how the Bhuyans of Nowgong built embankments on the river Tembuwani for protection of crops and houses.¹² It may be presumed that this land-lord class of medieval north-east with their advanced cultural traits knew the agricultural methods well ahead of the autochthonous people. The Kacharis, who had also formed states, knew how to irrigate lands. They used to make dams across the hill streams and then led the stored-up water to the fields through a net work of dug-up channels.¹³ The Khasis and the Jaintias had also adopted such system of water supply to the fields.¹⁴ It is only during the Ahom rule for long six hundred years (1228-1826) that much of upper Assam was turned into a flat level lands of rice cultivation. As pointed out by Shihabuddin Talish, in "this country they make the surface of field and gardens so level that the eye can not find the least elevation in it upto the extreme horizon."¹⁵ The Ahoms had built hundreds of embankments "with a view to increasing the extent of wet-rice cultivation."¹⁶ The account of the Muslim chroniclers reveal that wet-rice cultivation attracted the attention of foreigners in upper Assam only. The absence of some significant extension of agriculture in the lower Assam region also be inferred from the account of Ralph Fitch who visited Koch Behar in 1584/85 but does not make any mention of rice cultivation even though he specifically mentions other agricultural crops grown in the area.¹⁷ This implies that if there was any large scale cultivation of rice especially transplanted or wet that was in Upper Assam alone and that too grew at the hands of the Ahoms. As a matter of fact, that 50% 39% and 9% of the settled areas in Barpeta, North Lakhimpur and Gauhati respectively were under shifting cultivation till the beginning of the 19th Century,¹⁸ prove that although the tribes knew of wet rice culture, shifting cultivation was always predo-

minant in medieval times among the tribes other than the Ahoms.

Fertiliser in the modern sense of the term was only a recent development. It was hardly in use in agriculture even as late as the 20th century.¹⁹ Indeed, cultivation solely depended on what amount of fertility the soil naturally possessed. This is why large-scale shifting was always undertaken in those days and lands were lying fallow for years together to regain fertility. People did not think of the use of any fertiliser, because soil of the north-east is naturally fertile; and the Brahmaputra and the Surama with number of tributaries annually flooded the plains always depositing manures. But then manures from ashes were also sometimes used in the process. The *Katha Guru Carit* mentions how the weeds had been burnt to clear the jungles and to enhance the fertility of the land for *Ahu* rice and mustard cultivation.²⁰ The hill tribes - notably the Khasis and the Jaintias burnt the weeds and jungles to obtain ashes by the mixture of which lands became fertile.²¹ Cowdung was also used as manure.

Almost the entire north-eastern region has most simple implements of agriculture. The lower Brahmaputra valley which came into contact with the early Aryan migrants to this region, had possibly knowledge of the use of plough and bullocks - a heritage which the Bhuyans carried to the medieval periods.²² The tribes of the surrounding regions were throughout the period associated with hoe and stick. It is only recently that plough enters some of the tribal societies - notably in the plains. The Khasis and the Jaintias some of whom were now using plough in terrace-cultivations, possibly had knowledge of plough as early as their local kingdom had existed. It is only the Ahoms who had large scale use of plough, pulled both by the bullocks and buffaloes.²³ The Bhuyans who had settled almost in mid-Brahmaputra valley, appear to have large-scale use of bullocks and plough as evidenced from some early records. For example, Sankardeva (1449-1569), the great Vaishnava reformer of Assam, inherited a landed estate along with thirty pairs of bullocks and twenty cows.²⁴

Medieval Muslim accounts, supported by the early British records show that whatever methods there might have been applied, while the extent of transplanted and the high yielding rice was large in upper Brahmaputra valley, *Ahu* or shifting rice in slash and burn and of sowing bread cast had been extensive in the lower. This was largely because of topographical difference and different cultural heritage of the two regions. From the contemporary valley-hill relations that existed it appears that although rice was culti-

vated in some parts of the hills, it was with the most primitive way and with mostly insufficient production to meet the hill people's demands. This is why items of hunting and fishing, roots and fruits constituted major items of food of the hill tribes.

The process throughout the region - both hills and plains remains till date almost the same except that chemical fertilisers have peeped in a very limited way into some rice fields of the north-east. Shifting - Jhuming, transplating, hoeing - and sticking, are still there. All types of *Sali*, *Ahu* and *Bao* with construction of dykes, embankments and of manuring with burning weeds and mixing ashes with soil are still dominating the fields-depicting both tribal and non-tribal heritage or culture of the region.

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