CHAPTER V

PATTERN OF LAND UTILIZATION IN ASSAM - A HISTORICAL PERSPECTIVE

Pre-Ahom Land Utilization Pattern

As there was no definite data about the pre-Ahom land utilization pattern in Assam, copper plate inscriptions or early literary sources throw little light on the pre-Ahom classification of land. From the scanty data it is known that there were broadly three-fold classification of land in the Brahmaputra Valley, viz., Khetra (arable land), Khaile or Aparikrata dhami (waste lands) and vastu (building sites). Lands belonging to Khetra were generally paddy fields, criss-crossed with dykes. King Ratnapala's Berophon copper plate (eleventh century), however, mentions of labukutikabhetra, meaning fields of gourds and pumpkins along with paddy fields. Paddy was undoubtedly, the dominant crop since land management was expressed in terms of the paddy yield.

The pre-Ahom utilization of land was confined to residential purposes and cultivation. Shifting cultivation was the chief form of cultivation, which was practised in up-land cultivating crops like abo paddy, mustard, pumpkins, chillies etc.

The vast areas in the plains affected by regular floods were kept utilised. On the other hand forests occupied the maximum portion of land in Assam. Even in plains low-lying areas there were sufficient number of forests. The people were not very much conscious about the development of their residential houses and roads. Except the King's palaces, the people used to live in houses made of thatch, ekra and bamboo. Present living conditions of some of tribal people in remote areas of the State throw some lights on the living conditions of the pre-Ahom tribal people of Assam.

At the time of the Ahom immigration in the thirteenth century from somewhere in South-western China, the entire Brahmaputra Valley was dominated by Dodo-Kacharies and allied tribes. These tribes had practised wasteful shifting cultivation, which required in the long run, as it still requires 10-15 times more land than cultivation in permanent fields required to maintain a family.

2. A Chutia King, who ruled the eastern part of Medieval Assam during 11th century.

Land Utilization Pattern During Ahom Rule

The Ahom rule in Assam brought a change in utilization of mainly agricultural land in the state. After migration into Assam, they engaged themselves to wet paddy (sali) cultivation and depended on the people conquered by them for other kinds of tributes and services. Jukapha, the first Ahom king established three royal khat (farm or estate) through reclamation with the labour of the Moran servitors. One of these farms, the Gachikala khat, was the supply provision for worship of deities, the second called Dara-khona khat, for ancestral rites of the king and the third, the Engera khat for royal household. These khata were utilized by the field-serfs of the king, such as Khatowal, Babatiya, etc.

As wet-rice (sali) crop practised by the Ahoms in the low-lying level lands known locally as runit since their immigration and influx of other people to adopt such type of cultivation in low-lying level lands, which remained mostly fallow. They had a developed technique in growing wet rice through irrigation and terracing. The yield obtained from wet rice cultivation was manifold compared to yield

obtained from **abu** cultivation on the high land. This had
turned **abu** paddy cultivation into an insignificant crop.
From the available statistics, it is found that in Darrang
77 per cent and in Nowgong and Kamrup 50 per cent of all
rice land were under **gali**\(^6\). The yield of **gali** was 50 to
200 lbs. higher than that of **abu** or **bog** rice per acre of
cultivated land.

For bringing more land under plough and for
improvement of land, investment was made by the Ahom kings
in the Upper Assam Valley. But it should be remarked that
nearly every stream in Upper Assam was anciently bounded.
Investment in Lower Assam Valley was totally negligible.
Though, Lower Assam was ruled by the Ahoms for about 200
years, the wet-rice cultivation of Upper Assam could not
encourage majority of the people of Lower Assam to adopt
the same. As indicated only 50 per cent of all rice lands
in Kamrup district was under **gali** paddy. As Robinson\(^1841\)
observed that lands of Lower Assam was too valuable which
were covered by reeds or abandoned owing to periodic floods,
might be recovered by adopting a general system of land\(^7\).
where embankments raised, these lands might, on the
contrary, be rendered abundantly productive, and not being
liable to the effects of currents across their surface,

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5. The migrant Ahoms believed themselves that their fore-
fathers were sent to earth from the heaven because
'Large fields are lying fallow. These may be well-
cultivated'.

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would be permanently protected from floods. Cultivation was thus confined to ahu and bao, both flood resistant crops, in Lower Assam.

Agriculture was the main branch of industry in both Upper and Lower Assam. Over and above rice crops, lands were utilized by cultivation of sugar cane, mustard, opium, cotton, tea, etc. With the cultivation of rice, other cereal crops like gomdhan (maize) and kanidhan (a kind of small millet and its plant), pulse crops like matikolai (Phaseolus radiaturn), mug (Phaseolus mungo), til (Sesamum orientale), betelnut, palm, etc. were raised. According to Hamilton, "The most common pulse in Assam is the Phaseolus max called the Mati-mas, but they have also the Mug-mas or Phaseolus minimus of Burmah, the Kola-Mas or Lathyrurn sativus the Pokola-Mas or Lignum oryzenae, and the Mohu-Mas or Ervum leus".9

The tea bush, the identical tea of China, grow as favourably upon the mountains possessed by the hill tribes such as Kangtis, Singphos and Muttocks10.

8. Sugarcane was cultivated only with a view to making Gur (molasses).
Tea was the favourite beverage of these tribes and was constantly drunk by them. Fruit crops, although abundantly grown wild, many people also raised in their homesteads. Among others were bananas, jack-fruits, mangoes, guava, pineapple, papaya, etc. From the note of Shihabuddin, who accompanied Mir Jumalah on his invasion of Assam, can be referred here. From Kaliabor to Garhgaon, houses and orchards, full of fruit trees stretch in an unbroken line; and on both sides of the road, shady bamboo groves raise their heads to the sky. Many varieties of sweet-scented wild and garden flowers bloom here, and from the rear of the bamboo groves up to the foot of the hills, there are cultivated fields and gardens. From Lakhuaghur to Garhgaon, also there are roads, houses and farms of the same style. In this country they make the surface of fields and gardens so level that the eye cannot find the least elevation in it up to the extreme horizon. Uttarkuli has greater abundance of population and cultivation. The trees of its hills and plains are exceedingly tall, thick and strong. Many kinds of odorous fruits and


herbs of Bengal and Hindustan grow in Assam. We saw here certain varieties of flowers and fruits, both wild and cultivated, which are not to be met with elsewhere in the whole of India. The coconut and pim trees are rare, but pepper, spikenard and many species of lemon are abundant. Mangoes were full of worms, but plentiful, sweet and free from fibre, though yielding scanty juice. Sugarcane is of the black, red and white varieties and very sweet; but so hard as to break one's teeth; ginger is juicy. The chief crop of the country is rice, but the thin and long varieties of the grains are rare. Wheat, barley and lentils are not grown. The soil is fertile; whatever they sow or plant grows well.

About the utilization of waste lands in Assam before British occupation, the observation of Robinson is worth-mentioning. "The amount of lands in Assam may be estimated at considerably more than one-half the extent of its area. These wastes are fully as rich as any of the lands now under cultivation. The scantiness of population, combined with political causes, among which the ancient feudal customs, and the consequent minute division of land among the peasantry, were probably the most important, have along prevented them from being turned to

11. The mode of manufacturing of tea by these tribes was not very refined. Tea was generally prepared in balls about the size of an eighteen pound shot and as hard as a brickbat, and in this State it keeps a long period of time.
profitable account. The extent of unimprovable wastes is comparatively very small indeed; for even the hills, which have in most cases a gentle slope, are not only for the most part free of rock, but generally covered with a fine rich soil and capable of producing very profitable crops.”

During British Period

The British administration in Assam did not give due emphasis for the improvement of land. Like other States in India, the Government extended due stress only for those areas, where improvement and utilization would give the Government the maximum economic benefit. Utilization of waste lands in Assam by cultivation of tea crop is a clear example. With the breakdown of monopoly tea trade with China, the East India Company wanted to supply tea to meet the growing demands in the European countries by cultivating and manufacturing tea under its own jurisdiction. Accordingly, several places were selected and examined and later found the Brahmaputra Valley of Assam the most suitable for cultivation of tea. Tea cultivation was started with the importing of tea seed and plants from China and later on through the indigenous plants available, which were discovered by Robert Bruce in 1823. To encourage the tea cultivation


in Assam so as to utilize the abundant available waste land, the British government granted considerably tracts of waste land on very easy terms and conditions by passing several special rules as mentioned in Chapter IV (Land Systems and Land Reforms in Assam). Thus bringing of waste land of the State into profitable use is a remarkable step in land utilization history of the State of Assam.

With the starting of utilizing the waste land in the Brahmaputra and the Barak Valleys by cultivation of tea, the Government tried to bring several thousand hectares of spare land in the district of Goalpara under cultivation. In order to encourage the extension of cultivation, waste land tenures were readily granted by the Government. The lands were leased out to new settlers and a remission of rent is allowed for two or three years in order to enable them to make a fair start and to settle conveniently. This remission was called pail. Money advances were also made in certain cases to new settlers. The tenure was called pail patta.

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14. To the extent of waste lands, the early measurement of land, Mr. Matthews revealed in 1827 that in Lower Assam alone, 112995 puras (or 149605.38 acres) were waste lands, cultivated land being 529,735 puras (or 714609.14 acres). In 1853, of the total area of 34,345 sq.miles of this province, not more than 2252 sq.miles were under cultivation.
Table 5.1. shows the total area, population and land under cultivation in Assam during 1853. It is revealed from this Table that only 0.07 per cent of total land was used for cultivation purposes.

Table 5.1. Total Area, Population and Land Under Cultivation of Assam during 1853

<table>
<thead>
<tr>
<th>District</th>
<th>Total area (sq. miles)</th>
<th>Land under cultivation (Sq. miles)</th>
<th>Population</th>
<th>No. of inhabitants per sq. mile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goalpara</td>
<td>4,104</td>
<td>677</td>
<td>141,638</td>
<td>34</td>
</tr>
<tr>
<td>Kamrup</td>
<td>3,345</td>
<td>562</td>
<td>387,775</td>
<td>116</td>
</tr>
<tr>
<td>Nowgong</td>
<td>8,712</td>
<td>276</td>
<td>241,300</td>
<td>28</td>
</tr>
<tr>
<td>Darrang</td>
<td>2,844</td>
<td>346</td>
<td>185,569</td>
<td>66</td>
</tr>
<tr>
<td>Sibsagar</td>
<td>5,440</td>
<td>256</td>
<td>199,573</td>
<td>30</td>
</tr>
<tr>
<td>Lakhimpur</td>
<td>9,900</td>
<td>134</td>
<td>85,236</td>
<td>9</td>
</tr>
</tbody>
</table>

Total: 34,345 2,252 1,201,151 36

Although, there was no scientific land use classification during the British rule in Assam, yet all cultivable lands were classified into "fixed cultivation" and "fluctuating cultivation". This classification was mainly made for collecting the land revenue through the Government agent known originally as Chaudhuri and later on as Meugader. The "fixed cultivation" land included rupeit and homestead lands, while "fluctuating cultivation" included all high lands which could be utilized for raddi, mustard and other different pulse crops. The utilization of land by the households possessing the land was far from satisfactory. Of course the agricultural peasantry had not the means enough to improve the land under occupation. "He had to content himself with his pittance of arable land, wherein he raised, generally the salidhan (winter rice), his staple food crop. If he was fortunate enough to possess some bari or garden land, he cultivated his requirement of pulses, mustard and vegetables. His mode of cultivation was of the primitive nature and the implements he used were of the most archaic type. The annual produce was for his immediate need; hardly was there any surplus for sale or provision for the rainy day.

Consequently, in the event of failure of crops on account of the drought or inundations, conditions bordering on famine were of frequent occurrence. This observation tempted the Government to change the attitude of the agricultural ryots in harnessing the land resources of the province. The Government attempted to give the people a commercial and industrial bias, firstly, by encouraging increased cultivation of such crops as were easily marketable, and secondly, by creating a class of speculators to exploit the land resources of Assam. While recommending the tax on the bari land in 1836, it was expressed to convert these wastes and haunts of wild beasts into fruitful fields of sugarcane, mustard, mulberry, lac, tobacco and vegetables. The Government felt that a certain amount of compulsion was necessary to rouse the dormant spirit of the people. When the people will find that they will have to pay for them (bari land), they will consider to what advantage they can turn them. This had a good impact on the people and the productivity of land was increased.

Like the cultivable lands, waste lands were classified under the modified scheme in three categories - first, the forest and high waste lands; second, the

extensive high reed and grass (nal and khagori); third, grass lands amidst cultivated lands. The First class to be held rent free for five years, the second class for ten years and the third class for twenty years. After these terms are over in regard to each grant, the land would be brought under assessment.

The forests of Assam are full of valuable timber, not only of the ornamental but also the useful type, adapted for building or for canoes, etc. M'Cosh refers to 90 varieties of timber available in Assam, e.g., Urial (Acacia odoratissima), Korui (Acacia margiata), Doro-belok (Antiderma), Kombo (Garaya), Kodom (Nauclea cordamba, Roxb.), Amari (Guarea), Tima (Quercus), etc. Over and above timbers and firewood, the forests are full of wild animals and birds. Among animals, elephants are plentiful. The rhinoceros inhabits the densest parts of the forests. Tigers, leopards and bears are numerous.

20. First Second Third

<table>
<thead>
<tr>
<th>Year</th>
<th>Year</th>
<th>Year</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>6th</td>
<td>11th</td>
<td>21st</td>
<td>@ 8 annas per pur-</td>
</tr>
<tr>
<td>7th</td>
<td>12th</td>
<td>22nd</td>
<td>@ 12 annas per pur</td>
</tr>
<tr>
<td>8th</td>
<td>13th</td>
<td>23rd</td>
<td>@ Re.1-2-0 per pur</td>
</tr>
<tr>
<td>9th</td>
<td>14th</td>
<td>24th</td>
<td>@ Re.1-2-0 per pur</td>
</tr>
</tbody>
</table>

Wild buffaloes abound in all parts of Assam. Other important animals are horses, sheep, hogs, deer, etc. Among the birds, peacocks, jungle fowl, ducks, etc. are to be reckoned.

Classification of Land

The need for classification of land into various patterns according to use felt in India in the last quarter of the nineteenth century, when a beginning was made for the collection of statistics. The immediate urge was the recurrence of famines and local shortages of food to meet, which it became necessary to know how the land resources in the country were utilized. According to existing pattern of utilization, the land of India were classified into five broad classes, which virtually remained unchanged for a long period of time. The broad classification of land use were - I. Area under forest, II. Area not available for cultivation, III. Other uncultivated lands excluding current fallows, IV. Area under current fallows, and V. the Net area sown.

'Areas not available for cultivation' are the areas covered by rivers, lakes, roads, houses, etc. Under no circumstances, these lands can be brought under plough. Forest areas, were the lands declared as such by the Government. These were protected, managed and controlled by the Forest Department of the Government.
'Other uncultivated lands excluding current fallows' include those forest areas or more correctly jungles of
woods, grasses and useless trees, which are under private
ownership and management or which remained unmanaged and un-
exploited. The major areas under this pattern were not
cultivated at all. Cropped areas which were kept fallow
during the current year were termed as 'current fallows'.

On the basis of this five-fold classification
the total land area of the State stood 32.56 million acres
in 1949-50, which was classified and shown in Table 5.2.

Table 5.2. Pattern of Land Utilisation in Assam during
1949-50

<table>
<thead>
<tr>
<th>Items</th>
<th>Area (in million acres)</th>
<th>Per cent of total area</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Forest</td>
<td>4.06</td>
<td>12.47</td>
</tr>
<tr>
<td>II. Not available for cultivation</td>
<td>4.25</td>
<td>13.05</td>
</tr>
<tr>
<td>III. Other uncultivated land excluding current fallow</td>
<td>16.95</td>
<td>52.06</td>
</tr>
<tr>
<td>IV. Current fallow</td>
<td>1.74</td>
<td>5.34</td>
</tr>
<tr>
<td>V. Net area sown</td>
<td>5.56</td>
<td>17.08</td>
</tr>
<tr>
<td>Total</td>
<td>32.56</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: (1) Table of Agriculture Statistics (Assam). Annual.
(2) Annual Report on Crops and Seasons in Assam, Annual.
(3) Also see Goswami, P.C. - Economic Development of Assam-Asia-1-963, p.244.
Table 5.2. shows that other uncultivated land excluding current fallow occupied 52 per cent of total land of the State followed by net area sown. Forest occupied only 12.47 per cent of the total land in the State.

The land utilization pattern under five-fold classification of the area for different periods since 1911-12 are noted below in Table 5.3.

<table>
<thead>
<tr>
<th>Items</th>
<th>1911-12</th>
<th>1931-32</th>
<th>1941-42</th>
<th>1949-50</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Forest</td>
<td>2.28</td>
<td>3.66</td>
<td>4.14</td>
<td>4.00</td>
</tr>
<tr>
<td>II. Not available for cultivation</td>
<td>5.17</td>
<td>4.23</td>
<td>4.24</td>
<td>4.25</td>
</tr>
<tr>
<td>III. Other uncultivated land excluding current fallow</td>
<td>14.95</td>
<td>18.74</td>
<td>17.55</td>
<td>16.95</td>
</tr>
<tr>
<td>IV. Current fallow</td>
<td>2.39</td>
<td>1.54</td>
<td>1.49</td>
<td>1.74</td>
</tr>
<tr>
<td>V. Net area sown</td>
<td>3.47</td>
<td>4.26</td>
<td>5.00</td>
<td>5.57</td>
</tr>
<tr>
<td>VI. Total reporting area</td>
<td>28.26</td>
<td>32.42</td>
<td>32.54</td>
<td>32.56</td>
</tr>
</tbody>
</table>

Source: (1) Table of Agriculture Statistics (Assam) Annual. (2) Annual Report on Crops and Seasons in Assam, Annual. (3) Also see Goswami, P.C. - Economic Development of Assam-Asia-1-963., p.244.

The comparative figures since 1911-12 showed that net cropped area and area under forests have increased during 40 years period from 1911-12 to 1949-50. Area not
available for cultivation and current fallow had been
reduced slightly during 1911-32, while area under other
uncultivated land excluding current fallow had slightly
been increased from 14.95 million acres to 18.74 million
acres.

The five-fold classification continued up to
1949-50. This classification however, offered only a
broad outline of land utilization in the country and was
far from satisfactory and did not give a clear picture
of the actual area under different categories of land
use, which is essential for agricultural planning. Even
the data, in respect of several States were not strictly
comparable owing to lack of uniformity in the methods of
classification and in definitions of different classes.
But nothing could be done till the clue from the same
came from the F.A.O. Standing Advisory Committee on
Statistics in 1948. In April, 1949, the Government of
India appointed a Committee on the coordination of
Agricultural Statistics in India to work out the details
of the annual and provincial required to be organised in
connection with the World Census of Agriculture. Among
other things, the Committee examined the existing five-
fold classification of land utilization and recommended
the need for revising it. Accordingly, a revision was
made in 1950 to remove the defects associated with the
five-fold classification. New classification is only
the extension of the old land classes of II, III and I.
The II class termed as 'Are not available for cultivation'
is further divided into two sub-classes: (i) Land put to
non-agricultural uses and (ii) barren and uncultivable
land. The class III land i.e., 'other uncultivated land
excluding fallow lands' is divided into three sub-classes:
(1) Permanent pastures and other grazing lands, (ii)
miscellaneous tree crops and groves not included in the
not area sown and (iii) the cultivable waste land. The
class IV i.e., fallow lands are sub-divided into two
sub-classes - (1) Other fallow lands and (ii) Current
fallow land. Thus revised classification of land stands
at nine i.e., (1) Forest, (ii) Land put to non-agricul-
tural uses, (iii) barren and uncultivable land, (iv) or-
manent pastures and other grazing lands, (v) miscellaneous
tree crops and groves not included in net area sown, (vi)
culturable waste land, (vii) fallow lands other than current
fallow, (viii) current fallow and (ix) net area sown. The
revised classification was accepted by all the States and
was adopted in 1950-51 issue of the Agricultural Statis-
tics. The new classification has been introduced by all
the States except West Bengal and Manipur in respect of
which data are still presented on the basis of the old
classification 22.

22. Guide to Current Agricultural Statistics (Revised Edition),