

## **Mahabharata and agriculture a historical review**

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The Mahabharata is the biggest epic in the world, being larger than all the European epic put together. Size however need to be a merit and often is a demerit. but the Mahabharata's deep human concern has conserved its universality through all the epochs<sup>1</sup>. as one of the great national epics of India, credits with the great antiquity and encyclopedic knowledge. It is a colossal work of a one lakh(1,00,000) verses, presenting within its vast fabric the most diverse material of great historical and cultural value. The central theme is a bloody fratricidal war around which is woven an intricate web of the most fascinating stories, myths, legends, fables and parables. On this count alone the Mahabharata is a whole literature, the accumulated wisdom and genius an ancient race.

The Mahabharata is the story of a dynastic struggle between kurus and Pandavas for the fertile and wealthy land at the confluence of the Yamuna and Ganges river delta is enhanced by peripheral stories that provide a social, moral and cosmological background to the climactic battle<sup>2</sup>.

But there is always another side to a coin and so it happened that this very encyclopedic nature of the Epic militated against its historical value. Its text had been in a fluid state for centuries and was tampered with on and again not only by poets of genius but also by very ordinary scribes. This memory of the fluidity of the original is preserved in the Epic to this day.

In the course of centuries as the epic came to be handed down from generation to generation. From place to place and from bard to bard, its wording varied and contents swelled till it became a confused conglomerate of various cultural cross-currents. No historian could approach this inflated bulk of the Mahabharata without being assailed by doubts about the dubious nature of the material and its loose chronological set-up. The utter desperation of a scientifically inclined mind, when confronted with this literary giant, is best summed up in the words of the noted Indologist Oldenburg when he described the Mahabharata as a monstrous Chaos, the problem was how to evolve an order out of this chaos.

This source material is held out for comparison and corroboration with all available historical evidence, but particularly with excavated finds whenever they are present. This is no mistaking the degree of certainly these well dated and well stratified finds can impart in building up new historical and chronological horizons for the Mahabharata.

The present paper is an attempt to assess the role of agricultural economy and to trace the agricultural practices of the Mahabharata period. Here in, I tried to state some of basic assumption of mine about practice of agriculture. With support of the Vyasa Mahabharata and secondary sources which speaks more about the great epic of India.

There is something rather special about the role of epic literature in India life, we need to explore the whole question of the relation between the myth poetic and moral in the context of the

Mahabharata we have a story of extreme complexity Characters that are unforgettable and cosmic context in which gods and men alike jostle with each other.

I start with a remark of V.S.Suktankar made in 1942 'Whether we realize it or not it remains a fact that we in India still stand under the spell of the Mahabharata there is many a strand that is women in the thread of our civilization reaching back to hoary antiquity<sup>3</sup>'.

Further he called this epic dateless and deathless poem which forms the strongest link between Indian old and new.

At all events it may be proper to ask to what extent modern man living in the midst of a different set off social institutions can respond to all this. The society portrayed in the epic much resembles what we find the today.

India has had a rich agricultural heritage since time of the Indus Valley Civilization. While formers still follow ancient practices in many regions, Agriculture was the corner stone of ancient Indian economy although we lack precise details and statistics it seems certain that farming enterprises ranged from the cultivation of a single field yielding scarcely enough to support a family to great landed properties worked by a large number of hired lands<sup>4</sup>.

The Indian Village economy is based mainly on agriculture, cattle rearing and industries dependent on agriculture. Agriculture has been the chief source of wealth. It has been the backbone, and the nerve centre of rural economy. With the bulk of population as agriculturist, land came to be the most valued possession. The type of climate, the quality of soil and the technology used in agricultural operations and their impact on agriculture and increase or decrease in agricultural production had its effects on socio economic and political system.

The economic life of India as reflected in the epic was chiefly agricultural. During the Mahabharata the main profession of the population of the India was agriculture. The period comprises the beginning of rural economy in Mahabharata.

Mahabharata includes all aspects of Indian social and economic life. It reflects the characteristics of a complex, development society. But the other portions of the epics contain many things which seem to be at variance with such a society.

The social landscape of Mahabharata presents a clear picture of Indian avunculate society. Its inherent conflicts from the Mahabharata also we can get clear indications of the agricultural traits of the ancient period.

The principle story and several legends and discussion hard back to the later vedic and early past vedic ages. The socio-economic life of the Mahabharata may be said to spun the long period of a whole millennium from 600BCE to 200CE and to comprise within itself 3 distinct strata. It appears to have creatively utilized diverse kinds of traditions then present. Since the text was used for popular recitation and exposition many supplementary narratives and discourses were added in this process to further illustrate the point already made in the original text Mahabharata reflects the critical representation of a bygone heroic age from the point of view of a subsequent age of enlightens. Since social landscape of the Mahabharata is largely sylvan and rural, the forests are the abode of hermits and sudras, nishads, exemplified the tribes.

Number of the verses of the Mahabharata speaks from time to time on the agriculture and the food habits of the ancient people. It is rich and interesting evidence. The picture that emerges is of a

robust people, relying, mainly upon their herds of cattle and agriculture. Didactic and descriptive portions of the Mahabharata can be used for indicating the social and cultural trends in pre-Mauryan.

The political thinkers of the Mahabharata Brhaspathi, Vidura, Narada, Devala, Sukra, and Kamandaka etc., have discussed the importance of agriculture finance in the state economy. It has been examined earlier that without economy and its allied activities state in ancient India could not fulfill the policies. Narrative account of the epic refers to the agricultural economy and agriculture was one of the most important sources of income to state India.

Here some of the evidences which are from Vyasa Mahabharata and other secondary sources referred to agricultural activities of Mahabharata.

Shanti parva 139.19 states that during this period agriculture cattle rearing and external and internal trade would be rooted out rules of the assembly of townsmen would disappear and all festivities would stop.

We get some important information on agriculture in the Sabha Parva where Narada gives valuable advice and instruction to Yudhishthira. He wanted to know the condition of the cultivators. He enquired of the ponds and reservoirs of water so that agriculture would be independent of rains<sup>5</sup>.

The conversation between Narada and Yudhishthira indicates the significance of agriculture. Narada asked Yudhishthira and makes the following inquiries, 'have you ensured the people of the country are not oppressed by thieves, the greedy, the princess or women of the kingly household or even by yourself and have you ensured that in every part of the lands large irrigation tanks have been constructed that these are brimming with water and that agriculture is not left at the mercy of the god of rain alone? Have you ensured that the cultivation have not exhausted their seed or feed and that through your generosity they are offered loans at the rate of one percent? O dear one have you ensured that varta is being carried out well by men of honor and virtue; because happiness and prosperity in the world are founded on varta'. Here varta indicates the occupations of the peoples of the society in which agriculture was the important occupation of the particular community.

The Lands was usually tilled with plough share made of iron and then seeds were sown. In Mahabharata, the plough is a sacred implement which was supposed to have been the symbol of truth and duty with the prince Balarama, who is described as a champion of ploughmen. He would never go away without a plough. Agriculture remained neutral, suggesting perhaps, that the duty of the grower was to feed all persons whether they were friends or foes or good or wicked.<sup>6</sup>

In another one occasion Krishna states. 'I till the earth assuming the form of a large plough share of black Iron'<sup>7</sup>.

The great epic also refers to the process of making the field free from unwanted plants and that was used for cultivation<sup>8</sup>.

Lands were cultivated with the help of bulls. They were indispensable in agriculture. Anushasan Parva, 72-18-19 verses speak very emphatically the importance of the cows in agriculture. Thus, it is stated that the cows feed men with their milk and ghee (Butter) and their (sons, Bulls) perform agriculture. They produce paddy and other crops that are used in the performance of Yajnas.

Descriptions of material wealth as we read in the course of material wealth as we read in the course of Yudhishthira's raja suyayaga or royal sacrifice (II 30-32) includes several agriculturals based one, silk, cotton, dresses etc. as ably interpreted by Dr. Romilathapar the predominant economy of the epics

a mixture of pastoralism and agriculture with an emphasis on the former gradually changing to the latter.

The detailed description of agricultural implements especially the plough, along with measurements of the various parts is a noteworthy feature of the text. Mahabharata also stated that agriculture, animal husbandry and trade were the way of life of the people it was mentioned that large irrigation tanks have been constructed for agriculture purpose. Agriculture was certainly the occupation of the bulk of the population and agriculture had developed and advanced in India to the position at which perhaps stands today.<sup>9</sup>

it appears from the Mahabharata that most probably there were state owned agriculture in a large where many hands were employed<sup>8</sup>. This we can understand how Narada enquired whether the farmers had plenty of food and seeds and in case of need whether they could get State loan with interest at rate of 4%.<sup>10</sup>

Irrigation adequacy and attempt was made to make agriculture independent of uncertain rains.

The king and the state had a close eye on the welfare of the farmers. If needed state help in the form of loan with 4% interest was allowed to the cultivators<sup>11</sup>.

It would reflect some differentiation in land ownership and among those working on the description given by Narada of a govern state(Sabha Parva 5)cultivation was probably still within the confines of the clan since agriculture slaves and peasant cultivators are absent in the narrative sections.

All this may suggest a form of mass upheavals in which the peasants and artisans refused to pay taxes. there was difficulty to officials to collection of taxes and payment to government this problem was solved through the adoption of the practice of land grants on a large scale.

G,Romila Thapar in her article 'The Historical and the Epic' has pointed out that burning of the KhandavaVana, forest in the vicinity of Indraprastha, gives an indirect reference to primitive agriculture. She remarks that 'the burning of a forest is indicative of the early stage of an agrarian economy when population groups are relatively small and can survive on this low yielding methods of cultivation'<sup>12</sup>. but the information supplied by the Epic, specially on agriculture, is indicative of a more developed stage when the land was ploughed and irrigated and if needed state help was extended to the cultivators.ThusThapar observes -reference to agriculture and agricultural processes are comparatively infrequent in the narrative sections of the text. A well developed agrarian economy would compute wealth in terms of fields and stocks of grain apart from other items such as livestock and gold. The change from a pastoral cum agricultural economy to one more intensively dependent on cultivation is most clearly seen in the pattern of gift giving, classified as dana and discussed in detailed in the didactic sections, as for example, in the Anusasana Parva. The growing importance of agriculture becomes apparent from the same part of the text when in addition to land the donating of a tank is also mentioned<sup>13</sup>. The methods of cultivation practiced during this ancient period is revealed by several proverbs' village songs and literature of the period which are available even today.it is surprising that the people had good knowledge about agriculture.

Several rituals in the epic suggest that even agriculture was practiced by princess. Duryodhana was advised to do so<sup>14</sup>.

Vidhura who was considered to be a very wise person advised the king to take to agriculture<sup>15</sup> agriculture was the main source of the period state of the period.

It was clearly understood that although taxes constitute the very basis of the state. They can be raised only from settlements rural and urban which need favorable attention. In the Sabha Parva a reference has been made to collection of Bali Tax was to be realized from the Agriculturist<sup>16</sup>. Anushasan Parva 13.17, is gives significant information about agriculturist role in the society and their responsibilities. In which mentions how peasants involves a double burden on the peasantry official and various kinds of state functionaries such a burden however is not imposed on the shudras, who were asked to give cereals (anna) only to priests.

The varna division assured importune in the sense that only those who practiced forming and cattle rearing and carried on trade were generally the source of all. it is stated for examples that a vaisya who gives a part of his agricultural product to the brahman after he has taken out the sixth part of released forms in. There is mention about taxes raised from farmers<sup>17</sup>. it is significant that this involves a double burden on the peasantry which has to support both priest and princess including warriors' officials and various kind of state functionaries such a burden however is not imposed on the sudras who are asked to give cereals only to priest<sup>18</sup>The Mahabharata does not favor agriculture for the Bramhana. All taxes are drawn from the third estate or people caste<sup>19</sup>( vaisyas) all that has been stated above is sufficient to demonstrate the presence of strong elements of a class divided and state based society in the Mahabharata. Specific duties or professions for the four Varnas have repeatedly been mentioned on different occasions in the great Epic. The Santiparva also reference duties of social group assigns menial servies to the Sudra, agriculture to the Vaisyas.<sup>20</sup>

The brahmansa also evidently because of lack of gifts from princes and peasants would take to the functions of the vaisyas<sup>21</sup>. The prescription of duties for the four Varnas mentioned in the Great Epic gets support by Manu vaisya are agriculturist<sup>22</sup>. A crucial element in the social crisis was the defiant attitude of the members of the producing and paying varnas who seem to have offered resistance on account of the confusion of the varnas or varnasamkarana speaking of a large ordeal kingdom which was inhabited by all the four varnas<sup>23</sup>

This literal meaning of the verse would not make any sense unless we presuppose that varnasamkarna implied compelling members of the upper varnas to take to mining and agriculture which they could legitimately organizing but could not actively practice. Study of Mahabharata makes it quite clear that the it contains economic aspects of life of the Indian traditions. The text itself speaks of the peoples engaged in different occupations.

For instance, it is stated that the warriors would function as vaisyas and live on agriculture and other means of earning properly, apparently because they found it difficult to be paid and maintained as warriors and administrators. Agriculture, cattlerearing and trade practiced by the vaisyas formed the source of state income. It is significant that land grants which assume importance in the epigraphs of the early centuries of the Christian era appear at several places in the Mahabharata and probably presuppose an element of feudal development. For officers lower down to the hierarchy it is laid down that the lord of a hundred villages should have for his support a large village. Grant of land revenue is provided for the head of ten villages and for that of Twenty villages obviously for their fiscal and administrative functions<sup>24</sup>. This presupposes a society in what the vallyas and Sudras seem to be the main producers and payers of surplus produce and labour. The Shanti parva suggest that land revenues were unequally divided, but this unequal division did not apply to land itself.

Since Agriculture was main stay of economic life, agriculture dependent only on rains was distinguished from that assisted by artificial means of Irrigation such as wells, tanks and water –

channels. As already mentioned state had responsibility to provide irrigation facilities. The state was expected to help the cultivators by light taxation, loans and remissions.

The peasantry consisted mainly of the vaisyas although persons of other varnas were also known as farmers peasant's proprietorship appears to have been the prevailing mode of land tenure though the king had the right to levy taxes in lieu of the protection forefeared.

The excavations at Hastinapura and Atranjikhhera clearly attest the association of iron tools and weapons with PG ware, which characterized the period 1000BCE in the reign where the Mahabharata story is located.

There was increased use of iron for some tools and weapons constituted in itself any revolution. The advance in iron technology while improving the efficiency of ploughs and axes, Sickles as also the quality of wheels doubtlessly increased production helped the clearing of forest and added to the precession and ease of manufacture in general. The lands were usually tilled with plough-share made of iron and then the seeds were sown.

Even from the food habits of the people also we can understand the agricultural crops of Mahabharata period.

The Epic would have us believe that as many as 2000 animals were slaughtered daily in Randita deva's kitchen. Ksatriya princes like Nala and Bhima themselves become such expert cooks, both excelling in meat preparations? The elaborate splendor and luxury of the palaces was certainly a later superimposition on a simple people who slaughtered their own animals and cooked their own meat into a simple broth or a mess with rice. With the emphasis on meat and milk, cereal came in only incidentally. Barley (yava) in all its forms, cakes(purodasa<sup>25</sup>). gruel<sup>26</sup> (karambhha)), porridge(yavagu)<sup>27</sup>fried grains(dhana)<sup>28</sup>and groats saktu<sup>29</sup>was the main cereal nourishment. Rice (vrihi) too was there mostly taken boiled with milk,butter,ghee<sup>30</sup>. the wide consumption of barley is a marked feature of the vedic diet too, but its record goes back even further to mohenjo-daro and Harappa. This importance is related strictly to its easy cultivation. The Mahabharata refers to this grains vrihi more commonly than Sali, and swastika only once<sup>31</sup>.

However even at this stage, when there were large sugarcane groves all around its cultivation was both troublesome and expensive. The few preparations with sugar in the Mahabharata are all confined to Parvas XII,XIII and XIV ( shanty, Anushsasan, Ashvamedika )of the Epic in ritual or didactic portions. There is samyava<sup>32</sup>and Yavaka<sup>33</sup>from barely flour, payasa<sup>34</sup>

the ancient archaeological evidence of rice also comes from the interiors, Hastinapura the epicenter of Mahabharata activity. Some of the latter parvas of Mahabharata, particularly the Santi and Anusasana, which form a discontinuous link with the rest of the story contain information not found elsewhere in the epic. The mention of oilseeds in Mahabharata is in similar contexts. Of the pulses there is masa or udida, mudga or moong, the grene pea, kalya, the common gramcana and the horse gram kulattha,all mentioned together, this being the only reference to them in the entire Epic<sup>35</sup> then there is also rajamasa<sup>36</sup> of all these masa alone seems to have better known. The only prominent oil seed in the Epic is tila or sesamum,another important sraddha offering<sup>37</sup>. It was regarded as a quality food , bestowing strength and beauty<sup>38</sup>, particularly during the winter months of Magha(XIII.65.7), but again references to it are confined mostly to the Anusasanaparva. A widespread use of oil pre supposes an equally widespread cultivation of the oil seed and some kind of oil extracting mechanism.<sup>39</sup>

The most popular drink for all people and for all occasions was sura which was brewed from barley or rice flour.<sup>40</sup> despite a wide variety of intoxicants there is however no reference whatsoever to any of grape-wine in the Mahabharata.<sup>41</sup> By taking up archaeological evidence it may be well worthwhile to narrate in a nutshell the main part of the Mahabharata story in order to let the unfamiliar reader know which sites were associated with that story. The key site in the story is of course, Hastinapura, situated on the right bank of the Ganga in Meerut District of UP. Varanavata, modern Barnawala district, Viratanagara Rajasthan, Indraprastha (Puranacila) Tilaprastha, Mathura, Ahichhatra and Kampilya have been excavated and the rest subjected to thorough exploration. Excavation of Hastinapura revealed information about agriculture and cattle breeding seem to have been the main stay of these people. The principal crops cultivated by them were wheat, Barley, rice.<sup>42</sup> Sickles and probable ploughshares of the copper gave the necessary booster to agriculture<sup>43</sup>.

### **conclusion**

To conclude the epic in origin relates to clan based tribal society with effective power invested in tribal chief ship and where the term tribal does not preclude social stratification a society which gradually gave way to monarchies of the more conventional type based on development agriculture.

But why one should ignore altogether the innumerable account in the epic of the lives of Brahmins and those who subsist on agricultural products is not clear. But not only was agriculture prevalent on a large scale with good agricultural implements, but even improved methods of irrigation were in practice.

India has had a rich agricultural heritage since the time of Indus valley culture. Which farmers still follow ancient practices in many regions the modern agricultural graduates trained in the agriculture of the west are mostly ignorant of our own ancient agricultural practices. It is absolutely necessary for the farm scientist to possess knowledge of our agricultural heritage in order to effectively communicate with majority of farmers.

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