247

Biodiversity in Ramayana

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Satyam vadah Dharmam chara is the known message of Ramayana.

But beyond the *dharmic* obligations of Lord Rama to his father, mother, brother, wife, and subjects and the predicaments of fulfilling these, Ramayana has another subtle message too – a message of significance of biodiversity and its conservation in ancient India.

Exploitation and sustainable use of biodiversity as well as conservation of biodiversity assumed a new found significance during the last two decades, especially after the 1992 Earth Summit at Rio de Janeiro. After that many more international biodiversity agreements also came into effect. India is now one of the 17 mega diversity centers of the world. True, the new found significance of biodiversity has given a fresh lease of life to the importance of biodiversity and its conservation. But it is a fact that since very ancient times India has been a treasure trove of biodiversity.

In Ramayana, believed to be of *Treta yuga* origin (approximate antiquity of 5500 BCE), there are many descriptions of places, incidents, and events directly linked to

biodiversity. An important verse of Ramayana is given below:

Ramam Dasaradham vidhi Mam vidhi Janakatmajam Ayodhyam adavim vidhi Gachathatha yadha sukha.

In this verse, adavi (forest) and Ayodhya (kingdom) are given equal importance. The 14 years of 'exploration' from north to south of India by Rama, Sita, and Lakshmana gives not only a glimpse of the rich flora and fauna of the then Bharat (India) but also the interdependence of the living beings of the ecosystem. Perhaps the very purpose of Mata Kaikeyi demanding that son Rama should be sent to the forest for 14 years was intended to unravel the rich biodiversity of the then India extending from Nepal to Sri Lanka. Many of the places mentioned in the route of the trio are now located based on geographical evidences. For example, the forest in Chhattisgarh is believed to be the Dandakaranya of Ramayana.

About 200 different plants are mentioned in Ramayana (Source: en.wikipedia.org/wiki/Flora_of_the_Indian_epics_period) with maximum diversity at *Panchavati* followed by *Matanga* hermitage. The *Sarabhangasram* and *Sudheeshnasram*

near *Dandakaranya* are reported to be rich with respect to different plants and animals.

In the *Ayodhya kanda*, the rich biodiversity of Chitrakoot is illustrated. Agastyasram is yet another example of the description of biodiversity in Ramayana. Again in the Aranyakanda there is Panchavati with its gigantic banyan trees (Ficus benghalensis)! Ashoka (Saraca asoca), ashwakarna (Vateria indica), champaka (Michelia champaca), chandan (Santalum album), mango (Mangifera indica), dhawada (Anogeissus latifolia), bamboo (Dendrocalamus strictus). kans (Saccharum spontaneum; thatch grass), (Pandanus odoratissimus), catechu (Acacia catechu), date palm (Phoenix dactylifera), palas (Butea monosperma), jackfruit (Artocarpus heterophyllus), gamboge (Garcinia sp.), palmyra palm (Borassus flabellifer), Cinnamomum sp., Calophyllum inophyllum, Prosopis cineraria, etc. are some of the other flora of Panchavati. During their stay at Panchavati, Rama, Lakshmana, and Sita survived on forest fruits, tubers, etc. available there in plenty.

The role of the bird Jatayu (mythical vulture) in locating Sita is described in Aranya kanda. This perhaps implies the significance of interdependence of man with other beings! Not only the bird Jatayu and Sampati (Jatayu's brother) but also animals (monkeys) and even trees assume significance in searching for Sita. All these symbols are perhaps indicators of the mutual cooperation between man and other life forms of nature, as visualized by our ancestors.

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In the *Kishkindha kanda* too there is good description of biodiversity. Another example of interdependence of man with another living being is described in this *kanda*. There is mention of a squirrel to carry pebbles to assist in building the bridge! All these symbols were perhaps meant to drive home the significance and value of each and every living being in nature.

Again, why was Sita seated in the *Asoka vana* (Ashoka forest) rather than in King Ravana's palace in Lanka? Was it perhaps to ease the mental tension of a bereaved Sita amidst the medicinal tree canopy? Horticulture therapy? Perhaps!

In the Yudha kanda, to revive the unconscious and injured Lakshmana, Hanuman brings the Sanjivani plant from the Himalayas. Ramayana describes the medicinal plant wealth of Himalayas under four groups, viz., Visala kalyani, Sandhana karani, Suvarna kanti, and Mrutha sanjivani, each with its own significance, perhaps!

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A scholarly study of this ancient Hindu treatise from the point of biodiversity in the light of the current developments in the field may bring forth the much hidden wisdom of our ancestors.

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