

सञ्चारिणी

Sañcārīṇī

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A QUICK GLIMPSE AT AGRICULTURE AND ANIMAL HUSBANDRY IN THE PURĀNAS

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Introduction:

yo vidyāccaturo vedān sāngopanṣisado dvijah
na cet parāṇaṁ saṁvidyān naiva sa syād vicakṣaṇah
itihāsa-purāṇābhyāṁ vedāṁ samupavṛṁhayet
bibheti alpa-śrutād vedo māṁ yam praharicyati //

That twice-born (Brāhmaṇa), who knows the four Vedas with the Angas (supplementary sciences) and the Upaniṣads, should not be (regarded as) proficient unless he thoroughly knows the Purāṇa. He should reinforce the Vedas with the Itihāsa and the Purāṇas. The Vedas is afraid of him who is deficient in traditional knowledge (thinking) 'He will hurt me'.¹

The Purāṇas are the records and sources of the geographical, historical, cultural, religious, educational, philosophical and economic life of the people of India. The researchers and scholars differ from each other regarding the date of the compositions and the codifications of the Purāṇas.

The Viṣṇupurāṇa, the Vāyupurāṇa and the Matsyapurāṇa describe the history of the Maurya and the Gupta dynasties. So these Purāṇas are composed after the Gupta period and

before the 7th century. Ācārya Śaṅkara (about 8th century) and Kumārila Bhaṭṭa (8th century) quoted ślokas from the Purāṇas. Bāṇabhaṭṭa mentioned the Vāyupurāṇa in his book Harṣacarita (7th century). The Jaina poets began to compose the Jaina Purāṇas based on the Jaina greatmen from the 7th century. Alberuni (10th century) named the Viṣṇupurāṇa, the Ādityapurāṇa and the Viṣṇudharmottara Purāṇa in his account. He was known to the names of the 18 Purāṇas.²

We have to know the systems of agriculture and animal husbandry of those periods that are mentioned in the Purāṇas. The systems of agriculture and animal husbandry are not properly arranged in the Purāṇas. The elements of agriculture and animal husbandry are mentioned in a scattered way. But the treatments of some animals are dealt with in a few chapters of the different Purāṇas.

Agriculture:

Before going to this heading of the topic, we may know about agriculture and animal husbandry during the periods of the Maurya and the Gupta as the three Purāṇas describe the history of the dynasties of the Maurya and the Gupta periods.

a. i) Agriculture in the Maurya period³

The Mauryan economy was agrarian. The majority of the people were agriculturists. The Vaishyas were specially entrusted with

kr̥ṣi (agriculture), Paśupālana (cattle rearing) and Vānījya (trade). The fertile soil and artificial irrigation enabled the Indians to collect two and sometimes more harvests a year. The principal crops were various kinds of rice, barley, millet and wheat. There are also references to sugarcane, fruits and vegetables. The system of irrigation was developed.

ii) **Animal husbandry in the Mauryan period⁴**

The concern for the promotion of livestock-breeding was largely a consequence of the needs of agriculture. The people glorified in the possession of cattle. Special officials supervised pastures. Economic needs and military requirements promoted horse-breeding and elephant-breed.

b. **Agriculture in the Gupta Period⁵**

Agriculture remained the economic basis of society during the Gupta period. There were two principal harvests, one for summer and the other for autumn. A large variety of agricultural crops including different varieties of rice, wheat, barley, peas, oilseeds etc., trees and medicinal plants were grown during the Gupta period. Constant supply of water was made available to agriculturists through irrigation works.

c. **Agriculture in the Purāṇas**

The Agriculture in the Purāṇas includes the following elements-

1. **Bio-diversity of flora**

2. Crops
3. Creation of crops
4. Classifications of vegetation
5. Land
6. Seeds and sowing
7. Manures
8. Irrigation
9. Rainfalls
10. Forest guards
11. Farmers and agriculturists
12. Pests and their management
13. Horticulture

The short discussion on these elements may throw light on the system of agriculture in the Purāṇas.

i) **Bio-diversity of flora**

Purāṇas mention about 500 species of plants. The Vāyupurāṇa⁶ mentions the following plants and herbs:

Āḍhākya (Cajanus Indicus Spreng), Aguru (Aguilaria Agallocha), Akṣotaka (Walnut), Ambuda (Cyperus Hexastychinus Communis), Āmra (Mangifera Indica), Aṇu (Panicum Miliceum), Aśoka (Jonesia Asoka Roxb), Aśvattha (Ficus Religiosa), Atasī (Crotolaria Juncea), Badarī (Jujube), Bhaṇḍī (Rubia Munjista), Bilva (Aegle Marmelos), Campoka (Michelia Campaka), Caṇaka (Chick pea), Candana (Sirium

myrtifolium), Dāima (Pomegranate), Darbha (Saccharum cylindricum), Dēvadaru (Himalayan Cedar), Phalgu (Ficus Oppositifolia), Drākṣā (Grape), Dūrvā (Panicum Dactylon), Godhūma (Wheat), Gṛnjana (Onion/Garlic), Ikṣu (Sugar-cane), Kadalī (Plantain), Kalka (Terminalia Bellerica), Kalpavṛkṣa (Wishing tree), Kapittha (Feronia Elephantum), Karambha (Groats), Kāśa (Saccharum Spontaneum), Kāśmarī (Gmelina arborea), Khādīra (Acacia Catechu), Kharjura (Date), Kimśuka (Butea Frondosa), Kulāthaka (Dolichos uniflorus), Kurantaka (Amaranth), Kuśa (Poa cynosuroides), Lakuca (Artocarpus Lacucha), Laśuna (Garlic), Lava (Nutmeg), Māṣa (Phaseolus Radiatus), Masura (Lentil), Matulunga (Citron), Mudga (Phaseolus Mungo), Nāga (Mesua Roxburghii), Nīlāsoka (Blue Jonesia Asoka Roxb), Nīpa (Ixora Bandhuca), Nyagrodha (Indian fig), Padma (Lotus), Palāṇḍu (Onion), Puṣkara (Nelumbium Speciosum), Śāka (Tectona Grandis), Sāla (Sāl), Sālmala (Silk-Cotton), Śabara (Lodhra), Sarjaka (Terminalia Tomentosa), Śleṣmātaka (Cordia Latifolia), Śyāmāka (Panicum Frumentaceum), Udumbara (Ficus Glomerata), Uśīrī (Andropogon Muricatus), Tāla (Fan-palm), Tamāla (Xanthochymus pictorius), Tīla (Sesamum Indicum), Tīlaka (Clerodendrum Phlomoides), Vaṭa (Ficus Indica), Venu (Reed), Vibhītaka (Terminalia Bellerica), Brīhi (Rice), Yava (Barley).

The Agnipurāṇa mentions many plants and herbs. Some of them are listed here:

Japā (China rose), Vibhītaka (Terminalia Bellerica), Viśālā (Colocynth Basella Cordifolia), Bhṛngarāja (Eclipta Prostrat), Guggula (Indian Bedellium), Hingu (Asafoetida), Viśva (Dried Ginger), Śrī (Black Holy Basil), Drākcā (Grapes), Śvadangṣṭrā (Astercanta Longifolia), Kṛṣṇā (Piper Longum), Ugrā (Hyperanthera Moringa), Granthika (Pepper), Vahni (Plumbago Ceylanica), Yuthikā Jasminum Auri culatum), Bhallātaki (Cashewnut), Pathyā (Citrina), Kulaltha (Dolichos Uniflors), Snuhī (Euphorbia Antiquorum), Arka (Indian Ipecacaunha), Lāngulī (Glory), Nirguṇ-ḍika (Indian Privet), Kramuka (Betel Nut), Nārikela (Coconut), Śīgru (Drum Stick), Ādraka (Ginger), Rasuṇa (Garlic), Devadāru (Himalayan Cedar), Śunṭhi (Dried Ginger), Ingudī (Balanite), Dādīma (Pomegranate), Rāsna (Ichneumon Plant), Citraka (Ricinus Communis), Āmalaka (Myrobalan), Kharjur (Dates), Badara (Jujube), Vṛṣa (Gendarussa Vulgaris), Ariṣṭa (Soapnut), Pippalī (Long Pepper), Śatī (Curcuma Zedarla), Haridrā (Turmeric), Ikṣu (sugar-cane), Bākucī (Malaya Tea), Rakta Yaṣṭikā (Red Paddy), Kākāmārī (Menispermum Cocculus), Dhātrī (Emblica Officinalis), Mālatī (Jasmine), Simhī (Solanum Jacquini), Vatsaka (Wrightia Antidysenterica), Māṣa (Black gram), Musta (Cyprerus Rotundus), Parpaṭaka (Oldenlandia), Śāra (Cuscuta Grass), Nāgara (Dry Ginger), Yava (Barley), Śāli (a kind of rice), Masura (Lentil), Caṇaka (Chickpea), Kuṣṭaka (Sausurea), Paṭola (Snake Gourd), Nimba (Margo), Godhūma (Wheat),

Makuṣṭha (Phaseolous Aconitifolius), Lodhra (Symplocos), Vāstuka (Chenopodium Album), Khudira (Black Catechu), Rkṣa (Bignonia Indica), Abhaya (Chebulic Myrobalan), Jāngala (Venison), Dhātrī (Myrobalan), Matulunga (Citron), Jāti (Nutmeg), Mūlaka (Radish), Viḍanga (Embelica Ribes), Marica (Black Pepper), Gokṣura (Tribulous Lanuginosus), Ajamoda (Liguisticum Ajwaen), Karañja (Indian Beech), Amṛtā (Ocimum Sanctum), Agniśikhā (Gloriosa Superba), Śrngī (Water Chestnut), Atibalā (Indian Mallow), Ativiṣā (Indian Atees), Kuṭaja (Tellicherry), Palāṣa (Flame of the Forest), Bacā (Sweet Flag), Kalambikā (Convolvulus Repens), Śatāvārī (Asparagus), Arjuna (Terminalia Arjuna), Pāṭhā (Velvet Leaf), Kolā (Black Pepper), Yaṣṭimadhu (Liquorice), Bilva (Aegle Marmelos), Sthirā (Salmalia Malabarica), Nāgaballī (Piper Betel), Ankola (Alangium Hexapetalum), Puṣkara (Nymphaea Nelumbo), Kuṣṭha (Costus Speciosus), Chinnaruha (Boswellia Thurifera), Punarnavā (Hogweed Horsepurselene), Priyangu (Calicarpa Macrophylla), Agnimantha (Clerodendron), Putikā (Indian Spinach), Guḍci (Tinospora), Śyonaka (Tutun), Prṣṇiparnī (Uraria Picta), Śelu (Cordial Myxa), Kṣudra (Oxalis Pusilla), Vyōṣa (Dry Ginger, long pepper and black pepper), Brāhmī (Ruta Gravedens), Bhūnimba (Creat), Viṣāṇikā (Odina Pinnata), Padma (Lotus) etc. Other Purāṇas also mention many trees, plants and herbs. Those cannot be mentioned for want of space.

ii) Crops:

Rice, sugar-cane, wheat, jute, oil-seeds, cotton, jawar, bajra, spices, etc. were the main agricultural crops.

iii) Creation of herbs and plants

According to the Brahmāwḍa Purāṇa, Brahmā created trees, plants, herbs and creepers.⁸ Brahmā recreated these.⁹

iv) Classification of Vegetation

The Viṣṇupurāṇa classifies the entire vegetation into three categories¹⁰. The Brahmāṇḍapurāṇa classifies herbs into two – Grāmya and Āraṇya¹¹. Grāmya (produced in villages) herbs are – Dhānya (corn, grain), Yava (Barley), Māṣa (Phaseolus Rodiatus), Mudgu (Phaseolus Munga), Masura (Lentil), Godhūma (Wheat), Aṇu (Panicum Miliaceum), Tila (Sesamum Indicum), Priyanga (Penicum Italicum), Karuṣa (a species of herb), Kulattha (Dolichos Liniflorus), Ādhakī (Cajanus Indicus Spreng), Caṇaka (Chick pea).

Āraṇya herbs are:- Śyāmāka (Panicum Frumentaceum), Nīvāra (Wild rice), Jarttila (Wild sesamum), Gavedhūka (Coix Barbata), Kurbinda (Terminalia Catappa), Markamaka (a species of grain).

The Brahmāṇḍapurāṇa says that at the beginning of the Tretayuga 14 herbs were created. These are – Dhānya, Yava,

Māṣa, Godhūma, Aṇu, Tila, Priyangu, Kulaltha, Śyāmāka, Nivāra, Jarttila, Gavedhūka, Kurubinda, Venuyava, Markāṭaka¹².

v) Land

The Amarakoṣa describes 12 types of land, depending upon the fertility of the soil, irrigation and physical characteristics¹³.

But Purāṇas generally mention two types of land – productive and non-productive lands or tilled and untilled¹⁴. Three classes Jangala (arid), anupa (marshy), and samanya (ordinary) are also mentioned.

vi) Seeds

According to the Brahmanḍapurāṇa, Brahmā churned the earth and got seeds¹⁵. The Vaiśyas were able to determine the quality of seed.

vii) Manures

In ancient India much importance was given to manures for the obtaining of the high crop yields. The Agnipurāṇa recommends the application of excreta of sheep and goat and pulverized barley and sesame allowed to be soaked in meat and water for seven nights to increase the flowering and the fruiting of trees¹⁶.

viii) Irrigation

During the Purānic period irrigation system was developed. Some officers were entrusted with the task of inspecting the sluices by which water is distributed into the branch canals¹⁷. The Agnipurāṇa prefers river water for irrigation¹⁸.

ix) Rainfalls

Crop production depended on seasonal monsoon rains¹⁹. The Viṣṇupurāṇa says that the sun sucks water from the earth for eight months and pour rains for four months²⁰. Crops grow due to the rainfalls.

x) Forest Guards

Forests were very important during the Puranic period. The Brahmanḍapurāṇa mentions the names of many forests²¹. Forest guards were engaged in protecting the forests²².

xi) Farmers and Agriculturists

The Vaiśyas were entitled to carry on the activities of agriculture. Farming was the only profession selected for the Vaiśyas²³. They were also entrusted with animal husbandry and trade²⁴. The Vaiśyas were connected with the economic life of the country. They were responsible

for the production of wealth. As India was an agricultural country, the Vaiśyas tilled the land and reared cattle²⁵. The Viṣṇupurāṇa says that even the Brahmins and the Kṣatriyas may take the profession of the Vaiśyas in case of poverty²⁶.

xii) Pests and their managements

During the Puranic period, it was marked that trees and fruits were attacked with many diseases. The Agnipurāṇa states that if the fruits were attacked with diseases and destroyed, a paste of horse gram, black gram, mung bean, barley and sesame should be applied after sprinkling the affected areas with cold water²⁷.

xiii) Horticulture

The Agnipurāṇa provides excellent information about horticulture. The chapter 282 of the Agnipurāṇa deals with the art of growing flowers, fruits and vegetables and also the art of gardening²⁸.

Animal Husbandry:

The Animal husbandry is common name in this modern period. It is meant for the care and management of cattle, sheep, horses etc. Purāṣas specially the Agnipurāṇa, the Viṣṇupurāṇa, the Garuḍapurā-ṇa, the Brahmaṇḍaurāṇa

and the Matsyapurāṇa deal with the care and management of animal husbandry. These Purāṇas are flooded with information about animal care, health management and disease cure.

The common diseases marked in the animals are-

Infection of horns, ears, tooth, throat, heart and navel, rheumatism, haemorrhagic enteritis, dysentery, digestive ailments, cold, parasite/verminous diseases, stomach worms, rabies, abscess, anaemia, wounds, less milkproduction, epistaxis, retention of urine, urinary colic, constipation, lacrimation, arthritis, rhinitis, sprain, haematuria, skin infection etc.

The chapter 207 of the Garuḍapurāṇa deals with the treatment of horses and elephants²⁹. The Agnipurāṇa sorts out the characteristics of the elephants, the ways of caring, their food, and prescribes herbs for curing diseases in the chapter 287³⁰. This Purāṇa describes the nature, traits, the methods of the controlling of the horses and the training of the horses in the chapter 288³¹. Besides the description of the traits of the horses, the chapter 289 of the Agnipurāṇa deals with the diseases and the treatments of the horses³². The chapter 290 of the Agnipurāṇa prescribes the ways of breeding of the horses and the methods of worship for the good of horses in addition to medicines³³. In the chapter 291 of the Agnipurāṇa the methods of doing good to elephants are described³⁴. The chapter deals entirely with the utility of the rearing of cows,

their diseases and treatments. The chapter 292 of the Agnipurāṇa deals with treatment of the cows³⁵.

The herbs and plants prescribed for the treatment of animals³⁶

Eraṇḍa (Castor oil plant), Haridrā (Curcuma Longa), Śunthī (Dried ginger), Patol (Snake gourd), Nimba (Nimba), Vacā (Sweet flag), Pippali (Long Pepper), Ārdraka (Ginger), Rasuna (Garlic), Jaṭāmāmsī (Nardostachys Jatamamsi), Śatamūlī (Asparagus Racemosus), Vidāṅga (Embelia Ribes), Vāsaka (Adhatoda Vasica), Pālaśa (Flame of the forest), Aśvagandhā (Physalis Flexuosa), Śatāvārī (Asparagus Racemosus), Marica (Black Pepper), Kulultha (Dolichos uniflora), Kākamācī (Solanum indicum), Triphalā (3 Myrobalans), Trikaṭu (Black and Long Pepper and dry ginger), Hingu (Asa Foetida), Nilapadma (Blue water lily), Priyangu (Calicarpa Macrophylo), Dāḍīma (Pomegranate), Lodhra (Symplocos), Drākṣā (Grapes), Śmgaṅṭika (Barleria Longifolia), Kaśerukā (Scirpus Kysoor), Rāsnā (Ichneumon plant), Devadāru (Himalayan Cedar), Mañjiṣṭha (Rubia Manjista), Tila (Sesamum indicum), Dhānya (Paddy), Dūrvā (Panicum Dactylon), Arjuna (Terminalia Arjuna), Yaṣṭimadhu (Liquorice).

Tradition of the Ethno-veterinary medicine:

Before the advent of the modern allopathic system of medicine, it seems possible that the healing art was almost the same throughout the world including India. This system of

medicine is given the term ethno-medicine and ethno-veterinary medicine. In case of human treatment it is termed as ethno-medicine. Purāṇas are the repository of traditional medicine prescribed for the treatment of animal diseases. Purāṇas specially the Skandal Purāṇa, the Devi Purāṇa, the Matsya Purāṇas, the Agni Purāṇa, the Garuḍa Purāṇa and the Linga Purāṇa prescribe the ethno veterinary medicine³⁷. Modern veterinary doctors also follow some traditional treatment prescribed by the Purāṇas.

Conclusion:

In India most of the people are connected with agriculture and animal husbandry. Many large-scale and small scale industries were and are being set up in connection with agricultural products. All the modern agricultural technologies are applied. In spite of this development, many people still follow the traditional agricultural methods. In case of animal husbandry, a large number of people still depend on indigenous applications. The traditional systems of agriculture and animal husbandry are keeping pace with the modern scientific technological methods and applications. Hence our present generation is indebted to the Purāṇas that provide us with the information about agriculture and animal husbandry. We may quote a famous scholar³⁸.

“Not only vedic metaphysics, mythology and cosmogony, not only the great legends of the Brahmanas, not only the accumulated religious traditions of India, not only the multiple cults but also history, culture, chronology, life polity, sociology, geography, topography, art, architecture and painting, government, administration, cattle wealth, economic life and a thousand other similar topics mapping out the entire canvas of the nation's life have gone into the making Purāṇa literature.”

Reference Books:

- | | | |
|--------------------------------------|-------------------------|---|
| 1. Purana Samgraha | 18 Volumes | Navapatra
Prakashan,
Kolkata, 1990 |
| 2. Ancient India | V.D. Mahajan | S. Chand &
Company
Ltd. 2001 |
| 3. History of Ancient India | R. S. Tripathi, | Matilal
Banarsidass,
2006 |
| 4. The Cultural Heritage
of India | Vol. 2 | R. K.Mission
Institute of Culture,
Kolkata, 1962. |
| 5. Sanskrita Sahityar
Itihasa | D. N.
Bandyopadhyaya | Paschimbanga
Rajya Pustak
Parisad,
Kolkata, 2000 |
| 6. Amarakosa | | Sanskrita Pustaka
Bhandar, Kolkata. |
| 7. Sanskrit English
Dictionary | M. M. Williams | Oriental
Publishers. |

- | | |
|---------------------------------------|--------------|
| 8. Purāṇas | H. H. Wilson |
| 9. Agnipurāṇa | A Study |
| 10. Studies in the
Epics & Purāṇas | |
| 11. A History of Indian
Literature | Vol. 1 |

New Delhi.
Kolkata, 1897
S. D. Gyani
A.D. Pusalkar

M. Winternitz.

Bibliography

- ¹ As quoted in The Cultural Heritage of India, p-268
- ² Sanskrita Sahityera Itihasa, p-101
- ³ Ancient India, p-333
- ⁴ Ibid, p-334
- ⁵ Ibid, p-561
- ⁶ Vayupurāṇa, Introduction, p-10-11
- ⁷ Agnipurāṇa, Ch. 279-292
- ⁸ Brahmāṇḍapurāṇa, p-21, 29
- ⁹ Ibid, p-29
- ¹⁰ Internet domain,
- ¹¹ Brahmāṇḍapurāṇa p-30
- ¹² Ibid.
- ¹³ Amarakoṣa, Bhūmivarga.
- ¹⁴ Brahmāṇḍapurāṇa, p-30
- ¹⁵ Ibid
- ¹⁶ Agnipurāṇa, source – Internet domain.
- ¹⁷ History of Ancient India, p- 156.
- ¹⁸ Agnipurāṇa, p-411
- ¹⁹ Brahmāṇḍapurāṇa, p-165
- ²⁰ Viṣṇupurāṇa, p-92
- ²¹ Brahmāṇḍapurāṇa, p-116, 118
- ²² Viṣṇupurāṇa, p-274
- ²³ Ibid, p-125
- ²⁴ Brahmāṇḍapurāṇa, p-31
- ²⁵ Ancient India, p-165
- ²⁶ Viṣṇupurāṇa, p-125
- ²⁷ Agnipurāṇa, Internet domain.
- ²⁸ Ibid, p-410-411
- ²⁹ Garuḍapurāṇa
- ³⁰ Agnipurāṇa, Internet domain.