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Anjali Kundu

Ph.D. Scholar, Visva-Bharati,
Santiniketan, West Bengal,
India

Agriculture in ancient India

Anjali Kundu

Abstract:

Agriculture is explained as the best of all professions. The people of Vedic period were attached with the great importance of agriculture and we can understand this very well by the references from *Vedas*. In ancient Indian texts, agriculture has been called a blessed and holy act. The person involved in agricultural activities; despite being involved in the blame for the violence get rid of those guilts because of serving everyone. In the Vedic period, agriculture was the main method of living. By farming, people were happy and benefited. The food earned by agriculture has been compared to *Brahman* in the Upaniṣads and has been instructed to show due respect to it- अन्नं न निन्द्यात् (तै. उ. 3.7) Like the Upaniṣads, astrological texts on agriculture also refer the food (anna) as the source of life and energy. The main purpose of this research paper is to expose and bring out the methods and decisions of the agricultural system of ancient India. Although the current system of agricultural work is much more efficient and richer than the ancient system, but the ancient system which has provided some important doctrines, especially in the matter of disruption and timing of sowing are very favourable now-a-days.

Keyword: Precipitation, cultivation, harvesting, meteorology, monsoon rain, irrigation

Introduction

All living creatures on earth depending on earth's surface for a better and sufficient life. Among them the greatest and talented animal people constantly strive to procure many kinds of food from earth for himself. Nature provides food for all other animals; but in its own effort, people arrange food with the help of nature. This need for food of human is the essence of farming or agriculture. People are eager to produce different types of crops for different types of food. This necessity of people develops agriculture. India is an agricultural sub-continent. Agriculture is the science and art of cultivating plants and livestock. It is the key aspect of human development and civilization. Agriculture has been practised and developed in India since at least last six or seven thousand years. This practical knowledge of agricultural system being forwarded from generations to generations to the farmers and by their experience this system is developed in a right way. Agriculture plays a crucial role to develop the life of humans. Today agriculture not only provides food and raw materials but also provides employment opportunities to a very large proportion of population. The development of agriculture is also happening as well as the development of us at every moment. Although agricultural science is in much advanced condition at present, the ancient system is no longer useful today. Nevertheless, those ancient knowledges still point to general inquiry now-a-days. Knowledge of ancient traditions is very significant not only in historical view but also in exploration. Since Vedic times this agriculture is the basis of life. Vedic literature is one of the valuable ancient scriptures of India. In Vedic literatures, there are many statements which express various aspects of agriculture and its value. Like in the *Akṣa Sūkta* of *Rgveda*, where seer *Kavaṣa Aulūṣa* describes the importance of agriculture to become prosperous and happy-

अक्षैर्मा दीव्यः कृषिमित् कृषस्व वित्ते रमस्व बहु मन्यमानः।

तत्र गावः कितव तत्र जाया तन्मे विन्वष्टे सवितायमर्यः॥ (ऋ. सं. 10.34.13) ^[1]

In this mantra seer *Aulūṣa* advice to a gambler, who loses everything by playing with dice to stop gambling and engage himself in agriculture to become wealthy and happy. In *Kṣetrapati Sūkta* of *Rgveda* seer *Goutama* prays to the god of field for nourishment and such gifts which can make them happy -

Corresponding Author:

Anjali Kundu

Ph.D. Scholar, Visva-Bharati,
Santiniketan, West Bengal,
India

क्षेत्रस्य पतिना वयं हितेनेव जयामसि।

गामश्च पोषयित्वा स नो मूळातीदृशे। (ऋ.सं. 4.57.1) [2]

Agriculture is explained as the best of all professions. The people of Vedic period were attached with the great importance of agriculture and we can understand this very well by the references from *Vedas*. *Yajurveda* commands to follow agricultural method in the proper way to earn good crops. Again, in the hymn of *Rgveda* seer *Bharadvāja* prays to *Indra* for a son who can destroy his enemies and a fertile land for wealth-

द्वौ रयं य इन्द्राभि भूमार्यस्तस्थौ रयिः शवसा पृत्सु जनान्। (ऋ. सं. 6.20.1)

Agriculture was considered from the very ancient time as the source of prosperity. There are also other scriptures in ancient India that provide different explanations for the agriculture of that time. Those are *Kṛṣi Parāśara*, *Kṛṣisūkti*, *Brhat Samhitā Arthaśāstra* etc. In *Kṛṣi Parāśara* also it has been said by sage *Parāśara* to explain the priority of agriculture, that despite being the knower of four Vedas, orator of scriptures and clever the Brahmins are wealth less if they do the venial work of asking others for food. The only person involved in agriculture does not have to ask others for anything, anyone occupied with agriculture can become a sovereign in this world [3]. Food is called the main aspect of force, soul and the fulfilment of all needs. All gods, devils, human beings live through food. *Kṛṣi Parāśara* says-

अन्नं प्राणा वलं चान्नमन्नं सर्वार्थसाधनम् देवासुरमनुष्याश्च सर्वे चान्नोपजीविनः
॥ (कृ. प. 1.6)

Agriculture in Ancient Indian Texts

In ancient Indian texts, agriculture has been called a blessed and holy act. The person involved in agricultural activities; despite being involved in the blame for the violence get rid of those guilts because of serving everyone. In the Vedic period, agriculture was the main method of living. By farming, people were happy and benefited. Precipitation is the essential constituent for proper management of this agriculture- वृष्टिमूला कृषिः। (कृ. प. 2.1) the livelihood of the Indian farmers is largely depending on monsoon rains. Therefore, useful discussions on rainfall have been repeated in ancient scriptures. What kind of rainfall is suitable for definite which crop cultivation, knowing this knowledge helps in agriculture. In ancient Indian scriptures there are various doctrines for managing agriculture properly. Among them, the doctrines based on astrology are very interesting and acceptable.

Among the available texts in Indian scriptures on agriculture, the *Kṛṣi Parāśara* of sage *Parāśara* occupies an important place as it records ancient records. In the text *Kṛṣi Parāśara*, all the main features of production, preservation, seedling as well as agricultural production, leaf diseases, their treatment, agricultural components are mentioned mainly. After mentioning the agricultural importance in the first chapter here are the signs of rainfall, monthly rainfall result has been discussed. Then there are the signs of fresh rains and all necessary agricultural implements and also discussion on how to use them. This book mainly mentions various ancient methods for enriching agricultural field. It is said to have been written around 4th century BC. For the proper improvement of this farming, the context of the weather is mentioned here. One of the most important factors for the fertility of

agricultural land is precipitation. Therefore, the main point of this book is to determine the appropriate rainfall time. Not only that, the signs and results of each month's rainfall are also discussed here. For example, it has been said that the result of the rainfall of the month of *Māgha* is-

माघे मासि निरन्तरं यदि भवेत् प्रालेयतोयागमो
वाता वान्ति च फाल्गुने जलधौश्चैत्रे च छन्नं नभः।

वैशाखे करकाः पतन्ति सततं ज्येष्ठे प्रचण्डातपाः

तावद् वर्षति वासवो रविरसौ यावत्तुलायां व्रजेत्॥ (कृषि. पराशर. 2.33)

If there is very cold rain in the month of *Māgha*, if the air flows with the clouds in *Fālguna*, if the sky become obscure in *Chaitra*, if there is enough hail-storm in *Baiśākh* and in the month of *Jyāsthya* there is great sunshine, then god *Indra* gives rain until the sun enters in the *Libra* (*तुला राशि*). This rainfall descriptions are given for months ruled by the respective planets. Depending on the location of the planets, here are the signs of drought also. As it is said-

ध्रुवे च वैष्णवे हस्ते मूले शक्रे चरन् कुजः।

सद्यः करोत्यनावृष्टिं कृत्तिकासु मधसु च ॥ (कृषि पराशर. 2.66)

That is, when Mars enters the constellations like *Fālguni*, *Rohini*, *Shravaṇā* etc. then there is a drought. *Samgraha Śiromaṇi*, the book of ancient India based on astrology discussing the weather conditions to direct or determine the time of farming. The author speaks in this context in the 23rd chapter of his book that, the life of the world depends on food (*Anna*) and this food production depends on farming which is depend on precipitation-

अन्नं जगतः प्राणाः प्रावृत्कालस्य चान्नमायत्तम्।

यस्मादतः परीक्ष्यः प्रावृत्कालः प्रयत्नेन ॥ (सं. शि. 23. 528)

Ācārya Koutilya has also discussed different types of agricultural work in the second section *Śītādhyakṣadhīprakaraṇa* of his text *Arthaśāstra*. Discussion of what kind of rain is beneficial for agriculture is available in this text. If three clouds continuously rain for seven days, eighty pour minute drops, sixty drops appear with the sunshine. Where rain is free from wind and unmingled with sunshine. Then the reaping of good harvest is certain.

त्रयः साप्ताहिका मेघा अशीतिः कणशीकराः।

पष्टिरातपमेघानामेषा वृष्टिः समाहिता॥ (अ.शा. 2.24.13)

This chapter also discusses that what amount of rainfall at any place is important for cultivation-

षोडशद्रोणं जाङ्गलानां वर्षप्रमाणमध्यर्धमानूपानाम्।
देशवापानामर्धत्रयोदशाशमकानां त्रयोविंशतिरवन्तीनामपितमपरान्तानां
हैमन्यानां च कुल्यावापानां च कालतः॥ (अ. शा. 2.24. 6-7)

According to him, the quantity of rain that falls in the country of *Jāngala* is 16 *dronas*, means if the total rain water of that country becomes sixteen *dronas*, so this amount of rainfall is necessary to produce good crops in the desert. 24 *dronas* of water is suitable in moist countries for good crop production, in the country of *Asmakas* 13 and half *dronas*, 23 *dronas* in *Avanti* and an immense quantity of rainfall in western countries, in the borders of Himalayas and in the countries

where water channels are made if required rainwater falls time to time then good crop is produced. Again, according to the amount of rainfall which types of seeds should be sown at which time has been discussed by *Koutilya*. *Śālī* (a kind of rice), *Brīhi* (a kind of rice), *Kodrava*, *Tila*, *Priyangū*, *Dāraka* and *Varāka* are to be sown at the first commencement of rainy season. Then *Mudga*, *Māṣa* and *Saimbya* are to be sown in the middle of the season. Then *Kusumbha*, *Masūra*, *Kuluttha*, *Yava*, *Godhūma*, *Kalāya*, *Atasī* and the seeds of *Sarpasa* are to be sown last^[4].

The term agriculture has also discussed in *Bṛihat Samhitā*, a book based on astrology by *Barāhamihira*. This ancient book contains various theories of agriculture. According to the positions of planets what is the suitable time for any crop production, when and how the proper growth of any crop is possible, these valuable discussions are available here. It has been said that if at the time of Sun's entry into *Vṛścika*, the Kendras from him are occupied by benefic, or he is conjoined with strong benefic, then the summer crop will thrive splendidly^[5]. There are also some astrological promises that determine the timing of rainfall.

आर्द्रं द्रव्यं स्पृशति यदि वा वारि तत्सञ्ज्ञकं वा तोयासन्नो भवति यदि वा तोयकार्योन्मुखो वा ।

प्रश्ना वाच्यः सलिलमचिरादस्ति निःसंशयेन पृच्छाकाले सलिलमिति वा श्रूयते यत्र शब्दः॥ (वृ. सं. 28.2)

If a query regarding rain be posited and the querist touches any wet object or water or any other liquid, or stands near water, or is about to do something connected with water or liquid, or at the time the word Water be heard in the place, then it is confirm that there is rain are long without any doubt. Here, the yield and growth of the crops are calculated according to the position of Sun in different zodiac signs. When the Sun posited in *Meṣa*, *Vṛṣava* and *Mithuna*, is conjoined with Mercury, Venus and Jupiter, summer corn will fetch good price, will be free from pests and be entirely useful.

The people of the Vedic period skilled in cultivation and succeed in agriculture. The people started the agricultural practices such were ploughing, showing, reaping and harvesting. The Vedic agriculture performed properly by understanding the weather and monsoons. The seers wrote the hymns in *Rgveda* and *Atharvaveda* about the importance of rains and cattle. Seer prays to the god of Wind and Sun that the water located in the sky should rain down and irrigate the earth-

शुनासीरिह स्म मे जुषेथाम्। यद् दिवि चक्रथुः पयस्तेनेमामुप सिञ्चतम्॥ (अ.सं. 3.17.7)

Atharvaveda has also narrated, how to increase soil fertility and how to improve the productivity of cultivated land. Land and water are the two most essential component of agriculture. Water irrigation is one of the major tasks for growth of crops. Different irrigation systems are observed in ancient India. Many types of water used for irrigation are found in ancient Indian Vedic scriptures. As, in this hymn of the *Rgveda* there are descriptions of five types of water used for irrigation-

या आपो दिव्या उत वा स्रवन्ति खनित्रिमा उत वा याः स्वयंजाः।
समुद्रार्था याः शुचयः पावकास्ता आपो देवीरिह मामवन्तु॥ (ऋ. सं. 7.49.2)

These five types are- *Divyāḥ* (Rain water) *Sravanti* (Natural spring) *Khanitrimāḥ* (Wells and canals) *Svayamjāḥ* (Lakes) *Samudrārthāḥ* (Seas & Rivers). Again, in *Atharvaveda*, names of different types of water available needed for the purpose of agriculture. Those are *Dhanvanyā* (Plain water), *Anūpyā* (Pond water), *Khanitrimāḥ* (Dig water), water brought in vessels, Rain water, *Haimavatī* (Water from snowy mountains), *Ūtsyā* (Fountain water), *Sanisyadā* (Running water) etc.^[6] *Yajurveda* also commands different types of water, like pond water, mountain water, lake water, river water, well water, the water of clouds, rain water^[7].

The Deities of Agriculture in Ancient India

To make agriculture suitable people of Vedic period have envisioned various deities and prayed to them. Generally, sacrifices or various religious ceremonies were performed for the proper production of grains. The main reason for all these religious ceremonies related to agriculture was to protect crops from natural calamities. Moreover, Vedic literature is completely deity-centered. The seers have sought the grace of various deities to maintain order in everything, be it ordinary human life. Therefore, there is no doubt that their praises to the gods for the proper production of agriculture will be more frequent. The name of the God Indra comes first among the deities in order to get a good harvest. There are also references to deities like *Marut*, *Parjanya*, *Kṣetrapati*, *Śūnāsīra* etc. For example, in the *Rgveda*, the grain grown without cultivation has been termed as, given by *Indra*-

विश्वजिते धनजिते स्वर्जिते सत्राजिते नृजित उर्वराजिते।

अश्वजिते गोजिते अब्जिते भरेन्द्राय सोमं यजताय हर्यतम्॥ (ऋ. सं. 2.21.1)

In *Rgveda*, *Indra* has been called as *Urbarājita* and it is prayed to him that with the help of the god *Puṣana* he should take the plough, and let the land fertile, and it will reap year after year^[8]. Again, somewhere in the *Atharvaveda*, the goddess *Sītā* has been prayed for the success of agriculture. Seer worshiped to *Sītādevī* and prayed to her that may the ploughing land gives us the best minds and good fortune and be favourable to us^[8].

In the *Rgveda*, the seer *Vāmadeva* prays to god *Śūnāsīr* to provide rain water to improve the agricultural system so that the world created by him stay beautiful and he also solicits to *Parjanya* who is the god of water to give always water with happiness so that we get the prosperity.

Śūna and *Sīra* be pleased by this our praise, and consequently sprinkle this (earth) with the water which you have created in the heaven^[9]. ((tr. By H.H. Wilson)

Another hymn also explains, May the plough shares break up our land happily, may the ploughman go happily with the oxen, may *Parjanya* (water the earth) with sweet showers happily: grant, *Śūna* and *Sīra*, prosperity to us^[10]. (tr. By H.H. Wilson).

Among all other deities related to agriculture, the *Prajāpati* and *Viṣṇu* are also mentioned. Praises to the god *Prajāpati* for the fertility of the land, mentioning its agricultural advantages and characteristics situated in *Atharvaveda*. It is said in the prayer that in all the parts of which world people completes the farming, which contains the whole world within itself, may God *Prajāpati* make every part of that world beautiful for us-

यस्याः पुरो देवकृताः क्षेत्रे यस्या विकुर्वते।

प्रजापतिः पृथिवीं विश्वगर्भामाशाशां रण्यां नः कृणोतु॥ (अ. सं. 12.1.43)

In another mantra of *R̥gveda*, the lord *Viṣṇu* is said to be the protector and guardian of the womb and is prayed for food and son. Almost every one of the Vedic deities has enriched agriculture in some way and from all these statements the dominance of the gods in every aspect of the prosperity of agriculture is easily inferred.

Conclusion

Agriculture is assumed as a huge step in human life. The Vedic *Brāhmaṇas* and *Āraṇyakas* have given importance to greatness and the necessity of agriculture in a primary way. Up to the period of *Pāṇini*, the usefulness of determining cultivable land in the society is seen. The discussion of meteorological science, which is one of the most important part of agriculture, was also become very necessary from that time. Gradually, writing and editing of separate books on this science began. Discussion on these topics begins in the texts related to theology, ethics, economics etc. Many disciplines of Indian literature are available in the field of agrometeorology. Among the texts related to agrometeorology the most important are *Sasyāyurveda*, *Br̥kṣāyurveda*, *Kṛṣiśāstram* etc. The development of agriculture is also happening as well as the development of human habitation at every moment. As it has been said first that agricultural science is in much advanced condition at present, the ancient system is no longer in practice now-a-days. But those are still a point to general inquiry. Knowledge of ancient traditions is very significant not only in historical view but also in exploration by non-mechanical procedures. Generally, agricultural discussions remain incomplete without the discussion of weather and rainfall. In Indian scriptures, rainfall, heavy rainfall, drought is predicted by the movements of the planets, the speed of wind and the condition of the sky at different times. Various rules for predating the monsoon have been described in Indian astrology and mythology as well.

Methodology

This work is mainly based on secondary sources of information such as published documents, books, journals, etc. The paper makes use of previously published works in addition to citing from original texts, etc. Data are collected through the overview of previous works and related texts. These primarily include *Vedas*, *Dharmaśāstras*, *Brāhmaṇas* and Astrological texts. In this approach, the data collection begins with specific observation of the previous literatures and then I analyse the data collected. For interpretation I follow current trends of research methodology on Indology.

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References

1. गुप्ता, देवेन्द्रकुमार. वैदिक कृषि-विज्ञान, प्रतिभा प्रकाशन, दिल्ली, 2012
2. जुगनू, श्रीकृष्ण. सम्पादक. काश्यपीयकृषिपद्धति (काश्यपीयकृषिसूक्तिः), चौखम्बा संस्कृत सीरिज अफिस, वाराणसी, 2013
3. झा, अच्युतानन्द. व्याख्याकार. वराहमिहिरविरचिता बृहत्संहिता, चौखम्बा विद्याभवन, वाराणसी, 2017

4. त्रिवेदी, रामगोविन्द. अनुवादक. ऋग्वेदसंहिता (4 खण्ड), चौखम्बा विद्याभवन, वाराणसी, 1999
5. नवलता. संस्कृतवाङ्मये कृषिविज्ञानम्, नाग पब्लिशर्स, दिल्ली, 2007
6. पाण्डेय, रामचन्द्र. सम्पादक. कृषि पाराशरः, मोतीलाल बनारसीदास, वाराणसी. 2002
7. शर्मा, रामचन्द्र. सम्पादक. शौनकीया अथर्ववेदसंहिता, सनातनधर्मयन्त्रालय, 1986
8. शास्त्री, उदयवीर. अनुवादक. कौटिलीय अर्थशास्त्र, संस्कृत पुस्तकालय, लाहौर, 1925
9. शुक्ल, कमलाकान्त. सम्पादक. सङ्ग्रहशिरोमणि: (भाग 1-2), सम्पूर्णानन्द संस्कृत विश्वविद्यालय, वाराणसी, 1996
10. Bernardi Michele. Handbook on Climate Information for Farming Communities- What Farmers Need and What is Available. Food and Agriculture Organization of United States, Rome, 2019.