



JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)

An International Scholarly Open Access, Peer-reviewed, Refereed Journal

Concept of Spraying in Sanskrit Texts: An Outlook

Dr. Debashis Panigrahi

Ex- Guest Faculty

Department of Sanskrit

Sri Venkateswara Vedic University, Tirupati

E-mail: debashis579@gmail.com, (M).8763171816

Introduction

The Spraying is always played a vital role in the agricultural industry of our country from ancient times. In effect, the origin and evolution of agriculture and feeling need of spraying are not separate processes. They are closely connected with the general course of history of plant growing with the invention of tools and spraying techniques. Water is much essential for the growth of crops. It is one of the primary requisites of agriculture for increasing the fertility of land, growth of crops etc.

आपः चिदस्मैः धृतमित् श्रन्ति - Atharva veda 7/18/2

Our ancient texts have taken care of watering of plants at the micro level such as watering after transplanting the plant and after their growth individually and collectively; and at macro-level of water supply on a larger scale with irrigational facilities. According to *Satapatha Bràhmana*, water and trees depend upon each other and enrich each other and together they enrich mankind. It is an interesting fact that waters have been preserved to rear the plants and trees who in their turn are being planted on bank of reservoirs and rivers to preserve the waters.

Water is available from four sources as seen from hymns in *Rigveda*. The *Yajurveda* refers to a complete list of water resources namely rivers, lakes, tanks, ponds, pools, stagnant water, wells, sea, small streams, big streams, canals and so on (*Yajurveda* 16/37-38). There are numerous hymns pertaining to *Parjanya* (Rain water), rivers, well water in *Vedic saùhitas*. *Indra* being deity of clouds and *Varuna* of *Parjanya* they are prayed for abundant and timely water.

Coercion on Rain water

But, in many cases it is either insufficient or irregular or not available at the proper time. Rain water has to be supplemented by the man-made devices of supplying water. Even in cases

of other natural sources of water, such as rivers, streams, lakes and ponds, human effort is required to carry or direct water to the field.

Thus irrigation falls into two clear categories, natural and artificial. During *Vedic* period farmers were mostly dependent on rain water for agricultural works. There are numbers of *Suktas* or hymns references indicating irrigation by rain water such as in Rig veda, - 7/101/1,2,5,6,10 and in 10th *Mandala* 10/50/3; in *Yajurveda* 16/48 in *Atharvaveda*, 4/15/1;6/54/1 and in 11/4/17 as well. In Vedic period people well known about that rain water was the first and foremost source of water supply. *Yajurveda* says, अपः पित्न्वः (Yajurveda 14/08) i.e. wet the soil with rain water.

According to the *Rigveda* rain water helps to grow food plants.(Rigveda 5/83/10) Food crops for living beings of the world will grow when there is rain.(Rigveda 5/83/4) Rain gives happiness. all plants, trees, crops etc. will grow and become fruitful when there is rain(Rig veda 5/55/5) *Yajurveda* says that for healthiness of the state, watering of the plants should be done properly with sweet rain water.(Yajurveda, 11/38).

The technique of bringing rain through rituals and sacrifices was known and was practiced in ancient India. Even now such practice is observed- मे वृष्टिः यज्ञेन कल्पताम् (Yajurveda 18/9) i.e. let the water pour from rain through the sacrifice was perform. According to *Rigveda* rain could be obtained through a sacrifice called *Kànestri* (Yajurveda 18/9). There is another sacrifice called *Kàriri*, which when performed a systematically using stick of *Kàrira* tree, rain was sure to come.

Hymns of Rain of Vrusti Sukta

As we know that Yajurveda is enforced for scarifies. Through that human can fulfill own desire. In the *Vrushti Sukta* (Krushna Yajurveda 2/4/7/10) gives very beautiful picture of cloud formation and raining as seen below:

समुत्पतन्तु प्रदिशो नभस्वती समभ्राणी वातजूतानि यन्तु ।
महऋषभस्य नदतो नभस्वतो वाश्रा आपः पृथिवीं तर्पयन्तु ॥

- Atharva veda 4/15/1

Let all the misty regions of the heaven be overcast with clouds, let the rain-clouds accompanied by gusts of wind overwhelm the sky. Let the rattling waters of the thundering tremendous clouds moved by wind satisfy the earth.

समीक्षयन्तु तविषाः सुदानवोऽपां रसा ओषधीभिः सचन्ताम् ।
वर्षस्य सर्गा महयन्तु भूमिं पृथग् जायन्तामोषधयो विश्वरूपाः ॥

Atharva veda 4/15/2

Let the bounteous impetuous winds show us forth the heavy rain, and let the essence of waters i.e. moister be hung up with the herbs and plants. Let floods of rain refresh the earth and let the herbs of various forms and colors separately grow in abundance.

समीक्षयस्व गायतो नभांस्यपां वेगासः पृगगुदु विजयन्ताम् ।
वर्षस्य सर्गा महयन्तु भूमिं पृथग् जायन्तां वीरुधो विश्वरूपाः ॥

Atharva veda 4/15/3

Let the hosts of wind show the rainy clouds to them who are singing in pleasure and let the rush of water burst in many phases. Let the floods of rain refresh the earth and let the herbs of various forms and colors separately grow in abundance.

गणास्त्वपो गायन्ति मारुताः पर्जन्य घोषिणः पृथक् ।
सर्गा वर्षस्य वर्षतो वर्षन्तु पृथिवीमनु ॥

Atharva veda 4/15/4

Let the troops of wind roaring everywhere sing the glory of rainy cloud and let the pouring torrents of the raining cloud rain upon the earth.

उदीरयत मरुतः समुद्रस्त्वेषो अर्को नभ उत् पातयाथ ।
महऋषभस्य नदतो नभस्वतो वाश्रा आपः पृथिवीं तर्यन्तु ॥

Atharva veda 4/15/5

Let the winds lift up the waters from the ocean as the light and splendor of the Sun raise the vapors upward. Let the rattling waters of the thundering tremendous cloud moved by wind satisfy the earth.

अभि क्रन्दः स्तनयार्दयोदधि भूमि पर्जन्य पयसा समङ्ग्धि ।
त्वया सृष्टं बहुलमैतु वर्षमाशारैषी कृशगुरेत्वस्तम् ॥

Atharva veda 4/15/6

Let the cloud roar and thunder, and set the sea in agitation, let it moisten the earth with its rain. Let the plenteous showers rained by cloud come to people desiring the rush of water and the peasant possessing lean cows go to his home for shelter.

सं वोऽवन्तु सुदानव उत्सा अजगरा उत ।
मरुद्भिः प्रच्युतां मेघाः वर्षन्तु पृथिवीमनु ॥

Atharva veda 4/15/7

O people! Let the bounteous, coiling serpent like torrential pours of rain keep you safe and the clouds agitated by winds pour down rain upon the earth.

आशामाशां वि द्योततां वाता वान्तु दिशोदिशः ।
मरुद्भिः प्रच्युतां मेघाः सं यन्तु पृथिवीमनु ॥

Atharva veda 4/15/8

Let the lightning flash on all sides and let the winds blow from all directions and the clouds agitated by the winds come down to the earth.

आपो विद्युदभ्रं वर्षं सं वोऽवतु सुदानव उत्सा अजगरा उत ।
मरुद्भिः प्रच्युतां मेघाः प्रावन्तु पृथिवीमनु ॥

Atharva veda 4/15/9

Let lightning, waters, rain and the coiling serpent like torrential pours of rain keep the people safe and the clouds agitated by the winds rush towards earth.

अपामग्निस्तनूभिः संविदानो य ओषधीनामधिपा बभूव ।
स नो वर्ष वनुतां जातवेदाः प्राणं प्रजाभ्यो अमृतं दिवस्परि ॥

Atharva veda 4/15/10

Let that *apàmgnih*, the fire of the waters the electricity which is the protector of the herbaceous plants and its present in the created objects of the world of the waters-the clouds, rain water for us from the heaven and give life to the creatures.

When there were no rains and drought conditions were prevailing, *Vedic* hymn were recited and *Yajnas* (sacrifices) were performed in order to please *Varunadeva*-the deity of rain, *Patanjali* says that such efforts had instant effects (Mahavashya 1/4/83). Yaska (Nirukta) names a group of hymns in the Rigveda (Rigveda 10/98) *Varshakama sukta* or hymns recited at a sacrifice performed to bring about rain. The belief in the efficacy of a sacrifice to cause rains in recorded in Gita mentioned that:

अन्नाद्भवन्ति भूतानि पर्जन्यादन्नसम्भवः ।
यज्ञाद्भवति पर्जन्यो यज्ञः कर्मसमुद्भवः ॥

Shrimad Bhagwat gita, 3/14

It is saying that all living bodies subsist on food grains, which are produced from rains. Rains are produced by performance of *yajna* (Sacrifice), and *yajna* is born of prescribed duties. This concept accepted in the *Manu Smruti* (3/76) as well.

Prayers were made for timely rain. *Naradāya Smruti* says that plants will not grow without water and even with excess water. Both no water and excess of water affect the field and crop equally (*Naradiya Smruti*. 11).

Krushī Parasara: A book of Agricultural Science

Krushī Parasara has written much on various aspects on rainfall. It would be of great use to mention his entire theory here. Modern day scientists should work on the observations and come up with more relevant theories in this regard. According to *Krushī Parasara*, farming totally depends on rainfall. Life itself, therefore, depends on rainfall. Hence, to begin with one should strive hard to acquire the knowledge of rainfall such as:

वृष्टिमूला कृषिः सर्वा वृष्टिमूलं च जीवनम् ।
तस्मादादौ प्रयत्नेन वृष्टिज्ञानं समाचरेत् ॥

- *Krushī Parasara*.1

Every year has a particular planet as a ruler, another planet as a minister, a particular cloud and depending on that an amount of rainfall which one has to study to acquire the knowledge of rains.

अतो वत्सराजानं मन्त्रिणं मेघमेव च ।
आढकं सलिलस्यापि वृष्टिज्ञानाय शोधयेत् ॥

- *Krushī Parasara*.2

The Sun as ruler of the year indicates average rainfall, the moon heavy rains, Mars scanty rains, and Mercury good rains.

चित्तलोके नृपे वृष्टिवृष्टिरुग्रा निशापतौ ।
वृष्टिर्मन्दा सदा भौमे चन्द्रजे वृष्टिरुत्तमा ॥

- Krushi Parasara.4

When Jupiter happens to be the king of the year the rainfall is satisfactory. Venus indicates excellent rainfall while Saturn as king leaves the earth dry and dusty.

गुरौ च शोभना वृष्टिर्भागवे वृष्टिरुत्तमा ।
पृथिवी धूलिसंपूर्णा वृष्टिहीना शनौ भवेत् ॥

- Krushi Parasara.5

Diseases of the eye, threat of fever, and all sorts of other calamities, scanty rainfall, and continuous blowing of winds are the characteristics of a year ruled by the Sun.

चक्षुरोगो ज्वरारिष्टं सर्वोपद्रव एव च ।
मन्दा वृष्टिः सदा वातो यत्राब्दे भास्करो नृपः ॥

- Krushi Parasara.6

The year in which the Moon is ruler is sure to enrich the earth with good harvest and bestow health on mankind.

यस्मिन्संवत्सरे चैव चन्द्रो राजा भवेत् ध्रुवम् ।
कुर्यात्सस्यान्वितां पृथ्वीं नैरुज्यं चापि मानवे ॥

- Krushi Parasara.7

In the year ruled by Mars, damage is caused to the crops and disease spread among people. The earth becomes bereft of crops.

शस्यहानिर्भवेत्तत्र नित्यं रोगश्च मानवे ।
यस्मिन्नब्दे कुजो राजा शस्यशून्या च मेदिनी ॥

- Krushi Parasara.8

When Mercury happens to be the ruler, earth is free of diseases. Transportation is easy and there is plenty of harvest. The earth is blessed with varieties of crops.

नैरुज्यं सुप्रचारस्य सुभिक्षं क्षितिमण्डले ।
यत्राब्दे चन्द्रजी राजा सर्वशस्या च मेदिनी ॥

- Krushi Parasara.9

If Jupiter rules the year, Dharma prevails on earth. People enjoy peace of mind. There is good rainfall. The whole earth enjoys prosperity.

धर्मस्थितिर्मनः स्थैर्यं वृष्टिकारणमुत्तमम् ।
यस्मिन्नब्दे गुरु राजा सर्वा वसुमती मही ॥

- Krushi Parasara.10

Venus, the preceptor of demons, as a ruler of the year causes the kings to prosper without fail. Prosperity and plenty result. The earth is blessed with variety of food grains.

नृपाणां वर्धनं नित्यं धनधान्यादिकं फलम् ।
राजा दैत्यगुरुः कुर्यात्सर्वशस्यं रसातलम् ॥

- Krushi Parasara.11

The year in which Saturn rules, war, stormy rains, and outburst of diseases are sure to occur. Rains are scanty and winds are continuous.

संग्रामो वातवृष्टिश्च रोगोपद्रव एव च ।

मन्दा वृष्टिः सदा वातो नृपे संवत्सरे शनौ ॥ - Krushi Parasara.12

Tone of the topic

There are plenty of issues has been shaking to write some topic like that. Many of us whimsically ignore eating completely from the plate. This tendency is totally wrong by unethical (<https://www.foodethicscouncil.org/issue/food-waste/>). This concept not only appears in the current time but is also mentioned in our ancient script. Water, food, and adages these three are counted as jewels in our script such as:

पृथिव्यां त्रीणि रत्नानि जलमन्नम् सुभाषितम् ।
मूढैः पाषाणखण्डेषु रत्नसंज्ञा प्रदीयते ॥

- Sanskrit Subhasitam

In this statement is clearly mentioned that water and food are more essential for us. Every human being needs care and seriousness about food and food will come after sufficient watering. Water is a part of our ecosystem. This concept everyone must keep in the mind and they should not waste water and food. The farmer can cultivate food from land but water is not with his hand it depends on nature. So, everyone must concentrate on watering. The *Chandogya Upanishad* gives a clear thought on the rain:

अभ्राणि सम्प्लवन्ते स हिंकारो मेघो जायते स प्रस्तावो वर्षति
स उद्गीथो विद्योतते स्तनयति स प्रतिहार उद्गृह्णाति
तन्निधनमेतद्वैरूपं पर्जन्ये प्रोतम् ।

Chandogya Upanishad. 2/15/1

References

1. Rig Veda/Yajur Veda/Atharva Veda/Sama Veda: Edited by Ravi Prakash Arya & K.L. Joshi, Parimal Publication Pvt. Ltd. 2016
2. Krushi Parasara: Prof. Ramachandra pandey, Motilal Banarsidass Pvt. Ltd. 2002
3. Chandogya Upanishad: Translated by Swami Gambhirananda, Advaita Ashrama Kolkata 1983
4. Bhagvat Gita: by Swami Prabhupada by the Bhakti Vedanta Trust, Mumbai 2009
5. NCERT Sanskrit Book Class 7 (RUCHIRA –II) : by NCERT 2014.
6. Manu Smriti: by Kewal Ananda Joshi, Raja Pocket Books, Delhi, 2015
7. Web: <https://www.foodethicscouncil.org/>