UNIT- 3: SCIENCE COMMUNICATION IN ASSAM

UNIT STRUCTURE

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3.1 LEARNING OBJECTIVES

After going through this unit you will be able to

- explain how Science Communication began in Assam
- discuss the progress of science communication in different aspects in Assam.

3.2 INTRODUCTION

In the previous units of this course we have learnt about the concept of Science Communication and its various aspects.

In this unit we will discuss the beginning of science communication in Assam. Science Communication was not an alien concept in Assam where it has passed through various stages of growth from the pre Orunodoi era to the present time. Right from the translation of a popular book on Mathematics in 1434 by Bakul Kayastha ,Science Communication has come a long way to claim for itself a respectable place as a medium for popularizing

of science. This unit will chart the steady growth with particular attention to the popularity of science magazines being written at different points of time.

3.3 SCIENCE COMMUNICATION IN ASSAM

There has been special relationship between scientific world and the mass media in Assam ever since the first Assamese newspaper Orunodoi which began to be published from 1846. Science Communication in Assam has been evoled over a few phases such as Pre Orunodoi, Orunodoi, Post Orunodoi and post independence. In each of these phases mass media has been used for the purpose of making people aware of scientific achievements and scientific attitude. Given below is a historical overview of the growth of Science Communication in Assam.



3.3.1 Pre Orunodoi era

Assamese science literature in written form was started in the fifteenth century as sponsored by King Naranarayan during the Vaishnavite movement. Bakul Kayastha translated a popular book on Mathematics namely *Kitab Manjuri* in 1434. Bakul Kayastha therefore can be regarded as the first Assamese science writer and *Kitab Manjuri* as the first Assamese science book. Even before that, Assam had a long and magnificent tradition of popularization of science beginning with Dr. Dinesh Ch. Goswami says : “The Assamese society paid a lot of importance to scientific temper and scientific practices in day to day life. The sayings of Daka Purusha during the 4th or the 6th century, very well depict the practice of science and its acceptance by and influence on the society. Daka’s sayings cover almost all aspects of the day to day rural life including agriculture, health, hygiene, gynaecology, pediatrics, infant care and food and nutrition.” This comment by one of Assam’s pre-eminent science communicator neatly sums up the science communication scenario in Assam in the earliest phase.

3.3.2 Orunodoi era

As Dr. Manoj Patairiya, renowned science communicator, cited in his article *Science Journalism in India,* it was all started in the country in 1818 with

the publication of the monthly *Digdarshan,* which was published in Hindi, Bengali and English, carrying a few articles on science and technology. Assamese Science journalism can be traced back to the mid nineteenth century, i.e., just after 28 years of the publication of *Digdarshan,* the first Indian journal to carry science and technology information. Assamese science journalism started with O*runodoi*, the first Assamese newspaper published from January 1846.



The most interesting fact is that this first Assamese newspaper *Orunodoi* represents the Baptists' Church's role benefactor towards the people of Assam particularly in the field of education with the publication. The publishers wrote in the printers line of the Orunodoi the following words : "The Orunodoi - A monthly Paper, devoted to Religion, Science and General Intelligence, is printed and published at the Sibsagor Mission Press, by O. T. Cutter, for the American Baptist Mission in Assam." Later, Pandit Maheswar Neog stated that 'the Orunodoi was devoted to Science and General Intelligence" is especially to be emphasized, as its pages went a long way to extend the intellectual horizon of the readers. The columns brought news stories from all corners of the globe. It explained global geography and gave descriptions of the night sky with its stars and planets.'

The first issue of *Orunodoi* (published in January, 1846) did not carry any science news. But in the February issue, i.e. the second issue, it carried two features with about 35% total space covered in aggregate. The first two essays published in the paper were "*Grahar Bibaran*" and "*Prithibir Akarar Bishai"*. These were a description of the planets and about the size of the planet Earth with two illustrations. In the third issue, the paper published a lengthy feature on the discovery of printing press. In the fourth issue, it carried a detailed write up on the description of the world with two drawings of the globe from west and east sides. In the issue they published an article on the description of the lion with a sketch followed by other animals in the subsequent issues. Regarding the writing style of the scientific events and news in the *Orunodoi* Pandit Neog opined, 'they could have the intelligence of scientific inventions and discoveries in a simple and digestible form.'

The science books published towards the end of nineteenth century are Nathan Brown's "Bhogol Siksha" (1849) Nidhi Liwai Pharowel's "Padartha

Bidyasar" (1855) "Bigyanar Barematara", "Lara Siksha" and others. These may be considered a valuable contribution to science literature in Assamese.

3.3.4 Post Orunodoi era

The post Orunodoi era covers the period from early twentieth century to independence. This period can rightly boast of the publication of a number of science articles published in different Assamese journals. In the beginning of the twentieth century magazines like "*Assam Bandhu*" (1906), "*Alochani*"(1908), "*Jonaki*", "*Assam Bandhav*" (1909), "*Bahin*" (1909), "*Milan*" (1922), "*Assam Hitaishi*" (1926), "*Abahan*" (1929) and "*Jayanti*" (1938). published science articles and news in a regular basis. The famous Assamese litterateur Kaliram Medhi made science efforts to create an environment of scientific temperament among the readers by writing a series of science articles in *Assam Bandhav* and *Alochani*. *Darwinar mator jatkinchit abhas* (An introduction to the ideas of Darwin; published in *Assam Bandhav*, Vo. 3, No. 4,1912), *Helir nejal Tara* (Hailey's comet; published in *Assam Bandhav*, Vo. 1, No. 8 & 9,1910), *Prithivi* (the World; published in *Alochani*), *Surya* (the sun), *Baidyutik Paramanu* (ion), *Pani aru Baraf* (Water and Ice; published in *Bahin,* Vol. 20, No. 01, p. 35) were some of the topics discussed from scientific point of view in these magazines. *Bahin* gave special stress on science and technology section. On the other hand, the journal, "Asom Chatra Sanmilani" *Milan* (1922) started to publish various science news and awareness stories. In an article published in *Milan* (Vol. 6, No. 2) on the journey to the moon in the section *Bijnan Jagatar Jilingani* a science communicator encouraged the general people with the last line – " whatever the case may be, that men will one day reign supreme on the moon, is certain." In addition to that, *Jayanti* (1938) promoted the social awareness as to scientific developments. In the pre Independence era, all magazines and newspapers published and covered science and technology news. It is only a haldful popular magazines like *Usha and Asom Pradipika* that did not give much attention to science news.



Sarbeswar Sarma Kataki, Lakshmi Prashad Chaliha, Sarat Ch. Goswami, Lakshminath Das, Saifuddin Ahmed, Mahananda Barua, Birinchi Kumar Barua, Nagendranath Phukan, Girish Ch. Barua, Damudar Hazarika, Nalini

Kumar Mishra, Dimbeswar Neog, Kiran Ch. Goswami were some successful science writers of this period, who tried to create an environment to popularize science.

3.3.5 Post independence era

India attained freedom in 1947. The post independence era marks further development in the spread of science journalism in Assam. In the post Independence period some new areas of science and technology communication occupied space in the magazines and the newspapers of the state. *Bijnan Baichitra* was a regular column published in *Ramdhenu (*popular Assamese magazine*)* and have a series of articles on psychology were published. *Amar Pratinidhi ,* another magazine introduced and continued a special column named *Bijnanstambha. Sadiniya Navayug,* yet another weekly magazine had two important sections titled *Swasthyar Sitanat* (Health Section) and *Bijnanbedya* (Science). Children magazines like *Akash, Safura, Mukuta, Mouchak, Abiskar, Jnan- Bijnan* etc. also tried to attract the children's attention to science issues and thereby develop this interest in science in general. Dr. Dinesh Chandra Goswami, a popular contemporary science writer, wrote a science based children's novel entitled *Tritonar Abhijan* for *Mukuta.*



CHECK YOUR PROGRESS

Q.1: ..... is the first Assamese science book.

Q.2: ..... the first Indian journal to carry science and technology information.

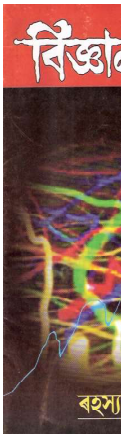
Q.3: Assamese science journalism started with .....



3.4 SCIENCE MAGAZINES IN ASSAM

The first Assamese science magazine is *Pashu palan* -edited and published by Dr. Kanak Chandra Sharma which deals with the subject of agriculture and veterinary science. This magazine was published every month from

1925 to 1948. During the period from 1939 to 1961 there were about 30 science books that greatly enriched the Assamese science literature. In 1953 we can see the establishment of Assam Science Society, a volubility organization dedicated to the cause of science in Assam. It can take legitimate credit for popularizing science in Assam. *Bigyan Jeuti*, the second exclusive science magazine in Assamese language was published in 1962 by Assam Science Society and from that time onwards, *Bigyan Jeuti* have been playing the most vital role in the development of Assamese science literature. Some of the other science magazines published in seventies are – *Deh-man* (1970), *Swasthya Pradip* (1971), *Lahar* (1973-74), *Spandan* (1974-75), *Padartha Bigyan Patrika* (1975), *Bigyan Rasana* (1976), *Bigyan Barnali* (1979-80), *Bigyan Patra* (1979), *Bigyan Barta* (1979), *Jnan Bigyan* (1979) etc. Nuclear (1981), *Dristi* (1982), *Bigyan Safura* , *Bhougolika* (1985), *Abiskar* (1987), *Natun Abiskar* (1988) were published in the eighties. In the last decade of the twentieth century only two three science magazines were published.



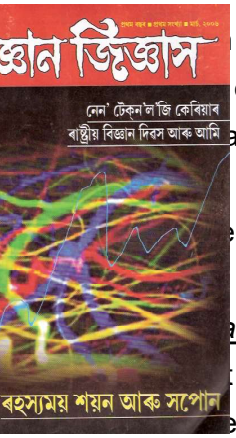
In the present decade a large number of science magazines have been published but most of the recent science magazines are basically health based. The AIDS Control Society, the Public Health department and the National Rural Health Mission are engaged in creating a health awareness campaign in the state. It is a very positive sign for the growth of science journalism in Assam which aims at making the general people science literate. But it is unfortunate that most of the media and publishing houses are not interested in publishing pure science magazines. Health continues to occupy the major space among scientific writings.

During this period a section of monthly magazines like *Prakash, Sutradhar, Prantik etc. have* offered space for covering scientific topics and thereby contributing in no mean way to the popularization of science among the literate class of people. It is also worth mentioning that the articles published in these magazines are written in a simpoel and easily digestible writing style. Dr. Paramananda Mahanta a noted academic says that we can divide the writing ways or genre of these magazines into three types : the pure and applied science writings; the descriptive science writings; and news based science writings.

But in recent times, science communication sections in other Assamese magazines are comparatively negligible except in a few magazines like *Prantik*. A thorough analysis is required about the coverage of science stories in the family and commercial magazines in Assam. From such on analysis we have seen that *Prantik* regularly dedicates a large section to science and technology, followed by *Satsari* with at least 5 % of its total space to science and technology. Some other commercial magazines like P*riyo Sakhi, Trisnatur, Rahashya, Saparibar, Jiban* etc. allocate a minimum space for science. It includes basically health sections. On the other hand, a large number of magazines do not publish any science and technology stories. Some of them are *Gariyashi, Nandini, Bismoy* and *Maya.*

3.5 LET US SUM UP

In this unit you have been introduced to the topic of science communication in Assam. Let us analyse some of the important points as given below-



- The beginning of the concept of science communication in Assam be traced to the pre Orunodoi era and even earlier than that going by evidence of scientific ideas scatterd in the sayings of Daka Purush in and 5th century.

The post Orunodoi and post independence periods have witnessed emarkable growth in terms of publications and readership.

Bakul Kayastha translated a popular book on Mathematics namely *ab Manjuri* in 1434. Bakul Kayastha therefore can be regarded as the Assamese science writer and *Kitab Manjuri* as the first Assamese ence book.

- The post Orunodoi era covers the period from early twentieth century to independence.
- The first Assamese science magazine is *Pashu palan* -edited and published by Dr. Kanak Chandra Sharma which deals with the subject of agriculture and veterinary science.
- In 1953, the Assam Science Society was established.
- *Bigyan Jeuti*, the second exclusive science magazine in Assamese language was published in 1962 by Assam Science Society



3.6 FURTHER READINGS

1) Dutta, Ankuran and Anamika Ray (2011), Science Communication in Assam, DVS Publishers, Guwahati



3.7 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q.No1. Kitab Manjuri

Ans to Q.No 2. Digdarshan

Ans to Q.No 3. Orunodoi



3.8 POSSIBLE QUESTIONS

A. Short Questions (Answer each question in about 150 words)

Q.1 : Enumerate the impoprtance of Daka's sayings.

Q.2 : Write a note on Bijyan Jeuti.

B. Long questions (Answer each question in about 300-500 words)

Q.1: Discuss science communication in Assam with special reference to post orunodoi era.

Q.2 : Discuss the contribution of ‘Orunodoi’ in communicating science in Assamese literature.