

The background of the image is a dark blue and purple night sky filled with numerous white stars of varying sizes. In the foreground, there is a silhouette of a forest of evergreen trees. The text is centered in the upper half of the image.

TOPIC OF THE WEEK

JUNE'19 (13 to 19 Jun)

Stirring mix of landscapes and cultural traditions

“Gandharavanam Chitra Ratha, Sidhanam Kapila Muni,” in this shloka, Krishna compared himself with the Pipl tree which gives oxygen even at night and it is best for all trees. The importance of trees is even mentioned in the mythological book. The existence of farming and trees in our mythology and Vedas make agriculture our culture. In India, about seventy percent of total population is engaged in farming and other agricultural activities. India’s geographical condition is unique for agriculture because many favorable conditions like climate, soil etc. for farming are available here and these agriculture products provide raw materials to a much agro-based company which are abundant in India. Apart from soil and climatic condition every day various scientific techniques and innovations are done for the growth of agricultural production. Agriculture is the biggest industry in India and it also plays a key role in the socio-economic growth of the country.

Despite many setbacks, Indian agricultural scenario has surely undergone many drastic changes and has achieved many milestones. Interestingly, some developed countries, mainly Canada, which were facing a

scarcity in agricultural labour, were so impressed by the results of India's Green Revolution that they showed interest in allowing farmers experienced in the methods of the Green Revolution to their own country. Many farmers from Punjab and Haryana states were then sent to Canada by GOI to settle there. That's why today one can see thousands of Punjabi-speaking citizens in Canada.

A few months ago our respected Prime Minister Mr. Narendra Modi highlighted the importance of agriculture and put emphasis on science and technology used for agriculture. In July, I.C.A.R (Indian Council of Agricultural research) celebrated its eighty-sixth anniversary where our Prime Minister addressed scientists and policymakers and urged them to bring more high technology in farming with the limited resources. This function was not only addressing the scientist but even a standing ovation for farmers. The traditional way of farming cannot be eradicated but practicing it with scientific technology can help in production and it should be one of the agenda for a scientist. As India is an agricultural based country and agriculture contributes 16% of total Gross Domestic Product. Ten percent of total export earning depends on agriculture. Thus we

don't have any choice other than developing agriculture technique and improving crop productivity. It is very important to invent technologies in agriculture so that our farmers can feed India as well as the world and can also strengthen the economy of our country. Mr Modi even appealed the agriculture universities to install radio of their own so that the farmers can be well informed with all the latest technology in agriculture. Students should conduct researchers in the lab and tell farmers how to improve the crop productivity. This “per drop, per crop” mission statement to conserve water and appeal to farmers and scientists to find ways and work for increasing farm productivity through optimum utilization of scarce resources.

There are different types of agriculture in India based primarily on nature of the land, climatic characteristics and available irrigational facilities, the farmers in India practice different types of farming like- Subsistence farming, Shifting Agriculture, Plantation Agriculture, Intensive Agriculture, Terrace Agriculture and etc. Harvesting of water and its management has become an integral part of agriculture. India has a variety of local community traditions of water harvesting that is the tradition of collecting, storing and preserving water for

various uses specially for agricultural purpose. Throughout India, several ingenious ways have been devised to catch and store rainwater for future use. They are known as traditional water harvesting systems. It is the traditional water harvesting systems that have made life possible even in the Thar Desert. The technology and engineering of the traditional water harvesting systems differed, depending on whether they were to provide drinking water or to be used for irrigation. Those meant for drinking water were generally smaller, sometimes covered and with steps leading down to the water. This ensured that people could only collect water manually in small quantities to meet their individual or family's needs. Irrigation systems on the other hand spread over large open areas and had a complicated network of pipes and channels for collecting and distributing water.

Like in Eastern Himalayas Streams are the only dependable source of water here. Bamboo pipes are used to divert the water for irrigation. The Apatani system of Arunachal Pradesh was practiced by the Apatani tribes. They harvested both ground and surface water for irrigation. The stream water was blocked by constructing a wall 2 to 4 m high and 1 m thick near forested hill slopes. This water was taken to the

agricultural fields through channels. The valleys were terraced into plots separated by 0.6 m high earthen dams with inlet and outlet channels (to the next plot) that help to flood or drain the plots as and when required. While in Indo-Gangetic Plains the rivers and their floodwaters are the main source of water here Ahar-pyne is a traditional floodwater harvesting system indigenous to south Bihar. Here the terrain has a marked slope, the soil is sandy, groundwater levels are low and rivers flood their banks only during the monsoon. The Ahar is the catchment basin embanked on three sides, while the fourth side is the natural slope. Pynes or artificial channels start out from the river, and meander through fields to end up in an Ahar.

Most ancient Indian traditions and festivals revolved around the seasons of harvest and cultivation. Be it saffron and poppy in Kashmir, Wheat and Maize in Punjab or the canes and teas in the northeast and stretching down south to the chilies and rice in Andhra Pradesh to further down in Kerala and Tamil Nadu, India has always celebrated its most important lifeline – the farmer's life and most festivals revolve around these season cycles. For example, Pola is an agricultural and conventional festival in which bull is being worshipped

by the farmers. It is a one-day festival and falls on 'Pithori Amavasya' or the New Moon Day of Shravana month in a year. This day is also celebrated by the citizens of Chhattisgarh as their main festival. On this festival the farmers show their reverence and gratefulness towards their bulls for helping them in the field works throughout the year. Field works like ploughing of the field and sowing of the seeds gets started after the worshipping of the bulls. They are not given any task on the day of the festival.

Another derivative of the Makar Sankranti or harvest festival, Lohri is a festival of Punjab that is celebrated with a bonfire and marks the shortest day and important harvest day of the year. Celebrated widely all across Northern India the festival involves delicious Punjabi food like Sarson da Saag and Punjabi folk dance performed by all the members of the community.

The harvesting of the crop is a happy time for the farmers as it will bring in prosperity for the agricultural workers and also the nation. Thanks to the climatic and soil diversity of the nation, the farmers residing in various parts of the country can produce the more than one crop during the year. For this reason, the Indian harvest festivals, in different parts of the nation, have a unique

character, flavor, and color. Feeding the teeming millions is not a mean task. Without proper stress on agriculture, it will be impossible for a country like India to meet the food requirements of the countrymen.

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