



Cover Page

DOI: <http://ijmer.in.doi./2021/10.06.01>



PROSPECTS OF AGRICULTURE ECONOMY WITH SPECIAL REFERENCE TO CLIMATE CHANGE IN INDIA

¹Dr.Surya Prakasa Rao Gedela, ²Dr.Srinivasa Rao Pasala and ³Dr.Raju Paila

^{1,2&3}Faculty, School of Management Studies

Gayatri Vidya Parishad College for Degree and P.G. Courses (A)

¹Rushikonda Campus, ²M.V.P Campus and ³Dwaraka Nagar Campus
Visakhapatnam, Andhra Pradesh, India

Abstract

Agriculture is known to Indians right from Stone Age. Aryans depend upon the agriculture which forced them to establish their kingdoms on the river banks. River Ganga, Jamuna, Brahmaputra and Indus are called as Himalayan Rivers. These rivers are filled with water throughout the year as snow melts from Himalayas and flows into the rivers. Some of the tributaries of these rivers merge with the above-mentioned main rivers. The agricultural lands become fertile through the water flowing from the Himalayan Rivers coming to the south, all the south Indian rivers receive water through the on setting of monsoon. Present study is significant as economic conditions in India have been shattered due to the climate change. People face acute drought conditions due to the failure of monsoons. Climate change is major cause for the failure of monsoons. Failure of crops damages the Indian economy to some extent. Industries face shortage of raw material due to the drought conditions prevailed in India frequently. The climate change may affect the health of the Indians. Such significance has been attributed.

Keywords: Agriculture, Climate Change, Drought, Rainfall, Elnino and Lanina.

Introduction

Objectives of the Study

Present study has been based on climate change with hampers the Indian economy. On the basis of above statement entire study has been conducted on the specific objectives keeping in mind.

1. To focus the importance of agriculture in Indian economy.
2. To focus the rainfall which is essential for good harvest.
3. To lay emphasis on the climate change which is responsible for economic imbalances in India.
4. To know the causes for the climate change which damages the living creatures including human life on the earth.

On the basis of above-mentioned objectives present study has been conducted.

Methodology

Doctrinaire approach has been made to conduct a thorough study on the impact of climate change which hampers the economic prosperity in India. Literature available on economic development, saga of agriculture impact on Indian geography are consulted. Several news items published in major news dailies like Hindu and the journals like economic and political weekly published in India. Firsthand knowledge has been gained by attending seminars, symposia and workshops conducted by various education institutions and industries. Internet has been visited to get material to conduct useful study on present topic.

Hypothesis

Indian agriculture is the backbone of Indian economy. Agriculture depends upon the on setting of monsoons in India. Climate change is responsible for fluctuations in the on setting of the monsoons. The climate change is linked with Global warming emerged from the human activities. On the basis of above tentative conclusions present study has been conducted.

Significance of the Study

Present study is significant as economic conditions in India have been shattered due to the climate change. People face acute drought conditions due to the failure of monsoons. Climate change is major cause for the failure of monsoons. Failure of crops damages the Indian economy to some extent. Industries face shortage of raw material due to the drought conditions prevailed in India frequently. The climate change may affect the health of the Indians. Such significance has been attributed.

Theme of the Paper

Agriculture is known to Indians right from Stone Age. Aryans depend upon the agriculture which forced them to establish their kingdoms on the river banks. River Ganga, Jamuna, Brahmaputra and Indus are called as Himalayan Rivers. These rivers are filled with water throughout the year as snow melts from Himalayas and flows into the rivers. Some of the tributaries of these rivers merge with the above-mentioned main rivers. The agricultural lands become fertile through the water flowing from the Himalayan Rivers coming to the south, all the south Indian rivers receive water through the on setting of monsoon. Indian monsoon can be



Cover Page

DOI: <http://ijmer.in.doi./2021/10.06.01>



divided into two such as south east monsoon and North West monsoon. South West monsoon which is on setting in India provides rains from June to September. Only with this rain fall the Peninsula Rivers receive water. Godavari, Krishna, Kaveri, Tungabhadra and Narmada are the major Peninsula Rivers. During the summer season the Peninsula Rivers would be dried up due to the excessive heat wave conditions. During the South West rainy season, the farmers so the seeds to get good crops. This period can be treated as Kharif and North East monsoon period would be treated as Rabi.

On setting of monsoon change the social and economic conditions in India. Fluctuations in monsoon are responsible for drought like situation and over rainfall which damage the agriculture and animal husbandry in this country. Good monsoon makes India as prosperous and failure of monsoons created drought like situation in this highly cultural country. For ten years from 1986 to 1996 India has faced successive droughts. Due to the failure of monsoons paddy culture and cereal culture was badly affected. During this period public distribution system was hampered due to the shortage of food grains. The failure of monsoon totally depends upon the climate change.

A discussion must be made on the climate change. The reasons for the climate change are varied. Lanina and Elnino of Pacific Ocean are major causes for the climate change in the world. Due to the emergence of Lanina in Pacific Ocean cool condition would prevail even in hot countries. Due to lanina fury of rain can be witnessed. In last five years the state of Bihar has experienced excessive rainfall which is responsible for fury of floods in the rivers Kosi, Gandak and Ganga. Agriculture was totally damaged due to the heavy floods and hundreds of people have lost their lives. Property to the worth of crores of rupees was damaged. These kinds of natural calamities have shaken the roots of economy of Bihar. Similar situation could be witnessed in Uttar Pradesh, Haryana and Punjab. Lanina is responsible for heavy-to-heavy rain with create natural calamities in regular period. Contrary to this situation Elnino creates hot conditions in the world. During the summer mercury may touch even fifty degrees Celsius. Bharmar in Rajasthan is the hottest place in India mercury hovering around fifty-six degrees Celsius. In south Janga maheswara puram, Rentachintala and Rayalaseema of Andhra Pradesh will touch the mercury between 48 to 50 degrees Celsius in month of May. Same situation could be witnessed in Tamil Nadu. The excessive heat conditions may cause the evaporation of water in the river. Shortage of water in the rivers Godavari, Krishna, Kaveri creates water problem and the people suffer heavily due to the shortage of drinking water. The animals, birds and other living creature die due to the shortage of water. All the crops would be dried up due to the prevailed heat conditions.

After the emergence of Elnino and Lanina the major cause for the climate change is deforestation. Indian population is growing day by day and it will cross the 150crore mark leaving China behind. The governments are facing to provide shelter to the huge population grown in India. The government can provide shelter by cutting trees and plants which destroy the forests. In every country the forest should occupy 33% of the land owned by it. Presently India has 23% of the forest land. The forest of Madhya Pradesh, North Eastern States and Southern Peninsula are diminishing rapidly. The Neelagiri hill area which is a beautiful tourists spot is getting warm due to the climate change. Apart from the deforestation emission of gases into the atmosphere is responsible for Global warming. The weather men have stated that the heat conditions of India are increasing by 2 degrees in summer due to Global warming. For the sustainable development rapid industrialization has been taken up by the governments in India. It is necessary for the government to establish Industries to mitigate the unemployment problem. Fortunately, 30 to 40% employment can be generated only through industries. Similarly, 30% employment can be generated through the agriculture and agro based industries. But agriculture can provide seasonal employment. Due to the natural calamities like cyclone, floods and drought situations the agricultural activists are facing severe problems. The grain growers are selling their lands due to the on setting of natural calamities which have forced them to acute poverty. The farmers of coastal area are hampered by periodic cyclones. Cyclones and floods are caused due to the Global warming which is triggered by climate change.

Climate change is not only problem to India but all the countries are severely affected by the climate change. It is already mentioned that climate change is happened due to the over emphasis on Industrialization. The western countries like Canada, America are releasing 45% of gases into the atmosphere which causes the damages of Ozone layer. A big hole was found in Ozone layer over Canada. Through the hole Ultra virus rays directly hit the people living in American continent. Due to the ultra-virus rays earth is getting warmer and warmer by which the climate is being changed swiftly and softly. Due to the damage of Ozone layer the human beings on the earth are being suffered by the attack of different viruses. In a recent study Japan scientist have found that the Ozone layer may damage the Corona virus. Greenhouse effect may cause the climate change. Due to the excessive deposit of Carbon dioxide, Global warming is being increased on the earth Globe. Over wood cutting existing of oxygen on the earth is being diminished. During the day time particularly on sunny day, the trees consume carbon dioxide and release oxygen which is essential for the health of people. So, it has emphasized to grow trees and plants in the premises of houses, offices and the education institutions. The forest can preserve the climate without getting any change. Fortunately, the governments are taking measures to keep the climate change in control by initiating more steps. But explosion of population is a major problem for the governments. Now the world has nearly 900 crores of population which is posing a threat to the safety of earth globe. Over consumption of



Cover Page

DOI: <http://ijmer.in.doi./2021/10.06.01>



underground water is another major problem for climate change. To meet the challenge of water scarcity, the people depend upon underground water. To draw the underground water several bore wells are installed through digging the land. For an instance in and around Lathor of Maharashtra 700 bore wells are drugged. Water levels have been fallen and due to the heavy digging of land, earth quakes are occurred in 1990s severe earthquake was struck to Lathor area killing thousands of people. In the first decade of 21st century severe earthquake struck Gujarat which killed nearly 2,500 people. The earth quakes have been occurred duo to the movement of Tectonic place. Construction of dams is responsible for movement of Tectonic place due to the heaviness of dams. The Koinada dam on River Godavari at Maharashtra poses a threat to the earthquake due to the heaviness of the dam. Similarly at the mountain reasons landslides are causing due to the deforestation. If the large trees are grown on the hill top, the trees would hold the hill top from breaking and causing landslides. Every rainy season in Uttarakhand the hill top are being broken causing landslides which fell on the people causing death of hundreds and thousands of people. The landslides, deforestation and over emission of gases are responsible for climate change which hampers the prospects of agriculture and agro based industries. Similarly, the climate change has affected the environment in the oceans. Spilling of oil on the sea and merging of rubbish into the sea released from industries causing damage to the health of living creatures. The major problem to the earth is from the tests conducted by countries to know the power of atom bomb and nuclear bombs manufactured by them. India is conducted two nuclear tests at Prokhran of Rajasthan. Pakistan has also conducted the nuclear tests at Quetta. France has conducted five nuclear tests so far at Mororava. Similarly, America has conducted nuclear tests at Nevada dessert. China's conducting place is Taiwan Sea. These nuclear tests have badly damaged the environment. Due to the frequent conduct of nuclear tests, acid rains are falling down on the earth. After the Nagasaki and Hiroshima incidents most of the countries particularly the developed countries have attacked small countries like Afghanistan, Granada and Kosovo with cluster and other bombs. Gulf region is a disturbed area which was experiencing bomb and gun culture. These attacks have disturbed the environment of Indian subcontinent. The Nuclear tests are very much responsible for the Global warming which is showing its impact on climate change in India. Recently the climate change in India is badly affected the economic prosperity. Bay of Bengal and Indian Ocean are badly affected by climate change. Due to the climate change industries have failed to get raw material which forced them to close their units. Climate change is badly affected the employment sector. Agriculture and Agro based industries such as poultry industry and food processing unit are badly affected by the climate change. Human life and bio-diversity is linked with climate change.

In this connection, the environment scientists, agricultural scientists should sit together to find out the ways to protect the agriculture and agro based industry from the climate change. For last twenty years major reforms have been initiated to protect the environment from pollution. Pollution control boards, Green Tribunals etc. are trying their best to protect the geographical conditions of India from climate change. Atmosphere, monsoons, agriculture and agro based industries, employment sector, people's life, living creatures in oceans, forests, mountains etc., are badly affected by the climate change which is linked with Global warming. The people particularly the Indians should aware of the effects of Global warming and climate change. They should change their life style and eating habits which are suited to the Indian conditions. To protect their health and nature from the climate change which has been triggered by Global warming.

References

1. Balasubramanian and V Dhulasi Birundha (2012), "Climate Change and Its Impact on India ", The IUP Journal of Environmental Sciences", page no:31-45, Vol. VI, No. 1, 2012.
2. R.K.Mall and etal., (2006), "Impact of Climate Change on Indian Agriculture: A Review", Climatic Change , Springer publishers, Vol.No. 78, page no:445-478 , 2006.
3. Reports, www.undp.org
4. Internet source from www.google.co.in

Filename: 1
Directory: C:\Users\DELL\Documents
Template: C:\Users\DELL\AppData\Roaming\Microsoft\Templates\Normal.dotm
Title:
Subject:
Author: Windows User
Keywords:
Comments:
Creation Date: 12/21/2020 11:11:00 AM
Change Number: 35
Last Saved On: 6/15/2021 11:15:00 PM
Last Saved By: Murali Korada
Total Editing Time: 112 Minutes
Last Printed On: 7/1/2021 8:19:00 AM
As of Last Complete Printing
Number of Pages: 3
Number of Words: 2,302 (approx.)
Number of Characters: 13,125 (approx.)