



INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Floods And Flood Prone Areas

¹Prashant H,²Dr.Anjanappa B.H

¹Research Scholar and Asst. Professor, ²Professor

¹Dept. of Sociology GFGC Hulkoti, ²Kuvempu University Shimoga, India

Abstract: Water is very much essential to life, but too much of water can have severe consequences on our communities, society and the environment. Floods are some of the most dramatic and severe natural disasters associated with water that humans are experiencing for thousands of years. Flood is the overflow of water onto normally a dry land. The flooding of a normally dry area caused by rising of water level in an existing waterway, such as a river or pond is called Flood. Flood is enormous amount of water. Sometimes too much of anything called as Flood. Floods are the most frequent type of natural disaster and occur when an overflow of water submerges land that is usually dry. Generally Flooding is a type of extreme weather and it happens when there is heavy precipitation in a very short amount of time. Generally, floods take hours or even days to develop, giving populations time to prepare or evacuate. But many times floods develop quickly and with little warning, at such times people will not be having any time for preparedness.

Index Terms - Flood, Disaster, Overflow, Warning, Precipitation.

I. INTRODUCTION

A flood is an overflow of water that submerges dry land. Flood also means the inflow of the tide. Floods are of significant concern in agriculture, civil engineering, national security and public health. Floods are caused by the excessive rainfall, climatic variations and environmental changes. Floods require speedy attention by the Govt. authorities and also community help. The flooding of a normally dry area caused by rising of water level in an existing waterway, such as a river or pond is called Flood. Flood is enormous amount of water. Sometimes too much of anything called as Flood.

II. MEANING OF FLOODS

Camridge Dictionary defines flood to cause to fill or become covered with water, especially in a way that causes problems:

Merriam Webster Dictionary defines flood as the rising and overflowing of a body of water especially onto normally dry land

Asper Oxford Dictionary a large amount of water covering an area that is usually dry. The heavy rain has caused floods in many parts of the country.

According to World Health Organisation Floods are the most frequent type of natural disaster and occur when an overflow of water submerges land that is usually dry. Floods are often caused by heavy rainfall, rapid snowmelt or a storm surge from a tropical cyclone or tsunami in coastal areas.

As per NDMA India, India is highly vulnerable to floods. Out of the total geographical area of 329 million hectares, more than 40 mha is flood susceptible in India. Floods are a continuous phenomena which cause huge loss of lives and damage to livelihood systems, property, infrastructure and public utilities. In India Flood is a cause for concern as flood related damages are showing an upward trend. The average annual flood damage in the last 10 years period from 1996 to 2005 was Rs. 4745 crore as compared to Rs. 1805 crore, the corresponding average for the previous 53 years. This is due to many reasons including a sharp increase in population, rapid urbanization growing

III. AREA LIABLE TO FLOODS IN INDIA

India has witnessed a rise in rainfall and waterlogging across eastern, central and northern India. The monsoon rains from the southwest cause flooding in rivers such as Yamuna, Ganga, Brahmaputra, etc.

States	Flood-affected Area (in Million Ha.)
Uttarpradesh	7.336
Punjab	3.7
Rajasthan	3.26
Bihar	4.26
Assam	3.15
Haryana	2.35
West Bengal	2.65
Orissa	1.14
Gujrat	1.39
Tamil Nadu	0.45
Andhra Pradesh	1.39
Madhya Pradesh	0.26
Tripura	0.33
Maharashtra	0.23
Manipur	0.08
Jammu and Kashmir	0.08
Himachal Pradesh	0.23
Delhi	0.05
Meghalaya	0.02
Karnataka	0.02
Pondicherry	0.01
Kerala	0.87

TABLE 1 (*godigit.com*)

Coastal floods, River Floods, Flash Floods, Urban Floods are the major types of floods in India. Central India and Deccan, Ganges, Brahmaputra, and Northwest are the four major regions that are flood prone. The states that are prone to Flood are West Bengal, Orissa, Andhra Pradesh, Kerala, Assam, Bihar, Gujrat, Uttar Pradesh, Haryana and Punjab. The intense SouthWest Monsoon rains cause rivers like Brahmaputra, Ganga, Yamuna etc. to swell their tides and banks, which may cause floods in the adjacent areas. Several times, central India has become familiar with precipitation events like heavy rains and flash floods.

An aerial view of the flooded Ganges river in Allahabad city



FIGURE 1 (BBC)

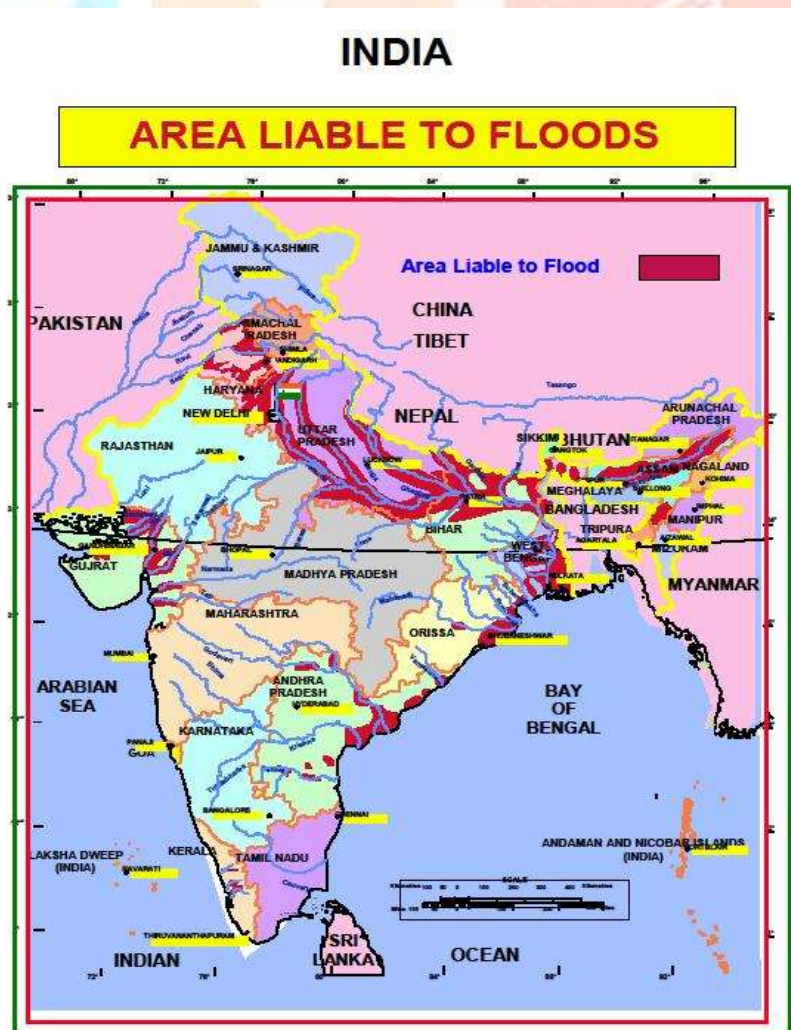
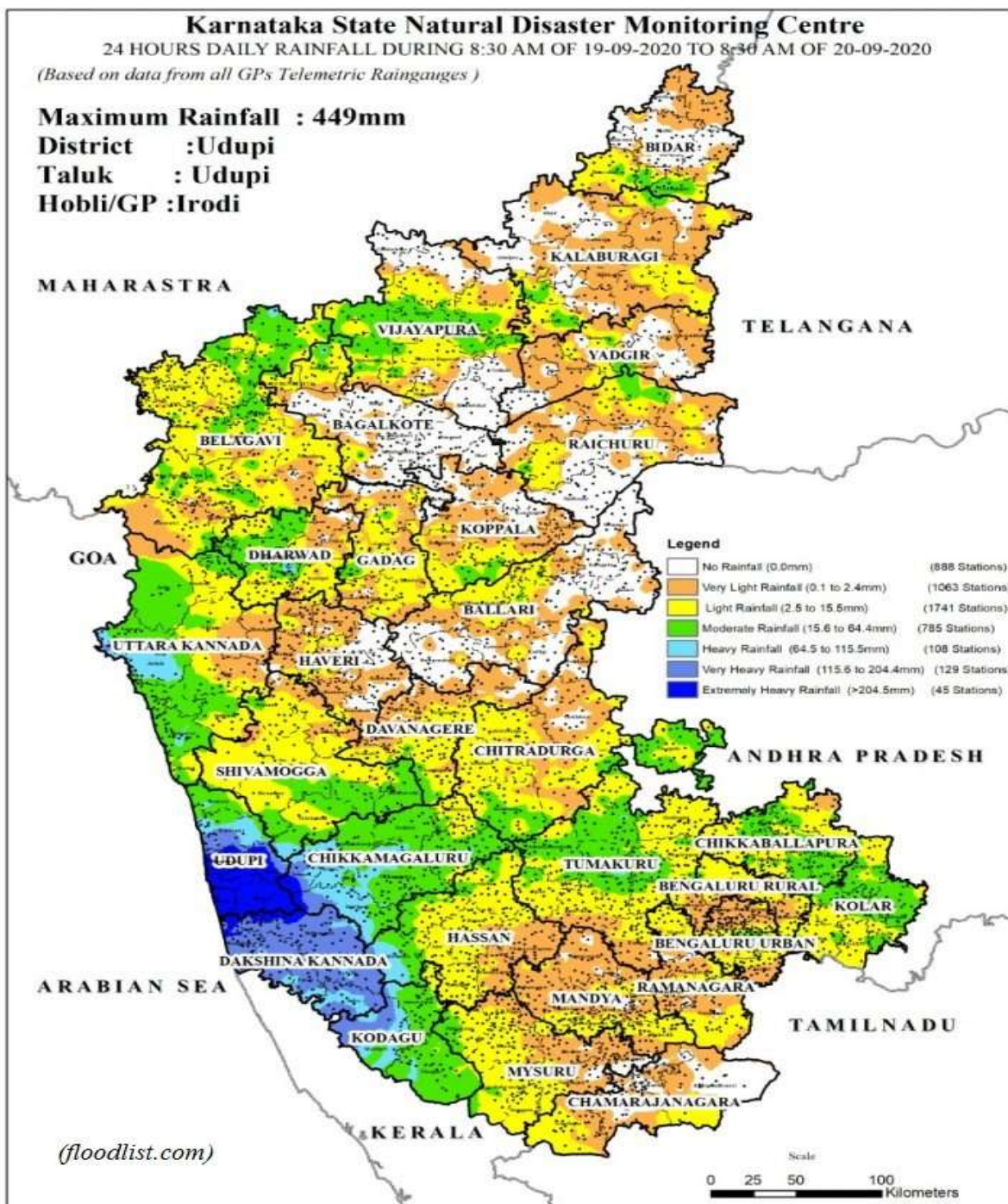


FIGURE 2 (ndma.gov.in)

Ganga Basin: The Ganga Basin gets flooded mostly in the northern part by its northern tributaries. Flood prone areas affected states of the Ganga basin are West Bengal, Bihar and Uttar Pradesh. Besides the Ganga Sarada, Rapti, Gandak and Ghagra rivers cause flood in eastern part. Haryana and Delhi are flooded by Yamuna.

Yamuna: According to Govt of NCT of Delhi Yamuna is the main river of Union territory of Delhi which flows in its Easterly direction from North to South. This river is an alluvial river and hence has got a meandering tendency. In the past Yamuna has caused various serious flood problems in U.T. of Delhi by flooding large areas during flood season, and disturbing the normal life of people. The main city areas of Delhi and New Delhi and Trans-Yamuna Area of Shahdara Block though protected by embankments but also there remains a danger to breaches which may jeopardise the normal life of the residents in such areas. The floods of the years of 1924, 1947, 1955, 1956, 1967, 1971, 1975, 1976, 1978 are the main examples of the flooding of the river Yamuna during which the normal lives of the residents of Delhi were either disturbed or threatened, seriously.



Karnataka's Flood: Karnataka's Flood 2022 Memorandum states Karnataka's tryst with floods and landslides during South West Monsoon and says that this tryst continues as the State has been inflicted with 5th consecutive year of flooding and landslides since 2018. The State as a whole recorded +106 % rainfall during the pre-monsoon season (1st March to 31st May 2022), which falls under the large excess category of rainfall. This excess rainfall during the premonsoon period increased dam storage and minor irrigation/ZP tanks during the summer. During the year 2018, the State experienced events of flood and drought. Many parts of Plains, Malnad and Coastal Karnataka were badly hit by floods and landslides/mudflows due to heavy rainfall during August 2018 causing blow to agriculture/horticulture/high value

REFERENCES

1. Alexander D. "natural Disasters".Taylor& Francis Publishers. 2018
2. Giddens A. "Sociology: Introductory Readings". Polity Press. 2022
3. Gupta H. "Disaster management". University Press. 2003
4. FEMA, "Emergency Management in the United States" https://training.fema.gov/emiweb/downloads/is111_unit%204.pdf [Nov. 13, 2023].
5. FEMA Department of Homeland Security, "Natural Hazards",<https://hazards.fema.gov/nri/natural-hazards:text=Natural%20hazards%20are%20defined%20as,hazards%2C%20such%20as%20manmade%20hazards>. [Nov. 13, 2023].
6. Kotlyakov V M. "Natural disasters – Volume II". EOLSS Publications.2010
7. Singh R B. "Vladimir M. Natural Hazards and Disaster Management".Rawat Publications.2009
8. Steinberg T. "Theodore Acts of God The Unnatural History of Natural Disaster in America".Oxford University Press.2006
9. Scott J. "Sociology: The Key Concepts". Taylor & Francis Publishers. 2006
10. The Pennsylvania State University "What is a Natural Hazard?" <https://www.e-education.psu.edu/geog30/node/378#:~:text=Geological%20hazards%20are%20hazards%20driven,the%20impacts%20of%20the%20events>. [Nov. 13, 2023].