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[ijirset@gmail.com](mailto:ijirset@gmail.com)

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# Flash Floods of 2014 in Jammu and Kashmir:A Review

Akash Kumar <sup>1</sup>, Anmol Kumar <sup>2</sup>, Rishabh Srivastava <sup>3</sup>, Divyanshu Dixit<sup>4</sup>

U.G. Student, Department of Civil Engineering, Maharana Pratap Engineering College, Kanpur, U.P., India<sup>1</sup>

U.G. Student, Department of Civil Engineering, Maharana Pratap Engineering College, Kanpur, U.P., India<sup>2</sup>

U.G. Student, Department of Civil Engineering, Maharana Pratap Engineering College, Kanpur, U.P., India<sup>3</sup>

Assistant Professor, Department of Civil Engineering, Maharana Pratap Engineering College, Kanpur, U.P., India<sup>4</sup>

**ABSTRACT:** Flash floods are serious occasions which are brought about by downpours, cold lake upheavals, dam disappointment, avalanches, arrival of ice jams. As the notice time for streak flood is exceptionally less, for example in minutes or at most in hours, they can have exceptionally awful effect over a huge zone. Streak floods are likewise portrayed by a lot of trash, and abrupt ascent in water level with high speeds. Streak flooding happens most normally in bumpy territories with steeply slanting valleys, yet can likewise happen in urban situations along little conduits. Stream inclination, steepness of watershed, term and power of precipitation additionally assume a significant job in streak flood. They are by and large portrayed by ragging deluges after overwhelming precipitation that plunge through stream bed, urban boulevards, or mountain gun along these lines clearing everything that comes in the middle of them henceforth they are considerably more perilous than floods. The investigation here portrays the flood moderation and preventive techniques alongside the core values that were required to lessen the effect of debacle in September 2014 at Jammu and Kashmir and furthermore recommends that with the improved understanding and all the more convenient and precise admonition of glimmer flood would be conceivable accordingly would help the concerned government body in making mindfulness and upgrade alerts.

**KEYWORDS :**Flash Flood causes, Flash Flood Overview.

## I. INTRODUCTION

Flash floods particularly in Narrow gorges are the explanation behind a bit of the huge torrential slides in Jammu and Kashmir. The shortcoming of topographically energetic volatile and fragile rocks of the state has extended regularly in the progressing past on account of various casual developmental activities. Deforestation, casual road advancement and terracing, encroachment on steep slant slants are anthropogenic exercises which have extended the repeat and intensity of avalanche.

Flash floods, brief incredible events, which normally occur under bit by bit moving or fixed whirlwinds, suffering under 24 hours are a regular catastrophe in the state. Due to the quick of the present which can wash away all hindrances in its way, this scene has achieved colossal loss of life and property in various bits of the territory.

## II. CHARACTERSTICS OF FLASH FLOOD

Flash Flood has the following characteristics-

- **Depth of water**-Building establishments and vegetation will have various degrees of resilience to bring immersed water.
- **Duration**-Damage to structures, infrastructure vegetation identified with span of time with water immersion.
- **Velocity**-High speeds of stream make erosive powers, hydrodynamic weight, which devastate establishment underpins and may happen on floodplains or in the fundamental waterway channel.
- **Frequency of event** – The recurrence of event estimated over timeframe decides sorts of development or horticultural exercises on the floodplain.

- **Seasonality**–Flooding during a developing season annihilate crops while chilly climate, floods truly influence the network.

### III. CAUSES OF FLASH FLOODS IN JAMMU AND KASHMIR

FLASH FLOOD USUALLY OCCURS IN HILL AREAS. THEY OCCUR UNDER VARIOUS TYPES OF CONDITIONS. THESE CONDITIONS CAN BE NATURAL OR ANTHROPOGENIC. THE MAIN CAUSES OF THE FLASH FLOOD OF JAMMU AND KASHMIR IN 2014 ARE AS FOLLOWS:

#### A. NATURAL REASONS

- **HEAVY RAINFALL**-The overwhelming precipitation was brought about by rainstorm which prompted streak flood expanding harm across Jammu and Kashmir.
- **LANDSLIDES**-The second most significant reason for the debacle was Landslide which expanded the effect of catastrophe and furthermore upset street availability.
- **WIDESPREAD FLOODING**-The third most significant reason for the calamity was across the board flooding which caused death toll in enormous number.

#### B. ANTHROPOGENIC REASONS

- **TOURISM**-Tourism has likewise lead to increment in level of fiasco as enormous number were available which caused issue at an extraordinary level.
- **CONSTRUCTION**-The expansion in the degree of the travel industry has lead to increment in street development which are finished by cutting of slopes.
- **FOREST ENCROACHMENT**-This is additionally a significant explanation in causing calamity.

### IV. OVERVIEW OF FLASH FLOODS

After the scaffolds escaped by the glimmer flood, the streets prompting the well known vacationer goal Gulmarg in North Kashmir was shut for the vehicular development.

The 300-km-long Jammu-Srinagar National Highway was shut down for traffic because of avalanches at different places in Ramban locale of the state.

GSDP of J&K State is enrolling a negative development of -1.57% during the year 2014-15 when contrasted with 5.63% during 2013-14 (financial study 2015J&K).

Water during streak flood streams at high speed and convey a lot of flotsam and jetsam. These flotsam and jetsam loaded waters can cause the incredible death toll and can remove foundation that is the life saver of mountain networks. A portion of the pulverization which is brought about by streak floods is promptly obvious while some unobtrusively undermine existing structures and the genuine harm shows up after some time. A portion of the pulverization can be effortlessly fixed while a few has long haul unsafe impacts on the earth and the financial existence of networks. Paddy and natural product crops have suffere extraordinary misfortune and harm was additionally caused to vegetable and maize crops and furthermore potential loss of seeds and devices. The flexibly courses and transportation systems have been unfavorably influenced.

Flooding likewise had significant effect on family unit level food stocks and glimmer floods additionally washed away family unit resources.

### V. IMPACT OF FLASH FLOOD

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FIG 1: Image at the time of disaster

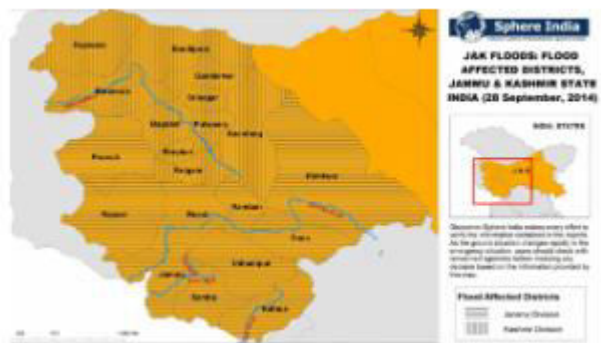


Fig 2: The Regions of Disaster (Source: Sphere India)

## VI. CONCLUSION

After the investigation of a few instances of blaze flood in sloping zones clearly the primary driver of summer flood in Jammu and Kashmir was overwhelming monsoonal precipitation, avalanches and boundless flooding in Kashmir Valley. In view of these the streams in sloping zones floods and the blaze flood happen. It is obvious that the quantity of blaze flood occasions happened in the uneven zone for example Jammu and Kashmir brought about by substantial rainstorm precipitation and avalanches. Flooding has been appeared to effectsly affect the human exercises on one hand and the earth then again. It is fundamental that auxiliary measures, especially bioengineering works be supplemented with non-basic measures. Just their joint usage can make sure about the satisfactory utilization of avoidance and moderation methodologies. What's more, non-auxiliary estimates should be viably solidified and executed inside a lawful system with the goal that such procedures can be reasonable for what's to come.

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