History of Floods of Sawai-Madhopur District

*Dr. Gopal Lal Gupta

Introduction

The district Sawaimadhopur is located in the Eastern region of Rajasthan between 25°-45° and 27°-14° North latitud and 75-59 and 770-23' East longitude. It is bounded in the North by Alwar district, in the south by Kota and Bundi districts and in the East by the Chambal river. The chambal forms a natural boundary of it and separates it from the M.P. states.

The 10593 sq. kms. area of Sawai-Madhopur district is captured by the Banas, the Morel, Dhundh, the Raseli, the Gambhir, the Parbati and the Chambal Rivers and its tributaries Galva, Churahao, Panchai Gudiag. Gombhri rivers have significant roles to play in increasing the supply of subsoil water in the wells and the tanks by per colation. The average rainfall in the district is 685.8, mms most of which is received during from June to September. The highest rainfall occured in 1917 which was 209 percent above the normal. The Dhund, Banas, Banganga rivers bring water from Jaipur, Tonk, Alwar districts and increase the amount and velocity of water in the district creating flood situations.

The district gets heavy rain falls occassionally in the rainy season. So floods are unprecedented, only when a heavy down pour occur in a short spell and a small area. As a result of this, the small rivers and rivulets flowing in the region get a flow of high velocity of run- off beyond their capacity discharge when the tanks are also filled upto their capacity, facing the floods subsequently. In the past, the district had suffered from flood in years of 1924 and 1943 when the area was in Jaipur state. The district was also affected by flood 8 times in two and a half decades of 60s and 70s mid 80's.

The Flood 1968.1969

In 1968, the flood was caused due to heavy rainfall of 310mms within a spell of 48 hours from 10 to 12 July 1968. It was more than the total rainfall received, in the year 1965. The rainfall in the catchment area of the Banas river took the form of floods in 62 villages of Khandar, 58 villages of Sapotra, 44 villages of Gangapur, 33 villages in Sawai-Madhopur tehasils-Total affected villages were 221. Due to heavy rainfall, rivers and rivulets were in spate. Several tanks, wells of irrigation department and road system of P.W.D. suffered from the flood. The earthen embankments of many bunds and canals were badly damaged. Loss to Swai-Madhopur Town was caused due to washing away of CI. pipe line. Damage was also caused to the compound wall and the approach roads to the offices and 3720 houses were collapsed and 3400 houses were damaged 2060 cattle heads were parished away. Rs 88,000 were distributed as subsidy and 11 0000 as loan to the affected families.

In Sawai Madhopur district, there was heavy downpour on 13 and 14 August, 1969 in the tehsils of Nadauti, Karauly, Mindahan and Gangapur. Total 203.2mms rainfall in 24 hours in Karauli area

History of Floods of Sawai-Madhopur District

resulted into heavy discharge of water in the river Gambhir generating flood situation in 146 villages of 7 tehsils. Total population of 18000 was affected, 1 man and 22 cettle died in the district. By the heavy velocity of water, 72 houses were completely and 805 collapsed. Total 3153 houses of Rs.181. 760 were damaged, 2742 hectare of land and crop worth Rs. 9.66 lacs were lost in the district 33 roads were damaged - orth Rs-79 lac loss was caused to the P.W.D. The tanks of the ghambirs catchment area filled to their capacity and after that they couldnot save themselves and got breached with high velocity, 16 irrigation tanks and canals were damaged. Worth Rs. 23 lacs loss was caused to the forest deptt.

The Floods of; 1971, 1972, 1977, 1978

There was heavy rainfall in June and July 1971 in Khandar, Sawai-Madhopur, Boanli, Gangapur, Mindiun, Karauli and sapotra tehsils. In Karuli and Seotra, rain- gauge recorded 319 mms rainfall in six days of June and 458mms rainfall in 13 days of July. Due to this frequent downpour in a short spell in the catchment area of the Gambhir, its tributaries could not bear the high discharge velocity and heavy run-off. Many villages of sapotra Kar- uali and Todabhim tehsils were affected with the accelarat- ed run-off. Total 46 villages with a population of 6800 were affected by the flood, 3412 houses collapsed and 1059 houses were damaged; the total loss being of the order of Rs. 3.51 lacs. There was heavy loss to Govt. and Private property and standing crops destroyed a vast tract of land making it unfit for cultivation. 81 acres (30.2 hectare) of agriculture land and 263 acre fertile land were affected. Damage was also caused to Public Health Engineering Deptt. of the order of Rs. 0.17 lacs and 45 cattle perished in the floods. Heavy rainfall accelerated the flow of rivers and tanks on the river and its catchment over flowed and after a time, they breached or damaged their embankments. Damage to irrigation Deptt. tanks was estimated of the order of Rs. 37.50 lacs.

Communication system became difficult on account of extensive damages done to roads which breached at several places. The span bridge, Karauli, roads were washed away. At other places, the approach to crossdrainage works were badly damaged. It made the area in-accessible for many days and dislocated the normal life of the people. The over all loss to the Public Works Department (P.W.D.) was estimated as Rs. 10.12 lacs.

In 1972, the monsoon behaved capriciously and from 8 August to 13 August 1972, it rained with vengeance. The intensity of rainfall was very high and wide spread almost throughout the district. Rainfall recorded at Nadauti, karauli, Gangapur, Sapotra, Mindaun, was 604mms, 483mms, 399mms, 315mms, respectively. Due to this heavy rainfall the small rivers and rivuletes could not possess the capacity to discharge the abnormal rainwater. The irrigation tanks could not store all the rain water and started overflowing. When they could not bear the onsalught of water, they breached resulting in to flood conditions. On 13 August, the lower part of Hinduan city was filled by water and the Gambhir river overflowed and flooded the villages of Hindaun, Nadauti, Todabhim, i.e. Tejgao, Kemla, Ronsi, Khandeep, Kishorpura, Loria, and Aupocha. 534 villages with 27000 families and 250000 population were affected by the floods. There were 6 human deaths, 4804 mortality among animals and loss to 29 780 houses. 1915 houses were comp- etetly washed awayand 28000 houses were collapsed or damaged. The flood in the river Gambhir are stated to be the worst in living memory of the old people

History of Floods of Sawai-Madhopur District

who stated that even 1924 flood were not so severe. A vast area of more than 500sq. miles was inundated. Almost all the bunds breached due to over topping. Besides, 22 bunds of irriga- tion dept, 11 bunds of Panchayat Samity and 268 private owned bunds were breached and total loss was 1.54 cror- es. There had been damages to the road of the order of about 102 kms 8 bridges, 4 culverts and one cause way were also damaged. Total loss to P.W.D. was of Rs. 54.50 lacs. The Gangapur, Hindaun rail line between Udai and piloda railway stations werebreached and the rail traffic was postponed between Delhi - Bombay. The heavy rainfall and the flood damaged 18538 acres of agricultre land and 14457 acres cropped area. 4800 acres in Gangapur Tehsil, 2500 acres in Karauli Nadauli, Bama was tehsils, crops damage was 30%, 30% 10% of total sown area in the 1972 flood.

During the year 1977, district Sawai-Madhopur received 1008.4 mms rainfall against the normal rainfall of 881.6 mms between June and 23 September 1977. This heavy rainfall created serious and unprecedented flood conditions. The population of 8,87003 was affected in the district, 57 privite houses were partially damaged and 33 houses were completly damaged amounting to a loss of Rs. 0.50 lacs. Govt. buildings were damaged worth Rs. 0.40 lacs. Two men and two cattle died due to flood.

Heavy damages were caused to many y roads of the district Roads were washed away at some places, Seriousdam- age to irrigation works also occurred in the district. Due to flood 53 irrigation tanks, earthen dams and canal syst- ems were damaged. This caused a loss of Rs. 81.95 lacs to the irrigation department and the public utility services.

On account of floods and incessant rains, nearly half of crops was badly damaged. The floods damaged about 1.90 lacs hectares of the cropped area and caused a loss of about Rs. 392.57 lacs. Extensive damages to the kharif crops were also caused.

In 1978, due to excess rainfall in the district the area got flood and by receiving more run-off, the Morel river Kalisil. & Jagar damsoverflowed with 1 feet hight, Baanwas, Mahawa, Hindun Tehsils got flood. This flood was not severe as it was hot in the vast area. Only road works damaged due to flood and caused loss of about Rs. 4.00 lacs.

The Flood: 1981

The year 1981 has unprecedented floods in the district. This was caused by heavy rainfall that lashed the districts of Tonk and Jaipur between 17 and 20 July 1981. The Morel dam was washed away causing the Banganga, the Bhad rawati and the Borkheda rivers to overflow. Besides this due to unabated heavy rainfall, all lakes in the tehsils of Bamanwass, Hindaun, Gangapur, karauli and Bonli overflowed and breached. On 19 July, the Moral Dam was washed away at three places flooding 36 villages of Bonli, 10 villages of sapotra tehsil.

The lake in Siwad village of Sawai-Madhopur, the Nagar and Nangal dams of Tonk district were washed away causing floods in the Salwa River. This affected 10 villages in the tehsil extensively. The villages of Piplia and Mahapura were affarted in khandar tehsil. The banas river was flooded causing a Nallah to change its course which accelerated the surge of the flood.

History of Floods of Sawai-Madhopur District

In Todabhim, tehsil, 20 villages were washed away and 12 lakes overflowed as a result of heavy rainfall. 8 villages were affected when the from jagram was breached. Flood occurred severely and heavy on 19 July in Hindaun town and in other 12 villages of the tehsil. jat- Ka Talab and Jaishen were opened due to heavy continuous pressure of the water.

In Mahuwa tehsil, the Nagrampura canal lent an increased force to the flood in the river Banganga. About 400 families in the tehsil were severely affected by flood in 10 villages. In Saptora tehsil, 4 villages were affected due to floods in the Morel and Kalisirivers. About 53 lakes were overflowed. Unceasing rainfall endange- red 4 villages in Gangapur tehsil. The flood was as a result of breaches in khandeep and Telenwala lakes. During the floods on 18,19,20 July, 172mms, 166mms, and 163mms raine fall respectively was recorded. 13 villages in Bamanwas tehsil were affected in 1981. In this flood, the Morel dame was breached which washed away Berkhandi village besides causing extensive damages in many villages. On 17, 18, 19, 20 July 270,255,505,208mms rainfall respectively, was recorded. This caused breaches in Lalsot Tehsil,600 families and 11256 people were affected. The loss of live stock was put at 647. In Nadauti Tehsil, 6 villages were affected by the flood. This flood was caused due to breaches in Nadauti, Tesgoan and Mondaheli lakes. Appendix)

Much damage was done to crops and live stock due to wide spread and heavy rainfall. Crops ready for harvesting in 59 thousand hectares land were destroyed. Another 0.04 hectares agriculture land was rendered unfit for the cultivation due to the sediment deposit carried by the flood water. 6535 Kuccha, 94 pucca houses were destroyed, 684 quintal food grain was washed away. In the district, the above description shows that the floods had invariably affected the South-West and the central-Eastern part of the district. The effects of flood in the North-Eastern region of the district are hardly visible.

> *Associate Professor **Department of Geography** Govt. College Malpura (Raj.)

REFRENCES

- Babu, J.S. (1896): History of Bharatpur, Lahore.
- Banergee, R.C. and H.S. Sharma, (1981): Unprecedented Rainfall and its Aftermath at Jaipur; Paper Presented at III Indian Geography Congress Jawar Lal Nehru University, New Delhi.
- Brockman, H.E.D., (1905): Rajputana District Gazetteers Eastern Rajputana State Agency, 3. Bharatpur, Dholput and Karauli, Ajmer.
- Reports On Flood in Rajasthan, Relief Department, Government of Rajasthan, Jaipur 1961-4. 1987.
- 5. Savitri Gupta (1981): Rajasthan District Gazeteer Sawai-Madhopur.
- Sharma, H.S., (1984): The Study of Palaeo-drainage in Rajasthan, Annals of the Association of Rajasthan Geographers, Vol. IV pp. 12-17.

History of Floods of Sawai-Madhopur District