

# Participatory Analysis of Climatic Risks and Impact on Livelihoods in Flood Prone Villages of Jalpaiguri District

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**Abstract**—*The climate change is the major issue affecting the economy and livelihood of farmers negatively. Therefore, a study was conducted in flood affected villages of Jalpaiguri district to analyze the climatic risk and its impact in agriculture and their livelihood. Several PRA exercises were conducted to collect the basic agro-ecological information of the flood prone villages near Teesta river in Jalpaiguri district. The data on participatory analysis of climatic behaviour revealed that too much rainfall just after the transplanting of rice seedlings (0-10DAS) affected the rice yield. Very less rain during active tillering stage i.e. 25-50 DAS and heavy cyclone at flowering stage (65-70DAS) affected the rice cultivation and yield in the area. Untimely rainfall and low rainfall in July created the problem of heavy weed emergence in rice field and affected the development of panicle. Beside these, the information on climatic disaster history, climatic risk map, climate smart technology preference etc, was collected and a suitable technology plan for intervention was prepared.*