



TRENDS IN RAINFALL AND THE CAUSES OF FLOOD EVENTS IN THE MUNICIPALITIES OF LOS BAÑOS AND BAY, LAGUNA, PHILIPPINES

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ABSTRACT – Trends in rainfall in the municipalities of Los Baños and Bay, Laguna were described. Five past flood events were mapped to determine their extent. Experiences, perceptions and records were obtained to determine the factors that contributed to the flood events.

Annual rainfall has been increasing, while the intensity of extreme rainfall events showed no significant trend from 1954 to 2012. However, the amount of rains and intensity of extreme rainfall during the wet season in the two municipalities were mostly higher in 2006 to 2012 than the 59-year average. Frequency of days with rainfall greater than 200 mm was also higher in 2006 to 2012 than the baseline value as projected.

Analysis of decadal monthly rainfall and the occurrence of flood events showed that there are other factors that may have contributed to floods. Major contributors to flooding identified were anthropogenic activities that adversely affected watersheds, natural waterways and accumulation of wastes. Data from past flood events also showed that the extent and persistence of floods were a combined effect of rainfall and the proliferation of communities in the lakeshore areas and in the sole outlet of the lake.

Keywords: rainfall and floods, Los Baños Laguna, Bay Laguna



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