

ABSTRACT

Mosquito born diseases cause major public health issues and are common in tropical and subtropical countries. Pakistan is a major hotspot of the vector born diseases because of its geographic location and climatic conditions. Malaria, dengue and leishmaniasis are endemic to Pakistan. Temperature, rainfall, humidity and vegetation cover are key factors affecting the distribution and prevalence of mosquitoes. These climatic factors have been used to predict the hotspots of mosquito born diseases. Analytical Hierarchy process (AHP) has been used to assign criteria weights to each of these factors. Temperature is most important factor in final decision making process. Metrological data has been calculated using relevant equations. ArcMap 10.5 used for creating Maps. Pakpattan, Vehari, Bahawalpur, Bahawalnagar, Sialkot, Leiah, Hafizabad, Narrowal and some areas of Faisalabad, Rawalpindi and Kasur are the hotspots of the mosquito born diseases because of their suitable climatic condition. These areas have moderately high temperature, high humidity, moderate rainfall and high vegetation index.