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Exploring Rainfall Scenario of Periyar Vaigai Command Area for Crop Planning

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Abstract: The present work was taken up, to understand the rainfall situation and its characteristics over the dry Periyar Vaigai Command (PVC) area located over the southern parts of Tamil Nadu. Data from 19 rain gauge stations over PVC area were utilized. Periyar Vaigai Command area has normal annual rainfall of 865 mm with considerable spatial variations (564 to 1052 mm). The normal annual rainy days of PVC area is 45. Rainy days clearly indicate a good distribution. Among the monsoons, NEM (20) had more number of rainy days than SWM (16), which clearly demarcates a good distribution during NEM that supports major cropping activities during the season. Crop sowing and establishment is decided by the month of peak rainfall; October was the wettest month while January was the driest month in terms of rainfall received. Second highest rainfall recorded was during November month followed by September invariably in all the locations. The minimum amount of rainfall required for cultivation of crops is 750 mm. Among the locations studied, Edayapatti, Viraganur, Gudalur and Pulipatti locations receives less than 750 mm. In these locations crops may suffer from water stress that may lead to decrements in crop yield and ultimately crop failure.

Keywords: Rainfall, Seasons, Variability and crop planning