

**11****RECOMMENDATIONS**

1. The Tank Model is best suitable to predict rainfall-runoff co-relationship and to establish relationship between surface and groundwater storage, particularly for an undulating topography like Machhan river basin.
2. Construction of more micro structures especially on second and third order streams will increase the base flow. So more microstructures should be constructed in such area.
3. This is a tribal area and looking to the status of the government office keeping data availability is comparatively poor so the model is selected in such a way that it requires minimum of data like rainfall, evaporation and runoff mainly.
4. Morphometric analysis indicates zones 4, 5 and 11 are the regions with highest number of streams having more drainage density. Out of these only zone 11 has two check dams so this area should be optimally harnessed and can be considered as potential sites for construction of check dams.
5. From the tank model analysis it can be said that for more recharging and increasing base flow number of check dams should be constructed in series on a river. The optimum number of check dams to be constructed can be judged out by studying morphology, site conditions and analysis of tank Model.