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Continued on Inside Back Cover

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Uttarakhand, India****MESSAGE FROM EDITOR'S DESK**

The current issue (Vol. 36, Number 4, October 2016) of IWRS Journal shares the findings of the researches with all its esteemed members. This issue broadly covers research papers pertaining to runoff estimation, crop water demand, geo-textile filters design for earthen dams, green house gas emission assessment, floods and droughts, etc. The first paper presents a study of Rupen-khan watershed (Mehsana district, Gujarat) for estimation of runoff by SCS curve number method using Geo-spatial technology. In the second paper, the SWAT model was used to simulate evapo-transpiration for wheat crop in the command of Butana distributary of Western Yamuna canal. The model simulated well the evapo-transpiration. The third paper deals with an analysis of causes and circumstances of extreme floods in Jhelum Basin (J&K, India). The study recommends for adopting an integrated watershed management plan with emphasis on flood hazard management for mitigation and preventing such disasters in future. The fourth paper deals with a detailed laboratory study on application of geo-textile filter for earthen dams. This study has relevance to demonstrate functional comparison of conventional granular filter with innovative geotextile filter, and experimental test results have also been validated by analytical study of the dam model using SEEP/W-GeoStudio 2007 software. The fifth paper deals with global warming related study due to greenhouse gas emission assessment from few storage based hydropower schemes in India. In this study, apart from prediction of diffusive flux in terms of CO₂ equivalents using UNESCO/IHA GHG Risk Assessment Tool (Beta Version), the paper also suggests to explore possibility to minimize CO₂ and CH₄ production in water bodies due to falling of trees before flooding process and reducing availability of lesser organic matter for decomposition. The sixth and last paper deals with assessment of vulnerability to drought using Integrated Drought Vulnerability Index (IDVI) towards effective mitigation planning for Ken river basin of India. The proposed methodology may be used as a reliable tool for demarcation of zones with different levels of vulnerability to drought, and near effective real time drought monitoring is also feasible with planning of appropriate mitigation actions to reduce the adverse impacts of drought.

Hopefully, this issue of IWRS journal would be useful to its members and all other stakeholders working in the area of water sector. In addition, IWRS gratefully acknowledges the generous support of all reviewers of this issue for reviewing the papers critically and Er. N.N. Pande, former Chief Engineer, NHPC Ltd., for his careful and meticulous editing work.



(S.K. Mishra)

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Chapter in Book or Paper in a Proceedings:

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