



INTERNATIONAL JOURNAL OF WATER RESOURCES DEVELOPMENT (JWRD)

<https://iaeme.com/Home/journal/JWRD>

Indexed in - Scope Database, Google Scholar, Academia, etc



Paper ID: JWRD/02/01/2024/JWRD_58169

Review Report

Date: 04-Jan-2024

Title: IMPACT OF LAND-USE CHANGES OF WATERSHED KRUKUT ON
RUNOFF

Authors: Boris Karlop Lumbangaol, Agustinus Purna Irawan, Wati A. Pranoto

Evaluation	Poor	Fair	Good	Very Good	Outstanding
Originality					√
Innovation					√
Technical merit					√
Applicability					√
Presentation and English				√	
Match to Journal Topic					√
Recommendation to Chief Editors					
	Strongly Reject	Reject	Marginally Accept	Accept	Strongly Accept
Recommendation					√

Review Comments: This research investigates the impact of land-use changes on runoff in the Krukut watershed, emphasizing the shift from undeveloped land covers to open building spaces. Utilizing satellite imagery and GIS spatial analysis, the study reveals a substantial increase in the runoff coefficient from 0.79 to 0.89 between 2010 and 2019. The analysis further indicates a notable rise in the 25-year return period discharge, emphasizing the need for effective watershed management strategies to mitigate the consequences of land-use transformations. The findings provide valuable insights for local government planning and environmental conservation in urban areas facing evolving land-use patterns and associated runoff challenges. **Paper Accepted for publication in JWRD.**