GeoJournal of Tourism and Geosites
ISSN 2065-1198, E-ISSN 2065-0817

Year XV, vol. 42, no. 2spl, 2022, p.787-793
DOI 10.30892/gtg.422spl19-890

ASSESSING SURVIVAL FACTORS OF RICE FARMERS IN THE FLOOD-PRONE AREA: A CASE STUDY IN BOJONEGORO DISTRICT, INDONESIA

Bambang Sigit WIDODO*
Universitas Negeri Surabaya, Faculty of Social Sciences and Law,
Department of Geography Education, Surabaya, Indonesia, e-mail: bambangsigit@unesa.ac.id

Mohd, Hairy IBRAHIM
Universiti Pendidikan Sultan Idris (UPSI), Faculty of Human Sciences,
Department Geography and Environment, Tanjong Malim, Malaysia, e-mail: hairy@fsk.upsi.edu.my

M. Turhan YANI
Universitas Negeri Surabaya, Faculty of Social Sciences and Law,
Department of Civic Education, Surabaya, Indonesia, e-mail: muhammadturhan@unesa.ac.id

Indah PRABAWATI
Universitas Negeri Surabaya, Faculty of Social Sciences and Law,
Departement of Public Administration, Surabaya, Indonesia, e-mail: indahprabawati@unesa.ac.id

Nuansa Bayu SEGARA
Universitas Negeri Surabaya, Faculty of Social Sciences and Law,
Department of Social Studies Education, Surabaya, Indonesia, e-mail: nuansasegara@unesa.ac.id

Citation: Widodo, B.S., Ibrahim, M.H., Yani, M.T., Prabawati, I., & Segara, N.B. (2022). ASSESSING SURVIVAL FACTORS OF RICE FARMERS IN THE FLOOD-PRONE AREA: A CASE STUDY IN BOJONEGORO DISTRICT, INDONESIA. *GeoJournal of Tourism and Geosites*, 42(2spl), 787–793. https://doi.org/10.30892/gtg.422spl19-890

Abstract: Bojonegoro is one of the largest producing districts in East Java Province, Indonesia. However, from year to year, floods become a problem that impacts the resilience of farmers in producing agricultural products. This study found out how the farmer could survive in these uncertain times. This research method is survey research. Samples were collected from 217 rice farmers in six sub-districts. The sub-districts were selected based on their vulnerability to flooding at a medium to a high level. Structural Equation Modeling (SEM) is used in this study to confirm the measurement model. This study revealed that nature, man, society, and networks significantly impact the resilience of farming communities in flood-prone areas in Bojonegoro. Meanwhile, the Shell factor is the only element that does not affect rice farmers' survival in Bojonegoro flood-prone areas. These results prove that the survival of farmers is highly dependent on factors that affect their daily lives. Meanwhile, flooding is not a problem because it only occurs on average 1-2 times per year.

Key words: survival, farmer, flood, settlement principles, SEM

* * * * * *

INTRODUCTION

Climate change is a worldwide issue that is extensively studied in geography due to its significant influence on natural conditions and human existence. Climate change's consequences are becoming more visible in a variety of ways around the globe. A critical challenge is addressing climate change and its harmful consequences both now and in the future. Various political initiatives have been formed on a global scale, including the G8 summit, which is considerably more serious and intensive than in the past (Sumi et al., 2010). Many studies have been conducted on the influence of climate change on the geosphere system on Earth. The circulating gases in the atmosphere; solar radiation; weather conditions; volcanic activity; sea wave; coastal destruction; and rise in sea level are all physical characteristics that may change (Letcher, 2009). Meanwhile, human life-related vulnerability include those connected to food, water, energy, shelter, and health. These are critical societal sectors, and each is vulnerable to the impacts of climate change. Because of the vulnerability to environmental changes, the influence of climate change has the potential to affect human interactions (NRC, 2010). Humans and Earth's physical systems are intimately connected. Humans, the primary cause of climate change, are the most endangered. Ocean currents, hydrology, agricultural systems, and the intensity of natural catastrophes such as floods, landslides, and volcanic eruptions that may have an influence on human survival are all factors to consider. Even though it is a concern for humans, just a few are aware of it. Flooding risk is growing globally, which must be evaluated as the influence of hazard, high risk, and susceptibility; each of these components must be addressed and studied if searching for explanations for this growth. The primary causes are the fast increase in the value placed by individuals in flood-prone areas, as well as their increasing vulnerability to their belongings. Climate change is also having an impact on the

* Corresponding author