

Agricultural economics concept toward earthquake and tsunami in Simeulue Island

Achdial Farhan Abus¹, Tasnim Lubis^{2*}, Buha Aritonang³, Rehan Halifah Lubis⁴, Dendi Wijaya⁵

¹Aceh Landscape Development Centre, Langsa, Indonesia

²Universitas Sumatera Utara, Medan, Indonesia

^{3,4,5}Badan Riset dan Inovasi Nasional, Jakarta, Indonesia

*Email: tasnimlubis@usu.ac.id

Abstract. Simeulue Island is the westernmost archipelago in Indonesia. This island has been hit by a number of natural disasters, including earthquakes and tsunamis. Simeulue Island's agricultural economic development adjusts to ecological, economic, and socio-cultural factors. The agricultural idea is built on diverse agricultural landscapes in a green economics scheme, and it was designed within the framework of macro and micro concept frameworks. The multi-landscape form is now part of the relevant customary law management plan. Data was gathered using ethnographic approaches such as in-depth interviews and participant observation. The data were descriptively examined using the Descriptive Question Matrix as a guide, demonstrating that the Simeulue people can manage the agricultural environment to satisfy their daily requirements. The entire agricultural environment of Simeulue has been created with an agroforestry system to ensure sustainability and sustainable development. As an agricultural concept, the sustainability of island groups and island seas may give a degree of production of products and services in various community and environmental demands, as well as a level of earthquake and tsunami catastrophe mitigation and adaptation to climate change.

Keywords: Agricultural economic, earthquake, tsunami, agroforestry, Simeulue Island