

The Analysis of Hydropower Development and the Mekong Power Grid on Regional Cooperation : Focus on the Greater Mekong Subregion Program

Nayeon Shin*, Seungho Lee**

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Abstract

This paper examines the extent to which the Mekong River Basin countries have achieved socioeconomic benefits based on regional cooperation through the Greater Mekong Subregion (GMS) Program, focusing on hydropower development and the Mekong Power Grid. This study pays attention to the time period from 2012 to 2022. The benefit sharing approach is employed to evaluate the extent to which hydropower development and the Mekong Power Grid have contributed to the regional energy trade in the GMS program. The GMS program was launched by the Asian Development Bank (ADB) in 1992, and the Chinese provinces of Yunnan and Guangxi, Myanmar, Lao PDR, Thailand, Cambodia, and Vietnam have taken an active part in the program. The goals of the GMS program are to achieve poverty alleviation, economic development, and regional cooperation in various sectors, including energy, tourism, and transportation. The GMS Economic Cooperation Program Strategic Framework 2030 (GMS-2030), in 2021, provides a new framework for prosperous and sustainable development in the river basin. In the energy sector, the GMS program has been instrumental in facilitating hydropower development and creating the Mekong Power Grid with the Regional Grid Code (RGC), contributing to economic benefits and promoting regional trade of hydroelectricity. It is argued that the GMS program has enhanced regional cooperation between the riparian countries. Despite such achievements, the GMS program has faced challenges, including the gap of economic development between the riparian countries, socioeconomic and environmental concerns regarding hydropower development between the Upper and Lower Mekong countries, and geopolitical tensions from the US-China rivalry. These challenges should adequately be addressed within the program, which can guarantee the sustainability of the program for the river basin.

Keywords: Mekong River Basin, Greater Mekong Subregion Program, Hydropower Development, Mekong Power Grid, Asian Development Bank, Benefit Sharing

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* Member • PhD student, Graduate School of International Studies, Korea University • E-mail: audtkd62@koera.ac.kr

** Member • Professor, Graduate School of International Studies, Korea University • E-mail: seungholee@koera.ac.kr