

the ongoing drop of wild fisheries, especially whitefish species (42.86%). Similarly, sediment of Mekong River has contributed considerably to maintaining soil fertility needed for the stability of rice productivity and food increase in An Giang and the MDV to date. However, this region has seen the decline of sediment loads driven by a wide range of factors. The reduction of sediment resulted in the increased agriculture production cost, which leads to the decrease of rice farmers' income.

The total damage of reduced sediment and wild fish cannot be quantified in terms of money but its potential negative impacts on socio-economic, environmental aspects and livelihood unsustainability of the population of An Giang and the MDV. Importantly, local people have no adaptive solutions under the loss of sediment and wild fish in case of hydropower dam projects constructed along Laos – Cambodia stretches, the sedimentation and wild fish population downstream would be endangered, which would cause countless impacts on inhabitants who live on wild fishing and agriculture production in the MDV.

Given the survey results, sediment load and wild fish resources have declined over years. According to the report of SEA MRC (2010), the completion of 12 hydropower dam projects on the Mekong mainstream would worsen the situation, which would seriously affect the livelihoods of fish and rice farmers in An Giang and the MDV. Given this complexity, the research suggests as follows: (1) There should be further study on impacts of wild fish resources and sediment on multiple dimensions including wetlands, biodiversity, alteration of hydrological regime in the MDV and the socio-economic issues (e.g., security of community nutrition, culture, migration, diseases, etc.); and (2) Riparian countries in the LMB should consider alternative energy resources in replacement for mainstream hydropower dam schemes. Process of dam construction should be halted for further study and elaborate assessments of possible impacts caused. The documentation of these assessments would also dramatically contribute to their consideration on the “win-win” energy development strategies in the LMB in future.

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