

# From globalisation to local migration: System study of the wider Mekong region

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**Special panel:** Rural out-migration and resource dependent communities in a globalized world

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## Abstract

This paper presents a system view developed for the flow of foreign investment and its impacts on migration dynamics in the wider Mekong region. System view was created using DPSIR (Drivers-Pressures-States-Impacts-Responses) framework.

National and sub-national decision makers in the wider Mekong region are in a continuous process of assessment and approval of a number of development projects. Some of those projects, such as construction of dams, inter-basin water diversions, responses to sea level rise, irrigation projects, commercial plantations, and mining projects; are both large-scale and numerous. The scale and the combined force of these interventions have a potential to create consequences beyond their respective sectoral and national boundaries. Nonetheless, trans-boundary and cross-sectoral perspectives and impacts are largely excluded from such assessments (Hirsch and Jensen 2006, Dore 2007, Molle et al. 2009), increasing the likelihood of unintended side-effects. Secondary and tertiary order impacts are unlikely to be identified unless cross-sectoral and cross-scale dynamics are articulated and explored (Smajgl and Larson 2007). Among potential unintended and insufficiently explored consequences, accelerated migration, land-use change and urbanisation have been identified as a particularly pertinent to the region (Molle et al. 2009). In addition, cumulative effects tend to manifest in a circular fashion (Smajgl and Larson, 2007). On the one hand, national and sub-national decisions have a potential to alter trajectories of regional drivers. On the other hand, flow-on effects might create feedbacks on the initial local situations, changing the local and regional conditions.

This project proposes to explore such cross-scale dynamics and compare them with the “desired futures” elicited via participatory research process. The methodological blend combines the development of holistic scenarios with agent-based modelling, carried out in strong partnership with decision makers and supported by a cross-sectoral expert panel. The approach includes five in-depth studies that analyse local consequences of sub-national decision making options. The studies are located in

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China, Laos, Thailand, Cambodia and Vietnam. In parallel, the series of sub-national changes and consequences is put into the context of Mekong regional drivers, such as migration, land use change and urbanisation. This regional work will analyse how regional drivers change and how feedback mechanisms could occur. Findings will be used to facilitate a workshop series with decision makers from Mekong region countries aiming for a discussion on how contemplated interventions relate to desired futures.

Migration has been identified a key consequence of the development projects, as well as a key connectors across the Mekong region. Understanding how migration can be conceptualised is thus critical for improved understanding of the regional dynamics. System view proposed for the study, created using DPSIR (Drivers-Pressures-States-Impacts-Responses) framework, is presented in Figure 1.

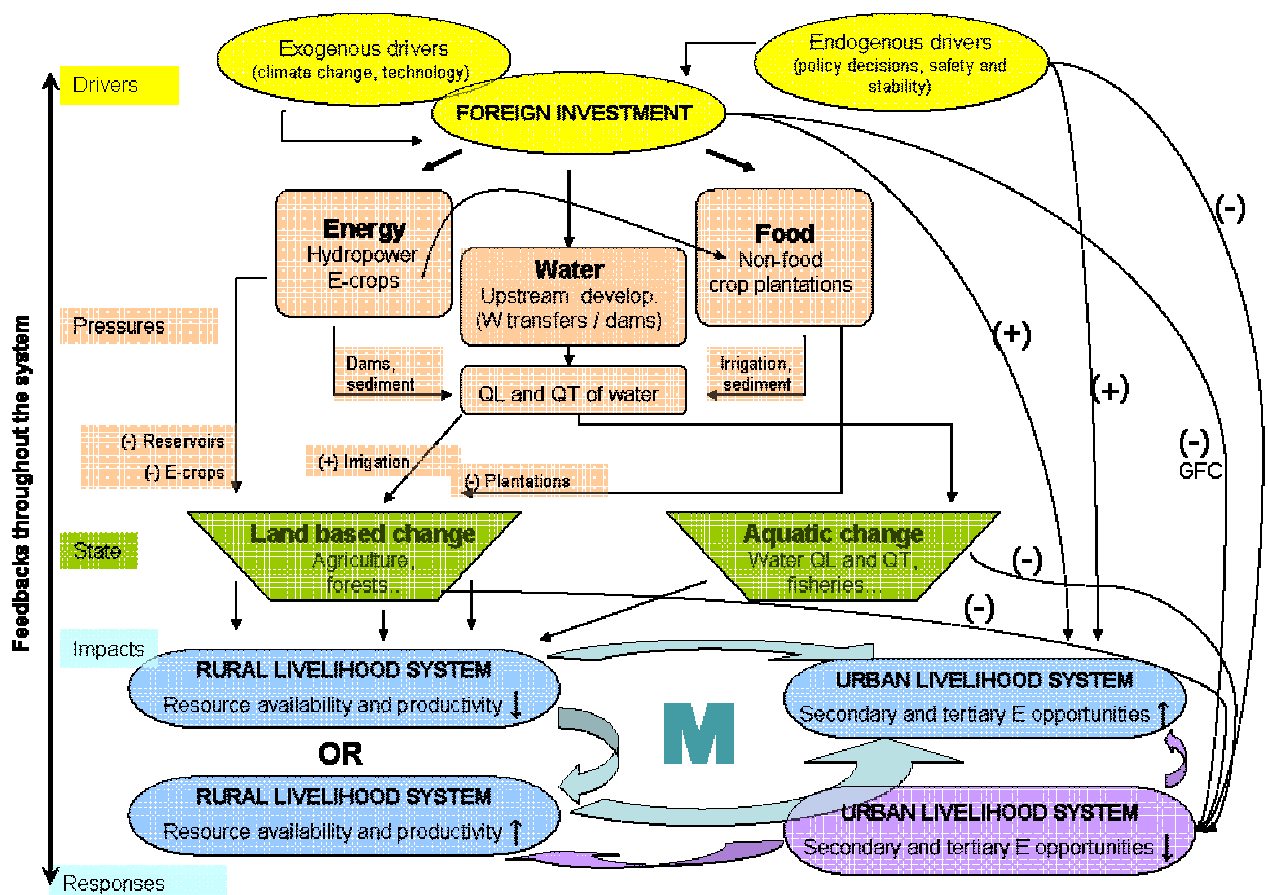


Figure 1. DPSIR framework for the migration flows in Greater Mekong Region

The key *driver* of interest for this study is foreign investment, an exogenous driver that is also influenced by endogenous national processes such as policy decisions and internal stability.

Foreign investments create *pressure* on many aspects of the system, three of which are set as boundaries for this view: demand for energy, food production and water.

Energy developments supported by the foreign investment of particular relevance to Mekong Region are development of hydropower plants and proliferation of the energy crops. The pressure on food production is created directly by foreign investment into large-scale non-food producing plantations, such as rubber plantations, as well as indirectly through energy crops. The direct pressure on the water resources is created via for example investments in large-scale water diversion projects, as well as indirectly as a result of investment in hydropower and irrigation for plantations.

As a result of those pressures, the *state* of both land based and aquatic resources changes. Creation of reservoirs, loss of forests to plantations, increased irrigation, changes in sediment flows, etc, create changes in agricultural patterns and use of forest and other land resources, as well as changes in the availability of the land. The pressures identified also create change in the state of water quality and quantity, and the state of aquatic organisms.

Rural livelihoods systems are *impacted* by these changed states, and the change might create either increase or decrease in the availability and productivity of the resources. For example, creation of the reservoirs results in the loss of land, while irrigation infrastructure developments might create new land suitable for intensive agriculture.

One of the potential *responses* in the areas of the lowering resource productivity and availability is migration. Migration occurs in two directions. It might manifest as migration to other rural system, one that is experiencing (or is being perceived as experiencing) increase in productivity and availability of resource (i.e. resettlement from the area impacted by loss of fisheries to area of new irrigation development). Or, the outmigration might result in exit from the rural system and migration into the urban areas. Either type of migration can be regional, national or trans-national. Employment opportunities created in the urban areas are also directly impacted by the foreign investment as a key driver, and are thus susceptible to changes in investment climate.

In addition, several feedback loops are operational throughout the system and these loops act to either reinforce or detract from the original flows.

The dynamic between the impacts and responses is explored in more detail and preliminary findings will be presented. In particular, our study is interested in the migration between the rural areas and the outmigration to the urban systems. Nonetheless, the feedback loop of migration that occurs once employment opportunities in cities decrease also warrants further research.