

Effect of war for community participation in mangrove restoration in northern Sri Lanka: Mechanisms and heterogeneity

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Community participation in environmental restoration is an important step in the postwar recovery as war-affected communities entirely depend on the existing natural resource base to restart their economic activities. At the same time, postwar community engagement can be highly influenced by war-induced changes in the society. However, effect of war on community participation in environmental restoration remains as an important question with limited empirical evidence.

Sri Lanka provides a very suitable case to investigate the effect of war on community participation in environmental restoration. Sri Lanka was exposed to a devastating civil war between the government forces and a rebellion group, representing Tamil ethnic minorities. Civil war in Sri Lanka has its roots connected to an ethnic conflict between two major ethnic groups. The war lasted over three decades finally came to an end in 2009. After the war, as part of the postwar rehabilitation, Sri Lankan government started large-scale mangrove restoration programs in the war-affected areas to support the recovery of the coastal communities in the war-affected regions. Although the mangrove restoration programs are mainly facilitated by the state, the local community members are also expected to actively contribute to the mangrove restoration process. Although the war ended in 2009, the legacies of war can still remain in the postwar society and influence their community participation in the mangrove restoration. As a community that was exposed to a prolonged war violence and undergone a deep trauma, the way how the community members respond to participate in postwar community development is an important question. Also, it would be worth to investigate whether the war-affected communities have developed any favorable social attitudes out of the war trauma so that they can support postwar community development. Therefore, this study tries to explore the mechanisms behind community participation in mangrove restoration in northern Sri Lanka by examining relations between war, war-induced social capital, and community engagement.

For this purpose, this study uses community-level data collected from 131 lagoon-based fishing villages in the northern province of Sri Lanka during 2009-2020. First, the data on community participation in mangrove management were collected from Fishermen cooperative societies (FCS) that are actively involved in mangrove restoration activities in this region. Community participation in mangrove restoration was measured by three indicators such as ratio of participation, average time spent in restoration activities, and number of meetings held by FCS. Furthermore, village-level socioeconomic information was obtained from annual statistical reports provided by the local authorities and focus group discussions held with local organizations. Effect of war damage was captured by number of forced displacements occurred in villages during the entire period of war (1980-2009). Social capital index was estimated from five different measures of social connectivity. To address the endogeneity issue, this study adopts instrumental variable approach (IV) using two-stage least squares (2SLS) technique. In the first-stage, social capital was regressed on instrumental variable i.e., number of forced displacements and other exogenous variables. Predicted estimates of social capital obtained from the first-stage were used in the second-stage equation to get consistent estimates of the impact of social capital on community participation. To check heterogeneous effect of war on social capital, we introduced an interaction term between war and ethnic diversity.

The main results show that the shared war trauma has increased social cohesion (i.e., social capital) of the war-affected communities and thereby facilitate their postwar community participation in mangrove restoration. Also, the results indicate the relationship between war and social capital weakens when the war-affected communities are ethnically heterogeneous. The findings suggest inclusion of war-affected communities can be a viable strategy in postwar community development. Also, the findings insist the need of strengthening the war-induced social capital in the postwar society while paying attention on ethnic composition of villages and other local conditions.