Abstract

This study intends to generalize the success indicators and the antecedents of success of watershed development and management programmes. Sustainable livelihood assessed on economic sustainability of households and psychological sustainability of beneficiaries, social sustainability of the community, and ecological sustainability of the watershed are conceptualized as the success indicators. Technological capital measured on parameters of technology adoption and absorption, social capital assessed on community cohesion and relations, and contextual capital evaluated on site-specific natural, financial, physical, and historical features are postulated as the antecedents of success. Data on dimensions of technological, social, and contextual capital and sustainable livelihood were collected from 130 watersheds of Orissa (India) using interview schedule and questionnaire. The findings suggest that the technological dimensions of adequacy of measures, understanding of measures, professional support, and land use; the social indicators of trust, confidence on policy, organization, and institution, participation, and human capital; and the contextual features of history of collective action, resource status, infrastructural availability, alternative livelihood, and financial strength are critical in influencing dimensions of sustainable livelihood of watershed beneficiaries. The contextual capital dimensions of history of collective action and financial strength facilitate sustainable livelihood, but, the dimensions of infrastructural availability, alternative livelihood, and resource status inhibit the same. Following the development of constructs, while the technological and social capitals are found to directly influence, the contextual capital is found to inversely influence the sustainable livelihood of watershed beneficiaries. Further, the adverse impact of contextual capital on sustainability of livelihood reduces when technological and social capitals improve the facilitating dimensions and reduce the inhibiting dimensions of the contextual capital. Among all the capitals, technological capital is the most influential predictor of sustainable livelihood of watershed beneficiaries. Therefore, watershed technology adoption and absorption need to be prioritized to develop and manage natural resources of the watershed in providing livelihood to beneficiaries and conserving resources for future generations.

Keywords: Watershed, beneficiaries, sustainable livelihood, technological capital, social capital, contextual capital.