



INSTITUTIONAL APPROACHES TO UTFI IN THE RAMGANGA SUB-BASIN

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Underground taming of floods for irrigation (UTFI) is a new approach for mitigating flood impacts through targeted floodwater storage in depleted aquifers for irrigating crops in the dry season. UTFI not only fosters the much desired conjunctive use and management of water resources but also provides the environmental services that are of high socio-economic value. UTFI interventions are established at the local level (e.g. village pond, check dam, etc.) but to achieve more substantial positive benefits at the scale of meso-watersheds (10s of km²) or sub-basins (100s to 1000s of km²) in the flood prone river basins requires area-based implementation. Given the nature and scale required, UTFI needs to be managed at the community level with the help of appropriate higher-level institutional arrangements taking into account both the upstream or downstream locations.

This paper reviews the existing institutional approaches and proposes an institutional framework that can help in mainstreaming UTFI operations and management in the context of the Ramganga sub-basin where the UTFI interventions are being piloted. The proposed approach should take the existing institutions and their strengths (formal and informal) in the region and also the ongoing programs at the regional level. The idea is to integrate non-market (participatory) and market instruments (Payment for Ecosystem Services) that can provide 'win-win' strategies for water resource management to downstream and upstream communities. It is argued that given the weak institutional base in the region, concerted efforts are required to create policy environment for evolving institutions at the local level. Various approaches such as encouraging public-private partnerships, financial institutions and non-governmental sectors for strengthening community based institutions in the region.