

# CULTURAL TRADITIONS AND THEIR IMPACTS ON TANK IRRIGATION ACTIVITIES: A CASE STUDY OF THE NORTH CENTRAL PROVINCE, SRI LANKA

R.M.A.U.P. Ranathunga<sup>1\*#</sup> and M.P. Perera<sup>2</sup>

<sup>1</sup>*Postgraduate Institute of Science, University of Peradeniya, Peradeniya, Sri Lanka*

<sup>2</sup>*Faculty of Arts, University of Peradeniya, Peradeniya, Sri Lanka*

\**Correspondance E-mail: udari.priyangika4@gmail.com, Phone: +94716302973*

<sup>#</sup>*Presenting Author*

**Abstract:** Cultural traditions are inherently interlinked with the rural agricultural community in Sri Lanka. These kinds of irrigation-related cultural practices may have significantly combined with societal relationships as well as irrigation water management. The objective of this research was to understand how cultural practices and beliefs shape irrigation practices and their subsequent impacts on community relationships in the North Central Province of Sri Lanka. A questionnaire survey (30 farm families) and formal interviews with farmers and community leaders were conducted to gain an in-depth understanding of cultural practices, beliefs, and rituals, covering large, medium, and small-scale tanks in the north-central province. Data on traditional practices, perceptions, and attitudes of farmers were analysed to examine the dynamics and interrelationships in tank communities. Results indicated that cultural traditions were common among the respondents such as decision-making in kanna (season) meetings to discuss the seasonal cultivation plan in all areas, panduru bandeema (ceremony of tying the offerings) - among 80% of the respondents, mutti-nameema (ceremony of pot overturn) - among 50% of the respondents, kiri ethiraweema (ceremony of cooking milk rise for the god) - among all respondents. The maintenance of irrigation systems was also deeply embedded in the local culture and play a significant role in shaping irrigation activities. These traditions not only foster cooperation and social cohesion among community members but also contribute to the sustainable management of water resources. Furthermore, the study revealed that these cultural practices enhanced community relationships by promoting trust, reciprocity, and collective responsibility. Further, this research highlighted the importance of cultural traditions in irrigation activities, emphasizing the positive impact they had on community relationships and the potential for their integration into contemporary water resource management strategies. The findings suggest that cultural traditions should be recognized and preserved as essential elements of sustainable irrigation practices, and efforts should be made to integrate traditional knowledge with modern approaches for effective water management in tank environments.

**Keywords:** Cultural practices; Community relationships; Irrigation activities; Sustainable water management