

Sustainable Development and Community Nutrition: A Multidisciplinary Framework Integrating Technology and Management

Dr. Bharti Pandey, Associated Professor, Department of Home Science, Acharya Narendra Dev Nagar Nigam Mahila Mahavidyalaya Affiliated to CSJM University Kanpur, Kanpur Uttar Pradesh, India

Abstract

Sustainable development and community nutrition are deeply interconnected, especially in the context of rising malnutrition, food insecurity, and lifestyle-related health challenges. This research explores how a multidisciplinary framework incorporating technology, innovation, humanities, and management can transform community nutrition initiatives and promote long-term sustainability. Drawing on global and Indian contexts, the paper examines how digital tools, effective management practices, and community-based approaches can enhance nutrition literacy, improve access to nutritious foods, strengthen supply chains, and support behaviour change. Through a mixed-methods approach involving curriculum/document review, field surveys, stakeholder interviews, and analysis of technology-driven models, the study identifies gaps in existing systems and proposes an integrated framework for sustainable community nutrition. The findings highlight that technology-enabled interventions—such as mobile nutrition apps, digital counselling, community dashboards, and AI-based monitoring—when combined with strong management practices and culturally rooted humanities perspectives, can significantly improve community nutrition outcomes. The study underscores the importance of multisectoral collaboration to achieve sustainable nutrition goals aligned with SDG 2 (Zero Hunger) and SDG 3 (Good Health and Well-being).

Keywords: Sustainable Development, Community Nutrition, Digital Innovation, Nutrition Management, Multidisciplinary Approach, Public Health, Technology Integration, SDGs, Behaviour Change Communication, Nutrition Governance

