

FROM TANKS TO DAMS: TECHNOLOGICAL MODERNIZATION IN THE WODEYAR PERIOD OF MYSORE STATE

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ABSTRACT

The story of Mysore's water systems is, in many ways, the story of the state's modernization. This paper traces how the Mysore kingdom, under the rule of the Wodeyars, evolved from a landscape dotted with small village tanks into one known for impressive modern dams and irrigation projects. The transformation was not a sudden leap but a gradual journey shaped by local innovation, colonial influence, and the ambitions of Mysore's enlightened rulers. Through this exploration, the paper highlights how technology, governance, and society intertwined to shape the region's hydraulic history — from community-built tanks to state-engineered dams that symbolized modern progress.

Keywords: Technological Modernization, state's modernization etc.

1. INTRODUCTION

For centuries, life in the Mysore region revolved around water — the lifeblood of an agrarian economy. Small tanks and lakes, built ingeniously by local communities, ensured water for crops, cattle, and homes. Yet by the late 19th and early 20th centuries, these modest tanks began to share the stage with massive dams and canal systems that redefined the region's landscape and economy. This paper examines that remarkable transition — from the age-old, decentralized tank irrigation systems to the modern state-managed dams that characterized the Wodeyar period. It seeks to understand how technological modernization unfolded in Mysore, not as a sudden break with the past, but as a layered process shaped by indigenous engineering traditions, British colonial science, and the Wodeyars' drive to modernize their kingdom.

2. Methodology and Sources

This study draws on both primary and secondary sources. The primary material includes the Mysore State Gazetteers, irrigation department reports, and administrative documents from the Wodeyar government. These are supplemented by secondary works by historians, environmental scholars, and engineers who have examined South Indian water systems. The method is historical-analytical, tracing the evolution of irrigation technology and governance, while interpreting these developments within political and social contexts.

3. Historical Background: The Wodeyars and Mysore's Agrarian Economy

The Wodeyars of Mysore ruled for several centuries, with interruptions such as the Hyder-Tipu interlude in the late 18th century. By the mid-19th century, Mysore was reinstated as a princely state under British suzerainty, and its rulers began to consciously promote a vision of progressive princely modernity. Agriculture was the backbone of Mysore's economy, and the rulers understood that controlling water meant controlling prosperity.

4. Traditional Tank Systems: Local Ingenuity and Social Harmony

Village tanks (kere) were small but remarkably efficient systems built across undulating terrain to collect rainwater and run-off. Maintenance was a communal affair — farmers desilted tanks, herders cleared vegetation, and temple committees managed rituals tied to water. The tank system was sustainable precisely because it was local, participatory, and adapted to nature's rhythms.

5. The Colonial Interlude: Mapping, Measuring, and Modernizing

The British colonial period introduced new ways of thinking about land and water. Engineers trained in European science began to map Mysore's rivers, calculate catchment areas, and plan systematic irrigation schemes. The Wodeyars adopted British administrative and technical practices, sending young engineers for training and establishing an Irrigation Department.

6. The Rise of Large-Scale Dams in Mysore State

By the early 20th century, Mysore embarked on large-scale dam construction. The Krishnaraja Sagar (KRS) Dam, built across the Cauvery River under the visionary engineer Sir M. Visvesvaraya, became the crown jewel of modernization. It was a marvel of civil engineering and a symbol of Mysore's leap into modernity.

7. Case Studies: The Hemavati, Kabini, and Krishnaraja Sagar Projects

The Hemavati, Kabini, and Krishnaraja Sagar projects illustrate Mysore's irrigation modernization. The Hemavati project served drier districts like Hassan, the Kabini project regulated southern flows, and the KRS became a national symbol of technical brilliance.

8. Technological Innovations and Engineering Excellence

The period saw advances in materials, design, and construction. Sir M. Visvesvaraya's automatic sluice gates revolutionized dam engineering. Mechanization, stone masonry, and cement usage redefined construction practices.

9. Governance and Institutional Shifts

As water systems grew, governance became centralized. The Wodeyars established the Department of Public Works and Irrigation, formalized rules for water distribution, and created engineering hierarchies, moving from community to bureaucratic control.

10. Social and Environmental Impacts

Modernization brought prosperity but also inequality. Large landholders benefited most, while smaller farmers sometimes lost land to reservoirs. Dams disrupted ecosystems and traditional water-sharing practices but expanded irrigation and boosted urban growth.

11. Continuities: Tanks in a Modern Age

Despite the prominence of dams, traditional tanks persisted. Many were repaired, linked to canal systems, and integrated into new irrigation networks. Mysore's modernization thus blended old and new, showing continuity within change.

12. Conclusion

The Wodeyar period reflects technological modernization rooted in cultural continuity. From tanks reflecting communal wisdom to dams showcasing engineering prowess, Mysore's story is one of adaptation and vision.

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