

"A man is  
great by  
deeds, not by  
birth"

-Chanakya

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## **Technology for a Better World: Evidence from Three ICTs in India**

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## **Technology for a Better World: Evidence from Three ICTs in India**

### **Abstract**

Science and technology have traditionally developed without consideration of their impact on the world around them. Technology has ignored the warnings of philosophers and human-welfare economists who elicit human values or community welfare and continued to thrive on purely outcome-based agendas. Similarly, as information and communication technologies (ICT) expanded over the years, it has continued to ignore the truly human-centric outcomes driven by the economic benefits. This is of particular concern as most ICTs are aiming socio-economic development of marginalized communities with human beneficiaries at the core. To address this pressing concern, this paper proposes that ICT design should consider environmental and human development values. Drawing heavily from the appropriate technology by Schumacher, and philosophies by Feyerabend and Hempel, I develop the design framework for ICTs to be humane and environmentally sustainable. The framework suggests that the ICT should be low-cost and easily available to all, appropriate for local use, offer the scope for creativity, offer a choice for using it (or not), and its success must be evaluated using social theories (in contrast economic outcomes). To explain the applicability of the framework, the paper uses three ICTs in the Indian context – the agricultural supply chain called eChoupal, mobile phones used by fisheries, and medical diagnostic software. The cases are analyzed using the reported data from the literature, and the ICTs are evaluated using the framework.

**Keywords:** Sustainable technology; human values; ICT4D; mobile phones; eChoupal

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