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Blow Hall - Board of Visitors Room

The Importance of Technology & Infrastructure towards Advancing Global Human Development

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Our research focuses on the significance of technology and infrastructure towards comprehensive global human development. Specifically, we consider how infrastructure technology can be used to not only promote human development, but do so in an environmentally sustainable way. We propose that infrastructure development should emphasize technology that effectively employs the resources developing countries have at their disposal and minimizes reliance on resources they lack. For example, developing countries often have an excess of human labor, but also a shortage of capital. In broad terms, we look at the Solow growth model and the impact of technology transfer on convergence. More specifically, we explore problems associated with infrastructure by examining the implications of remotely quantifying evapotranspiration using energy balances, water scarcity in the Blue Nile River Basin, sustainable agricultural practices used to reduce environmental impacts, and social dynamics in relation to Chinese community based renewable energy production.