Impact of National Policies on Knowledge Transfer to Small Tech Companies:

The Case of Rwanda

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Abstract

In the last few decades, a number of studies have examined the contributions made by smallscale developing nation tech firms in the knowledge development and diffusion sector. Many African countries have been struggling to attract private foreign investment to support the growth of their small-scale tech firms, in support of economic development and knowledge acquisition. In the past years, a new model of international cooperation has emerged, involving new actors, typically small-scale tech enterprises from developed countries seeking low-cost IT labor, market access, locations for prototype testing, and collaboration with startups in developing African countries where national policies are flexible enough to meet investor needs. This emerging new type of relationship between small scale tech firms in developed and developing countries can be considered as a new model of international cooperation. Therefore, an incremental national policy strategy with various supporting policies aimed at creating a conducive environment with a pool of skilled human resources and business-friendly regulations flexible for emerging technologies could help address development-related challenges and promote this form of new collaboration within the national innovation system.

This dissertation examines the case of Rwanda, focusing on two key aspects: (a) how national policies are structured to promote private partnerships between small-scale foreign and domestic tech startups, and (b) how this new model of international collaboration between small-scale tech firms from developed and developing countries is formed, along with its impact on these firms. Rwanda achieved the successful transition from agriculture based economy to ICT based economy despite various disadvantages and obstacles. By addressing the above questions, the thesis aims to unpack the factors that drove Rwanda's successful transition and attracted significant investment in the ICT sector.

The study conducted in-depth interviews with various stakeholders and analyzed secondary data from policy documents and official national, regional, and international reports and web articles focusing on startup ecosystems. The results show that national policies did impact international partnerships in Rwanda and that innovation capability enhancement was achieved by providing knowledge, training, and learning through an iterative process within collaboration between an investing Japanese small tech firm and a Rwandan partner firm. This thesis contributes to knowledge about the role of national policy in promoting knowledge transfer in small countries in sub-Saharan Africa and about the potential of African small-scale firms to contribute to global knowledge through interaction with small-scale firms from developed countries.

Keywords: Innovation system; mission-oriented policy; knowledge transfer; startups; National policy; Innovation capability; developing countries.