Utility led rural electrification in Morocco: combining grid extension, mini-grids, and solar home systems - DTU Orbit (28/12/2018)

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Morocco has become known for being an example of a well-performing utility-led rural electrification program, but so far little independent research has scrutinized this extraordinary case. Based on a critical review of the available literature, this study attempts to draw a picture of the evolution of rural electrification in Morocco, the policies and programs that have been implemented, and their institutional, technical, and financial dimensions. The review reveals that information available about the success of the programme has almost entirely been provided by the utility ONE, which has strategic and commercial interests in showing its achievements in a favorable light. With this in mind, three main principles are identified as having contributed to the rapid evolution of levels of electrification: (1) a clear vision and a continuing political commitment to follow the plan; (2) an institutional framework that brings into action the strength of the utility and of both national and international actors; and (3) a finance model that includes all stakeholders and international financial institutions. However, three factors may have been equally important in achieving these results: (1) a level of rural electrification in Morocco that from the outset was far below that in comparable neighboring countries; (2) a high GDP compared to sub-Saharan African (SSA) countries; and (3) a high level of urban electrification that allowed cross-subsidization from urban consumers. So while the Moroccan case is inspiring for SSA countries, we need to be prudent before we relate the rapid increase in electrification to the implementation model alone. © 2015 John Wiley & Sons, Ltd.

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