

Title : Functional analysis to strengthen an agricultural innovation process : the case of seedlings from stem fragments (PIF) plantain propagation technology in Cameroon

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Abstract

In Cameroon, plantain is crucial for food security but the cost, unavailability, and poor sanitary quality of planting material hindered its production's development. The national agronomic research (CARBAP) brought a planting material propagation technology innovation named seedlings from stem fragments (PIF) technique which still experiences a limited spread despite its high appropriateness to farmers. This paper questions the dynamics of the functions which support this innovation process and identifies perspectives of strengthening.

The data used come from in-depth interviews with key stakeholders of the process and academic and non-academic literature. Event History Analysis (EHA) serves to identify the functions and their causality pattern. Plus, the Impact of research in the South (Impress) ex-post approach enriches EHA.

During the first phase of the process, the combination of entrepreneurship and guidance of research by CARBAP leads to the creation of a technology with agroecological properties and a high potentiel of appropriateness to farmers. During the second one, CARBAP creates collaboration with other institutional and informal actors and leads the knowledge diffusion. Then the government creates a market and legitimizes the technology by launching a program of purchase-subsidy-distribution of seedlings. The technique is instantly appropriated by the farmers and a mass of independent trainers addresses part of the training demand. Although with the closure of CARBAP and the reduction in the scope of the government's programs, this phase ends with the decline of the technique's adoption and the disappearance of the profession. The third and last phase is characterized by the emergence of young nurserymen trained in the national education system and by public projects aiming at the professionalization of actors in the plantain value chain.

The decentralization of programs and the establishment of a certification system for nursery trade are identified as reforms to be taken to return to a virtuous loop.

Key words : banana plantain, agricultural research, appropriate Technology, event history analysis, Cameroon