

Assessment of Extension Approaches in Vegetable Production: Insights from the Vegetable Business Networks Model in Benin, West Africa

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Agricultural extension is central to enabling uptake of technologies, yet conventional approaches in sub-Saharan Africa are often criticised for their top-down orientation. In response, innovation system approaches have emerged as more inclusive frameworks for fostering collaboration, knowledge co-creation, and market linkages among multi-stakeholder actors in agricultural value chains. This study aims to evaluate the effectiveness of the VBN model, introduced by the Worldveg in Benin, an agro-based cluster that employs coaching as an advisory process. Guided by the analytical lens of the enhanced Structure–Conduct–Performance (SCP) framework, the research examines the operational features of the VBN, the factors influencing its performance, and a comparative analysis of coaching and conventional extension experiences witnessed by the actors. The study applied a qualitative research design, drawing on document analysis, field observations, and 24 semi-structured interviews among VBN actors across two case study sites, Zè and Tori Bossito in southern Benin. Findings reveal that the VBN approach fosters interactive learning, entrepreneurial and marketing capacities, and improved access to inputs, finance, and markets through collaborative arrangements. Its effective performance depends on structural arrangements (formalised membership and contracts), conduct conditions (trust, cooperation, motivation), process factors (facilitation, conflict resolution mechanism, capacity building), and contextual enablers (geographical proximity, natural resources). The comparative extension analysis highlights that, unlike the conventional ministry-based model and contract farming arrangements perceived to be widely used, the coaching process was recognised for fostering trust, enhancing farmer decision-making autonomy, and encouraging collective problem-solving. The study concludes that coaching offers a promising pathway for sustainable agricultural innovation, with practical implications for policymakers and extension practitioners.

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