Sustainable business models with a gender-sensitive approach for cattle artificial insemination services in the northwest highlands of Vietnam

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Abstract

The last 40 years of Vietnam's economic history have been marked by significant transformations and a dazzling market opening that impacted society's livelihoods, food preferences, and consumer demand. In this scenario, agricultural and livestock production plays a pivotal role. The livestock sector, especially poultry and pig chains, has undergone an energetic modernisation process resulting in a predominant model oriented to large and medium-scale production, with specialised breeds and greater technological adoption. However, the cattle production model remains mostly in small-scale production. Therefore, governmental plans have prioritised interventions for further the proportion of beef produced by commercial farms and improving local breeds' productivity by promoting crossbreeding with beef-specialised breeds through the artificial insemination (AI) practice. Then, initiatives implemented have focused on developing productive capacities and strengthening knowledge transfer to smallholders and veterinary workers to promote the adoption of sustainable livestock innovations. These have included breed selection, breeding, and artificial insemination (AI) techniques in cattle. Nevertheless, persistent gaps include limited supply, reduced access, and affordability of these services. This research aims to analyse the current delivery model of AI services in the northwest highlands of Vietnam. We follow the steps for developing innovative business models proposed by Osterwalder and Pigneur (2010) using the triple-layered business model canvas framework of Joyce, Paquin, and Pigneur (2015). A qualitative, gender-sensitive approach was used, conducting key informant interviews and focus group discussions with AI service providers and other stakeholders for whom the adoption of this practice in cattle is relevant (including adopters and non-adopters, women and men, farmer groups, input suppliers, and local authorities). The expected results will be articulated to develop integrated innovative models for the delivery and scaling of innovations in breeding, feeds and forages, and animal health, as well as generating evidence for their scaling in other regions.

Keywords: Breeding, cattle, delivery innovations, qualitative approach, scaling up

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