Adoption of Agroecological Approaches in Traditional African Vegetables in Kenya: Motivations, Barriers and Opportunities for Scaling up.

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Introduction

The ability of the food systems to produce and maintain food production has been weakened by climate change effects, soil degradation, biodiversity loss, and reduction in water quality and quantity. A major transforma-tion in food systems is needed to achieve food and nutrition security in the context of climate change. Ecological approaches like regenerative agriculture have been proposed to help restore natural resources and build economic resilience in food systems. This case study was conducted in the context of the Veggies for Planet and people project(V4P&P); a five-year, project being implemented by World Vegetable Center (WorldVeg) and the Netherlands Development Organi-zation (SNV), funded by the IKEA Foundation. The project is implemented in six counties: Machakos, Kiambu, Murang'a, Kisumu, Vihiga and Kakamega. The goal of the project is to create jobs, and improve incomes, par-ticularly for women and youth while ensuring environmental and human health through the safe production of vegetables.

Methodology

The case study explored farmer perceptions, barriers and motivations for the transition and scale-up of RA tech-nologies with a special focus on Traditional African vegetables (TAVs). Understanding farmer motivations for the adoption of regenerative agriculture is critical for developing the right policies, incentives, and interven-tions that encourage transitions ,scaling up of regenerative Agriculture. The qualitative study was conducted in 6 project counties in Kenya.Semi structured in depth interviews were conducted with 42 key informants along the TAVs value chain. Six focus group discussions were conducted. The respondents were selected using purposive sampling had in-depth understanding on barriers, perceptions and motivations for adoption of RA.

Results & Discussion

Findings show that V4P&P project implementation over the last two years has generated Positive experiences gained through experimentation of RA practices on the learning sites like composting and integrated pest management have sparked interest and contributed to a change of perceptions about RA. Social learning networks and participation in training (mentoring, coaching, exchange visits) have encouraged the transition process by creating new norms and a community of practice to learn from. Low-cost RAs that have been adopted by a large proportion of farmers include crop rotation, manure, compost, mulching, and botanical extracts while the capital-intensive bio-slurry and drip irrigation are least adopted. The main barriers to adoption of RA are lack of product differentiation in the market for regeneratively produced vegetables, perceived production loss in the short run, lack of awareness and access to alternative approaches. The key drivers of adoption are health concerns, ineffective chemical pesticides, and Changing farmers perceptions and mindset on the effectiveness of RA technologies through learning sites and peer support. The uptake and scaling of RA technologies can be improved through consumer education on food safety, financing SMEs or Start-ups in piloting business models to scale up innovations, improving access to markets and irrigation facilities.

Conclusion

The potential of regenerative agriculture technologies has not been fully exploited, interventions that remove barriers of adoption and promote a change in mindsets will go a long way to renew, restore and promote sus-tainable food production systems.