

# The perceived role of innovation platforms in addressing the value chain collective problems: Implications for agricultural extension services to rural farmer organizations By Willy Turyahikayo, PhD student, Makerere University- Uganda

## Introduction

Agricultural innovation platforms are increasingly being used as a means of mitigating the agricultural value chain challenges through enabling the co-evolution of different elements in the innovation process (Swaans et al 2013; Cullen et al., 2014). They are considered to be a new and dynamic extension mechanism that involves rural farmers and diverse service providers who interact for knowledge generation, sharing and diffusion for purposes of social learning and improved innovations along the value chain.

However, there is limited participation by rural farmers in platform activities that are intended to improve the value chain of various commodities. Actors are also not structurally and relationally embedded in the platforms. This is partly explained by the perceived benefits that are derived from innovation platforms. Using the transaction cost theory, we hypothesize that actor perceptions on environmental uncertainties, task complexity, customized products and frequency of interactions motivate them to join the innovation platforms.

## Objectives

1. To establish the value related challenges that farmers perceive as posed by the environment in which platform members interact.
2. To establish the extent to which members consider structural and relational embeddedness an effective responses to exchange conditions of environmental uncertainties, task complexity, customized products and frequency of interactions.

## Materials and methods

A cross sectional survey design was used in this study. The Kiboga-Kyankwanzi innovation platform was selected purposively because of its diverse activities along the value chain in the maize and soy bean production. A sample size of 369 was determined using Krejcie and Morgan(1970) but the response was 319(86%). Using interviewer administered questionnaire and FGDs, data was collected, coded and analyzed using SPSS version 23. Data was interpreted using t-tests and spearman rank correlation coefficients.

## Results

From one sample t-test, results show that the uncertain environment within which farmers operate, complex tasks that come with new crops, customized inputs and products and the frequent interactions with a multiplicity of other stakeholders are all significant in explaining why farmers join innovation networks ( $p=0.000$ ).

## Results (contd.)

From the correlations analysis, there was a positive significant relationship between the perceived environmental uncertainty and both constructs of embeddedness ( $\rho=0.155$  and  $p=0.006$ ) and ( $\rho=0.138$  and  $p=0.014$ ) for structural and relational embeddedness respectively. There was also a significant positive relationship between the frequency of interactions and structural embeddedness ( $\rho=0.141$ ,  $p=0.12$ ) and relational embeddedness ( $\rho=0.147$ ,  $p=0.009$ ). These results reveal that farmers perceive innovation platforms as a promising option for guarding against environmental uncertainties, complex agricultural tasks and customized skills and would want to be embedded in platform activities.

## Conclusions

On the whole, these results are an indicator that embeddedness both structural and relational is a result of uncertain environment in agriculture, customized assets and skills possessed by farmers, complex tasks and frequent actor interactions.

The study therefore recommends a policy framework that promotes innovation platforms for improving the crop value chains. This further has policy implications regarding extension services. Incorporation of agricultural innovation platforms in the extension services could serve as a springboard for agricultural transformation.

## References

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