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“Solidarity in a competing world —  
fair use of resources”

## Networking, Information and Technology Adoption: A Social Network Analysis of Colombian Small/Medium Scale Cattle Producers

CRISTHIAN DAVID PUERTA RODRIGUEZ<sup>1</sup>, STEFAN BURKART<sup>1</sup>, KAREN ENCISO<sup>1</sup>, ANDRES CHARRY<sup>2</sup>, JHON FREDDY GUTIERREZ SOLIS<sup>1</sup>, JHON JAIRO MUÑOZ QUICENO<sup>3</sup>, LISBETH ROCIO RUIZ<sup>3</sup>, NELSON JOSÉ VIVAS QUILA<sup>3</sup>, NOÉ ALBÁN LOPEZ<sup>3</sup>, SANDRA MORALES VELASCO<sup>3</sup>, MICHAEL PETERS<sup>1</sup>

<sup>1</sup>*International Center for Tropical Agriculture (CIAT), Colombia*

<sup>2</sup>*University of Hohenheim, Institute for Farm Management, Germany*

<sup>3</sup>*University of Cauca, Department of Agricultural Sciences, Colombia*

### Abstract

Social networks are an important strategy in helping people to cope with challenging conditions such as a lack of basic services or inputs. The worse the conditions are and the more difficulties exist in the access to resources, more likely people will protect themselves by forming social networks. In many cases, social networks replace formal services and input providers, relying on the delivery of informal financial services, extension services and problem solving assistance. Small and medium scale cattle producers in Colombia are facing difficult conditions, which not only comprise climate change related production constraints, market or credit access, but also the access to technical information (e.g., feeds, animal production, marketing).

In this paper, an analysis will be carried out in order to understand how social networks function as assets for small and medium scale cattle producers in the Colombian Cauca Department. Precisely, the authors will test the hypothesis that a strong social network has a positive influence on the adoption of improved forages in cattle production. Data was obtained in October 2015 through 308 semi-structured questionnaires with randomly selected small and medium scale cattle producers and is currently being analysed for network density, actor betweenness and actor centrality by applying UCINET as an analysis software for social network studies. These indicators will be statistically correlated with socio-demographic information and forage adoption levels to test the hypothesis.

Based on a similar study conducted for small scale pig and chicken producers in the same region, where significant relationships were found between social networking and the access to credit, the authors expect that cattle producers' social networks are an important asset and that they also have significant influence on the access to technical information, helping producers to make a decision on the adoption of improved forages and to take advantage of their benefits, which include e.g., climate change mitigation and adaptation potential or increased livestock productivity. In addition to that, this study will provide valuable information on the key actors of the network, which could play an important role in the dissemination of scientific findings and new technologies facilitating up- and out-scaling processes.

**Keywords:** Access to information, social network analysis, technology adoption, tropical forages