



AGRICULTURAL KNOWLEDGE: LINKING FARMERS,
ADVISORS AND RESEARCHERS TO BOOST INNOVATION

AGRILINK'S MULTI-LEVEL CONCEPTUAL FRAMEWORK

THEORY PRIMER: 23) SOCIAL NETWORKS

Coordinated by **The James Hutton Institute**
Authors: **Lee-Ann Sutherland, Livia Costa Madureira**



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AgriLink

Agricultural Knowledge: Linking farmers, advisors and researchers to boost innovation.

AgriLink’s multi-level conceptual framework

Theory primer: 23) Social Networks

The elaboration of this Conceptual Framework has been coordinated by **The James Hutton Institute**, leader of AgriLink’s WP2.

List of contributors:

- **Lee-Ann Sutherland** (WP lead), **Pierre Labarthe**, **Boelie Elzen**, **Anda Adamsone-Fiskovica**,
- with the support and contributions of Chris Blackmore, Marianne Cerf, Danielle Galliano, Alberto Lafarga, Andy Lane, Catherine Laurent, Livia Madureira, Carla Marques, Cristina Micheloni, Geneviève Nguyen, Katrin Prager, Jaroslav Prazan, Herman Schoorlemmer, Egil Straete, Sandra Sumane, Talis Tisenkopfs, Freddy van Hulst



This document presents the multi-level conceptual framework of the research and innovation project AgriLink. It is a living document.

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It has gone through a transdisciplinary process, with implication of both practitioners and researchers in writing, editing or reviewing the manuscript. This participation has been organised within AgriLink’s consortium and beyond, with the involvement of members of the International Advisory Board of the project, including members of the Working Group on Agricultural Knowledge and Innovation System of the Standing Committee on Agricultural Research of the European Commission.





Theory Primers

The purpose of the primers is to provide AgriLink consortium members with an introduction to each topic, which outlines the key points and identifies options for further reading. The primers have also served to demonstrate the wide range of expertise in the consortium, and to highlight the specific research interests of consortium members. Primers are intended to act as a **foundation for academic journal articles, and an early opportunity for collaboration between consortium members.**

23) Social Networks

Author: Lee-Ann Sutherland and Livia Costa Madureira

1.0 General Overview of the Theory or Approach

1.1 Summary of the Theory, Approach or Topic

Social networks refer to the relationships between people. Conceptualisations of the structure and influence of these networks often draws on the concept of 'social capital', which can be defined as "the features of social organization [...] that can improve the efficiency of society by facilitating coordinated actions" (Putnam, 1993, p. 167). In essence, 'social capital' is the means by which people access resources of various kinds through interpersonal relationships. Social networks are the representation of these relationships. Social network analysis comprises a range of methods for studying the structure and influence of social networks.

1.2 Major authors and their disciplines

Concepts of social capital have been developed most notably by sociologists Pierre Bourdieu (1986), Robert Putnam (1993) and James S. Coleman (1988). Other social capital theorists include Fukuyama (2000), Loury and Portes (1998). Robert Putnam's work on social capital is perhaps the best known – his popular books entitled 'Bowling Alone' (2001) and 'Making Democracy Work: Civic traditions in modern Italy' drew attention to the importance of history in developing cultures of voluntarism and organisational membership, which underpin economic development. James Coleman (1988) focused on the importance of social capital for producing human capital (i.e. the role that families play in ensuring the education and skill development of their children). Bourdieu focused on the different types of resources (economic, social and cultural) that can be accessed through social relationships, and the socialised access and interplay between these resources.

1.4 Brief history of how the theory has developed and been applied

Burt (2004) developed the concepts of 'brokerage' – innovations occurring through connections made between otherwise separate groups... 'bonding' versus 'bridging' social capital

Social capital became a mainstream concept within rural development studies in the 1990s. The term is widely used in international development (e.g. the World Bank, UNDP).

Social capital is linked to trust (e.g. that a reciprocal obligation will be met).

We also worked with network theory in PRO AKIS (e.g. Sutherland et al., 2017)

2.0 Application to the analysing the role of farm advisory services in innovation

2.1 Relevance to AgriLink Objectives

[tick relevant]	AgriLink Objectives
X	Develop a theoretical framework utilising a multi-level perspective to integrate sociological and economic theories with inputs from psychology and learning studies; and assess the functions played by advisory organisations in innovation dynamics at multiple levels (micro-, meso-, macro-levels) [WP1];
X	Assess the diversity of farmers' use of knowledge and services from both formal and informal sources (micro-AKIS), and how they translate this into changes on their own farms [WP2];
X	Develop and utilise cutting edge research methods to assess new advisory service models and their innovation potential [WP2];
X	Identify thoroughly the roles of the R-FAS (regional FAS) in innovation development, evaluation, adoption and dissemination in various EU rural and agricultural contexts [WP2];
X	Test how various forms of (national and regional) governance and funding schemes of farm advice i) support (or not) farmers' micro-AKIS, ii) sustain the relation between research, advice, farmers and facilitate knowledge assemblage iii) enable evaluation of the (positive and negative) effects of innovation for sustainable development of agriculture [WP4];
X	Assess the effectiveness of formal support to agricultural advisory organisations forming the R-FAS by combining quantitative and qualitative methods, with a focus on the EU-FAS policy instrument (the first and second version of the regulation) and by relating them to other findings of AgriLink. [WP4].
	At the applied level, the objectives of AgriLink are to:
X	Develop recommendations to enhance farm advisory systems from a multi-level perspective, from the viewpoint of farmers' access to knowledge and services (micro-AKIS) up to the question of governance, also recommending supports to encourage advisors to utilise specific tools, methods to better link science and practice, encourage life-long learning and interactivity between advisors [WP5];
	Build socio-technical transition scenarios for improving the performance of advisory systems and achieving more sustainable systems - through interactive sessions with policy makers and advisory organisations; explore the practical relevance of AgriLink's recommendations in this process [WP5];
	Test and validate innovative advisory tools and services to better connect research and practice [WP3];
	Develop new learning and interaction methods for fruitful exchanges between farmers, researchers and advisors, with a focus on advisors' needs for new skills and new roles [WP3];
	Guarantee the quality of practitioners' involvement throughout the project to support the identification of best fit practices for various types of farm advisory



	services (use of new technologies, methods, tools) in different European contexts, and for the governance of their public supports [WP6].
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2.2 How this can be applied/developed in AgriLink

Social network analysis draws attention to the nature of relationships between people.

Inclusion of actor-network approaches would also enable us to reflect on the role of material objects in advisory processes (particularly digital technologies).

2.5 Strengths and weaknesses/Sensitivities regarding use

Social capital gained popularity as a term because it puts a name to a resource that most people can easily recognise – social ties. However, critics identify issues with circular logic (e.g. that social capital leads to social capital) – it is far easier to identify where social capital exists than it is to develop effective measures to produce or increase it.

2.6 Potential operational problems

(e.g. theories may be ‘vague’ and difficult to operationalise, they may require labour-intensive data collection, may require data that are hard to get, etc.)

Social capital and social networks have a wide variety of meanings and applications. It will be important to ensure that AgriLink consortiums use consistent definitions in their empirical research and analysis.

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