



**agrilink**

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

# AGRILINK'S MULTI-LEVEL CONCEPTUAL FRAMEWORK

## THEORY PRIMER: 3) COMMUNICATIVE ACTION AND AGRICULTURAL INNOVATION SYSTEMS

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# AgriLink

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

***AgriLink’s multi-level conceptual framework***  
 Theory primer: 3) Communicative action and agricultural innovation systems

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

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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.**

### 3) Communicative action and agricultural innovation systems

Author: Freddy van Hulst

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#### 1.0 General Overview of the Theory or Approach

##### 1.1 Summary of the Theory, Approach or Topic

This primer summarises how some ideas from Habermas' social theory of Communicative Action can be and have been applied to agricultural extension and innovation. There are two key ideas that are potentially relevant for informing an analysis of Agricultural Knowledge and Innovation Systems (AKIS) in Europe:

1. Habermas' **distinction between instrumental rationality** (the calculation of the best means to a given end, oriented towards control) **and communicative rationality** (the interaction between social actors seeking to reach a shared understanding of situations and plans, oriented towards communication).

This resonates with the two extremes between which agricultural extension approaches can theoretically move: from 'Transfer of Technology' approaches that rely on predetermined objectives that are realised through a blueprint top-down process - treating people as objects, ranging to 'Facilitation of processes' approaches that rely on open-ended, emerging process of co-learning, negotiation and interaction in subject-subject relationships.

2. Habermas' ideal speech situation is a description of how a process of deliberation and discourse between stakeholders can lead to an agreement on definitions, problems and on the rules of the game. This concept can be used as a counterfactual for analysing the strengths and weaknesses of interactions in existing AKIS processes.

##### 1.2 Major authors and their disciplines

The theory of Reasoned Action is a high-level social theory, and in that domain and in the (applied) philosophy of science there is a wide body of literature. Applied to agriculture and AKIS, the main author to draw on Habermas is Niels Röling who published a lot on agricultural extension and innovation both in developed and developing countries (e.g. N. Röling et al., 2012; Niels Röling, 2009a, 2009b).

Interestingly, as Table 1 shows, there are many parallel distinctions to draw in other (scientific) discourses that contrasts 'normal' and 'post-normal' approaches, e.g. in social learning (Ison, Röling, & Watson, 2007).



An author who is more critical of drawing on Habermas for agricultural extension is Leeuwis (Leeuwis & Van den Ban, 2004<sup>1</sup>), who prefers Giddens' structuration theory to provide a theoretical lens to capture the interactional and strategic coalitions etc. in multi-stakeholder processes that characterise today's AKIS.

### 1.3 Key references

Habermas, J. (1984). *The Theory of Communicative Action. Vol. 1: Reason and the Rationalisation of Society*. Boston: Beacon Press.

Finlayson, J. G. (2005). *Habermas: A Very Short Introduction*. Oxford: Oxford University Press. Retrieved from <http://philpapers.org/rec/FINHAV>

Röling, N. G., Kuiper, D., & Janmaat, R. (Eds.). (1996). *Basisboek voorlichtingskunde* (2nd ed.). Amsterdam: Boom.

Röling, N. (1996). Towards an interactive agricultural science. *European Journal of Agricultural Education and Extension*, 2(4), 35–48. <https://doi.org/10.1080/13892249685300061>

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

The theory can be placed in the academic tradition of what is referred to as 'the Frankfurt school of critical theory' or simply 'Critical Theory'.

It has been applied as a theoretical underpinning of AKIS by Röling to criticize the conventional realist-positivist approaches in extension that are characterised by instrumental rationality. In the 'old' but still common paradigm, innovation is the result of a linear process of 'applying' of scientific findings to practice, around an uncontroversial objective: an increased production.

As a contrast, the idea of an AKIS explicitly draws on a constructivist epistemology, acknowledging a diversity of objectives, including social and environmental sustainability. The underlying rationality must therefore be communicative, aiming at reaching a shared understanding and collective agency.

### 1.5 Basic concepts

#### Instrumental rationality

"Instrumental rationality concerns changing things by instrumental intervention which is informed by predictions based on generalizations. The goal is control." (N. Röling, 1996)

#### Strategic rationality

"The anticipation of others' response to your moves and of other actors who are also busy making calculated moves, requires strategic rationality. The goal here is to win. [...] Economics is founded on the assumption that people try to maximize their benefit in their dealings with others" (N. Röling, 1996).

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<sup>1</sup> Free digital copy is available: <http://www.modares.ac.ir/uploads/Agr.Oth.Lib.8.pdf>

## Communicative rationality

“Communicative rationality is based on the fact that people can agree to cooperate to solve a common problem on the basis of discussion. The goal is consensus, where consensus is defined as agreement on action” (N. Rölting, 1996).

The objective of communicative action is reaching a shared understanding as a newly constructed reality: “The concept of communicative action refers to the interaction of at least two subjects capable of speech and action who establish interpersonal relations (whether by verbal or extra-verbal means). The actors seek to reach an understanding about the action situation and their plans of action in order to coordinate their actions by way of agreement” (Habermas, 1984, p. 86).

## Ideal Speech situation

Habermas speaks of discourse as a case of communicative action. It is a technical term for a reflective speech act through which participants of discourse strive for a rationally motivated consensus (Finlayson, 2005, p. 41). Habermas further argues that participants in the ‘discursive arena’ must adhere to some rules to create ‘the ideal speech situation’ (Habermas, 1990). These are not formal rules, but function as ‘pragmatic presuppositions’ that are implicit in discourse (Finlayson, 2005). The ideal speech situation is met if:

1. Every subject with the competence to speak and act is allowed to take part in a discourse.
2. a) Everyone is allowed to question any assertion whatever.  
b) Everyone is allowed to introduce any assertion whatever into the discourse.  
c) Everyone is allowed to express his attitudes, desires and needs.
3. No speaker may be prevented, by internal or external coercion, from exercising his rights as laid down in (1) and (2) (Habermas, 1990).

## Application to agricultural innovation

The table below gives an indicative overview of how this distinction between Habermas’ three rationalities can inform an analysis of innovation and extension networks. It is loosely based on (Ison et al., 2007; Niels Rölting, 2009b, p. 55). This table can be extended to include: role of extension professional, legitimation of an extension intervention etc.

**Table 1 Distinction between ‘instrumental’, ‘strategic’ and ‘communicative’ features of agricultural innovation**

<b>Discourses</b>	Use instruments of power	Assume rational choice	Rely on emergence from interaction
<b>Forms of rationality</b>	Instrumental	Strategic	Communicative
<b>Coordination mechanisms</b>	Hierarchy	Market	Network
<b>Innovation model</b>	End of pipe outcome of technology transfer and diffusion	Induced by changes in relative factor prices; market-propelled outcome of farmers on the treadmill	Emergent property of multi-stakeholder interaction (e.g. social learning; innovation systems (Hall, Janssen,



			Pehu, & Rajalahti, 2007)
<b>Purpose</b>	Control	Win, gain advantage	Equity, resolve resource dilemmas
<b>Intervention mechanisms</b>	Regulation, coercion, engineering	Laissez faire, fiscal policy, deregulation	Process facilitation
<b>Criteria for success</b>	Realisation of formal goals	Satisfaction of individual needs	Common meanings, concerted action, institutional change
<b>Conditions for failure</b>	Lack of information, no legitimation	Market failure	Inequality in power relations

Source: Based on Ison et al., 2007 and Roling 2009b p55.

## 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];
	Develop and utilise cutting edge research methods to assess new advisory service models and their innovation potential [WP2];
	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];
	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:
	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].

## 2.2 How this can be applied/developed in AgriLink

In general terms, it would be interesting to find which type of rationalities are predominantly driving AKIS at different scales, including EU level, country level, micro-AKIS. Are they aimed at convincing farmers to adopt certain practices? Are they aimed at answering demand for knowledge/services from farmers? Are they oriented towards facilitating group processes?

At a more practical level, the elements as listed in Table 1 could be added to a stakeholder analysis. One could ask stakeholders involved in a (micro-) AKIS how they see their role (e.g. as a consultant, a facilitator, and expert) which can be linked to a particular model of extension and a related underlying rationality.

Similarly it is interesting to ask stakeholders what they see as the legitimation of their involvement in the AKIS (e.g. there is a politically accepted decision, there is scientific evidence, an active demand or a shared idea of a problem). Again, this can be linked with a particular model of extension and a related underlying rationality.

Another application is the ideal speech situation described below. This can be used as a counterfactual ideal to assess what is hindering/facilitating interaction processes.

## 2.3 Research questions relevant to AgriLink

- At each level of agricultural extension (EU, country, micro-AKSI) what is an appropriate mix of extension approaches focussing on facilitation (aimed at reaching shared understanding through Communicative Action), persuasion (aimed at convincing through Instrumental Action), or negotiation (aiming at anticipating on ideas/problems through Strategic Action)
- Is Habermas’ Ideal Speech situation a useful idea to analyse and critique AKIS and the stakeholders’ participation, representation, power and influence?
- To what extent are instrumental and communicative extension approaches respectively, institutionalised in the institutions/bureaucracy supporting agricultural innovation?



## 2.4 Methodological implications

Unclear. One possible avenue is to use the above angles to inform a stakeholder analysis.

## 2.5 Strengths and weaknesses/Sensitivities regarding use

### 2.6 Potential operational problems

A potential problem is that although in theory it is easy to differentiate between the three rationalities, in practice there will most likely be a mix of several approaches. Therefore it may be confusing to try to apply it to a real situation. Nevertheless, in general terms it should be possible to compare AKIS in different regions/countries.

The 'instrumental' way of thinking is deeply entrenched in many ways of thinking and also in institutions, so discussing features of 'communicative' thinking can be a confusing exercise.

### Optional Section 4: Recommended further reading

Easy to read inaugural lecture:

Röling, N. (1996). Towards an interactive agricultural science. *European Journal of Agricultural Education and Extension*, 2(4), 35–48. <https://doi.org/10.1080/13892249685300061>

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