CTA/Cos-SIS Proposal
For an

# EXPERT CONSULTATION ON INNOVATION SYSTEMS: TOWARDS MORE EFFECTIVE THEORIES OF CHANGE

**04-06 FEBRUARY, 2013**

**CTA HEADQUARTERS**
**THE NETHERLANDS**

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## CONCEPT NOTE (January. 2013)

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## 1. Why An Expert Consultation

The Technical Centre for Agricultural and Rural Cooperation ACP-EU (CTA) and the Wageningen University and Research centre Conversion of Science – System of Innovation (Wageningen UR CoS-SIS) are collaborating in mounting a two-and-a-half-day International Expert Consultation on Innovation Systems (IS) from 4-6 February, 2013. Both organisations have credentials for this undertaking, but more importantly, a real need for assistance in identifying the ways forward in advancing the thinking and theory on Innovation System (IS) and building research capacity for influencing policy and practice.

CTA has in the past ten years provided leadership in an international programme that supports National Agricultural Innovation System Development with senior participants from ACP countries. CTA's programme benefitted from initial collaboration with UNU/INTECH, now UNU-MERIT Maastricht. The CoS-SIS research programme, a partnership between universities in West Africa and the Netherlands, has since 2002 investigated and experimented with innovation systems for smallholder development.

Given their experiences and the evidence they have collected, the partners felt that an expert consultation would be useful to generate a fundamental debate in which the experience, evidence and concepts of the participants supported by a team of independent experts foment rich ideas about the way forward for the benefit of agriculture and rural development. For CTA and CoS-SIS, the outcomes will be of direct relevance to their plans to further their IS R&D and policy agendas which especially benefit smallholder farmers. CoS-SIS will end in 2013 and formulation and identification of a CoS3 will have to be launched soon. There are also plans for an international conference at the end of 2013.

This concept note serves as the basis for mobilizing a group of selected individuals whom we believe are best able to contribute to the expert consultation as well as benefit from it.

## 2. Objective and focus

The objective of the Expert Consultation is to bring together people with diverse backgrounds who have the common interest in searching for more effective theories of change to underpin policies, strategies, interventions and investments for the sustainable intensification of smallholder farming in developing countries, especially in Africa. They have rejected simplistic approaches such as those in which any single discipline or intervention alone will determine the solutions to present and future problems. The box below provides an example where a single scientific or technological development is seen as the solution to a problem.

> During the recent global hunger summit at 10 Downing Street, sport heroes Pelé, Haile Gebrselassie and Mo Farah joined David Cameron, the Vice-President of Brazil Michel Temer and assorted food scientists from the UN and aid organisations to highlight global malnutrition and discuss how it should be tackled. 'One promising programme discussed was the development of fortified sweet potato shown to double vitamin A production in women and children'. DfID committed to invest in the creation of nutrient-boosted crops, including support for Harvest-Plus, the collaboration that developed he Sweet Potato (New Scientist 18 August 2012: 5).

The Expert Consultation will bring together people who see the need for solutions to be based on proper diagnostics of contextualised problem situations; people who would not immediately think of technical fixes; people who would not automatically think of the farm level, yields/ha and farming systems as 'target systems'. Instead, the experts should be independent thinkers who are willing to challenge the status quo, who have accepted that smallholder farming, and the poverty, hunger, low productivity, failing food security and lack of resilience that define it, have much to do with mechanisms that originate in the policies, institutions, governance, and economies in which smallholder farming is embedded and require interlinked thinking and knowledge sets that contribute to innovation. Sub-Saharan Africa shows 'a pervasive bias against the small farm sector on the sub-continent' (Djurfeldt et al. 2005).

Innovation systems (IS) comprise the actors, networks, processes and mechanisms that could make a difference to domain, sector or industry. The recognition of the sub-optimal impact of agricultural research on smallholder practices has led to a very rapid rise in the interest in applying IS thinking to ARD. CTA's Capacity Strengthening Programme on Analysing Agricultural Science, Technology and Innovation (ASTI) Systems (2004-2009) was based on IS thinking (Bolo & Francis 2010). CoS-SIS (Strengthening IS, 2008-2013) was funded on the basis of its IS focus (Hounkonnou et al. 2012). The Sub-Saharan Africa Challenge Programme (SSA-CP) grew from a fundamental controversy within the CGIAR and was launched to provide 'proof of concept' of an IS approach (Lynham et al. 2010). In Kenya, a major effort to set the dairy industry on a new footing took the shape of actively facilitating the interaction, negotiation and concerted action of the stakeholders in the industry (pers. com. Ed Rege, at McKnight meeting).

The understanding of the relevance and application of the Innovation Systems approach (ISA) to agricultural transformation remains unclear, controversial and is contested in several quarters. Some think of the ISA as little more than value chain integration.

Others focus on social innovations that make possible institutional and technological change. Still others emphasise integrated agricultural research for development (IAR4D), the integration of agricultural research in a wider development strategy. Finally we have differences between those who prefer to focus interventions at a local level and those who want to focus on agricultural innovation systems within the context of the national innovation systems. The other great divider is that innovation platforms are needed and that these should be set up and facilitated. While others propose that insights can be gained from a number of IS based approaches that have proven useful in bringing about change through the involvement of local communities and farmers, e.g. taking into account the competencies, habits and practices targeted by policy (working with and around), and putting into place linkages through which a support structure can be provided so that learning and innovation can take place on a continuous basis through a process that is owned by the actors themselves. All these views are based on theories about mechanisms and key actors and about levers, movers and agents for change.

*The objective of the Expert Consultation is to make explicit these and other theories of change and establish sound and consolidated differences of opinion and alternatives that can be the basis for further exploration and experimentation to support an innovation thrust which supports agricultural transformation and benefits smallholder farmers.*

## 3. Some Issues

A number of issues that could be addressed during the expert consultation is provided below:

- The assumption that sustainable intensification will make a major contribution to global food security and food sovereignty, and make the global food system more resilient in the face of predicted shocks and disturbances;
- The nature of the 'sustainable intensification' in which smallholders will be engaged will substantially reduce persistent rural poverty. Can smallholders be linked into global markets which are not necessarily transparent or is there need to take into account the need for decentralised resilience in the face of declining natural resources, climate change, price volatility, peak oil, etc., and the need to protect smallholders from unfair advantages of skewed markets? What is the role of strong farmer organisations, well-organised local systems, governments that defend their agricultural industries against predatory practices?
- What type of 'systems' are relevant? What exactly is an innovation system (IS) and the IS approach? What is the relationship between farming systems and IS approaches? Are they the same or different? What exactly are the differences? Where do the concepts for IAR4D, Innovation Platforms/clusters and value chain integration fit in?
- Is there need to explicitly embrace Checkland's Soft Systems Methodology? What are the consequences of hard system assumptions? What is the use of normative systems for guiding interventions? To what extent does empowerment and self-organisation play a role?
- What defines the boundaries of the (agricultural) innovation systems (agricultural sectors, industries; domains; farming systems)? What hierarchy of levels should be assumed and what are the interactions among those levels?

- What are the mechanisms that affect smallholders' opportunities and constraints? At what different aggregation levels do these mechanisms operate? To what extent is Ag. S&T relevant, and what other (f)actors should explicitly be taken into account and unpacked (markets, service delivery, policies, governance, regulatory frameworks)? Are they mutually exclusive?
- What are the methodologies for gaining better understanding about smallholder opportunities/constraints? The role, design and use of the diagnostics that link smallholder opportunities/constraints to key attributes of the institutional context;
- What is the nature of the (Agricultural) Innovation Systems and what are the strategies and interventions that should lead to change, at what aggregation levels? What is the link to the national innovation system? Should there be one and what will be the benefit of the linkage?
- What are the roles of policies and champions, brokers, facilitators, and other agents of change?
- What is the role of facilitation vis-à-vis self-organisation/ self-mobilization?
- What is the nature of the platforms, networks, stakeholders, dialogues, etc. that are being facilitated to affect 'the system'?
- How do we expect the IS work in experimental niches to affect policy and institutional regimes and landscapes?

## 4. Proposed Format

The expert consultation will start on Monday 04 February and end on Wednesday 06 February -mid-day or evening, (two-and-a-half days).

It will be relatively small, with maximally ten – fifteen invited experts and ten additional participants from each of the related CTA and CoS-SIS programmes / interventions(total 20 maximum 25 persons). Facilitated by expert facilitator(s) and inspired by the papers and the presentations, the two-and-a-half days will be used for debate and interaction in small groups and in plenary, to arrive at some meaningful conclusions about the way forward. The format will be as follows:

- The key experts and organisers will prepare lead papers for debate, which are sent to participants ahead of time. These will sketch the evolution of innovation systems and theories of change that guide the pathways for innovation that benefit smallholders during the past 30 years as well as reflect the experiences of the CTA and CoS-SIS programmes. The invitees are asked to share their reactions to these papers.
- The experts will make presentations as follows:
    - A 30 minute presentation (including 10 minutes question and answer session) by the lead expert on the thematic issue they have been asked to address (see item 5 for list). This should be grounded in the need of transformative change that benefit smallholder agriculture. A 5-6 page discussion document on the thematic issue is expected. New ideas are needed, not just reports on what people are doing or promotional talks about their organisations and specific academic interests.
    - A 15 minute presentation by a key expert showcasing lessons from a case study which is linked to the thematic issue. A 3-4 page paper is expected for the case study.

    - A 15 minute plenary discussion to address issues raised in the lead and case study presentations.
- Small working group sessions comprising key experts and other delegates will deliberate on issues raised.
- Secretarial and other support will be available to capture the lessons learned.
- The Expert Consultation will lead to a carefully edited published document, which the experts can claim as an academic contribution, as well as to carefully prepared policy briefs.

## 5. List of Thematic Issues and Key Experts

1. INNOVATION SYSTEM THINKING, CAPABILITY BUILDING, LEARNING AND COMPETENCIES
    - Lynn Mytelka, Professorial Fellow, UNU-Merit, Maastricht, the Netherlands
    - *Case study:* Maurice Bolo, Director Scinnovent Centre, Nairobi, Kenya - *Learning and Innovation in Agri-Export Industries*
2. SUSTAINABLE INTENSIFICATION –SMALLHOLDERS
    - Stephen Biggs, Stephen Biggs, School of International Development, University of East Anglia
    - Peter Carberry, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia
    - *Case study:* Amadou Fall, Director Institut sénégalais de Recherche Agronomique (ISRA), Saint-Louis, Senegal – *rice innovation system in Senegal*
3. AGRICULTURAL INNOVATION SYSTEMS AND FACILITATION
    - *CTA – Judith Ann Francis*
    - *Case study:* Adewale Adekunle, Coordinator of the Sub-Saharan Africa Challenge Program (SSA CP), Forum for Agricultural Research in Africa (FARA), Accra, Ghana - *SSA Challenge Programme*
    - Case study: Bernard Triomphe, La recherche agronomique pour le développement (CIRAD), Montpellier, France – Research project *Joint Learning in Innovation Systems in African Agriculture*
4. ANALYSING SYSTEMS AND MEASURING PERFORMANCE
    - CoS-SIS – Janice Jiggins
    - *Case study:* Charity Osei-Amponsah (PhD fellow in Ghana) – *Small-scale processing of oil palm fruits*
5. POLICIES AND INSTITUTIONALISATION
    - Ray Ison, Professor of Systems, Monash Sustainability Institute, Monash University, Clayton Victoria, Australia
    - Norman Clark, Development Policy and Practice, Faculty of Maths, Computing and Technology, The Open University, Walton Hall, Milton Keynes, UK
    - *Case study:* Richard Adu-Acheampong, Cocoa Research Institute Ghana (CRIG), Tafo (Akim Abuakwa), Ghana - *Pricing policies in cocoa in Ghana*

## 6. Logistics

*Date:* 04-06 February, 2013
*Venue:* CTA Headquarters, Agro Business Park 2, 6708 PW Wageningen, The Netherlands
*Lodgings*: Hotel in Ede or Wageningen.

*Organising Committee:* Judith Francis (CTA), Arnold van Huis (WUR/CoS-SIS), Niels Röling (CoS-SIS), Suzanne Nederlof (KIT/CoS-SIS)
*Organising Committee:* Judith Francis (CTA), Arnold van Huis (WUR/CoS-SIS), Niels Röling (CoS-SIS)
*Facilitator*: Joost Guijt
*Peer Reviewers: Workshop participants*
*Editors of publication*: Judith Francis, Cees Leeuwis, Arnold van Huis, Niels Röling and Lynn Mytelka
*Simultaneous translation:* Yes (English and French)
*Executive Team*: Ellen Mulder (CTA)
*Budget:* CTA and CoS-SIS