



Facilitating transformation of agricultural research towards relevant and effective innovation systems with impact

The challenge

This focal area deals with change processes within agricultural research organisations / systems at local, national, regional and international levels. In the last decade, research systems have come under high pressure to move from rather linear and reductionist component research on commodities towards impact-oriented, more integrated, inter / trans-disciplinary and systems-based research approaches. Development impact has become the major driver to re-orient and restructure research organisations and systems.

The implications of this new orientation are fundamental: the entire agricultural research system from local to global level was based on a linear model of innovation, where research develops technologies and extension services disseminate them. The new models see innovation as socio-technical processes where multiple sources of innovation are available and need to interact at multiple levels and scales. Consequently the role of researchers changes drastically as they are part of broader innovation systems together with other actors and they have responsibility for impact. This change poses hard challenges to the research systems in terms of competences of researchers / scientists, the structures and systems of research organisations including funding of research and related institutional arrangements.

Why we focus on this area

PICOTEAM regards the role of agricultural research as central for rural / agricultural development and thus puts great emphasis on research and development services for rural empowerment and poverty alleviation. We have been centrally involved in transformation of research systems and organisations in Africa over the last decade with the aim to make research organisations more adaptive in responding effectively to the rural development challenges and to demands for impact.

How we engage in transformation of research systems

PICOTEAM's involvement in this focal area develops around 6 intertwined elements of research transformation in which we have specialised with long-standing experience and a range of methodologies and approaches we have developed over time. These are:

1. **NARS Review and Reform Processes.** Most of the national agricultural research systems are undergoing reforms in the context of changing role of the state, decentralisation and decreasing research budgets. In most countries, the national / public agricultural research organisations / institutes (NARI) were highly dominant research service providers – often the only ones. Despite the fact that they were encouraged to work together with other actors in systems (NARS), these linkages are still weak in most cases. In the context of the reforms, other actors like Universities, private research institutes, NGOs and CBOs are brought into a pluralistic research system through



structural reforms and changes of the funding and institutional arrangements. Competitive grant systems and research networks are key mechanisms to enhance pluralism and quality of the services. Of particular importance for us is the articulation and the assessment of the demand side for research services.

PICOTEAM supports such reform processes mainly through:

- Design of review and reform processes with stakeholders and organisational leadership
- Involvement in review / reform task forces
- Core functional analysis and service analysis
- Feasibility studies for new arrangements, including demand assessment
- Research and lesson learning on reform processes

2. Institutional arrangements for integrated research / innovation systems (from local to international)

With the 'confusion' of the agricultural research systems in their transformation from 'producing knowledge' in the 1960's to now 'impact on alleviation of poverty' not only approaches to research are changing. Increasingly there is a need to re-look the entire context of the institutional arrangements and innovation systems and their integration from local to internationally based research. A range of processes at different levels aiming at a better integration and alignment of agendas and action of national, regional and international agricultural research are presently under way.

PICOTEAM members have been involved in processes negotiating and conceptualising alternative institutional arrangements at all levels, supporting through:

- Studies on new institutional arrangements
- Facilitating conceptual and integration workshops to design new arrangements
- Reviews of partnership arrangements between different actors
- Implementation of action research projects on operationalising alternative arrangements

3. Change management within research and development organisations

Institutional reforms of the larger NARS need to be operationalised through change processes within the existing research organisations. In order to be prepared for pluralism and competition as well as client-orientation, the organisations are challenged to re-think their orientation and adapt their structures, competences, systems and processes to the new context. In most cases a strong focus on the organisational culture is required if the reforms should really make a difference.

PICOTEAM members have a long history of supporting and facilitating change processes within research and development organisations through:

- Organisational analysis
- Core function analysis and service analysis



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- Facilitation of strategic planning and business planning with stakeholders and management (in an internalised mode)
- Facilitation of change management workshops at all levels
- Design and implementation of management development training programs and coaching
- Facilitation of conceptual workshop to develop guiding conceptual frameworks for operationalising strategies
- On the job team development and coaching (with a focus on performance, concepts, personal development and team-level development)
- Design of performance management systems
- Development of trainee programmes 'Future leaders'
- Development and internalisation of learning process approaches to planning and management, building on M&E and impact assessment
- Alternative approaches to project and process management (systemic and result-based management and integration management)
- Staff competence development

4. **Approaches and methods for effective and integrated research for development (IAR4D)**

Transformation of research requires new approaches for the way of 'doing business' at client level and at organisational level. Effective, impact-driven research is systemic and integrated in nature and depends on intensive interaction among stakeholders with their functions and roles in order to 'learn to play together' so that innovations can be successfully contribute to development.

PICOTEAM members have more than 15 years of experience in approach development and implementing multi-stakeholder research approaches with great success in a variety of countries and contexts. We have supported research organisations and projects/programmes in the development of approaches and methodologies for IAR4D (integrated agricultural research for development) through:

- Design and implementation of action research projects and processes to develop the 'new way of doing business' together with the clients
- Conceptualisation of experiences (systematisation through experiential concept development) and lessons learnt in interventions and developing them as full-fledged approaches
- Facilitation of innovation platforms and multi-stakeholder platforms
- Development of resource materials and joint publications on successful approaches and methodologies
- Connecting clients to other initiatives and knowledge through networking support and exposure-learning
- Proposal development for action research projects



5. **Competence for integrated research for development and action research**

Competence is at the heart of any transformation process. In agricultural research, there are huge challenges to operate in a different way as the research methodologies were rather rigid and well-cast in the past. A new research paradigm therefore requires a substantial effort towards changing the mindsets and behaviour of staff at all levels as well as new skills and conceptual and operational modalities.

PICOTEAM members have been centrally involved in such competence development processes in many contexts and levels ranging from local to international research institutes. The main approaches and services are:

- Design of iterative learning and coaching processes and programmes for implementation teams
- Facilitation, training and coaching of longer-term programmes
- Tailor-made training and learning courses (incl. short courses) for various levels of staff
- Facilitation of team development and personal development to support the behavioural change required
- Facilitating the negotiation between the practitioners and the managers in development of new research management methods and systems accommodating action research approaches

6. **Knowledge management for innovation**

A huge deficit of most research organisations is the fact that knowledge is highly personalised and once individuals leave, the knowledge goes with them. Unless good knowledge management systems become part of the organisations, this leads to loss of knowledge and repetition of the same experiments etc. By knowledge, we mean the technical knowledge about technologies and experiences on those as well as knowledge about approaches and methodologies in research for development as well as in technical areas (e.g. soil and water management, seeds systems – just to name a few). By knowledge management (KM) we also mean more than setting up databanks. Cutting edge knowledge management is a process of actively nurturing knowledge in an organisation by linking the right people, providing platforms for sharing and processing knowledge and packaging into useful products in the public domain.

PICOTEAM members have successfully developed and implemented specific methodologies to actively manage knowledge in organisations and across organisations.

The main services are:

- Design of M&E systems integrating knowledge management
- Facilitation of knowledge sharing and processing (lesson learning, systematisation and conceptualisation)
- Design of conceptually-based knowledge management systems (organisational and across organisations)
- Facilitation of workshops and conferences with an active knowledge management focus (e.g. recently a conference with 400 participants in a specialised field who then



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contributed to the KM framework we designed beforehand together with the organisers)

- Packaging / development of knowledge 'products' with our clients and development of Knowledge management platforms based on them, including e-learning
- Facilitation of 'knowledge networks', 'communities of practice', 'open space' fora, LearningWheel events and other methods for KM within and across organisations
- Design and facilitation of e-learning programmes and web-based portals for specific topics (e.g. research reform)
- Project / programme development on the basis of knowledge capturing and lesson learning processes.

Transformation of research systems has been a major focal area over more than 15 years for PICOTEAM members. We have been involved in change processes in 8 NARS in Africa, 1 in Latin America, 3 Sub-regional organisations in Africa, The Forum for Agricultural Research in Africa (FARA), the Global Forum for Agricultural Research (GFAR) and more than 10 of the international CGIAR centres as well Universities and NGO/CBOs across the range. We have been involved in 'making change happen', but alongside with it, we have carried out 'research on change' to substantiate our experiences and findings. Presently we are supervising a range of PhD students who study changes, besides our own research.

Our successes have been propelling the demand for our services in that area. Besides the impacts on the ground, one of the strongest outcomes across the board have been the changes in the mindset of the actors, the conceptual clarity of all involved parties and the implementation capacity which emerged from the processes we were engaged.