

GLOBAL CONFERENCE ON AGRICULTURAL RESEARCH FOR DEVELOPMENT

# **GLOBAL EVENT** JOHANNESBURG SOUTH AFRICA

Theme 3: Keeping science relevant and future-focused



#### MULTIDISCIPLINARY PHD TRAINING SYSTEMS AND RELEVANCE OF RESEARCH TO DEVELOPMENT:

#### LESSONS FROM AGTRAIN'S AND ARI'S EXPERIENCE IN EUROPE AND AFRICA

Lana Repar and Didier Pillot

#### Main challenges

- To renew the generation of scientists/development specialists able to handle the development problems within a global perspective and not only from the disciplinary science perspective
- To develop the research capacities at the front line of science of the different disciplines, and in the meantime to respond to development needs
- To broaden the ARD scope and develop networks for the youth to contribute to addressing development issues by research

# Capacities needed for the research addressing development:

 Combination of disciplinary and multidisciplinary approach: focusing on the improvements in one discipline, while actively exchanging the knowledge with others

• Dialogue with farmers and other stakeholders

• Based on the field (field is the lab)

# Examples of the multidisciplinary PhD training systems: AgTraIn and ARI



# Agricultural & Rural Innovation







# AgTraIn



- Agricultural Transformation by Innovation
- 6 Universities in EU together



- Double supervision, double degree
- 40 PhD students in 5 batches
- Networks (YPARD, ERASMUS MUNDUS)

# ARI

Agricultural & Rural Innovation

- Agricultural and Rural Innovation
- 3 African Universities



- Negotiation on topics with the stakeholders prior to research
- 52 PhD students in 3 batches
- Joint undertaking of trainings

### AgTraIn and ARI together



#### Building the capacities in ARD through PhDs The three pillars of quality

**ARD Excellence** 

Structured -Training Applied Perspective

## **ARD Excellence**

Double degree, double registration (Agtrain)

- Comprehensive double supervision (complementarity)
- Two quality assurance systems

Competitive selection

 Students are selected internationally, according to the criteria of related universities and Consortium criteria (development focus)

Link with research organisations

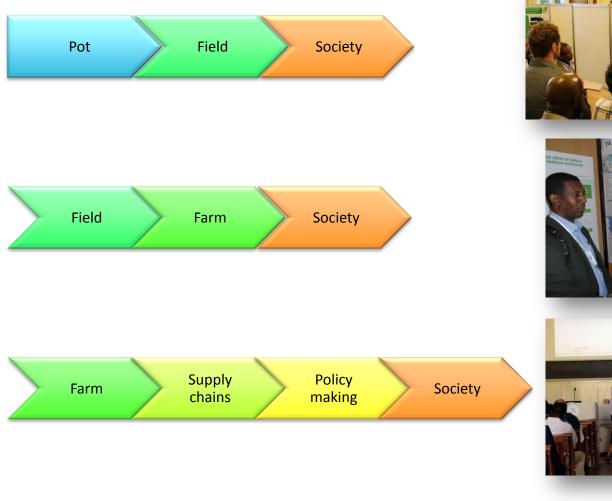
- International: ICRAF, IRRI, CATIE, ICIPE, IITA, IWMI, etc.
- National: KARI, INRAM, EMBRAPA, etc.

# **Applied Perspective**

• Diversity and relevance of the topics addressed:



## **Examples of research topics**







# **Applied perspective**

• Diversity and relevance of the topics addressed:

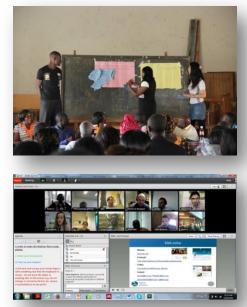


- Capacity to negotiate the topics
- Multidisciplinary: different orientations and perspectives carried by various supervisors and universities
- Networking with the development stakeholders

# **Structured Training**

Necessary component, as the specificity of ARD requires an unique set of skills (e.g. both academic and non-academic communication, qualitative research methods, team work, etc.)

- AgTraIn and ARI field course
- Communication and personal mastery courses
- Webinars, seminars and research mentorship



 Access to the taught courses and library materials from several universities

# Way forward – the gap

- Universities themselves cannot carry out alone described PhD training for the future professionals, who want successfully respond to the complex development needs
- Agtrain and ARI are interesting examples, but they are particular initiatives by the carrying universities, not yet a global system widely offered to the int'l ARD community
- Stakeholders in ARD should come up with a comprehensive system

# Way forward – the system

This specific system should:

- Gather the problems raised by the development stakeholders (non-academic component)
- Organise a comprehensive system to transform those problems into research questions appropriate for the PhD projects (academic component)
- Extend the double supervision system to more universities over regions and hence secure multidisciplinary training system
- Follow the research for the development chart, with all the quality assurance requirements

# Way forward – and the youth?

- The system shall invite and support the youth to be trained as high-capacity professionals in development field, with a strong multidisciplinary and field based component
- As youth, students or alumni are ready to support such a system, both institutionally (YPARD) and personally (mentoring)
- As University organisations, regional institutions of universities like RUFORUM (Africa) and AGRINATURA (Europe) would be ready to contribute in organising such a system - More would be welcome so no one is left behind!





agriculture, forestry & fisheries Department: Agriculture, Forestry and Fisheries REPUBLIC OF SOUTH AFRICA





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### - Thank you for your attention -