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European Initiative for Agricultural Research for Development

The European Alliance  
on Agricultural Knowledge for Development

# Capacity Development in Agricultural Research for Development

STUDY



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Graphics:  
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STUDY

by

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## List of abbreviations and acronyms

AAA	Accra Agenda for Action
ACIAR	Australian Council for International Agricultural Research
ACP	Africa, the Caribbean and the Pacific
AECID	Agencia Española de Cooperación Internacional para el Desarrollo
AIRES-Sud	Appuis Intégrées pour le Renforcement des Equipes Scientifiques
ANAFE	African Network for Agriculture, Agro-forestry and Natural Resources Education
APPEAR	Austrian Partnership Programme in Higher Education & Research
ARD	Agricultural Research for Development
ASARECA	Association for Strengthening Agricultural Research in East and Central Africa
ASTI	Agricultural Science and Technology Indicators
AWARD	African Women in Agricultural Research and Development
BSU	Building Stronger Universities
CAADP	Comprehensive Africa Agriculture Development Programme
CCARDESA	The Centre for Coordination of Agricultural Research and Development for Southern Africa
CD	Capacity development
CDI	Wageningen UR Centre for Development Innovation
CGIAR	Consultative Group on International Agricultural Research
CIALCA	Consortium for Improvement of Agriculture-based Livelihoods in Central Africa
CORAF/ WECARD	West and Central African Council for Agricultural Research and Development
CORUS	Coopération pour la Recherche Universitaire et Scientifique
CSIR	Council for Scientific and Industrial Research, Ghana
CTA	EU Technical Centre for Agriculture and Rural Cooperation
DAAD	German Academic Exchange Service
DAC	Development Assistance Committee
DANIDA	Danish International Development Agency
DEEC	Developing and Emerging Economy Countries
DFID	Department for International Development
DGDC	Directorate for Development Cooperation
DGIS	Directorate-General for International Cooperation (Netherlands)
DURAS	Promoting Sustainable Development in Agricultural Research Systems
ECDPM	European Centre for Development Policy Management
EDULINK	Educational Linkage Programme
EED	Evangelischer Entwicklungsdienst
EIARD	European Initiative for Agricultural Research for Development
ENRECA	Enhancement of Research Capacity
EPINAV	Enhancing Pro-poor Innovations in Natural Resources and Agricultural Value-chains
EXCEED	Higher education Excellence in Development Cooperation
FARA	Forum for Agricultural Research in Africa
FOCAL	Future Opportunities and Challenges in Agricultural Learning
FSR	Farming Systems Research
FSTP	Food Security Thematic Programme
GCARD	Global Conferences on Agricultural Research for Development
GCHERA	Global Conference on Higher Education and Research in Agriculture
GRASP	Gender-sensitive Research and Against Smallholder farmers Poverty
IAR4D	Integrated Agricultural Research for Development
ICART	Implementation and Coordination of Agricultural Research & Training
ICRA	International Centre for development-oriented Research in Agriculture
ICT	Information and Communication Technologies
IDS	Institute of Development Studies
IFAPA	Instituto de Investigación y Formación Agraria y Pesquera

IFPRI	International Food Programme Research Institute
IIRR	International Institute for Rural Renovation
IFAD	International Fund for Agricultural Development
ILRI	International Livestock Research Institute
IOB	Department of Evaluation of Policy and Operations from the Dutch Ministry of Foreign Affairs
IRD	Institut de Recherche pour le Développement, France
IRTA	Institut de Recerca Tecnologia Agroalimentaria
IS	Institutional Strengthening
ISNAR	International Service for National Agricultural Research
IVIA	Instituto Valenciana de Investigación Agraria
MDGs	Millennium Development Goals
KFPE	Commission for research Partnerships with Developing Countries
NAADS	National Agricultural Advisory Services
NARS	National Agricultural Research System
NCCR	National Centres of Competence in Research
NICHE	Netherlands Initiative in Cooperation for Higher Education
NGO	Non-Governmental Organization
NRI	Natural Resources Institute (UK)
NUFFIC	Netherlands Organization for International Cooperation in Higher Education
OD	Organizational Development
OECD	Organization for Economic Co-operation and Development
PAEPARD	Platform for African-European Partnership in Agricultural Research for Development
PANTIL	Programme for Agricultural and Natural Resources Transformation for Improved Livelihoods
PRCP	Pilot Research Cooperation Programme (Denmark-Tanzania-Vietnam)
PROLINNOVA	Promoting Local Innovation in Ecologically-Oriented Agriculture and Natural Resource Management
PROSPERER	Programme for Support for Rural Micro-enterprises and Regional Economies
RIU	Research into Use
RFPP	Research Fellowship Partner Programme
RUFORUM	Regional Universities Forum for Capacity Building in Agriculture
SAREC	Swedish Agency for Research Cooperation with developing countries
SADC/ FANR	Southern African Development Community
SADC/FANR	SADC Food, Agriculture & Natural Resource directorate
SCAIN	Strengthening Capacity for Agricultural Innovation
SCARDA	Strengthening Capacity for Agricultural Research for Development
SCOPEs	Scientific Cooperation between Eastern Europe and Switzerland
SDC	Swiss Development Cooperation
SLU	Swedish University of Agricultural Sciences
SME	Small and Medium Enterprise
SNSF	Swiss National Science Foundation
SRO	Sub-Regional Organization
SUA	Sokoine University of Agriculture
TARP	Food Security Household Income for Smallholder Farmers in Tanzania
TOT	Transfer of Technology
UDC	University Development Cooperation
UMB	University of Life Sciences from Ås, Norway
UNiBRAIN	Universities, Business and Research in Innovation
UNDP	United Nations Development Programme
Wageningen UR	Wageningen University & Research centre, the Netherlands
YPARD	Young Professionals Platform for Agricultural Research for Development

## Executive summary

This paper reviews the current policies and programmes of EIARD members in relation to capacity development and makes recommendations on future directions. The main issues and recommendations will be incorporated into a policy brief in which specific policy options or guidelines will be presented.

The goal of EIARDs strategy is to reduce poverty (i.e. MDGs); to promote economic growth, food security, and sustainable management of natural resources in developing & emerging economy countries and to contribute to global development issues and knowledge generation.

The purpose of this study on capacity development for ARD is to contribute to these objectives by carrying out a broad-scale mapping exercise of current capacity development programmes in EIARD member countries. It identifies some specific initiatives which illustrate different aspects of capacity development and which are representative for a range of different EIARD members. To this end also initiatives from EIARD countries which recently started to support programmes for capacity strengthening in ARD are included.

In the next paragraphs we summarize a series of findings and conclusions we arrived at based on the analysis of the documentation we managed to collect. For general recommendations we refer to chapter 6 of this study report.

### The present situation

1. Over the last couple of decades agricultural research has evolved from on-station research, via farming systems research, to investigation on sustainable livelihoods and more client-oriented research, to studies on value-chain development and innovation systems. This shift is due to the recognition that agricultural development comes about as a result of new technologies and practices in the process of innovation. Agricultural Research is one of the components in the wider context of innovation systems and is not a monopoly of the public sector, because the private sector and civil society also play essential roles in innovation.
2. In innovation systems we distinguish three domains: knowledge and education, business enterprises and livelihoods, and the institutions that facilitate the transfer, exchange and interaction of knowledge between them. ARD approaches recognize that agricultural production and growth also heavily depend on location and situation specific variables and that capacity to be developed should match its operational context.
3. In many universities, colleges and research institutes, staff still harbour a strong tradition of focusing on technical and natural sciences using the same conventional teaching and research methodologies they were exposed to during their own education and training.
4. Moreover, capacity development is mainly focused on training individuals through Masters and PhD programmes hosted by northern universities. Although, in general, individual students thus trained effectively upgrade their knowledge and skills, this type of capacity development has only limited impact in strengthening the wider research and education

systems in partner countries. The fact that linkage between national agricultural research organisations, higher education institutes and other organizations with a stake in agriculture is rather weak, in particular in sub-Saharan Africa, is also not conducive to bring about substantial improvement in the prevailing situation.

5. Policies on capacity development for ARD are often scattered among various ministries, and most interventions in this domain are supported by mechanisms that are not specific to ARD. Capacity development for ARD can be part of a support programme for Higher Education & Research, or for the educational sector in general. It can also be addressed as part of programmes for agricultural and/or rural development, or in support of one or several MDGs.
6. Institutional arrangements in support of capacity development for ARD vary considerably: in the relative weight of support through bi-lateral agreements versus multilateral channels; through project funding or basket funding; in number of projects or intensity of the North-South links; in the types of implementation arrangements: mentoring, coaching, scholarships, short courses; and in the content of capacity development (more change management, IAR4D, leadership training, economic skills, social and organizational capacities).

## Perspectives

7. Slowly but steadily Innovation Systems thinking is gaining ground in academic circles, an approach that might provide more effective and more efficient ways to practise ARD. For the time being such concepts have not yet been widely incorporated in agricultural research, even if noticeable exceptions exist like the innovation platforms of the Sub-Saharan Africa Challenge Programme or the training and mentoring modules of the International Centre for development oriented Research in Agriculture. In some countries this situation has given rise to the foundation of private universities and colleges that offer curricula that respond more directly to the emerging needs of the market place. Some universities have managed to introduce new approaches with impressive results like the Earth University in Costa Rica.
8. High profile reports like those by the Inter-Academy Council (2004) and the World Bank (2009) drew attention to the vital importance of capacity development in underpinning agricultural development. The Paris Declaration (2005) and the Accra Agenda for Action (2008) strongly emphasise the need for enhanced capacity development in order to achieve the MDGs (OECD/DAC, 2008). This is being reflected in new initiatives such as “TEAM Africa”, led by the World Bank in partnership with donors from Europe and elsewhere, which supports capacity development in Higher Education in Africa.
9. African governments committed themselves to increase their investments in agriculture within the framework provided by the Comprehensive Africa Agriculture Development Programme (CAADP). FARA, the Forum for Agricultural Research in Africa, coordinates research and capacity development through CAADP, while networks of education organizations such as the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) and the African Network for Agriculture, Agro-forestry and Natural Resources Education (ANAPE) specifically focus on capacity development. These

organizations are advocating stronger support for higher education in agriculture organizing events such as the Ministerial Conference on Higher Education in Agriculture in November 2010, in Uganda. At this conference 13 countries formally confirmed the commitment of their governments to improve the quality of higher education and strengthen partnerships between universities, communities, the private sector and the African Diaspora.

10. Although in Europe only a few countries consider agriculture a core theme in their policies for international cooperation, most EIARD member countries consider capacity development for ARD of strategic importance to contribute to the goals of poverty alleviation, food security, rural development and environmental sustainability.

## Needs assessment

The needs assessment procedures applied in the various programmes and projects are not systematically reported in a comprehensive database, but the following observations were made based on the available information:

11. Programmes to establish a solid foundation for international cooperation in capacity development for ARD should be identified in line with the strategic priorities of the partner countries and matched by those of the EIARD donor countries. Although in the descriptions of the various programmes such policies are referred to, quite often they are formulated in general terms and not tailored to the specific needs of the individual countries. Little evidence was found that programmes for capacity development were based on a comprehensive analysis of the (inter-)disciplinary needs and the labour market in the agricultural sector or related sub-sectors of the local, regional and/or national economy.
12. Involvement of the partner organizations in the process of needs assessment seems to vary from internal needs assessments by a single partner organization to multi-stakeholders consultations, from surveys to participatory workshops to needs assessments performed by the organizations themselves or by third parties specifically contracted for that purpose. For example, in the Dutch NICHE programme this is done by tripartite meetings among policy-makers, embassy staff and donors; in IRD (France) through workshops among partner institutes; in APPEAR (Austria) organizations applying for funding should demonstrate that the projects they submit are demand-driven; SCARDA (UK) provides assistance for a participatory institutional analysis with help from external facilitators.
13. Rather often it occurs that staff, having benefitted from specific training or education, cannot apply their enhanced competence due to lack of facilities, equipment or resources, or because after graduation they are nominated in functions that are not closely related to the subject matter they have been trained in. This raises questions on the quality and relevance of the needs assessment prior to their training, and about the strategy for strengthening the capacity of the organization involved. A broader approach addressing overall organizational development is likely to be more effective in retaining key staff, who often seek better conditions elsewhere after they have acquired new skills.

## Types of capacity development

### *Levels of intervention*

14. Most EIARD countries focus their programmes in support of capacity development for ARD on individuals through fellowships, grants schemes, exchange and partnership programmes and the like. Some countries make an explicit effort to embed individual training and education into more comprehensive programmes for organizational strengthening, or combine capacity development of individuals with organizational strengthening (e.g. SCARDA/NARS - UK, NICHE/NP – Netherlands). A third group of countries explicitly focus their programmes on the organizational level providing support to actors strategically positioned within the innovation system in which the research institutes are operating: the Agricultural Research & Education system, organizations in the value chain, and bridging institutions like providers of extension advisory services, cooperatives, policy-makers (e.g. ICART/SADC-FANR –EU).

### *Capacity domains*

15. Support programmes differ in the knowledge domains they are addressing: some emphasize the technical domain, others (like UNIBRAIN, Denmark) link technologies to the economic feasibility of their use. Integrating business skills, management techniques and organizational strengthening, like in EDULINK-EU, is less common, while programmes with a focus on interactive policy-making, participation and empowerment (e.g. NRRA, KFPE- Switzerland) are quite scarce.

### *Beneficiaries*

16. From the mapping it appears that overall the range of beneficiaries in capacity development for ARD is slowly but steadily widening. Although many programmes are mainly focussing on research staff, gradually staff from other organizations within the agricultural sector are also being included. In some CGIAR centres the number of trainees from agricultural extension and farmer organizations has increased in recent years, while programmes like NICHE and EPINAV (Norway) are explicitly focusing on involvement of multiple stakeholders from the agricultural sector.

17. *Gender and diversity issues.* Many EIARD countries view gender and diversity issues as a priority in their overseas development initiatives. Some, such as Germany and UK, have concrete action plans to mainstream gender and diversity in their programmes. Although attention to gender issues is often one of the evaluation criteria in capacity development programmes, indicators tend to be rather simplistic. Gender targets are frequently confined to the number of women participating in training programmes. These do not always take into account the local context and, in the absence of complementary measures, do not necessarily lead to improved gender outcomes. To improve gender outcomes through support to research and education organizations, greater consideration should be given to initiatives that address the specific needs of female researchers early in their careers. Mentoring approaches are well suited to this and the African Women in Agricultural Research and Development (AWARD) programme supported by the Bill and Melinda Gates

Foundation is an example of good practice which could be replicated more widely<sup>1</sup>. Another practical measure is to improve the capacity of ARD researchers to undertake gender analysis in their work.

18. *Rural Youth*. Young people in developing countries seldom view agriculture, including agricultural research, as a preferred career. Some reputed universities with a long history of teaching agricultural subjects, such as Makerere University in Uganda, are finding it difficult to attract students to their agricultural degree courses. Rural unemployment is usually high and the potential rewards are generally greater in other professions. Small-scale farming is not very interesting to them and there is limited access to finance for local enterprise development. Although some EIARD countries fund programmes which work with rural entrepreneurs to help young people acquire new skills, the emphasis is often on preparing them for work outside agriculture. Therefore new approaches are needed to attract young people into agriculture and the educational system has to evolve so that it responds accordingly.

### ***Vocational training***

19. Availability of suitably skilled higher and mid-level technical professionals is of crucial importance, especially for the successful development of innovations through applied research. However, for ARD to be effective, the local population needs vocational training with emphasis on enterprise development, information and communication technologies, as well as practical farming skills. The base of the capacity strengthening 'pyramid' needs to be broadened with more support for technical and vocational training, in-service training and skills provision and rural learning platforms<sup>2</sup>. There are few examples of policies designed to strengthen this type of capacity strengthening provision.

### ***Geographical spread of support for capacity development in ARD***

20. The distribution of Priority Countries for EIARD Development Cooperation in Africa is very uneven. Some countries are clearly more favoured for such support than others (see table 4 in Appendix 2). For example, 9 countries (Benin, Burundi, Ethiopia, Kenya, Mali, Mozambique, South-Africa, Tanzania and Uganda) enjoy support in capacity development for ARD from 6 – 8 European countries, while the majority of countries (24) has support from only 1 or 2 European countries in this respect.

### ***Methods and approaches for capacity development***

21. The relevance of utilization-focused approaches to training and education, attuned to the conditions in which the knowledge and skills acquired through capacity development are to be applied, is recognized by some EIARD member countries (for example, in the PROLINNOVA and RIU programmes). Yet, the level to which such approaches are being practised seems to vary considerably.

<sup>1</sup> No formal evaluation of the impact of the programme has been undertaken, but personal testimonies of awardees suggest that there are significant benefits.

<sup>2</sup> See von Kaufmann, R. (2011) Rebuilding the African Human Capacity Pyramid and Estimating Capacity Demands. Presentation at the 7th GCHERA Conference held in Beauvais, France in June 2011.

22. Criteria such as the application of clearly defined strategies for organizational strengthening, and active policies on embedding staff training in institutional partnerships, seem to be increasingly applied as a condition for granting fellowships and other training facilities. We also found that more countries are supporting competitive grant schemes, switching to public tendering of projects.
23. Although it is widely recognized that ARD practitioners should take into account local expertise and the system-like character of production practices, only a small proportion of programmes in support of capacity development for ARD give attention to the system-like character of the programme itself. Few programme documents and evaluation reports describe how to deal with a systems approach in a situation where practices, attitudes, incentives and institutions prevail that are biased to a focus on technology development, and compliance with pre-fixed procedures and rules, rather than comprehensive learning on the interconnectivity of the various dimensions of change.
24. Other aspects meriting specific attention are the necessity of thorough situation analysis, a clear exit strategy and institutional embedding of the programmes. Countries like Belgium already signalled these shortcomings, where, based on evaluation of their programmes, the Directorate General for Development Cooperation observed a general lack of systematic situation analysis to assess the existing capacity, and lack of attention for exit-strategies. Norway, Denmark, and Switzerland are already applying explicit guidelines on how to cater for such deficiencies.
25. Many partner institutes overseas can benefit from strengthening their capacity for programme management. In an evaluation of APPEAR - a programme, in which Austrian institutes for higher education & research collaborate with sister institutes overseas – it is concluded that, in general, while the Austrian institutes are leading the partnerships, project documents do not refer to any activities to build the capacity of the partner institute to manage international projects. This is observed not only in this programme, but in many others as well. Therefore, the inclusion of a project component to strengthen this type of management competence should be considered for all programmes for strengthening capacity development for ARD.

### ***Monitoring & Evaluation***

26. Although there have been some recent comprehensive studies, the availability or accessibility of Monitoring and Evaluation (M&E) data is low and this suggests that insufficient attention is given to this important area. If the weakest link in a chain determines its strength, then certainly M&E of programmes for capacity development in ARD should not be that link, given its strategic importance as the key mechanism to measure and reflect on the factors that can decisively determine success and/or failure of these programmes.
27. M&E, which includes timely, relevant and clear reporting and getting feedback from the relevant users, is indispensable for learning, which is at the core of Capacity development. In change processes like capacity development for ARD, participatory M&E by all the parties involved is the best mechanism to systematically reflect on the way people and organizations are learning. Practicing participatory M&E helps people to develop and consolidate a learning attitude in their organisational culture and among the various actors involved. The level of success achieved by programmes and projects for Capacity Development is to a high



degree determined by the type and quality of the M&E practised in these initiatives.

28. Our study has revealed that collecting evidence to measure the benefits of programmes in support of capacity development for ARD is a challenge and that in spite of periodic evaluation of the effect of their programmes in international cooperation, only a few countries such as Denmark, Norway and Switzerland conducted comprehensive reviews at an aggregated level of the support they provide to capacity development in ARD. This means that there is limited evidence of the beneficial outcomes of the support for capacity development, which may eventually undermine public support for their policies in this particular respect.



# 1 Introduction

## 1.1 Background

This paper is one of a series of studies commissioned by the European Initiative for Agricultural Research for Development (EIARD) within the framework of the European Union's Food Security Thematic Programme (FSTP), which is providing support to EIARD to implement its current strategy.

The goal of EIARD's strategy is to reduce poverty (i.e. MDGs); to promote economic growth, food security, and sustainable management of natural resources in developing & emerging economy countries; to contribute to global development issues and knowledge generation. EIARD envisages that this goal will be reached through more effective European investments in ARD and partnership with developing & emerging economy countries, and more support to capacity development of those countries.

Therefore, EIARD considers capacity development to be central to the attainment of its ARD objectives. The impact of capacity development interventions can be enhanced if there is strong coherence and coordination among EIARD member countries at the policy level. Improved harmonisation of policies may also provide the basis for joint advocacy, initiatives and programmes which would increase the efficiency of investments in capacity development. This paper reviews the current policies and programmes of EIARD members in relation to capacity development and makes recommendations on future directions. The main issues and recommendations will be incorporated into a policy brief in which specific policy options or guidelines will be presented.

The study was performed by a team of researchers: Ruud Ludemann, Marianne van Dorp, Annemarie Groot Kormelinck (Centre for Development Innovation - CDI- part of Wageningen University & Research Centre in the Netherlands) and Tim Chancellor (Natural Resources Institute - part of Greenwich University - in the United Kingdom).

## 1.2 Objectives

The primary objective of the study is to investigate and document current approaches to capacity development in ARD supported by EIARD member countries. The study considers the geographical and thematic focus of capacity development interventions and examines the various types of support provided to different target groups. This is done against the backdrop of emerging thinking on the need for capacity development and how it can address emerging challenges in agriculture. Particular attention is paid to the role and level of inclusion of women and youngsters in agriculture and ARD. Examples of good practice in capacity development are presented from Europe and elsewhere which may be considered in the design of future initiatives.

## 1.3 Definitions

For the purposes of this study, we have used the definition of ARD proposed by EIARD in its current strategy(2009-2013): *ARD is multi-dimensional in addressing the agricultural development challenges of DEEC. The agricultural domain includes crop production and animal husbandry, agro-*

forestry, fisheries and aquaculture, food, agribusiness and related enterprises, as well as the sustainable management of the natural resources on which farming depends, the animal and human health related issues, and the socio-cultural and bio-diverse landscapes, food systems and ecologies in which it is embedded. ARD is closely linked to other research sectors and themes (such as health, energy and environment), but also to social and institutional issues like gender and capacity development. ARD provides technological, economic and institutional knowledge and innovations contributing to sustainable development. It encompasses public and private sector research, aiming at producing national and international public goods. ARD may be basic or applied in nature and it may operate at different scales, but it must take into account the needs and concerns of relevant stakeholder groups, even if these groups do not actively participate in the research itself.

With regard to capacity development in ARD, we have adopted the definition proposed by Horton and co-workers (2000) which is *'the process of improving the ability of agricultural research organizations and systems to perform their assigned tasks in an effective, efficient, and sustainable manner. Such capacity development involves strengthening the capabilities of individuals, and organizations and linkages among them'*. This formulation captures the multi-faceted nature of capacity development and links it to improved performance as an outcome of enhanced capacity.

## 1.4 Levels of Capacity development

Interventions to develop capacity should be differentiated according to the level they are targeting and be carefully attuned to each other. Such capacity development efforts include different forms of individual training, organizational strengthening, and institutional development. We examine these capacity development interventions for ARD at these three capacity levels:

1. The *individual level*: skills, knowledge, experience and attitudes that reside in people.
2. The *organizational level*: the procedures, structures and policies, norms and values, corporate culture and style within an organization which collectively influence its performance and its ability to fulfil its mandate. Some also include the facilities that an organisation avails of as part of its capacity to perform its mandate. These include ICT, transport, and other facilities and infrastructure.
3. The *institutional level*: policies, legislation, social norms and other societal factors which facilitate or constrain the performance of individuals and organizations.

## 1.5 The widening scope of ARD

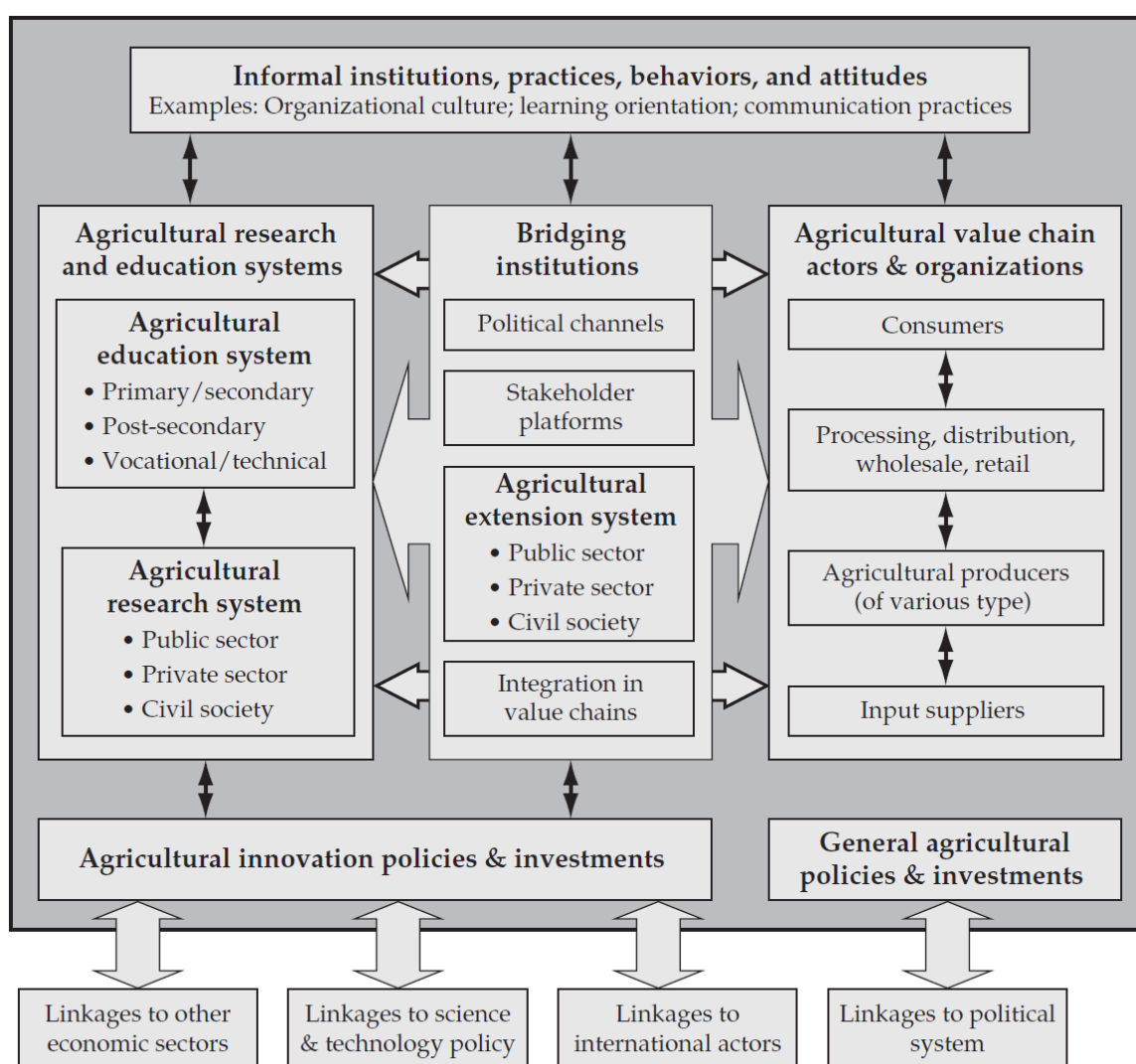
In order to achieve greater impact agricultural research has evolved over the last couple of decades from on-station research, farming system research, via more client-oriented research, and research on sustainable livelihoods to an increasing focus on value-chain development and innovation systems. This shift is due to the recognition that agricultural development comes about as a result of uptake of new technologies and practices in the process of innovation.

Agricultural Research is one of the components in the wider context of an innovation system. Innovation systems are made up of three main components: the domain of knowledge and education, the business and enterprise domain and the domain of institutions that facilitate the transfer, exchange and interaction of knowledge between them (see Figure 1).

Agricultural research is not a monopoly of the public sector, because the private sector and civil society also play a significant role. The agency of other actors has to be taken into account as well in

the design, elaboration and implementation of ARD, such as the producers, the agro-food industry, distributors and retailers, input suppliers, consumers, the Agricultural Education system and a whole range of intermediate institutions like organizations for extension advisory services, quality control and inspection, marketing, financing and contractual arrangements, policies, information and communication services, rules and regulations<sup>3</sup>.

Therefore, innovation systems approaches go beyond the research system and take into account the whole range of actors involved in and affected by the generation, verification, adaptation, assessment and exchange of technologies and knowledge, and the way in which they interact to do this (World Bank, 2006).



Source: Authors; adapted from Arnold and Bell 2001.

Figure 1 - Agricultural Innovation System.

<sup>3</sup> Some new ideas about research for development, by Arnold, E. and Bell, M. (2001). In: Danish Ministry of Foreign Affairs. Partnership at the leading age: a Danish vision for knowledge, research and development. Spielman, D.J. (2005). Innovation systems perspectives on Developing-Country Agriculture: a critical review. IFPRI, USA.

## 1.6 Capacity development for ARD and the wider development framework

Among EIARD countries there is renewed interest in the role agriculture has to play in promoting economic growth and reducing poverty<sup>4</sup>, although only a few countries consider support to the agriculture sector as a core theme in their overseas development programmes<sup>5</sup>. However, Capacity development for ARD is of essential strategic importance to achieve the goals defined by the policies of the vast majority of EIARD country members, such as poverty alleviation, food security, rural development and environmental sustainability. For countries like Belgium, Italy and the Netherlands international cooperation in support of food security is a priority area and in many other countries agriculture is an important component of broader thematic areas such as economic growth (UK), rural development (Germany) and the environment (Austria).

As indicated in an earlier paper in this series, arrangements for coordination and governance of ARD vary among EIARD countries<sup>6</sup>. Often policies and coordination of capacity development for ARD are under the jurisdiction of various ministries, and in general interventions for capacity development are supported through mechanisms that are not specific to ARD. This implies that institutes for Research and Higher Education in Agriculture dealing with ARD need to establish network contacts and active communication with entities beyond the agricultural sector to effectively lobby for modifications in institutional arrangements conducive to Capacity development in ARD.

## 1.7 Capacities needed for ARD

Historically, the main focus of capacity strengthening in agricultural research in developing countries has been in the area of technical and disciplinary-based scientific skills. However, agricultural research for development requires the integration of these skills with the types of expertise that support the implementation of ARD within a dynamic systems context. For the parties requesting research, education and training services, the capacities to be developed include skills to identify and articulate the domain in which such support is required, enhancing organizational and managerial abilities, as well as the capacities for effective communication, negotiation, conflict management, lobbying and advocacy.

Therefore, organizations need to supplement the aforementioned skills and expertise with a range of '*system skills*' so they can develop partnerships and manage change with the stakeholders concerned in the agricultural sector and society at large; to build and manage interdisciplinary and inter-institutional teams; and to assist other stakeholders to enter into effective dialogue, joint planning and implementation to achieve common goals whilst monitoring, evaluating and assessing the impact.

Staff in research and education institutes needs to develop the skills for problem-based and group action-learning through real-world experience in a professional setting. Particularly important for ARD are entrepreneurial and business skills; facilitation, leadership and communication skills; and the organizational competence to create the enabling environment for

<sup>4</sup> See the World Development Report, 2008.

<sup>5</sup> For an overview of the priorities as specified in the policies of the various countries see the appendices.

<sup>6</sup> Pound et al., 2011.

ARD and manage institutional change processes. Many of the aforementioned skills can be learned best through exposure to real-life situations and in the context of group interaction, but many universities, colleges or research institutes harbour a strong tradition of individual learning of technical and scientific capacities.

Their staff continue to use the same conventional teaching and research methodologies they have been accustomed to and absorbed during their own education and professional training. Without opportunities to learn and apply knowledge and skills under real-life conditions, the complementary skills so urgently needed to make education and research more relevant for the actual needs of the agricultural sector nowadays, little improvement in the existing situation can be expected.





## 2 Methods used

To explore European policies and practice in capacity development for ARD the following range of methods was used:

- a) A literature review was conducted. This took into account changes in thinking and in practice about the implementation of ARD and how its impacts can be measured;
- b) Information and documentation on the policies and programmes of selected EIARD countries in capacity development for ARD were collected, studied and summarized. In the attempt to ensure a broadly representative sample of large and small countries covering a wide geographic range eighteen countries were selected. Information was obtained through internet and by communication with contact persons in the countries which responded to the request for information;
- c) During the Global Conference on Higher Education and Research for Agriculture in Beauvais, France (June 27-29, 2011) face-to-face interviews were held with some contact persons;
- d) We developed a framework to analyse the policies and programmes of the EIARD countries. A set of standard criteria was used to discern and compare the approaches to Capacity development practised. These criteria are:
  - a. the overall objectives of the policies and programmes;
  - b. the way needs for capacity development were identified;
  - c. the focus of the collaboration projects /programmes for Capacity development in ARD;
  - d. the comprehensiveness of the approach to Capacity development or systems orientation;
  - e. the type of intervention and implementation arrangements;
  - f. sustainability and risks;
  - g. how benefits of the capacity development efforts are measured; and
  - h. the institutional embedding of the programmes / project for capacity development in ARD.

In general, this framework was applied to one or more major programmes for each country. When suitable information was available, other important programmes are listed but not described in detail.

- e) Special consideration was given to policies and actions relating to gender and youth. This reflects the important roles played by women and young people in agriculture in developing countries, and the tendency to pay inadequate attention to their particular needs;
- f) Information collected through the mapping exercise was used to identify examples of capacity development practices which are likely to make a useful contribution to ARD needs. These examples are included as boxes in the main part of the report;
- g) Based on the analysis of the data recommendations were drawn up on ways in which EIARD member countries can strengthen synergies and achieve greater coherence in their own policies and programmes on capacity development for ARD.

The amount of information we were able to gather on capacity development for ARD in different EIARD countries was highly variable. In particular, it proved to be difficult to obtain comprehensive information on the number and type of capacity development programmes and the level of funding provided to support them. This is partly due to the fact that Capacity development for ARD is not a specific goal in their policies for development cooperation, but rather a component or intermediate objective of programmes or projects for Food Security, Agricultural and/or Rural Development, Poverty Alleviation, Higher Education, or part of an inter-University partnership. When support to capacity development is provided through multi-lateral channels, through GCIAR institutes or through basket-funding, these data are even more difficult to find. Therefore, we relied more heavily on qualitative than quantitative analysis, identifying ‘*flagship*’ programmes and, using the aforementioned framework criteria. This approach enabled us to review the extent to which national policy was translated into practice and to characterise the specific attributes of the individual programmes.

## 3 Features of capacity development for ARD

### 3.1 Capacity development for individuals versus capacity development of organizations

During the 1980s public sector budgets for agricultural research and training in developing countries were considerably reduced. The dependence on donor funded programmes and projects and on World Bank loans to support them, increased. Capacity development in most of these programmes and projects was focused on the training of individuals, especially through MSc and PhD programmes hosted by northern universities.

The overall experience with this type of support was that individual people, departmental staff or project teams in organizations for research and education benefitted. However, this approach to capacity development had limited impact in strengthening the wider research and education systems in target countries<sup>7</sup>. By contrast, in countries like Brazil and Malaysia, where governments made substantial and long-term investments to strengthen education, the outcomes were more positive (Eicher, 2004).

Similar positive impact in terms of enhanced organizational performance is being reported in case donor countries kept up long-term commitment in programmes for capacity development (for example in Denmark, Norway and Switzerland), or where sister institutes maintained long-term organisational partnerships (such as the University of Life Sciences (UMB) from Ås, Norway and Sokoine University of Agriculture in Morogoro, Tanzania).

### 3.2 Alternative approaches

Apart from success stories from a small number of countries, the lack of evidence of the impact of agricultural research and training initiatives stimulated the search for alternative approaches in strengthening capacity development for ARD. These included initiatives to promote and practice *Farming Systems and Farmer First* approaches, which drew on inputs from different disciplines and made explicit efforts to tailor research to the specific social and economic contexts in which farmers are operating.

As indicated in Section 1.5, *Innovation Systems thinking* has gained ground recently in academic circles. For the time being however, although uptake of technologies from the formal research system remains limited, such concepts have not yet been widely incorporated into agricultural research and training in developing countries. In particular in sub-Saharan Africa linkages between national agricultural research organisations, higher education institutes and other organizations with a stake in ARD have not been well developed. The vision of a functional national agricultural research system remains largely unfulfilled<sup>8</sup>.

This is partly because there is a difference between introducing the concepts, methods and new approaches such as Farmer Participatory Research to individuals who are working in research,

<sup>7</sup> Jones et al., 2007.

<sup>8</sup> Pound & Adolph, 2005.

education and training, and the institutionalisation of such approaches into the mainstream of research, development and training within the countries concerned<sup>9</sup>.

### 3.3 Institutional inertia

The systems perspective to innovation can be very helpful to get insight and understanding of how innovations can be triggered and promoted through concerted efforts to enhance synergy among key actors. Equally, the same systems perspective can be very useful to identify and understand the factors and variables that work in favour of the status quo and obstruct the reform of standing research practices.

Research institutes are embedded in a wider institutional context, and even if there is willingness to reform internal structures and operating procedures and to promote attitudinal change to fully embrace the new paradigm – including organisational and individual reward systems and different success indicators – such changes also require alterations in the wider context these institutes are operating in. This is discussed further in relation to specific capacity strengthening programmes and projects in Section 4.

### 3.4 Capacity developed should match its operational context

ARD approaches recognize that agricultural production and growth heavily depend on location and situation specific variables, such as the availability and affordability of land, labour and capital, and effective demand for agricultural produce. It should also take into account factors like biodiversity, environmental conditions, the know-how and experience of individuals and the extent to which institutional arrangements (regarding, for example, transport, trade, pricing and quality control mechanisms and information management) are complied with in practice by the actors involved and applied by the executive and controlling agencies.

In addition, the initiatives to build and strengthen capacity for ARD should take into account that they themselves are also subjected to location and situation specific variables, and that their 'goodness of fit' into the actual institutional setting determines to a high degree the level of success and sustainability of the results that can be achieved.

In many countries, institutes for Research and Higher Education in agriculture are not well equipped to respond to the constraints they are facing. Lacking adequate investment, these institutes are struggling with poor infrastructure and equipment, weak administrative facilities, unfavourable labour conditions and a high turn-over rate and/or lack of well-qualified teaching staff. For these reasons institutes lack capacity to update course curricula, reform their teaching practices and modernize the teaching materials. This is an enormous obstacle to creating the type of knowledge, skills and behaviour most urgently needed in the agricultural sector. As a result, there is little incentive for graduates to choose a career in agriculture, or agricultural education (Gaillard, 2003).

<sup>9</sup> FARM-Africa had a project in southern Ethiopia to institutionalise FPR that lasted over 10 years which had some limited success (Bedada, F. et.al. in Institutionalisation of Farmer Participatory Research in Southern Ethiopia: a joint learning experience. Advancing Participatory Technology Development: case studies on integration into agricultural research, extension and education. 2003. Silang, Cavite, Philippines: IIRR/ETC Ecoculture/CTA. 257p). Wettasinha C, van Veldhuizen L and Waters-Bayer A (eds).

There is an acute shortage of capacity to train the next generation of agricultural researchers and teachers<sup>10</sup>.

This is the present situation although new pedagogies with greater emphasis on experiential learning and the development of 'soft' skills have taken deeper root in some disciplines. But in most public universities there has been little change with the result that agricultural graduates are not equipped with the skills demanded by employers<sup>11</sup>, nor have they acquired entrepreneurial and managerial skills to create their own employment.

Recently, in some countries this situation has given rise to foundation of private universities and colleges that are turning out graduates presumably more suited to the market place – which clearly illustrates that traditional Universities should re-think and re-design their education and research programmes.

### 3.5 Promising perspectives

Nevertheless, there are grounds for optimism. High profile reports such as those released by the Inter-Academy Council (2004) and the World Bank (2009) drew attention to the importance of capacity development in underpinning agricultural development. The Paris Declaration of 2005 and the 2008 Accra Agenda for Action strongly emphasised the need for enhanced capacity development in order to achieve the MDGs (capacity development/DAC, 2008). They also called for greater harmonization and stronger alignment of donor support with the policies and priorities from the developing countries.

In Africa, the Comprehensive Africa Agricultural Development Programme (CAADP) provides a common framework for investment in agricultural development (including research and extension) by national governments and donors. During 2001-2008 overall investment in agricultural research and development in sub-Saharan Africa increased by 20%<sup>12</sup>. However, there are large variations from country to country and to date there has been limited allocation of resources for capacity development in country investment plans.

At a Conference on Higher Education in Agriculture in Africa in Uganda ( November 2010) ministers from 13 countries signed a communiqué confirming the commitment of governments to improve the quality of higher education and strengthen partnerships between universities, communities, the private sector and the African Diaspora. Hopefully, this commitment will be translated into action with support from a wider group of national governments and development partners.

The Global Conferences on Agricultural Research for Development (GCARD) provide another route through which enhanced support for capacity development for ARD can be galvanised. Capacity development occupies a prominent place on the GCARD roadmap for future action.

<sup>10</sup> African Agricultural R&D in the New Millennium: Progress for some, challenges for many. by Beintema, N. & Stads, G-J. International Food Policy Research Institute: Washington, DC, 2011.

<sup>11</sup> Blackie et al., 2010.

<sup>12</sup> Most increase in expenditure occurred in a small number of countries (notably, Nigeria, Ghana, Tanzania, Uganda and Sudan). In many countries, especially in francophone West Africa, total agricultural research and development spending fell during 2001-2008. ( Beintema & Stads, 2011).

However the roadmap lacks concrete actions and capacity development is not high on the agenda for the next global conference in 2012. This situation needs to be challenged.

Some universities, like the Earth University in Costa Rica, managed to introduce new approaches with impressive results (Chakeredza et al., 2008; Earth University, 2011). The curriculum has a strong practical orientation and includes visits by students and staff to rural communities during which production systems are analysed in their social, environmental and ecological contexts. The courses have an entrepreneurial orientation and students develop and apply business skills through practical projects. The success of Earth University's approach is reflected in high student retention rates of around 88 percent and high employment rates for graduates, particularly in the private sector and among NGOs. In spite of its success, the model has not been widely adopted although some tertiary education institutes in Africa have implemented some of its features. For example, the Botswana College of Agriculture operates a Supervised Enterprise Project (Chakeredza et al., 2008). In addition, organisations like the International Centre for development-oriented Research in Agriculture (ICRA) have been supporting universities to introduce more holistic programmes.

### **3.6 Policies and types of support provided for capacity development**

The way countries provide support to Capacity development for ARD varies considerably. Next we describe some of the modalities most frequently used. It should be noted that one country can provide support to capacity development for ARD via several approaches.

#### ***As part of capacity development in general***

Countries such as Germany, Denmark, Norway and Switzerland, are addressing capacity development as a cross-cutting theme in the overall development policy underpinning implementation of interventions in other thematic areas prioritized in their policies in international cooperation.

#### ***As part of support to Higher Education and Research***

Some countries support Higher Education and Research in agriculture as part of an overall support programme for the education sector in general:

NORAGRIC, UMB - the University of Life Sciences from Ås, Norway – and Sokoine University from Morogoro, Tanzania are managing EPINAV (2010-2015), an extensive research-led education programme for exchange of staff and students as a follow-up to PANTIL (2003 -2008) and NUFFIC, a Dutch foundation for international cooperation in higher education, funds two programmes, NICHE<sup>13</sup> and NPT, to strengthen post-secondary education and training in developing countries. Several of the projects funded through these programmes involve partnerships between agricultural institutions in the Netherlands and in the partner countries.

#### ***As part of cooperation in educational programmes***

For other countries, support to Higher Education is not a priority in their cooperation policies, but they do support educational programmes oriented towards ARD. For example, in Italy the Development Cooperation Directorate supports MSc courses conducted by the Istituto

<sup>13</sup> NICHE, the Dutch Initiative for Capacity Development in Higher Education see appendix 13.

Agronomico per l'Oltremare in association with the University of Florence on Irrigation Problems in developing countries and Geometrics & Assessment of Natural Resources.

### ***As part of programmes for agricultural and/or rural development***

In some countries agriculture is an important component of strategies developed for related areas. For example, various ministries are sometimes involved in funding the support to capacity development for ARD as a component of programmes for agricultural or rural development. These include the ministries for Science & Innovation (Spain), Agriculture & Rural Development (Hungary and Poland), Foreign Affairs (Finland), Economic Cooperation and Development (Germany) and International Development (UK) to name a few. However, it is difficult to quantify the level or scope of this type of support.

### ***Geographic focus of capacity development for ARD***

In recent years, most EIARD members have reduced the number of countries to which they provide development aid. E.g. the Czech Republic, following a review of its development aid programme by the Development Assistance Committee in 2007, is targeting aid towards fewer countries in order to enhance its impact. Partner countries are divided into programme countries, where the level of commitment is greatest, and project countries. The basis for engagement is adherence to the principles of 'partnership, efficiency and transparency' and the existence in partner countries of clear strategies for economic development.

Financial constraints in donor countries are also influencing the debate on aid effectiveness. Budget cuts in development cooperation are forcing EIARD members to review their country focus. The Netherlands, for example, recently reduced the number of its partner countries from 33 to 15. In Belgium, Germany, Denmark, Portugal and Spain similar changes in development cooperation have taken place or are being considered.

Concentration of European donor support to fewer countries has led to a reduction of programmes in certain regions. The United Kingdom and Denmark, for example, no longer provide development support to countries in Latin America and support to countries in Southeast and East Asia has been reduced, while support to countries in Eastern Europe has increased. Whether countries themselves are investing more in CD for ARD, or get support from other donors is unknown.

The variation and trends in the modalities of institutional arrangements to support Capacity development for ARD is illustrated in appendix 2, where the recent distribution patterns show the relative weight of bi-lateral vs. multilateral assistance for capacity development; project funding vs. basket funding; number/strengths of N-S links e.g. in extension Reading, Wageningen UR – African countries; types of implementation arrangements: mentoring, coaching, scholarships, short courses; content of capacity development (more change management, IAR4D leadership training, SCARDA etc.).

<sup>14</sup> The need to support ARD and for associated capacity development in this region was highlighted during the European stakeholder consultations held prior to the GCARD Conference in Montpellier and some EIARD members have a strong focus on this region.





## 4 Comparing the various approaches

The information collected for the mapping exercise was analysed comparing the approaches against a set of criteria concerning, respectively, the overall objectives of the approach, the method used to identify the needs for capacity development in ARD, the development focus of the approach, its comprehensiveness, the type of intervention and implementation arrangements, its sustainability, the M&E system used to measure its results, and the institutional embedding of the support programmes concerned (see also chapter 2).

### 4.1 Overall objectives of support for capacity development for ARD

ARD aims at building capacity for sustainable development and poverty alleviation, by enhancing the capacity of individual people and their organizations to provide better services to their clients in such a way that the latter can improve their conditions or practices in the social context they are living in.

Some European countries [like the Czech Republic, Finland, Greece, Italy and Portugal] have not formulated a comprehensive approach to Capacity development, because it is not an explicit objective of their policies on international cooperation. Capacity development for ARD is, at the most, a component of projects or programmes aimed at objectives most often directly related to improved (technical) production practices, management of natural resources, or the performance of individual entities providing education and training service.

Other countries [like Denmark, Norway, Sweden and Switzerland] are aiming at capacity development for ARD as part and parcel of their efforts in international cooperation to develop organizational capacity and strengthen the competence of the public sector with particular attention for the strategic, structural and institutional aspects involved.

A third group of countries [like Austria, Belgium, Germany, the Netherlands, France and the UK] are providing support to capacity development for ARD in order to contribute to the achievement of overall goals like Food Security, Poverty Reduction and Agricultural and/or Rural Development, with a particular focus on smallholder livelihoods.

### 4.2 Identification of capacity needs and development focus

The way in which capacity needs for strengthening ARD are identified varies according to the policy and approach of the individual countries, and the type of intervention. In many educational programmes, scholarships for individuals studying for postgraduate qualifications do not require students to address research topics which meet priority needs in their home country.

In response to the recommendations of an external evaluation carried out in 2007, the Austrian Partnership Programme in Higher Education & Research (APPEAR) decided to link its funding for individual scholarships to the research projects it is supporting. This type of approach helps to ensure that educational programmes contribute to the priorities of developing countries and to the programmes of specific institutes.

Frequently, graduates who have benefitted from scholarships made available by programmes for capacity development are placed in another function than the one for which they have been trained. Instead of being positioned in a function where the organization can capitalize on their enhanced knowledge and skills in the specific disciplinary field they graduated in, the graduates are immediately promoted to senior management positions in which there are limited opportunities for them to apply their newly acquired expertise. Moreover, in many cases they have had little or no management training to prepare them for their new positions.

Graduates may also be unable to apply the skills and knowledge they have acquired due to the lack of facilities, equipment or resources in their institutes. Unfortunately, significant numbers of graduates do not return home after graduation since there is no obligation that binds them to the organization or project through which they obtained their scholarship.

Our review indicates that, in general, programme identification is done by aligning the strategic priorities of developing country partners with those of the EIARD donor country. However, we found little evidence that programmes for capacity development were based on a comprehensive analysis of the needs of the labour market in the agricultural sector or related sub-sectors of the local, regional and/or national economy. At best, in the rationale of programmes for capacity development reference is made to national policies, or international guidelines subscribed to by the Government, whilst the capacity development needs are defined by the institutes or organizations in accordance with the strategies they pursue and the resources they can mobilize.

The degree of involvement of organizations in partner programmes for capacity development in the process of needs assessment appears to vary considerably. The NICHE project funded by the Netherlands adopts an approach which is designed to assess capacity needs under local conditions in a way that promotes ownership and stimulates systematic data gathering. National authorities, the Dutch embassies and NUFFIC staff jointly engage in a review of national policies and strategies. Where feasible, this is supplemented by additional studies and stakeholder meetings.

Capacity needs may also be identified by reviewing progress made in existing initiatives. Recently, the Institut de Recherche pour le Développement (IRD) in France launched a series of eleven workshops in ten countries across Africa and bordering the Indian Ocean (see Box 1). The workshops were associated with activities in two educational programmes coordinated by IRD and funded by the French government. One of the aims of the workshops was to canvass opinions on ways to strengthen research capacity. Although resource-intensive, this approach is a useful means of consolidating learning and using lessons from current initiatives to inform the development of future support in a participatory manner.

Several programmes funded by EIARD members require that the research teams submitting project proposals clearly demonstrate that the proposals are demand-driven and have been developed in a consultative manner. One example is the APPEAR programme which also requires applicants to outline the expected impact on the target group or groups. This approach is more likely to lead to beneficial outcomes when associated with monitoring and evaluation systems that track the progress of relevant indicators. However, the limited evidence available suggests that monitoring and evaluation systems are often insufficiently rigorous for such a purpose.

#### ***Multi-stakeholder Initiatives to identify needs in Capacity development***

Identifying capacity gaps ARD by multi-stakeholder initiatives presents a particular challenge

### Box 1 The IRD and participatory identification of capacity needs

The Institut de Recherche pour le Développement coordinates 2 capacity development programmes funded by the French Ministry for Foreign and European Affairs:

- CORUS, a programme promoting scientific partnerships between universities and research institutions in France and in selected partner countries in Africa; and
- AIRES-Sud, a programme providing support to research teams in partner countries to enhance their capacity to address development issues.

Between September 2010 and May 2011, IRD organized 11 workshops bringing together the CORUS and AIRES-Sud programme teams to share experiences and exchange ideas. The thematic workshop included round table discussions on ways to strengthen research capacity and the recommendations were used to define the strategic priorities and intervention mechanisms to support future research in Africa. A synthesis report on the workshop outcomes is due to be published in September 2011.

Source: Personal communication with Sébastien Hubert, IRD

because the needs and interests of different types of organization are usually different. The International Centre for development-oriented Research in Agriculture (ICRA) has played a prominent role in supporting the development of multi-stakeholder ARD approaches. Through its training and action research programmes ICRA seeks to strengthen the articulation of demand in ARD activities (see Box 2)

### Box 2 The International Centre for development-oriented Research in Agriculture

In 1981 the European members of the CGIAR founded ICRA, the international Centre for development-oriented Research in Agriculture to develop the capacity for ARD. Initially ICRA focused on agricultural researchers, extension staff and smallholder farmers, but, in the continuous effort over the past 30 years to make research matter, ICRA's focus has gradually widened. At present, it includes also other stakeholders in development of the agricultural sector. In addition to joint programmes to improve demand articulation for research, collaboration in action-research and knowledge sharing, ICRA addresses staff from institutes for higher education to develop teaching and outreach programmes to expose students to action-learning and real-life multi-stakeholder innovation processes. Over the past 5 years ICRA supported learning partnerships with institutes in Benin, Burkina Faso, Cuba, Ethiopia, Ghana, Kenya, South-Africa, Venezuela and Uganda.

The challenges involved in identifying capacity needs in multi-stakeholder ARD initiatives are illustrated by the recent experience of the new Platform for African-European Partnership in Agricultural Research for Development (PAEPARD). PAEPARD is funded by the EU and has a strong focus on facilitating involvement of civil society groups and the private sector in ARD activities. An attempt was made to identify the capacity needs of each of the main groups during separate stakeholder workshops. Although this approach generated useful discussions, the result was often a long list of capacity needs which were difficult to prioritise and could not be addressed with the time and resources available.

This highlights the need for new methodological approaches. SCAIN, a project for Strengthening Capacity for Agricultural Innovation funded by DIFD is currently attempting to develop and test

tools for identifying capacity gaps in multi-stakeholder ARD initiatives. This work is building on a recently-completed project in which institutional analysis was used to assess capacity gaps in national research and educational organizations (see Box 3).

### Box 3 Institutional analysis to identify capacity gaps in research and educational organizations

SCAIN (Strengthening Capacity for Agricultural Research for Innovation) is a new initiative which provides support to agricultural research and training organizations in sub-Saharan Africa working through the three sub-regional research organizations namely: ASARECA, CORAF/WECARD and SADC-FANR. Together with RUFORUM, and with support from the Natural Resources Institute of the University of Greenwich (UK), SCAIN documents and disseminates approaches, methodologies and lessons from capacity strengthening initiatives. In doing this, the initiative builds on SCARDA - a recently completed project on Strengthening Capacity for Agricultural Research for Development in Africa that was implemented from 2007-2011 coordinated by FARA and funded by DFID. Based on the needs assessment of capacity development of national research and educational organizations in Africa conducted in 2006, SCARDA provided support to 11 such organizations in 10 countries in sub-Saharan Africa, collaborating with these organizations to identify how to enhance their capacities, develop action plans and monitor progress through a continuous process of reflection and review. The objective for these organizations was to improve their performance by strengthening their research management skills and enhancing their professional competencies in key areas of their operations.

At the start, the staff involved at all levels of the organization, supported by external facilitators identified capacity weaknesses through an 'institutional analysis'. Key partners of the organizations were invited to participate also. A range of tools was used, including SWOT analysis, stakeholder analysis and force field analysis. Force field analysis was very useful to examine factors supporting or opposing change and to identify factors which tip the balance towards the former. Recently-appointed staff with new ideas and funding mechanisms which presented new opportunities to conduct quality research were amongst the conducive factors. Experience with the institutional analyses showed that outcomes were most successful in cases where senior management gave their full support and actively engaged in the process. To facilitate ownership, feedback from staff not directly involved in the analysis is necessary from time to time. It was also important that adequate time was allocated, and provision made for periods of reflection between successive stages in the analysis. The institutional analysis conducted at the Crops Research Institute of the Council for Scientific and Industrial Research in Ghana (CSIR) was characterized by these features. This led to a set of capacity strengthening interventions in line with CRI's strategic plan.

Source: Chancellor et al. (2011)

Two phenomena suggest it might be worthwhile to have a closer look into the way in which needs assessments are conducted. The first one is that graduates having benefitted from scholarships through programmes for capacity development are often placed in another function than the one for which they have been trained. Instead of being positioned in a function where the organization can capitalize on their enhanced knowledge and skills in the specific disciplinary field they graduated in, these graduates are promoted to a senior management position, which actually requires a different set of skills than the ones they studied. This raises the question whether the most pressing need of the organization is the lack of managerial competence, rather than lack of capacity in the subject matter the graduate was trained in.

Another common cause why graduates cannot apply the skills and knowledge they acquired, is the lack of facilities, equipment or resources to do so, or they do not return home and look for employment elsewhere, because there is no obligation that binds them to the organization or project through which they obtained their scholarship.

Both phenomena raise questions about the depth and scope of the needs assessment based on which the staff concerned was selected, the involvement and commitment of the organization that employs the graduates concerned, and whether there is a strategy for organizational development at all.

#### ***Partner involvement and commitment***

The occurrence of the aforementioned deviations has not gone unnoticed, and through reformulation of the needs assessment procedures for programs like UniBRAIN, BSU and, to a lesser degree, PRCP, DANIDA, for example, has shown that the willingness and preparedness for change of the recipient partner institutes are essential conditions for sustainable capacity development. It goes without saying that if the needs assessment is based on these conditions the perspectives for initiatives to take root and be institutionally embedded is much bigger.

### **4.3 Types of intervention and implementation arrangements**

To characterize the type of capacity development supported by the various countries several variables have to be taken into account, such as:

1. The level of intervention (individuals, organizations, institutions);
2. The capacity domain to be strengthened (technical, economical and/or social subject matter and/or methodology, managerial issues and organizational capacity, or interactive policy-making and strategy design);
3. Categories of beneficiaries aimed at (scientists, producers, research managers, education staff, trainers, extension agents, staff from support services);
4. Methodology applied (coaching, mentoring, short courses, formal education, face to face interaction, distance/e-learning); and
5. Institutional delivery arrangements (individual scholarships, fellowships as part of a research programme, or projects for organizational strengthening, institutional partnerships, basket funding earmarked for capacity development in general, competitive grant schemes, public tendering, etc).

#### ***4.3.1 Levels of intervention***

##### ***Individual level***

Training of individuals is still the type of capacity development for ARD most widely used and supported by European countries. Many countries provide funding for MSc or PhD studies, as part of schemes not specifically oriented towards agriculture or ARD. Although scholarships are usually awarded to individuals for study at universities in the country providing the funds, in some programmes such as SCARDA, most students are registered in universities in their own country. This helps to develop local capacity, strengthens networking among research institutes (where most of the students come from) and increases the probability that students select research topics which address priority issues in their countries.

### **Organizational level**

Partnership projects are the mechanism most frequently used to strengthen the capacity of institutes for higher education in developing countries. Some of these projects are short-term initiatives designed to develop capacity in specific areas. Others are longer-term relationships, such as those funded by the Belgian University Development Cooperation programme that may include a variety of support measures, including exchanges of staff and students, curriculum development, short courses and research initiatives.

A significant proportion of funding for ARD by EIARD countries such as Germany and the United Kingdom is channelled through the CGIAR. These funds are partially used by CGIAR Centres to support capacity development activities, but most are not earmarked by donors for this purpose. Recent evaluation of the training conducted by the CGIAR estimated its annual allocation of funds for training at USD 30m (CGIAR, 2006).

The review panel noted that funding for training has declined greatly and that the majority of capacity development support was linked to research projects. As a result, there has been an increase in the amount of informal training and mentoring in CGIAR initiatives. Training is still mainly focused on building capacity of individuals.

Support for organizations may include funding for infrastructure such as new buildings, equipment and information and communication systems. It was not possible to identify the proportion of funds allocated to infrastructure development, but some European donors exclude this type of support from their programmes or restrict it to a small component. The risk with this approach is that the return on investment from technical training in emerging areas such as biotechnology may be low if staff do not have the facilities to apply their new skills in their own organizations. One way to manage this risk is to provide support to regional centres of excellence by concentrating resources in specific institutes and facilitating access to them by other researchers. One example of this is the Biosciences Eastern and Central Africa hub in Nairobi, Kenya, to which some EIARD members contribute funding.

Regional Centres of Excellence are also being supported through the new East Africa Agricultural Productivity Programme which includes Kenya, Uganda, Tanzania and Ethiopia. This programme, which is implemented with the assistance of the World Bank, aims to invest in regional approaches to agricultural research with a focus on four commodities for which there is large and growing demand. The first Regional Centre of Excellence is for Dairy production and is being established at the Kenya Agricultural Institute's research station in Naivasha. Support is being provided for research capacity and infrastructure development and similar arrangements will be put in place for cassava in Uganda, rice in Tanzania, and wheat in Ethiopia. As the programme was only launched in August 2010 it is too early to assess whether the approach is producing promising results. But there are clear potential benefits from economies of scale, provided the institutional arrangements allow for effective collaboration with other organizations in the member countries.

### **Institutional level**

Few capacity development interventions target capacity development at the institutional level. An example already mentioned is the EC-funded PAEPARD project. Another one is ICART, the project for Implementation and Coordination of Agricultural Research & Training which ran from

2006-2010. ICART's key objective was the enhanced capacity of the SADC Department for Food and Natural Resources to coordinate agricultural research and training. The project made provision for short-term technical training to support the teams implementing projects awarded under the competitive grants scheme. In the SADC plans are now under way to transfer responsibilities for agricultural research to a new sub-regional research organization called CCARDESA. Especially during its early year, this organization will need support to develop its capacity to elaborate new ARD programmes.

#### ***Attention for organizational and institutional development emerging***

Reviewing the information gathered for the mapping exercise, the conclusion is that still the greater part of the support given by the European partner institutes seems concentrated in grants and fellowships for individual students, most of whom choose disciplines focussing technical subject matter instead of economics, sociology, business administration, communication and innovation, or other social sciences.

Nevertheless some countries, like Denmark for example, have shifted their support to Capacity development from individuals to strengthening organizations in the context in which they are operating. In its operational guidelines DANIDA stipulates that capacity development should be centred on strengthening organizations consistent with the overall policy, balancing capacity development of civil society organizations and government agencies, enhancing their organizational and institutional capacity and ensuring greater accountability in management of (public) funds. This approach requires longer term commitment from the donor agencies, as well as it also demands a high degree of dedication from the partnering institutes and their institutional environment.

#### ***4.3.2 The capacity domain to be strengthened***

As already indicated, most of the support to capacity development in ARD is provided through programmes for technical training of individuals or to build partnerships between institutes for higher education<sup>15</sup>. The EU-funded EDULINK programme is an example of a partnership programme that allows for a range of capacity strengthening interventions, focusing on leadership and management skills, and cross-cutting professional competences in research and innovation (see Box 4).

To advance graduate research-based knowledge that is relevant to the development of African agriculture and agri-business the UniBRAIN programme promotes establishment of innovation incubators which should function as centres for training, research and advisory services for small and medium enterprises and business start-ups to support graduate training in entrepreneurial and commercial skills and advance graduate knowledge in areas related to agribusiness. Consortia are invited to apply for support and successful applicants are granted funding for a period of three years (see Box 5).

As indicated above, the Botswana College of Agriculture (2008) helps students to develop entrepreneurial skills needed for future employment through its *Supervised Enterprise Project* and the ILRI-SLU runs the course on *Animal Genetics Training Resource*, which are both examples of

<sup>15</sup> Table 2 in appendix 3 shows the major capacity development programmes of the EIARD countries from which information could be obtained.

#### Box 4 Educational Linkage (EDULINK) programme funded by the European Union

EDULINK is a programme for cooperation between ACP countries and EU member states implemented by the ACP Secretariat. The overall objective is to “foster capacity building and regional integration in the field of higher education through institutional networking, and to support a quality higher education system, which is relevant to the needs of the labour market, and consistent with the socio-economic development priorities of ACP States.”

The programme has a strong development orientation to help ACP countries achieve the targets for the 2nd MDG on higher education and supports partnership projects of 2 - 3 years duration. In the 1st phase of implementation 6 out of the 55 projects concerned capacity building in agricultural education (2006- 2009). All projects involved partnerships with universities in Africa to strengthen MSc or PhD programmes. The projects enabled programme design in cross-disciplinary areas in which the universities had limited experience. E.g. one project focused on skill-building of university staff and strengthening curricula in rural innovation. Another project strengthened staff expertise in curricula on management of the fresh food chain and contributed to networking among university staff and businesses in this sector. In the 2nd phase (2009-2011) one of the projects related to agriculture is aimed at enhanced leadership, management and cross-cutting professional competencies in research and innovation at 3 universities in East and Southern Africa. A 3rd phase is planned to strengthen the institutional and academic capacities of institutes for higher education in ACP countries.

#### Box 5 UniBRAIN Universities, Business & Research in Agricultural INnovation (Jan 2010 - Dec 2014)

The Danish Ministry of Foreign Affairs has provided funds to FARA to support the UniBRAIN Initiative. The purpose of this initiative is to link university education, research and business in sustainable agriculture. The programme Development Objective is to create jobs through innovation and entrepreneurship in the agricultural sector through partnerships between universities, research institutions and the private sector. UniBRAIN's major components are:

1. Promoting innovation through establishment of university-led agribusiness incubators in Danida priority countries. For ASARECA these countries are: Kenya, Uganda, Tanzania; for CORAF/ WECARD: Benin, Burkina Faso, Mali, Ghana; and in the SADC region: Mozambique and Zambia;
2. Supporting graduate training in entrepreneurial and business skills;
3. Advancing graduate research-based knowledge that is relevant to the development of African agriculture and agribusinesses.

courses with a specific focus on skills enhancement through application of the training subject matter. Similarly, the course on *Agricultural Communication* at the Abeokuta University of Agriculture Nigeria is an example of an innovative, collaborative development of up-to-date, locally relevant course which can be adapted for use in many different university programmes, just like the BSc on *Rural Innovation* developed by the Makerere University with assistance of the England-Africa Partnership programme. The latter curriculum was developed with other stakeholders such as NAADS and the private sector who are also involved in programme delivery.

#### 4.3.3 Categories of beneficiaries

The main beneficiaries of capacity strengthening support for ARD from EIARD countries are students and staff in the formal agricultural education and research sectors. In addition to the



mechanisms already described, there is increasing interest in channelling this support through regional networks such as the Southeast Asian Regional Centre for Graduate Study and Research in Agriculture (SEARCA).

This trend is particularly evident in Africa where the activities of FARA and the sub-regional research organizations in capacity development for ARD are important to boost ownership of the process. Similarly, regional university networks in Africa have a key role to play in strengthening the capacity of institutes for higher education to conduct ARD and produce graduates with suitable skills. ANAFE, the African Network for Agriculture, Agro-forestry and Natural Resources Education has continent-wide coverage and it aims to strengthen educational provision at the undergraduate level.

RUFORUM, the Forum of Regional Universities for Capacity Building in Agriculture, has members in eastern, central and southern Africa and supports postgraduate provision. RUFORUM has developed regional postgraduate programmes at both MSc and PhD level and received some limited support from EIARD members. However, more support is needed to consolidate these programmes and help to ensure that quality standards are enhanced and maintained.

Capacity strengthening of extension workers, farmers and members of civil society organizations tends to be done as a component of programmes or projects targeted primarily at researchers. For example, trainees from agricultural extension and farmers organizations are sometimes included in training courses conducted by CGIAR Centres (CGIAR, 2006). However, there are a few examples of programmes aimed primarily at supporting the innovation capacity of farmers and one of these is discussed in the next section.

#### **4.3.4 Methodologies applied**

From the mapping exercise it is concluded that short training courses, formal education in specific disciplinary fields, combined with on-the-job training through intensive collaboration and exchange programmes are the prevailing modalities the projects and programmes supporting capacity development in ARD. Alternative methods like coaching, mentoring, distance/e-learning, computer assisted instruction, action research, and participatory technology development are also practised. However, these are not commonplace as they are much less frequently mentioned in the description of the various programmes<sup>16</sup>.

##### ***Mentoring***

Recently YPARD, the Young Professionals Platform for Agricultural Research for Development, conducted a survey which showed that young researchers have a positive view of mentoring but that less than half of their employers operated a mentoring scheme. As a matter of fact, few EIARD countries have capacity building programmes with a significant component on mentoring.<sup>17</sup> In SCARDA the provision of mentoring support was welcomed in some organizations but there was less enthusiasm in others where the culture of mentoring was weak. The success of the AWARD Fellowship scheme (for African Women in Agricultural Research & Development) coordinated by

<sup>16</sup> In reality methods oriented towards experiential learning may be more widespread, but due to the scarcity of M&E data in general, and lack of detail in the description of the educational approach we could not verify this.

<sup>17</sup> This is remarkable because in many developing countries the age structure of staff at research institutes and agriculture faculties in universities is skewed to staff close to retirement (ASTI, 2011).

the CGIAR programme on Gender and Diversity, demonstrates the value that mentoring can bring to help overcome the constraints often faced in pursuing a career in agricultural research.

### **Support for farmer-led research**

The initiative Promoting Local Innovation in Ecologically-Oriented Agriculture and Natural Resource Management (PROLINNOVA – see box 6) promotes participatory innovation development. Participatory innovation development is farmer-led research jointly with other partners which further develop and improve local innovations<sup>18</sup>.

PROLINNOVA's role is to support the innovation capacity of smallholder farmers to engage in this type of research process. It places smallholder farmers at the centre of agricultural research and innovation, sometimes supported using local innovation funds.

#### **Box 6 PROLINNOVA and participatory innovation development**

PROLINNOVA is a programme to build a global learning network to promote local innovation processes in ecologically-oriented agriculture and NRM. Its focus is on recognising the *dynamics* of indigenous knowledge and capacity development of farmers (including forest dwellers, pastoralists and fisher folk) to adjust to change – to develop site-specific systems and institutions for resource management to gain food security, sustainable livelihoods and to safeguard the environment. PROLINNOVA was started by NGOs in 1999 supported by GFAR, the CGIAR NGO Committee and the French Ministry of Foreign Affairs. After inception funding from IFAD, DGIS from the Netherlands is the main donor, while GFAR, CTA, the French Ministry of Foreign Affairs, the Rockefeller Foundation, Misereor, ActionAid, EED, the World Bank and RIU support specific activities, projects or CPs. The partners in the IST and CPs cover over one third of total costs themselves.

PROLINNOVA seeks to:

- *demonstrate the effectiveness of farmer-led participatory innovation for sustainable development*
- *build farmer-extension-researcher partnerships*
- *enhance capacities of farmers, researchers and extension agents in participatory approaches*
- *pilot decentralised funding and other mechanisms to promote local innovation*
- *engage in national and regional policy dialogue to stimulate and enhance local innovation*
- *set up platforms for reflection, analysis and learning about promoting local innovation*
- *integrate participatory approaches to farmer-led innovation and experimentation in research, extension and education*

This is not an easy task as research organizations are sometimes reluctant to engage or, when they do participate, may end up by attempting to control the initiative. But there are documented examples of cases where participatory innovation development has produced promising results. The challenge is how to build on these successes and achieve wider impact, bearing in mind that problems and their solutions are often highly location-specific.

### **Competitive grant schemes**

The EU provides funds for competitive grant schemes coordinated by the three sub-regional research organizations in sub-Saharan Africa, but the capacity development dimension of this support has been limited. One limitation of these regional schemes is that, unless specific provision

<sup>18</sup> See Farmer-led joint research: experiences of PROLINNOVA partners by Wettasinha & Waters-Bayer, 2010

is made to support organizations from countries in which research capacity is weak, they will have little chance of securing grant funding. This is exemplified in the EU-funded competitive grant scheme run by ASARECA in which organizations from the larger countries in East and Central Africa have submitted a large proportion of the successful proposals (Joseph Methu, personal communication). The participation of weaker organizations and countries can be facilitated by applying conditions for partnership arrangements. This may have the disadvantage of forcing partnerships between organizations which may not have a strong inclination or incentive to collaborate. However, it is clear that greater efforts are needed to address capacity issues in competitive grant schemes, either by placing conditions on partnerships, supporting complementary capacity strengthening activities such as training courses (see the example of PAEPARD below) or by making provision for mentoring activities.

The Research into Use programme (RIU) supported by the UK, and the DURAS project, funded by the French government, are two more examples of programmes designed to support research and innovation in multi-stakeholder ARD initiatives (see box 7) to render research more inclusive and demand-led. Both initiatives funded competitive grant schemes which sought to promote innovation through multi-stakeholder partnerships.

In this kind of initiatives it is important to recognise the time element: it takes several years of support to institutionalise these kinds of changes, if they are to persist beyond finalization of the support projects. In general, the projects do not last very long (three to four years at maximum) and the amount of funding per project is relatively small, thus limiting the scope for capacity development. However, a programme like DURAS went further than most competitive grant schemes in addressing the clear need of members of the research teams to learn how to work together effectively.

#### **Box 7 Multi-stakeholder initiatives to make ARD more inclusive and demand-driven**

The Research into Use (RIU) programme aims to identify processes for getting wide-scale adoption of research products. RIU's Africa Country Programme worked with innovation programmes in target countries and one of the objectives was to explore how capacity development could best support the overall aim of getting research into use.

**DURAS: Promoting Sustainable Development in Agricultural Research Systems**

The project funded by the French government (2004-2008) was designed to strengthen involvement of southern stakeholders in ARD. The primary aim of the competitive grants scheme used to encourage involvement of organizations from the private sector and civil society was to support the generation of new research technologies and methodologies and to scale up innovation practices. To achieve this it was important to strengthen the capacity of participating organizations to collaborate effectively and to learn lessons from the innovation process. This was done through visits to project teams by resource persons and workshops for project leaders. In some projects, also some short training courses were organized on technical topics as well.

### **4.3.5 Implementation arrangements**

In Africa, both the EU and some EIARD countries channel resources for capacity development for ARD to regional or sub-regional organizations. The rationale is that these organizations potentially bring economies of scale, that they are best placed to address issues of regional concern and can share lessons and good practice among member countries. Also, decreasing capacity within

donor organisations which are under pressure to reduce their staffing, may play a role to provide support to bigger organizations, instead of managing a large and diverse portfolio of cooperation with a larger number of smaller entities.

There is no clear evidence as yet to suggest that supporting regional agricultural research organizations has added substantial value to investments made at the national level. CORAF/WE CARD and ASARECA are engaged in capacity development through several programmes and projects, e.g. to improve capacity to conduct situation analyses, needs assessments, gender analyses, to design M&E systems, etc. Although both have developed a strategy in this respect<sup>19</sup> until now they seem not to avail of a consolidated package for Capacity development to enhance the capacity of their member organizations for effective participation in the respective sub- regional programmes and projects.<sup>20</sup>

### *Linking different stakeholders*

The EC project supporting PAEPARD has a work package specifically geared to capacity development and it is investing to support the development of multi-stakeholder partnerships over a considerable period of time. Through open Calls consortia are selected and provided with seed funding to prepare proposals targeted at particular funding programmes. In this way consortia get the means to hire facilitators who provide support to develop the proposals during project inception workshops and follow-up activities.

Based on the premise that formal research organizations tend to play a dominant role in most current ARD teams while other partners may not be as actively involved, one of the central aims of PAEPARD is to ensure that civil society organizations play a major role within the ARD consortia, so that more actors from the institutional context in which ARD is taking place, get engaged. Therefore greater attention is given to support development of new partnerships. Identifying and addressing the capacity deficiencies of civil society organizations in such partnerships continues to be a challenge. More work needs to be done to develop tools and methodologies to address this.

**Box 8 NICHE, the programme for the Netherlands Initiative for Cooperation in Higher Education**, is formulated through tri-partite consultation among the government agencies in the recipient countries, the Dutch embassy and NUFFIC. A condition to qualify for funding is that the request for financial support is formulated by the applicant organizations themselves, without interference from the organizations tendering for implementation of the support programme/project. The criteria to assess project proposals favour systemic, multi-stakeholder approaches and inclusion of local and/or regional partner institutions.

## 4.4 Development focus

Capacity development initiatives for agricultural research differ in the extent to which they explicitly support developmental objectives. Some have a strong emphasis on scientific advancement or on increasing agricultural production, while others are geared more towards enhancing the productivity and income of small-scale producers. Yet other initiatives may focus

<sup>19</sup> The recent MTR of ASARECA emphasised that ASARECA's role should be to utilise existing capacity in the region (as SCARDA has done) and promote exchange of experiences. The capacity of the NARS in the 10 countries is a lot bigger than the capacity of the ASARECA secretariat.

<sup>20</sup> Both organizations received funding from the UK to support processes for institutional change.

on the organizational, social, managerial and/or policy dimensions of agricultural or rural development.

It goes without saying that the nature of the development focus is directly linked to the overall goal of the support programmes for capacity development, and that it is a factor that greatly influences the other features of these programmes, like the level of intervention, the capacity domains addressed, the beneficiaries aimed at, and the institutional arrangements chosen for programme implementation.

The Programme on Transformation of Agricultural and Natural Resources for Improved Livelihoods (PANTIL), funded by the Norwegian government, is an example of a capacity development programme which achieved substantial development impact (Box 9). PANTIL supported collaboration between Sokoine University of Agriculture in Tanzania and the University of Life Sciences and the College of Veterinary Sciences in Norway. The programme combined support to human and physical capacity at Sokoine University with technology development and dissemination through multi-disciplinary research teams in 18 districts in Tanzania.

5. A mid-term review (MTR) of the programme conducted in September 2008 observed that PANTIL is a very relevant program. The programme addresses both women and men smallholders' urgent needs for new and appropriate technologies while SUA needs to strengthen its human and physical resource capacity. Hence SUA's role as an agent of change for development and improvement of rural livelihoods has been strengthened.

**Box 9 PANTIL, the programme on transformation  
agricultural & natural resources for improved livelihoods**

PANTIL (2005-2010) - a programme for capacity development to reduce poverty and increase food security- was a follow-up to three projects for, respectively, food security and household income for smallholder farmers in Tanzania (TARP, 2000-2005), Gender-sensitive Research Against Smallholder Farmers Poverty (GRASP, 2000-2005), and Future Opportunities & Challenges in Agricultural Learning (FOCAL, 2003-2006). The main programme goal was that the Sokoine University for Agriculture, SUA, would contribute to increased economic growth, reduced poverty and improved social well-being in Tanzania through transformation of the sector of agriculture and natural resources addressing the needs of the farming communities by creating the basis for a system for research and outreach concerning agricultural and natural resources. A mid-term review of the programme in 2008 concluded that the project reached over 2,000 farm families with a range of productivity-enhancing and poverty reducing technologies.

## 4.5 Systems orientation

Needs of individual livelihoods vary according to their specific features and the unique features of the situation they find themselves in, the way they assess the conditions they are facing, and their ambitions, aspirations, and priorities, and the actual choices they make. In the search for well-being, people try to spend their time, energy and resources in such a way that they can satisfy most of their needs. They do not necessarily aim at maximum financial gains or production volume in the trade or job they perform, rather they are looking for opportunities to get the best returns on their efforts in accordance to their objectives. Farmers (and researchers) are no different in that respect.

For ARD – especially ARD focussing on Food Security and Poverty Alleviation - this implies that research, apart from the technology of the agricultural practices it is investigating, explicitly has to take into account the economic, social and institutional aspects of the context in which such practices are being applied. This substantially complicates the set-up, elaboration and application of the way the research is to be conducted.

Table 1 - Comparing programmes regarding the bias for systems approach  
 [from 1 = very systems-oriented to 5 = not (or hardly) systems-oriented]

	1 very systems oriented	2 OD with attention for IS	3 Intermediate	4 mostly individual some OD	5 Individual TOT
AU			APPEAR		
BE				IUC	
CZ				Moldova	Mongolia
DK	UniBRAIN		BSU	PRCP	
FR		DURAS			
GE				Exceed	
GR					scholarships grants
IT					
NL		NICHE		NPT	
NO	EPINAV		PANTIL		
PO					
CH		NCCR North- South		SCOPEs	RFPP; young scientists
EU	PAEPARD				
UK		SCARDA/ SCAIN			

TOT = Transfer of Technology      OD = organizational development  
 IS = institutional strengthening

Although this insight dates from more than 30 years ago, and has given rise to the concept of farming systems and research methodologies for system analysis ( Farming Systems Research, FSR) – the complexity of this type of research might explain why in many research institutes most attention – and thus also most resources – is still focused on and mainly restricted to technical subject matter while little consideration is given to the economic, social or institutional dimensions of the context in which the technology eventually should be applied.

In Table 1, some of the main capacity development programmes of selected European countries and the EU are categorized according to the extent to which they show a systems orientation. The underlying assumption is that there is a spectrum from individual training to a focus on organizational development and finally to support for institutional strengthening; and that this broadly reflects the degree to which projects and programmes involve a systems approach. Although, there is only a small number which show a high level of systems orientation, there are several which are at least partially geared towards systems approaches. The three initiatives classified as ‘very systems oriented’ are all relatively new initiatives and it will be important to derive lessons from their implementation to inform future capacity development planning.

## 4.6 Sustainability and risks

Other aspects in the initiatives in support of capacity development for ARD easily neglected are the necessity to develop the skills, knowledge and attitude for careful situation and needs analyses,

and the attention to be given to the formulation of a clear exit strategy and institutional embedding of these initiatives. The Belgian DGDC evaluation study shows that there is a general lack of systematic situation analysis to assess the existing capacity, and little attention is being paid to exit-strategies and institutional development.

The Austrian APPEAR programme works through establishment of academic partnerships between Austrian research institutes and sister research institutes in recipient countries. Partnerships are said to be generally led by an Austrian institute for higher education. If the APPEAR projects contain a component to build management capacity for international projects, does this capacity focus on bilateral contacts with Austria, or does it cover international contacts in general?

Based on an evaluation of its NFP and NPT programmes for the 2002-2009 period, NUFFIC has made the quality of the exit strategy suggested by the organizations tendering for implementation of the NICHE projects for Capacity development a selection criterion. NUFFIC also encourages recipient organizations to actively assume responsibility for administration and management of (part of) the project budget.

For the present study it is worthwhile to investigate how much time, effort and resources the partner institutes involved commit to the design of a balanced approach to innovations which should be socially acceptable, ecologically sound, economically affordable and technologically safe and feasible.

#### **4.7 Measuring progress and outcomes of capacity development for ARD**

The scope and depth of the study of the initiatives of EIARD member countries on capacity development for ARD are conditioned by the timely availability and accessibility of sufficient reliable and relevant data. Therefore, and because Capacity development is all about learning and M&E is the most appropriate tool for that purpose, we included the way in which the countries measure and report the effects of the support programmes on capacity development for ARD as one of the assessment criteria in the mapping study.

The core of Capacity development is to instil, strengthen and consolidate a learning attitude in people, in their organisational culture and among the various actors involved. Monitoring and evaluation are very instrumental and indispensable tools to this end as they are designed for systematic data collection, analysis, reflection and assessment of the findings. Therefore, the level of success achieved by the programmes and projects for Capacity development is to a high degree determined by the performance of the M&E in use in these initiatives (which includes reporting on findings and outcomes and getting feedback from the relevant users).

Although the importance of capacity development for ARD is widely recognized, it is surprising how few programmes for capacity development have been systematically documented and thoroughly monitored to gain a better insight of the processes, conditions and variables at play, in order to substantiate and quantify the factors that can decisively determine success and/or failure of these programmes.

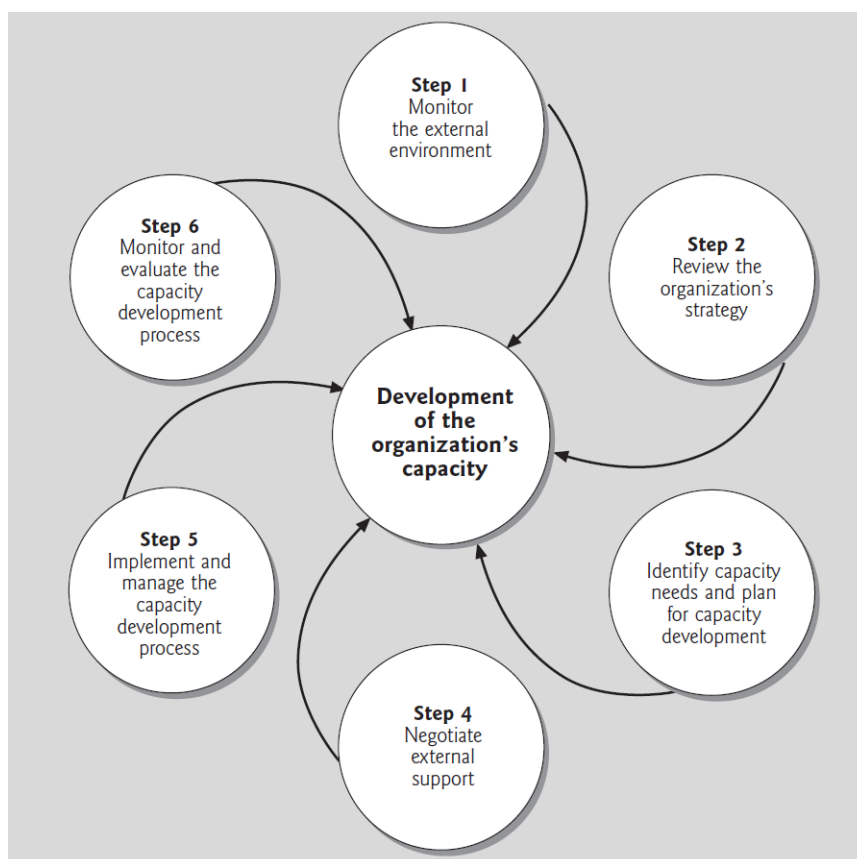


Figure - 2 Steps in a holistic approach to capacity development (after Horton, 2003)

Figure 2 shows how in a study<sup>21</sup> on the benefits derived from projects for Capacity development, an ISNAR research team gathered data on the subsequent phases in the development of an organization's capacity in order to learn about the effectiveness of the measures taken in the various steps of the process, and about factors that were conducive or adverse to the goals aimed at.

At individual level the most significant effects were measured in the realm of motivation: people who had participated in the capacity development activities felt their motivation had increased because they had learned new concepts, received new ideas, and different perspectives, and had become acquainted with methods and tools they could use in their daily professional tasks.

Evidence of improved organizational performance was only found where there was:

- a pressing need for change;
- support from the top management making available the necessary resources and staff;
- a sufficient number of people within the organization actually collaborating;
- authorization to adapt procedures and institutional arrangements; and
- adequate management to introduce, facilitate and apply the change process.

From the aforementioned factors, a project for capacity development can effectively do most by engaging the support of top-managers and the involvement of a critical mass of staff. The other

<sup>21</sup> Evaluating Capacity Development in Planning, Monitoring & Evaluation, Horton, D.et.al. ISNAR Research Report no.17, The Hague, 2000.



factors are much more likely to be influenced by the internal dynamics of an organization and the institutional environment in which it operates and are less easy to influence.

Table 2 - Measuring progress and outcomes

	project/programme		supervisory body	systems reviews	Guidelines M&E	I =intended A =applied	remarks
AU	APPEAR	2008-2014		?	?	?	-
BE	CIALCA UDC BFFS BELSRO	2007 2010	DGDC	?	?	I	focus on individuals; M&E needs upgrading
CZ				?	?	?	
DK	ENRECA UniBRAI N	2008	DANIDA		ROACH; outcome evaluation	A	focus on organization level and institutional arrangements
GE	EXCEED	2009-2014	DAAD	-	?	?	multilateral university cooperation
IT	MSc courses		DGCS	-	Sector guidelines	I	collaboration among universities focused on the individual level
NL	NPT NPF NICHE	2002-2009 2010-2014	DCO/DGIS	in use	5C model	A	switch to OD/IS made; M&E being upgraded
NO	TARP/ GRASP PANTIL EPINAV	2000-2005 2005-2009 2010-2014	Evaluation Department	in use	defined	A	matching capacity development at individual & organization level
SW	SAREC	2007-2012	evaluation & internal audit	in use	not found	A	
CH	KFPE NCCR RFPP	2009-2010	SDC	in use	defined	A	long-term commitment for organizational change
UK	SCARDA SCAIN	2007-2010	DFID	In use	defined	I	Main emphasis on organizational level

The facility with which we could find data concerning the results of programmes and projects for Capacity development in ARD varied greatly among the European countries. Information we were able to obtain on specific programmes and projects is summarized in Table 2. Few European governments measure the benefits of their support for capacity development for ARD systematically. This is caused by various factors:

- The evaluation of DGDC's educational programmes found that there were deficiencies in the M&E systems which made it difficult to obtain relevant data from the various actions it supported. This observation highlights the need to establish clear links between policies, programmes and specific interventions and to have a systematic approach to monitoring and evaluation of results.
- Capacity development for ARD is not a specific goal in itself in the policies for development cooperation, but most often a specific objective for a project component, or a sub-project within, e.g., a programme for Food security, Agricultural and/or Rural Development, Poverty Alleviation, Higher Education, or part of an inter-university collaboration programme.

- The support programmes are implemented by various government departments, institutes and services, or through NGOs, CSOs or the private sector whilst there is no focal point where all the relevant information is systematically and timely collected, analysed and reported, and that provides feedback to the various parties involved.
- Other variables at play are whether programmes operate from a systems perspective or on from a less comprehensive basis, whether support to capacity development is provided through multi-lateral channels, through GCIAR institutes, through basket-funding, or via bi-lateral cooperation. Often, within multilateral development cooperation support to capacity development for ARD is not specified.
- Apart from the imperfections in the information management on the programmes in support of capacity development for ARD, there are also methodological and practical difficulties in establishing impact attributable to capacity development interventions. This is partly because it is difficult to measure and attribute changes in knowledge, skills, behaviour and attitudes as a result of capacity development activities.

In all, this implies that it is difficult to collect evidence of the outcomes of the support for capacity development provided or received by the various countries, which may eventually undermine public support for the support programmes concerned.

However, such difficulties can be effectively tackled. In most countries efforts are being made to improve the information management regarding the various types of support provided in capacity development, and specific guidelines are developed to improve the M&E systems in this respect. Some departments, agencies and organizational entities in charge of programmes for capacity development design and apply alternative approaches to register results achieved. For example, in the case of a project on pigeon-pea breeding in India, ACIAR documented a cost-benefit ratio of 1:28 for the capacity development component. Approaches such as those used by ACIAR need to be used more widely and the findings made publicly available<sup>22</sup>.

## 4.8 Institutional embedding

Institutional Embedding of an initiative for Capacity development refers to the level of integration achieved in the existing social tissue of the action domain which it is meant to improve. For sustainability's sake, projects or programmes for strengthening and consolidating capacity development should attempt to achieve institutional embedding right from the start of their implementation (see box 10).

This implies that:

- Actors in the same action domain or in adjacent, related fields acknowledge that the initiative concerned is also an actor to take into account, and deserves their attention;
- Strategic actors are willing to establish and maintain a link with the project concerned – e.g. by participation in an Advisory Board, a Coordinating Committee, a Supervisory Committee or to contribute to a Task Group;

<sup>22</sup>See: A framework for assessing the Impact of Capacity building, by Templeton, D. from the Australian Centre for International Agricultural Research, Canberra 2009.

#### Box 10 Capacity development of the Food Sciences Department at the University of Zimbabwe

From 2004-2008 the Wageningen University & Research Centre was collaborating a NUFFIC funded project of Strengthening the Capacity of the Agricultural Faculty of the university of Zimbabwe in the design, elaboration and implementation of an MSc course in Food & Nutrition. One of the mechanisms created to give the MSc credibility, professional, political and institutional back-up was a Supervisory Committee in which major stakeholders from education, from agriculture, from government and from the Agrifood business were participating. The committee convenes twice a year, and during the meetings the results from the course, the monitoring results, and the planning are discussed. Content, methodology, participants, implementation problems and achievements are reflected upon, and so are latest trends, developments, policy alterations and perspectives for adaptation and improvement.

Source Marianne van Dorp, Capacity Development 2010

- The initiative is granted a juridical status, a legal capacity with rights and duties, a mandate, authority for decision-making that is respected by third parties;
- Affiliations to other actors are defined, and the initiative's competence area and qualifications are validated by law and practice;
- The initiative concerned is effectively operating in its institutional setting.

The Belgian DGDC evaluation clearly states that the university councils, which de facto are the main channel for Belgian aid to Higher Education, challenge the principles espoused by the international community to use national or regional systems. This seems to indicate that these capacity development initiatives still are far from being "institutionally embedded" in the recipient countries.

GIZ from Germany focuses most of its support in capacity development on international issues, primarily targeted at research centres or associated centres from the CGIAR rather than regional or national agricultural research. DAAD supports Centres of Excellence and Centres of Competence, the latter ones intended *to become think tanks to solve global challenges by suggesting solutions to policy makers, donors and practitioners*. The Centres have 5 years to prove their utility "to generate outputs demonstrating their value".

There is no evidence that these Centres have strong ties with the day-to-day reality in their own country. National decision-makers might be more readily convinced of the Centres' value if they got worthwhile advice to solve local and national problems, instead of suggestions how to deal with global challenges. It would be worthwhile to check which criteria prevail: national relevance or international ones. That would also answer the question how well such CE are institutionally embedded in either context<sup>23</sup>.

<sup>23</sup> Comparison of this model to the CE of EAAPP might be interesting – even if that is not a European funded programme, but a grant to EA countries.



## 5 Cross-cutting issues of gender and youth

### 5.1 Gender and ARD

Many of the EIARD countries reviewed in this study view gender issues as a priority in their overseas development initiatives and these are often linked to wider diversity issues; for example, respect for the rights of ethnic minorities or groups of people with particular physical conditions. With regard to gender specifically, this reflects the general focus on achieving the MDGs, with targeting the promotion of gender equality and the empowerment of women (MDG3).

In some countries policy prescriptions on gender have been translated into more concrete plans. For example, Germany has a Development Policy Action Plan on Gender which includes a systematic risk assessment for women. The management plan for 2010-2013 for the Belgian Development Cooperation has two priority themes, and Gender equality and empowerment is one of them<sup>24</sup>.

In several EIARD countries at programme level there is a focus on gender issues. For example, Austria's Higher Education strategy stipulates that gender mainstreaming should be done throughout the programme and project cycle. Thus the Austrian Partnership Programme in Higher Education & Research for Development (APPEAR) has a gender strategy and the document is made available to all applicants for funding. Gender is one of the evaluation criteria to assess the suitability of project proposals and applicants need to demonstrate that they have understood the issues and addressed them adequately in their submissions. In some countries, targets are set for the proportion of scholarships for graduate or postgraduate studies awarded to women.

However, meeting such targets in itself does not guarantee the desired results: evaluation of educational programmes funded by the Directorate for Development Cooperation (DGDC) in Belgium revealed that women were awarded about 30% of the scholarships (DGDC, 2007), but there were few gender specific indicators in the programmes and little evidence of positive gender mainstreaming outcomes.

Box 11 summarizes the approach DFID (UK) practices, providing a framework to ensure coherence across programmes and other levels of intervention. The DFID approach highlights the multi-dimensional nature of gender issues, including the need to ensure that research is relevant to both men and women and that women have equal opportunities in the workplace and in gaining access to higher education. In the context of the growing interest in innovations systems approaches, the recommendations made in the gender and innovation review of conducted under the RIU programme are important. In particular, the need to go beyond gender analysis and to use gender learning as a means of developing capacity is highlighted.

To improve gender outcomes in support to research and education organizations, greater consideration should be given to initiatives that address the specific needs of female researchers early in their careers. Mentoring approaches are well suited to this and the AWARD programme supported by the Bill and Melinda Gates Foundation is an example of good practice which could

<sup>24</sup>The second priority theme is environment and climate change.

### Box 11 An integrated approach to mainstreaming gender in research

In the *White Paper Eliminating World Poverty: making governance work for the poor* [DFID, 2006] the United Kingdom placed gender equality and women's rights as priority issues in its development policy. DFID then drew up a gender equality action plan on how to achieve this. One of the results areas in the plan was to build capacity in gender equality among international networks and DFID staff. Another result area related to the necessity to generate better evidence on the impact of the initiatives on gender equality and women's empowerment. A *key indicative activity* to support generation of better evidence was to "develop guidance that increases integration of gender equality and effectiveness of communication in DFID-funded research." This led to the publication of a paper on mainstreaming gender in research (2008) which built on a global consultation DFID organized to help shape its research strategy for 2008-2013.

The paper on mainstreaming gender in research indicates DFID's Central Research Department is committed to ensure that men and women benefit equally from capacity development opportunities. It also the intention to support its research partners to acquire the capacity to undertake gender analysis in their research. The paper refers to several key issues for research relating to agriculture and economic growth, such as barriers to women's economic participation, policies to facilitate access to the labour market, and labour-saving technologies that allow them to engage in other economic activities.

The RIU programme shows how gender issues are incorporated into capacity development at operational level. In the RIU's programme in Nigeria, women are actively involved in the three innovation platforms that were established (24-56% of the members). In the cassava platform, peeling tools were introduced to reduce drudgery, and 450 widows got trained in value addition for increased income. A study presenting a synthesis of lessons from gender-related activities in the overall programme makes two main recommendations (Kingiri, 2010):

- Emphasis should be placed on gender learning as opposed to gender analysis.
- There should be a shift from women's empowerment through enhancement of individual skills to addressing gender issues through a broader systems perspective so capacities can be built through various entry points.

Monitoring of implementation of the gender equality action plan is done on an annual basis and has resulted in a series of reports documenting progress. Monitoring at the programme and project level feeds into this and outcomes are made available in formal reports and through summary data on programme and project websites.

Source: DFID documents (as indicated) and Kingiri (2010)

be replicated more widely<sup>25</sup>. A practical measure is to improve the capacity of ARD researchers to undertake gender analysis in their work, as emphasised in the strategy of the UK's Department for International Development. It is also helpful to identify factors constraining women's participation in economic activities and to propose measures that support their access to the labour market.

Gender analysis can reveal useful information on differences in how men and women can be affected by particular issues. E.g., a recent evaluation of SIDA's agricultural programmes drew attention to the different ways in which men and women are affected by climate change (greater scarcity of fuel wood and lowering water tables increase the household chores for women and girls<sup>26</sup>. Germany's action plan on gender recognizes that women will be hardest hit by yield losses

<sup>25</sup> No formal evaluation of the impact of the programme has been undertaken, but personal testimonies of awardees suggest that there are significant benefits.

<sup>26</sup> Gender-aware approaches in agricultural programmes: a study of SIDA-supported agricultural programmes, Farnworth, C.R. (2010)

resulting from increasing climate variability and change, especially in view of the difficulties they face in securing tenure of the land they farm. Therefore, the aim is to mainstream gender in Germany's strategy on adaptation to climate change (BMZ, 2009)<sup>27</sup>.

## 5.2 ARD and youth

Young people are defined by the United Nations as persons aged 15 to 24 years of age. In developing countries, this group comprises approximately 20% of the population. This figure is likely to increase due to the large proportion of the population currently under the age of 15 years. Young people are a large potential resource in rural communities but this potential is not being realised. As a result there is high unemployment among young people in rural areas. This leads to high levels of migration to urban areas and the ageing of rural communities.

Partly, this is because young people lack access to land, finance, business services and quality training and the situation is especially acute for young women (FAO, 2011). Also, high levels of risk and low incomes associated with subsistence farming, and often the high work load in terms of physical labour required, low level of availability and/or affordability of tools, equipment, machinery and services imply that there are few incentives for young people to work on the land.

### *Educational opportunities and employer needs*

The low interest of rural youth in farming is mirrored by the perception among school leavers in many developing countries that agriculture is a profession which offers limited opportunities. In general, in many developing countries little attention is given to agriculture in primary and secondary education, and vocational training in agriculture is hardly developed, while in Higher education and universities alike, agricultural programmes have not evolved rapidly enough to meet the changing needs of the market place. Recent studies have shown that agricultural graduates are not equipped with the type of skills that employers are now seeking.

New approaches are needed to attract young people into agriculture and the educational system has to evolve so that it responds accordingly. There is a need for more 'soft' skills such as facilitation, negotiation and communication which will enable graduates to interact more effectively with people from a diverse range of organizations. They need to be more familiar with the business aspects of production and post-production processes. They must also have opportunities to acquire and utilise up to date information through electronic systems so that they respond to emerging areas of knowledge and communicate it to those who will benefit from it. The acquisition and use of practical skills also helps to build confidence in graduates and enhance their self-motivation (Blackie et al., in preparation).

More support for vocational training is required and this should have a strong focus on enterprise development, information and communication technologies, as well as practical farming skills. In general, there is a gap between the institutes for Higher Education and the institutes providing technical vocational education and training in agriculture, and there are only a few examples of policies to bridge this gap. However, the availability of suitably skilled higher and mid-level technical professionals is of crucial importance, especially for the successful development of innovations through applied research.

<sup>27</sup> Development Policy Action Plan on Gender 2009-2012. BMZ (2009).

There seems to be very little investment from European donors in vocational training, as compared to academic training. However, some donor organizations do support programmes which work with rural entrepreneurs to help young people acquire new skills, although they tend to place emphasis on identifying opportunities outside subsistence farming where anticipated rewards are considered to be greater.

PROSPERER, the Programme of Support for Rural Microenterprises and Regional Economies funded by IFAD, is one of these programmes which supports young apprentices in rural trades, including agricultural tool making and farming. The programme has trained 800 young apprentices and aims to increase this to 8,000 (IFAD, 2011). Some European donors support similar approaches. German development cooperation has a special focus on improving training and employment opportunities for young people in rural areas (BMZ, 2006). Denmark used to support the DATICS in Uganda (District Agricultural Training institutes or so), but has now discontinued this support.

### ***Opportunities or young professionals to learn and gain experience***

The Young Professionals Platform for Agricultural Research for Development (YPARD) is a network of young agricultural researchers which facilitates information sharing and interaction between members<sup>28 29</sup>. YPARD will shortly launch a new mentoring programme which is designed to contribute to the development of young professionals by providing them with support, expertise and networking opportunities. In many organizations, the capacity needs of younger staff are often neglected. For example, they are frequently denied the opportunity to gain experience through attending workshops, meetings and training events as more senior staff are given priority. Mentoring is an important means of supporting younger staff and developing a more dynamic and productive relationship among employees at different levels (cross-reference to the earlier sub-section on mentoring).

The recent rapid increase in access to the internet, and the dramatic expansion of mobile phone usage in rural areas provide new opportunities for information exchange, data collection, management, retrieval and supply, and knowledge development. These technologies facilitate access to relevant information sources, input suppliers, support services and markets. By acquiring skills in their use, young people are also more likely to identify other business opportunities which complement their farming activities by enhancing the productivity of their efforts, improving the quality of the produce, and/or using the scarce resources available in a more efficient and sustainable way.

More resources should be directed towards support capacity development for young people in agriculture. This should include support for the development of entrepreneurial skills as well as guidance on the use of new information and communication technologies. The emphasis must be on developing skills which will help young people in rural areas to generate reasonable levels of income. Only then will they have the incentive to stay and play an active part in stimulating local economic development.

<sup>28</sup> An analysis of the demand for agricultural graduates in the CORAF-WECARD, ASARECA, and CCARDESA sub-regions of Africa Blackie, M., Sanyang, S., Macala, J. and Methu, J. (in preparation). SCAIN project briefing paper.

<sup>29</sup> See the YPARD website at <http://ypard.net>.



## 6 Conclusions and recommendations

1. *Support to capacity development for ARD should be enhanced if the projected levels of investment in ARD are to generate sustainable returns.*

There is general recognition of the need for a substantial increase in levels of investment in ARD if agricultural productivity and poverty reduction targets are to be met. Such investment should come from national governments as well as international donors. However, the capacity of national agricultural research systems, especially in Africa, to utilise the increased resources in an effective, efficient and sustainable way requires that the organizational and institutional capacity of the major stakeholders in the innovation processes should be enhanced accordingly to improve the relevance, quality and scale of research outputs.

2. *Capacity strengthening initiatives should focus more on organizational and institutional strengthening as opposed to individual training. Multi-stakeholder initiatives should be pursued, as the available evidence suggests these are likely to lead to larger impacts than those exclusively targeted towards (individual staff at) research organizations and institutes of higher education.*

Because the availability of data concerning policies and programmes on capacity development for ARD varied widely within and among the various countries in terms of their nature, type, specificity and agglomeration, it was difficult if not impossible to obtain specific information concerning the proportion of resources allocated by European governments to different types of intervention. However, it is clear that there is a strong emphasis on individual training programmes, in particular on postgraduate schemes funding studies at universities in Europe. It is likely that European governments will want to continue to provide this type of support.

Whilst recognizing this reality, we would argue that there should be a re-balancing of providing support at the individual level on the one hand, and at the organizational and institutional levels on the other. To enhance the impact of the training, priority should be given to students linked to relevant organizations in developing countries and research topics should be aligned with the ARD priorities in those countries. This implies considerable scope for revision of the selection criteria for students and the topics they study in their individual training schemes.

3. *The need to link up initiatives in Research, Higher Education and Vocational Training.*

Support for vocational training in agriculture in developing countries is extremely limited. This is partly reflected in the decline in the number of diploma-awarding agricultural colleges in developing countries. Aggravated by significant reduction in funding of extension services (and other agriculture-related professions and services) over the last decades, there is now a serious shortage of agricultural 'technicians' able to support farmers and provide them with relevant information. In view of the urgent need to fill this gap, imaginative solutions are required to provide relevant training to accrue the numbers of agricultural technicians with proper knowledge and skills. This can involve a combination of distance learning and in-service training to enable persons in employment to upgrade their skills. More resources should be directed towards supporting vocational training for young people in agriculture. Such capacity development should include support to learn business

management and entrepreneurial skills, and guidance on the use of new information and communication technologies. Rural youth should acquire skills helpful in generating reasonable levels of income. It is especially important to focus on the use of technologies which remove the drudgery of subsistence agriculture and add value to produce through improved post-harvest processes. Only then will they have the incentive to stay, participate in and contribute to stimulating local economic development.

4. *Greater attention should be given to applying participatory methods to identify capacity needs and to facilitate the institutionalisation of capacity strengthening processes and outputs.*

Prevalence of outdated programmes and curricula, combined with traditional teaching methods and persistent use of conventional, discipline-oriented research methods focused on improvement of technology in controlled environments has led to a situation in which agricultural graduates are not equipped with the type of skills required. Our review revealed little evidence that changing societal demands (from the commercial sector, from the industry or services sector, from producers and their organizations, or from the sector as such) are a major leading principle to guide the design and implementation of support programmes for capacity development through higher education and ARD.

The complexity of the challenges facing farmers, such as getting access to profitable markets, value chains, compliance with GAP rules and regulations, or how to adapt to a changing climate, requires graduates with a wider range of practical and ‘soft’ skills for effective communication and problem solving. Skills of this nature are also required to enable the different actors in multi-disciplinary ARD initiatives to interact effectively and establish productive partnerships. Partnership programmes with institutes for higher education in Europe should place greater emphasis on these areas.

In many African universities postgraduate programmes are scarce, which is a critical constraint and a key issue that needs to be addressed. Some European countries are providing support on a bilateral basis to universities in Africa, Asia and Latin America to develop MSc and PhD programmes. In some countries universities cannot grant joint degrees with partner universities in developing countries, which is a bottleneck for more integrated modalities of support<sup>30</sup>.

5. *Clarity of policies facilitates measuring results.*

Our study has revealed that few European governments systematically measure the benefits of their support for capacity development for ARD. This means that there is limited evidence of the beneficial outcomes of their support for capacity development and this may eventually undermine public support for such programmes.

This may be caused by the fact that benefits of capacity development in ARD take time to become apparent, and interference of other factors which complicates attribution and measurement of the impact of such programmes. Still it can be done: evaluation methods used by the Australian Council for International Agricultural Research show it is feasible and even suggest that returns to investment in capacity development for ARD can be considerable. Such methods need to be used more widely and the findings made publicly available<sup>31</sup>.

<sup>30</sup> E.g. by law Dutch universities are not allowed to issue a joint degrees with partners universities.

<sup>31</sup> A framework for assessing the Impact of Capacity Building, by Templeton, D.J. a contribution to the conference

6. *Monitoring and evaluation for institutional learning and accountability*

Participatory M&E and impact assessment procedures have a proven potential to enhance the effects of capacity development, to boost ownership and sustainability of programme impact. In addition to serving as a mechanism to ensure accountability, such procedures should become a tool for institutional learning for the stakeholders involved in and affected by the capacity development support programmes. The ultimate goal of capacity development in ARD is that organizations and their staff are capable to perform their tasks and duties according to their mandate to the full satisfaction of the people and societies they are serving, and the practice of participatory monitoring and evaluation is a powerful instrument to achieve that purpose.

7. *Periodic collection, analysis of data and sharing information on capacity development for ARD*

At European level it is important that essential features of national and EU initiatives are periodically collated, summarized and made available in easily understandable formats. Periodic and systematic collection of such data at country level is a pre-requisite to this end. Within the support programmes for capacity development in ARD, as well as across the various programmes structural attention is to be paid to the strengthening of good practices in M&E (including the report and feedback mechanisms that should come along with it), so that both the European countries and the partner countries avail of a comprehensive overview of their activities in this respect – information that up to now, but for a few exceptions, is scattered and fragmented. A well-elaborated system for participatory M&E is an excellent mechanism to support learning and knowledge exchange for all the parties involved.

8. *Capacity Development of organizations in the institutional context*

We argue that more attention should be given to the development of organizational and institutional capacity. Although there are relatively few programmes function in this way and there is ample scope for sharing ‘good practice’ and experiences among European and developing country partners, we have found some cases in which consideration has been given to integrate the programmes for capacity development in ARD within national frameworks.

The EC-funded EDULINK programme is an example of type of support, in which universities in developing countries take the lead in developing their own staff in response to national priorities, identifying capacity needs through a systematic participatory process, addressing these needs in a holistic manner, and facilitating change through regular learning and reflection. Such support needs to be carefully negotiated to ensure that the programmes reflect the needs at the universities while simultaneously contributing to their overall organizational development. Support should be provided over a period sufficiently long to allow measurable benefits to result and include a clear exit strategy at the outset.



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## Appendix 1 - Analysis Framework

Criteria to assess the policies and programmes on capacity development for ARD

### **1. Overall objectives of support for capacity development**

What are the overall objectives of support for capacity development in ARD? Pound and Adolph (2005) concluded that most countries in Europe pursue similar objectives. These may be summarized as the “generation of relevant knowledge and material research outputs that will sustainably increase the livelihoods of people in the South.”

### **2. Identification of capacity needs**

How are capacity needs identified? This relates to the extent to which developing country institutions are involved in the needs analysis. It also concerns whether these needs are linked to the wider institutional context in which organizations involved in ARD operate. Finally, it considers the degree to which the capacity needs identified are aligned with national priorities and reflected in national capacity strengthening policies and programmes.

### **3. Developmental focus of capacity development initiatives**

Capacity development initiatives for agricultural research differ in the extent to which they explicitly support developmental objectives. Some have a strong emphasis on scientific advancement or on increasing agricultural production. Others are geared more towards enhancing the productivity and income of small-scale producers, or improvement of food security of livelihoods.

### **4. Systems orientation**

Is support for capacity development targeted solely at individual organizations or does it take into account the agricultural innovation system within which it functions? To what extent are other organizations in the innovation system engaged in the capacity development process?

### **5. Type of intervention**

There are many different types of capacity development intervention which may contribute to a similar overall objective. These range from individual training activities, such as short courses or undergraduate/postgraduate programmes to initiatives which provide broad institutional support. Interventions may address specific technical skills, whether technical or ‘soft’ skills, or they may be directed towards enhancing capacity in research management. Related to this issue, is capacity development support geared towards younger staff or is there provision for post-doctoral fellows, mid-career professionals and managers? How are gender considerations addressed in these initiatives? Do the initiatives include support for dissemination and use of knowledge, as well as its generation?

### **6. Sustainability**

Is there a clear (exit) strategy for sustaining the capacity that is developed? If the interventions are short-term, has provision been made to ensure that subsequent support is provided from within the beneficiary organization(s) or from elsewhere?

Does the capacity development support involve partnership between different organizations? In particular, is their provision to enhance the capacity of local service providers?

### **7. Measurement of benefits**

How is progress monitored and beneficial outcomes measured? What indicators are used to measure success? What kind of M&E system is used? Is M&E used for learning?

### **8. Institutional embedding**

To what extent attention is paid to embed the Capacity development initiative into its institutional context? Implementation arrangements may be readily agreed upon and put in writing, but in reality often it is hard to stick to them during implementation. Supervisory bodies or monitoring mechanisms may not function as smoothly as predicted, and sometimes it is simply impossible to adequately react and give proper follow-up to the facts which are signalled. Institutional embedding often is of vital importance for the sustained impact of the projects and programmes concerned, but it also one of the most difficult aspects to establish. It requires persistence, commitment, and familiarity with the institutional environment. Most organizations and institutes involved are not eager to deviate from their fixed routines and procedures, or to modify these to create more synergy with the routines and procedures practiced by other organizations.

Table 3 - Programme analysis

Programmes	Overall goal	stakeholder involvement Identifying Needs H = high L = low M = medium	Type F = formal education I = interactive training P = action-Re, PTD E = empowerment	Implementation arrangements S = scholarships P = partnerships N = SKO/CGIAR C = competitive grant schemes	Development focus on HR = individuals OD = organizations IS = institutional strengthening	Systems orientation S = strong M = medium W = weak	Sustain ability & project duration H = high M = medium L = low	Measuring benefits N = # graduates & publications O = organizational performance A = accountability L = learning	Institutional embedding
AU	Strengthened institutional capacities in education, research & management	H	F: academic partnerships & postgraduate programs	S P	HR	M	M 2-3 years	N O	APPEAR explicitly strives to ensure partner organizations institutionalize outputs for capacity development
BE	Empowering local universities as institutes to better fulfil their role as development actors in society.	H	F IP: academic partnerships, research projects	S P N	IS	W	M 5 years	N O	Incorporating initiatives for capacity development is a guiding principle for IUC, but no information was found on its application
CZ		?	F		incipient	?	L		A priority in Czech politics is to build the capacity of its own staff in development cooperation
DK	Agricultural innovation and improved tertiary, research-based education in agribusiness in Africa	H	FIPE: incubators linking university education, research & business in sustainable agriculture	S P	Comprehensive HRD, OD and IS	S	H variable	O A	DANIDA addresses capacity development strategically: a conducive institutional context is of essential importance
FI	long-term cooperation in Res-D between universities in Finland and abroad support of global sustainable development, research & education		FIP: building partner networks to support sustainability	S P	HR, OD & IS through personal contacts institutional links & partnerships	S	H 4-5 years	N O L	Applying strict selection criteria to enable initiatives to grow roots in the institutional context of partner countries
FR	Enhanced involvement and scientific capacity of southern stakeholders in innovation in ARD	H	IP: multi-stakeholder partnership fostering involvement of non-traditional ARD actors	P N C	OD	variable	M	O A L	Based on evaluation findings ARD suggests to give further attention to local capacity building and adaptation to contextual differences

Table 3 - continued

GE	EXCEED	Strengthen institutes for Higher Education contributing to the MDGs and other goals of development cooperation in an innovative way in education, research & consultancy	H	IP: creating Competence Centres for research as think tanks for development	HRD, OD	variable												Competence Centres/ Centres of Excellence are to be embedded. In the institutional context, but the programme description does not provide data in this respect
GR		Improved research concerning capacity building and training	?															L yearly
IT	RUIS	Improved access and sharing of data on environmental and natural resources in the IGAD region	L	FI: capacity building, networking, trans-border cooperation	HR, OD	W												L 3 years
NL	NICHE	Strengthen institutional capacity for education and training of human resources in developing countries	M-H	FIP: demand-driven, result-based	HR, OD, IS Integrated Capacity Development based on a shared vision, commitment & active participation	M												M 4 years
NO	ARDEP	Improve quality of life and well-being through a powerful, effective, efficient system for research & outreach to enhance productivity of the agricultural sector in Malawi	H	FIPE	HR, OD ownership anchored in grass-root level	S												H 5-10 years
Po	CYTED	Promoting cooperation for scientific and technological innovations applicable in production systems and social policies for development of the Ibero-American region	M	FP	HR, OD, IS	variable												M
CH	NCCR	Sustainable development through research, capacity development and societal empowerment in developing countries & countries in transition based on partnerships	H	FIPE	HR, OD, IS	S												L 5 years
UK	SCARDA	Strengthened capacity and performance of national systems for agricultural research in key areas of their ARD functions	H	FIP	HR, OD	S												M 4 years



## Appendix 2 – Priority countries from EIARD development cooperation in Africa

	Au	Be	Cz	De	Fi	Fr	Ge	Gr	Hu	Ir	It	NL	No	Pol	Po	Swi	UK
Algeria						x									x		*
Angola		x	x			x											
Benin		x		x		x	x					x				x	
Burkina Faso	x			x		x	x									x	
Burundi		x				x	x					x					*
Cameroon						x	x										*
Cape Verde	x					x									x		
Central A.R.						x											
Chad						x										x	
Comoros						x											
Congo						x											
Côte d'Ivoire						x											
DRC		x				x	X										x
Djibouti						x											
Egypt				x													
Eq. Guinea						x											
Eritrea						x											
Ethiopia	x		x	x	x	x	x			x	x	x	x				x
Gabon						x											
Gambia						x											
Ghana				x		x	x					x					x
Guinea						x											
Guinea B.						x									x		
Kenya				x	x	x	x					x					x
Lesotho										x							
Liberia						x				x							x
Madagascar						x	x										
Malawi							x			x			x				x
Mali		x				x	x					x	x			x	
Mauritius																	
Mauritania						x											
Morocco		x				x									x		
Mozambique	x	x		x	x	x	x			x	x	x	x		x	x	x
Namibia					x	x	x										
Niger		x				x					x					x	
Nigeria						x											x
Rwanda		x				x	x					x					x
Sao Tome						x									x		
Senegal		x				x	x				x						
Sierra Leone						x				x							x
Somalia																	x
South-Africa		x			x	x	x			x			x				x
South Sudan							x										
Sudan						x					x	x	x				x
Tanzania		x		x	x	x	x			x			x			x	x
Togo						x											
Tunesia						x											
Uganda	x	x		x		x	x			x		x	x				x
Zambia				x	x		x			x			x				x
Zimbabwe						x				x							x

### Appendix 3 – Major programmes in capacity development for ARD among EIARD countries

Programme	Donor	Target countries <sup>32</sup>	Type of support								Project				
			Partner-ship	MSc	PhD	Short courses	Mentoring	Curriculum development	Management training	Alumni support	duration (years)	size [€]	annual budget [€]		
APPEAR	Austria	priority	x	x	x								2-4	50-130k	485,067
UDC	Belgium	20	x	x	x	x				x			5-10		
CIDA projects	Czech Rep	priority		x		x							1-3	35-420k	1,356,181
PRCP	Denmark														
DPP	Denmark												2-3		
UNIBRAIN	Denmark	SSA priority	x		x					x			5		
EDULINK 2 <sup>nd</sup> phase	EU	ACP & EU (EDF)	x							x			2-3	333k	5,300,000
ACP S&T	EU														
ICART	EU	SADC													
EXCEED	Germany		x	x	x				x						5,000,000
Scholarship	Greece			x	x								yearly		
IAO	Italy	priority		x									various	300k	603,450
NICHE	Netherlands	15 incl. most priority	x	x	x	x				x			3-5		37,000,000
SCARDA	UK	10 in SSA	x	x	x	x			x				3	N/A	3,500,000

<sup>32</sup> 'Priority' indicates that eligible countries are the same as the target

## Appendix 4 – Mapping AUSTRIA

### ***Policy***

The Federal Ministry for European and International Affairs (FMEIA) defines the strategy of the Austrian development cooperation ADC and prepares an implementation programme on a 3 –years base, whilst ADA, the Austrian Development Agency, is in charge of its financial management and implementation. ADA is also mandated to inform and educate the Austrian public on development cooperation issues. In 2009 Austria's total overseas development assistance (ODA) budget was €820m, of which 56% was for multilateral ODA and 44% for bilateral ODA. The current programme covers the period 2010-2012.

The goals of ADC are to reduce global poverty, contribute to peace and human security and preserve the environment in accordance with relevant international agreements like the MDGs and the Paris Declaration.

### ***Geographical priorities***

ADC has defined priority regions in Africa, Asia, Central America and South Eastern Europe. Target countries are Albania, Bosnia-Herzegovina, Macedonia, Serbia, Kosovo, Montenegro, Armenia, Georgia, Moldova, Burkina Faso, Cape Verde, Ethiopia, Mozambique, Uganda, Bhutan and Nicaragua.

### ***Thematic and sectoral priorities***

The thematic priorities for the ADC are Rural development and Education. Other priority sectors are Water & Sanitation, Energy, Investment & Employment, Promotion of small and medium-sized enterprises, Governance and Safeguarding peace & security.

### ***Agriculture and agricultural research***

Austria places support for agricultural development within an environmental context. Based on experience from programmes in Africa and Latin America, ADC promotes integrated and diversified production in smallholder systems at the local level. In a review study performed in 2009, the Development Assistance Committee highlighted Austria's comparative advantage in ecological agriculture (FMEIA, 2010).

### ***Capacity development***

The Commission for Development Issues (KEF) at the Austrian Agency for International Cooperation in Education and Research (OeAD) is supporting a development-oriented approach in research and science to bridge the gap between science and development. Although Capacity development is a priority in Rural Development and Education, no specific policy on capacity development for ARD has been defined.

Capacity development is one of six priority themes In the Austrian cooperation with Africa guided by the provisions of the AU-EU partnership. The strategy spells out the role of technical training in agriculture, water management and protection of natural resources to contribute to MDGs 4-7.

There are seven guiding principles in the strategy for higher education:

- 1) *Poverty reduction;*
- 2) *Demand orientation and ownership;*

- 3) *Context orientation and participation;*
- 4) *Inclusion, gender and female empowerment;*
- 5) *Good governance;*
- 6) *Harmonization and complementarity of national and international donor programmes; and*
- 7) *Results orientation and sustainability.*

### **Types of intervention**

*Multilateral* Austria is a member of ERA-ARD (the European network on ARD) which has a work package on capacity development, and ADC contributes a significant portion of its budget to support research in agriculture by selected CCGIAR centers (in 2008, 7% of ARD funds were allocated to CGIAR initiatives). In this support there is no explicit component for capacity development purposes, but individual initiatives may include activities in this domain. Multilateral spending on the agricultural sector also includes support to the reform process in the FAO.

*Bilateral* Historically ADC placed strong emphasis on scholarships for postgraduate students, and also nowadays, for example through APPEAR, the Austrian Partnership Programme in Higher Education and Research for Development . Such scholarships are closely integrated into projects to develop broader institutional capacity (see below for further details of the APPEAR programme).

### **Monitoring and evaluation**

To check the quality and impact of development interventions, the ADC regularly orders evaluations of programmes and projects to be conducted. The results of the evaluations are published so that taxpayers and decision makers have ready access to information on the outcomes of development cooperation efforts.

ADC made significant changes in the way it provides support to capacity development to improve the sustainability of the projects and programmes in this domain. These changes are based on the results of evaluation of its efforts in development cooperation in education (2007), and draw on international good practice and quality standards.

Current projects have a clear focus, both thematically and geographically, and are more strongly oriented towards institutional capacity development than before; applicants for grants for postgraduate studies have to show the relevance of their proposals for the broader institutional development of their host organizations

## **APPEAR: the Austrian Partnership Programme in Higher Education & Research for Development**

### **Introduction**

APPEAR is funded by the Austrian Development Cooperation (ADC). The programme is a vehicle for implementing ADCs strategy in support of HE & Research for Development funding partnerships between scientific institutes in countries in the South and in Austria. It also provides grants for postgraduate studentships. Its overall budget is about €5.3m, 70% of which is allocated to the partnership projects.

. APPEAR addresses the ADC priority countries: Burkina Faso, Cape Verde, Ethiopia, Kenya, Mozambique, Senegal, Uganda; El Salvador, Guatemala, Nicaragua; Bhutan, Nepal, and the Palestinian Territories. The thematic focus is quite broad; it includes rural development, environment and natural resources, and gender equality. Strengthening institutional capacities in higher education and research for development is a cross-cutting theme.

### **1. Overall objectives of support for capacity development**

The overall objective of the APPEAR programme is to “strengthen the institutional capacities in education, research and management in the priority countries of the Austrian Development Cooperation (ADC) through academic partnerships with Austrian academic institutions and Masters and PhD programme as a contribution to effective and sustainable reduction of poverty.”

### **2. Identification of capacity needs**

In line with the participatory approach of the programme, applicants have to show that project proposals are demand-driven, planned jointly by the partner organizations suggested and they have to outline the expected impact on the target group(s). To support the development of realistic and effective project proposals, preparatory funding can be provided to applicants up to €15,000 for a six-month period. The programme team also provides support to guide the development of the partnership.

### **3. Type of intervention**

APPEAR supports two types of activity administered under separate components: academic partnerships and grants for postgraduate programmes.

*Academic partnerships* in higher education, research and management are aimed at strengthening the institutional capacities of academic partner organizations in the South. The partnerships are supported through projects with specific objectives, and in general, they are led by an Austrian institute for higher education, though this is not mandatory (see annex 3 for the current 3-years partnership projects which focus on agriculture and rural development). A Call for proposals for academic partnerships is scheduled for October to December 2011. Projects selected for funding will have a duration of up to two years. Projects with two partner institutes may be granted between €50,000 and €90,000 per year. Funding for projects with more than two partner institutes varies from €50,000 to €130,000 per year.

*Grants for postgraduate programmes* (MSc and PhD) in Austria for students from eligible countries in the South. Scholarships for entry in 2010 provided €880 for MSc students and €940 for PhD students. Provision is made for travel costs, including field research, and there are allowances for language courses and attendance of conferences.

### **4. Developmental focus of capacity development initiatives**

The programme has a strong developmental focus, guided by the overall objective of the ADC to contribute to the MDGs and by the emphasis placed on demand-driven approaches to deliver measurable benefits to clearly defined target groups.

APPEAR has a gender strategy which applicants for funding can readily access (APPEAR, 2011). This strategy demands that proposals must incorporate gender perspectives in the project’s approach and activities. The extent to which this requirement is complied with is assessed in the evaluation of the proposals. In this way the program’s approach reflects well the gender guidelines in the strategy on higher education. In APPEAR there is no specific policy on supporting young researchers, or the role of youth in agriculture. However, grants for MSc and PhD courses are only given to men and women under the age of 30 and 35, respectively.

### **5. Systems orientation**

The programme supports projects which link organizations for higher education with other stakeholders to promote local social and economic development. E.g. the TRANSACT project in Ethiopia aims at enhanced linkage between research, higher education and extension in order to assist farmers in risk-prone rural areas.

## 6. Sustainability and risks

Sustainability is viewed from the perspective to strengthen institutional capacity in higher education, research and management of partners in the South. Results and Sustainability is one of the evaluation criteria for project proposals is and this links institutional capacity to the delivery of impact for beneficiaries. The relatively short project duration of two to three years may present a challenge to ensuring sustainability. However, some of the projects are targeted towards strengthening existing initiatives and consequently the risks of failure are low. E.g., the Changing Minds and Structures project in Nicaragua supports a participatory rural development programme that has been running since 2006.

## 7. Measurement of benefits

The guidance for good practice recommends that quantitative and qualitative measurements be developed and used by project teams to evaluate the dissemination or analyze the results achieved. The general guidelines indicate that a work plan with key milestones should be prepared, which the applicants must submit linked to the logical framework of their project proposal. Projects are required to submit annual reports on project performance and to provide information on progress made towards the projected results using relevant indicators. This suggests a relatively 'light touch' approach to monitoring and evaluation. We could find no evidence that evaluation findings are systematically compared to the outcome of the needs assessment and the assumptions made prior to the project's design and implementation.

## 8. Institutional embedding

The programme places particular emphasis on institutional development by making explicit efforts to ensure that projects outputs are institutionalized within the partner organizations. In the absence of a central coordinating entity for ARD, Austrian ARD programmes are planned by the individual institutes for research and development, in coordination with the respective line ministries.

### FUNDING MECHANISMS ARD

Organization	Funding	budget (2008) [€]
Federal Ministry of Finance	Targeted funding of the CGIAR	1,686,000
OeAD, the Austrian Agency for International Cooperation in Education and Research	Commission for development Studies (KEF)	90,000
Federal Ministry of agriculture, Forestry, Environment and Water Management	Programme for Research & Development (PFEIL 10)	50,000
The Ministry of Foreign Affairs	North-south Dialogue Programme OEZA	370,000
	Total	2,196,000

Source: ERA/ARD Nov 2009 [www.era-ard.org](http://www.era-ard.org)

**Projects in the agricultural sector supported by the Austrian Development Cooperation**

Country	Project title	Capacity development component	Duration
Ethiopia	TRANSACT: Strengthening Rural Transformation Competences of Higher Education and Research Institutions in the Amhara Region, Ethiopia	The project aims at strengthening the capacity of two universities and one research institute in Ethiopia to conduct more demand-led, effective research and development in North Gondar province.	2011-2014
Nicaragua	Changing Minds and Structures: the Nicaraguan Agricultural University's growing involvement with rural communities	The project objective is to strengthen the capacity of the Universidad Nacional Agraria and to provide assistance in becoming more responsive to the needs of poor rural families in various regions of Nicaragua.	2011-2014
Uganda, Kenya	WATERCAP: Strengthening Universities' capacities for mitigating climate change induced water vulnerabilities in East Africa	The project provides support to Egerton University and Makerere University to strengthen their capacities in addressing climate change induced water vulnerability and uncertainty.	2011-2014
Uganda	Promoting gender responsive budgeting and gender mainstreaming through research and research dissemination, gender responsive policies and strengthening institutional and management capacities	The project aims to strengthen gender responsive management capacities at Kyambogo University by promoting gender mainstreaming approaches.	2011-2014
Burkina Faso	Sustainable management of water and fish resources in Burkina Faso	Project in preparation. No details available yet.	

Source: website of the OEAD at [www.appear.at/project\\_portfolio/academic\\_partnerships](http://www.appear.at/project_portfolio/academic_partnerships)

## Appendix 5 – Mapping BELGIUM

### ***Policy***

In Belgium, the Directorate-General for Development Cooperation (DGDC) is in charge of development cooperation. DGDC activities are divided into 12 topics, of which Agriculture & Food security and Education & Training are the ones most closely related to capacity development in ARD.

In 2008, Belgium decided to step up its efforts to support agriculture and rural development. By 2010, Belgium should be spending 10% of its official development assistance in agriculture and rural development, and by 2015 even 15%, while over the past decade DGDC spent between 10 - 12% of its budget on Education & Training. The respective objectives were aligned with the MDGs, two of which concern education, and to new forms of aid (such as sectoral budget support).

### ***Geographical priorities***

To improve the effectiveness of bilateral aid, Belgium concentrates its international bilateral cooperation to a maximum of 18 countries. In 2007, the priority countries were: Mali, Niger, Benin, Burundi, Congo, Rwanda, Uganda, Morocco, SADC Region, Algeria, Senegal; Vietnam; Bolivia, Ecuador, Peru; and the Palestinian Territories. There is an on-going debate to reduce this number even further.

### ***Thematic and sectoral priorities***

Governmental development cooperation is restricted to five sectors: 1) Basic health care; 2) Training and education; 3) Agriculture & food security; 4) Basic infrastructure; and 5) Social structure.

Sectoral themes are: Equal opportunities for men and women; Environment; and the Social economy.

### ***Agriculture and agricultural research***

Agriculture and food security are priority areas for Belgium's international co-operation in 11 out of its 18 partner countries, and the DGDC is supporting structural interventions to boost food production, to provide humanitarian food aid and to promote private companies in agriculture. In 2010 Belgium allocated almost 10% of its ODA to agriculture, rural development and food security. Belgium's support to agricultural development focuses on institution building and empowering stakeholders in line with the DAC guidelines on pro-poor growth and agriculture.

### ***ARD related programs***

DGDC provides three types of support to its ARD programme, which is built on four principles: participatory approach, sustainable management of natural resources, gender equality and efficient and sustainable implementation procedures in development projects:

1. *Through direct bilateral assistance* to 18 priority partner countries implemented by BTC/CTB, the Belgian Technical Cooperation agency, partially funded through projects, training programs, technical assistance, financial cooperation and debt reduction measures.
2. *Through indirect (non-governmental) bilateral assistance.* DGDC finances programs to



strengthen the capacities of scientific and technical institutes in developing countries via *the Institute of Tropical Medicine (ITM), The Royal Museum for Central Africa (RMCA)) and the Royal Belgian Institute of Natural Sciences. Other key agents for ARD are the Inter-university Council of the French Community of Belgium (CIUF) and the Flemish Inter-university Council (VLIR), which are in charge of the University Development Cooperation program (UDC; see below). Also BELSPO, the Belgian Federal Science Policy Office supports ARD-oriented programs, and coordinates science policy on (inter)federal, and international levels.*

3. *Through Multilateral assistance.* DGDC also provides support through the EU, IFAD, FAO and to international research on agricultural techniques in particular through the CGIAR.

### **Capacity development**

For the Belgian development cooperation capacity building is a central objective, in particular aimed at strengthening the institutional capacity in partner countries, and an immediate action area for implementing the AAA. However the concepts ‘*capacity*’ and ‘*capacity building*’ are not clearly defined.

Belgium grants scholarships, funds technical assistance and makes efforts to strengthen partner countries’ procurement systems. DGDC attempts to align its scholarships to the priorities of the partner countries, and explores how to co-ordinate with other Belgian organizations granting scholarships, including universities and NGOs. Belgium intends to double its funding to scholarships and training programmes through all aid channels by 2015. DGDC’s *Harmonisation & Alignment Plan* (2007) gives guidelines how to use technical assistance to strengthen partners’ capacity, including by pooling funds with other donors.

### **Types of intervention**

According to the DGDC Evaluation report on education (2007) some 55% of Belgian ODA for “*Education or Training*” goes to Higher Education. Scholarships are provided through 15 different routes, which is causing some confusion in partner countries. About 30% of the scholarships were awarded to women, but because most files do not include gender specific indicators, little evidence is found of particular interventions or effects on gender. Most scholarships are used for studying in Belgium.

### **Monitoring and evaluation**

At national level no conceptual framework for capacity development has been defined, and for the time being there is no focal point to review the framework and draw lessons from these efforts. DGDC and BTC already concluded the need to define a joint approach and tools to support capacity development in partner countries.

In an evaluation on the role of NGOs in capacity development (2010) it was concluded that although the NNGOs acknowledge the importance of Capacity development, they seldom translate this insight into concrete operational strategies. In the sample of partnerships studied in the evaluation, it was found that:

- Support for Capacity development only plays a small role, both financially and in volume.
- The main focus is on training staff via conventional training and workshops, followed by support to organizational development.
- Institutional development receives less attention. Strengthening of partner organizations is hampered by an unclear vision and identity of the NNGO, and weak institutional set-up of new partner organizations

- NNGOs lack of expertise in capacity development, and they also lack critical mass.
- Thus far only few evaluations have been conducted, and attempts to translate the results into NNGO policies do not seem very successful. Most NNGOs have hardly begun to become learning organizations themselves. *The evaluation concludes that DGDC should pay particular attention to capacity building and that increased investment is required in learning and building knowledge on the subject.*

## Program: VLIR-UOS/ IUC

### Introduction

On behalf of the DGDC, CIUF, the *Inter-university Council of the French Community of Belgium and VLIR, the Flemish Inter-University Council* are in charge of UDC, the University Development Cooperation providing support to Southern research institutes, with capacity building as a specific objective. This mapping focuses on the perspectives of VLIR in the context of the Institutional University Cooperation, a sub program of the UDC to promote ARD. VLIR awards grants and scholarships for attendance of international courses and training programs. It is responsible for design and implementation of development programs which cover research, education and training, institutional co-operation, scholarly exchange, and research for policy preparation over a broad range of different themes.

### 1. Overall objectives of support for capacity development

The goal of IUC is *Empowering the local university as an institute to better fulfil its role as development actor in society*. This goal is to be achieved through a coherent set of interventions guided by the strategic plan of the partner university, improving institutional policies, the management and the quality of local education, research and societal service delivery.

### 2. Identification of capacity needs

VLIR-UOS works with open tender procedures in which academics at a Flemish higher education institute can submit project proposals in association with partners in the South. It is a competitive system that prioritises academic quality and development relevance. VLIR-UOS requires transparent, objective selection procedures and has not set quotas at the level of universities, countries, disciplines or sectors. Selection is based on peer review in Belgium and abroad. Priority is given to applicants from developing countries, working at universities, public authorities, research institutes, small and medium-sized businesses and non-governmental organizations, and in the domain of social economics.

### 3. Type of intervention

1. *Scholarships*: MSc and PhD scholarships in Belgium; mixed scholarships; short-term courses.
2. *Research projects*, mainly in technical and natural sciences.
3. *Institutional strengthening*: covering curriculum development and strengthening teaching capacity; building a critical mass of teachers through PhDs; support to university co-operation and coordination units; academic and research development; support through provision of ICT infrastructure, documentary resource, and equipment.

### 4. Developmental focus of capacity development initiatives

The South programs comprise projects aimed at building local capacity in education, research or service delivery in the South. *The North programs* are primarily implemented at the Flemish

institutes of higher education to build development expertise, policy support for development cooperation and strengthening social support in Belgium. Both programmes include academic objectives to bring about improvements at the partner universities, as well as development objectives aimed at changes in society.

### **5. Systems orientation**

The main target of all support programmes is Human Resource Development at individual level, but also attention is paid at organizational aspects, with some projects aiming at upgrading the capacities of partner organizations or in society at large.

### **6. Sustainability**

IUC is based on long term partnerships (10 years) between Belgian universities and Southern institutes for research and education. The geographical and thematic priorities of university co-operation are defined in Five-year plans, which also provide the framework for all VLIR-UOS development co-operation activities

For implementation of the policy agreement between the DGDC and VLIR-UOS, signed in 2010, VLIR will elaborate a country strategy paper for all partner countries reducing the number of countries to 20 as from 2013.

### **7. Measurement of benefits**

For some projects VLIR-UOS commissions external evaluations, and for others it requests self-evaluation. IUC programs are subject to external evaluation during identification (ex-ante), at mid-term and at finalization. VLIR-UOS has published evaluations on programs and projects and has set up a number of thematic advisory committees where promoters can share project results and opportunities. Their website disseminates evaluation reports and studies.

### **Evaluation results IUC/VLIR-UOS by DGDC**

The DGDC's evaluations on education (2007) and on capacity development (2010), indicate that:

- The policy framework of university co-operation allows for different types of intervention with different aims. Some explicitly seek institutional development of the Southern partner university and provide a range of inputs to that end; others are supporting academic co-operation with mutual benefit to the partners but with less explicit developmental aims for the partner university (or country).
- De facto the councils are the channel for all Belgian aid to the sector of higher education and a significant portion of all Belgian aid to education. This approach is at odds with the trend that the international community increasingly is using personnel of national or regional systems
- International academic networking is a valuable contribution to knowledge creation and sharing but not *a priori* a contribution to the stated developmental priorities of Belgium or the partner country.

### **8. Implementation arrangements and institutional aspects**

Guiding principles IUC are (1) academic leadership, (2) process facilitation, (3) pragmatic but transparent institutional arrangements, (4) incorporation into local structures and systems.

**FUNDING MECHANISM ARD**

<b>Organization</b>	<b>Funding</b>	<b>budget [€]</b>
DGDC in collaboration with VKIR-UOS	Institutional University Cooperation (IUC)	174,0000
	Own initiatives programme (OI)	2,120,000
	International Courses programme (ICP) International training Programme (ITP) and scholarships (ICP, VLADOC, INCO)	6,225,000
DGDC in collaboration with CIUF/CUD	Institutional University Cooperation (IUC)	393,981
	Own initiatives programme	1,800,073
	International Courses programme International training Programme	1,176,719
Belgian Science Policy Office (BELSPO)	ARD in Research programme	275,788
DGDC	CGIAR restricted core support	4,512,995
	CGIAR unrestricted core support	1,884,000
	<b>Total</b>	<b>20,129,186</b>

In 2008 DGDC contributed approximately € 11.7 mill to FAO and € 7.6 mill to IFAD;  
While DGDC contributed some € 6.4 mill to CGIAR (restricted and unrestricted core support)

## Appendix 6 - Mapping the CZECH REPUBLIC

### ***Policy***

Since the start of the current millennium the Czech Republic has steadily increased its development aid budget and its annual budget for 2009 was approximately €35m, of which €3.5m was allocated to projects in the agricultural sector: 28% of the overall development aid budget supported activities in Southeast and Eastern Europe, 18% in South, Southeast and East Asia, and 10% in sub-Saharan Africa. In addition to its bilateral programmes, the Czech Republic also contributes to several multi-lateral programmes. Contributions to the 10th European Development Fund should be started in 2011, with a planned contribution of €115.6m over the duration of the programme.

Following external evaluation of its development cooperation programme in 2007, the Czech Republic made significant changes in the way it administers its development cooperation programmes (DAC, 2007). Before, each line ministry had its own budget from which it developed a portfolio of projects. Nowadays, the Czech Development Agency (CDA) provides overall coordination and it reports to the Department of Development Cooperation and Humanitarian Aid in the Ministry of Foreign Affairs. The Council on Development Cooperation, an inter-Ministerial forum, seeks to ensure coherence between the objectives and priorities of development cooperation and those of other policy instruments that might impact on developing countries.

### ***Geographical and sectoral priorities***

Since 2007 the Czech Republic targets its development assistance to a smaller number of target countries selected based on the principles of ‘partnership, efficiency and transparency’. Such countries should have developed their own strategies for social and economic development, taking environmental considerations into account. There is a two tier system in operation with programmes established with Angola, Bosnia - Herzegovina, Ethiopia, Moldova, Mongolia, Serbia and Zambia. Cooperation has been initiated with Cambodia, Georgia and Kosovo involving only projects, reflecting a lower level of engagement. Priority themes vary among countries and are established during dialogue with country representatives. Agriculture is one of the priority themes in several of the target countries. Specific projects classified as being within the agricultural sector are discussed under ‘Type of intervention’ below.

### ***Gender equality***

Gender equality is one of the ‘cross-cutting principles’ in the strategy on development cooperation, linked to the promotion of human rights (MFA, 2010a). It is addressed by mainstreaming gender criteria in the programming of development cooperation initiatives and by supporting projects with the objective of empowering women. Particular attention is paid to strengthening the capacity of NGOs to mainstream gender in their development projects (Pro Equality, 2010). Apparently, there does not seem to be any specific provision for addressing the needs of the youth in development cooperation programmes and projects.

### ***Capacity development***

Capacity development is not a core theme in the Czech development cooperation strategy, but capacity building is mentioned as being as a means of supporting climate mitigation and adaptation measures in developing countries. Emphasis is placed on strengthening the capacity of staff in the

MFA and other Ministries engaged in development cooperation. Also, support is provided for capacity building of NGOs through a grant scheme. The aim is to raise awareness of development issues and ensure that staff have relevant knowledge of the Czech Republic's international commitments and to acquire adequate expertise in the practical implementation of development projects. One of the reasons for a strong emphasis on bilateral forms of assistance in the development cooperation strategy is that it helps to build the capacity of organizations involved in Czech development cooperation.

### ***Developmental focus***

The Czech Republic is committed to the MDGs, to the Paris Declaration on Aid Effectiveness (2005) and the Accra Agenda for Action (2008). These commitments guide its approach to focus on priority countries for development cooperation. They are also reflected in its efforts to enhance donor coordination; for example, by assuming the role of EU donor facilitator in Moldova and Mongolia. The Czech Republic is an active member of the Practitioners' Network for European Development Cooperation, a platform for exchange, coordination and harmonization policy and practice between European organizations in the field of Development Cooperation ([www.dev-practitioners.eu/](http://www.dev-practitioners.eu/)). The thematic group on Institutional Development and Human Resources is jointly led by CDA and GIZ. This group aims at sharing good practices in systems for development cooperation and at contributing to organisational learning and capacity development.

The Ministry of Foreign Affairs supports several projects on Global Development Education within the Czech Republic. Through the Forum for Development Cooperation (FoRS), the Czech Republic participates in DARE, the European Development Awareness Raising and Education Forum which, amongst other activities, organises summer schools on development education. According to the findings of a survey conducted in 2008, awareness of government development cooperation in the country remains low (FoRS, 2010).

### ***Type of intervention***

1. *Projects* A list of overseas development projects in the agricultural sector has been compiled based on information from the CDA website. None of the projects has a significant research component, but most have at least an element of capacity development. ARD is not specifically mentioned in any of the project descriptions. According to the project summaries, much of the capacity strengthening consists of training courses and informal knowledge transfer through practical activities. Few projects appear to address the wider aspects of organizational or institutional capacity development. Projects are typically three years in duration and have budgets of between €0.2m and €1.2m. However, in some cases budgets are allocated annually which presumably has implications for the planning of activities. A small number of projects last one year with relatively low budgets of approximately €30,000 to €40,000.
2. *Individual scholarships* Apart from supporting projects, the Czech Republic allocates approximately 18% of the development cooperation budget for scholarships at public universities in the country. The scheme is administered by the Ministry of Foreign Affairs and the Ministry of Education, Youth and Sports in association with the Ministry of Health. A total of 130 scholarships were offered for 2009-10, of which 60 were for post-Masters and doctoral study programmes in English (MFA, 2010b). Various modifications are being made to the scheme, including reducing the number of study programmes in English. The Development Cooperation strategy refers to a programme proposal for posting academics and experts from Czech institutes to priority countries.

## Monitoring and evaluation

CDA has a framework for evaluation of development cooperation projects.

### Projects in the agricultural sector supported by the Czech Development Cooperation

Country	Project title	Capacity development component	Budget [€] <sup>1</sup>	Duration
Angola	Support for Secondary Agricultural Education	Support for a secondary school	1,260,594	2009-2011
Bosnia-Herzegovina	Increase of milk production in North-East Bosnia	Transfer of technical expertise in livestock husbandry, animal nutrition and milk quality	1,208,746	2010 – 2012
Ethiopia	Soil and water resources protection in Southern Nations, Nationalities and People Region	The project has an agricultural component and includes educational and capacity building activities	478,548	2010 – 2012
Georgia	Strengthening capacity building and technical support Martvili Agro Service Centre	The project supports small agricultural cooperatives and include training on planning, marketing, and technical areas such as silvicultural methods	42,130	2010
Moldova	Development of ecological agriculture in Moldova	Capacity development of farmers, their associations and service providers	228,000	2011-2013
	Increasing Competitive Strength and Efficiency of Moldovan Small and Medium-Scale Farmers through their Orientation to High Value Crops Growing at Selected Target Groups in Districts of Cahul, Anenii noi, Ungheni	Promotion of fruit and vegetable production through the establishment of cooperatives and the provision of technical training	228,00	2011-2013
	Strengthening the competitive ability and efficiency of Moldovan small and medium farmers	No information available	No information available	No information
Mongolia	Alternative solutions to the development of plant production in arid regions of Mongolia	Provision of technical support and development of infrastructure, including a new centre for mycorrhizal inoculation in Ulaan Baator	36,716	2010
	Livestock Identification System	Technical support, including capacity development	585,809	2010-2012
		<b>Total budget</b>	<b>4,068,543</b>	

Source: compiled from information on the web site of the Czech Development Agency ([www.czda.cz](http://www.czda.cz))

<sup>1</sup>Based on an exchange rate of €1 = Czech Koruna 24.24

## Appendix 7 - Mapping the DENMARK

### **Policy**

The UN's MDGs serve as benchmark for the Danish development policy to achieve concrete goals for poverty reduction and sustainable development in 2015. Within the Ministry of Foreign Affairs DANIDA is the agency for international development cooperation. The strategy *Freedom from Poverty – Freedom to Change* marks out five political priority areas for Danish development cooperation:

1. Freedom, democracy & human rights; 2. Growth & employment; 3. Gender equality; 4. Stability & fragility; and
5. Environment & climate.

The Danish Fellowship Centre is administering the support to development research. Its focus is enhanced use and ownership of national systems, strengthened collaboration with other Development Training Institutes, to ensure that the interventions contribute to the content, coverage and implementation of the priorities stated in the Paris Declaration, the AAA and by the MFA. DFC identified the following key strategic areas:

- Improved linkage with MFA, DTIs and donors and participation in international fora ;
- Alignment to national development needs through better linkage with national partners;
- Transfer of DFP courses which can be conducted nationally or regionally by selected STIs;
- Organizational development by continued staff development on a larger planning horizon;
- Enhanced assessment of DFP effectiveness by establishing an updated M&E system.

### **Geographical priorities**

Denmark is providing development assistance through bilateral and multilateral cooperation. For bilateral assistance there are 15 priority countries: Bangladesh, Benin, Bhutan, Bolivia, Burkina Faso, Egypt, Ghana, Kenya, Mozambique, Nepal, Nicaragua, Tanzania, Uganda, Viet Nam and Zambia. Partner organizations in multilateral development assistance are the development banks, especially the World Bank, the European Union, the United Nations, namely UNDP, UNAids; UNICEF, WFP, ILO, UNIDO, UNESCO.

### **Thematic and sector priorities**

Denmark has formulated five political priorities: Freedom, democracy & human rights, Growth & Employment, Gender equality, Stability & Fragility, Environment & Climate.

### **Agriculture and agricultural research**

Capacity development is an integral part of ARD. DANIDA funds ARD through research within bilateral programmes in developing countries, the Danish Council for Development Research (RUF), CGIAR centres and Danish research institutes, and include partnerships to boost capacity development, formal courses and training. Projects for capacity development are also called ENRECA projects: i.e. projects for Enhancement of Research capacity. DANIDA also financially supports ARD research networks through the BSU initiative *Building Stronger Universities*.

### **Capacity development**

DANIDA's Technical Advisory Services (TAS) and the Evaluation Department are in charge of the international cooperation for Capacity development, which is mainly focused on enhancing



the competence and accountability of the public sector so it can effectively contribute to poverty reduction. The Danish perspective on capacity development is that capacity to be sustainable should be simultaneously developed at three interrelated levels: the individual, the organizational and the institutional level. Capacity development should be based on an analysis of the internal functioning of the organizations involved and on analytical understanding of the external conditions and institutional setting in which these organizations are performing. This is more effective than focusing capacity development at the individual level. Support to capacity development in these domains is considered a central dimension of development assistance, which, in addition to technical and functional aspects, also focuses on the external context in which this capacity is to be built and political aspects thereof.

### ***Types of intervention***

Four of the major programmes through which Denmark provides support to capacity development for ARD are mentioned next: the Pilot Research Cooperation Programme (PRCP), the Fellowship Program DDFP, the programme to build stronger universities in developing countries BSU, and UNIBRAIN, a programme for universities, business & research in Agricultural innovation.

### ***The Pilot Research Cooperation Programme (PRCP)***

The PRCP started in 2008 in Tanzania and Vietnam to support major research projects to generate new problem-orientated knowledge relevant to the needs of developing countries. For the 2nd phase of the programme (2011-2013) Ghana was selected. The projects foster interdisciplinary research cooperation and innovative alliances between research environments, in particular in partnerships between Danish researchers and researchers from developing countries. Grants are mainly awarded to developmental research programmes in Danish partner countries below the GNI threshold. Research programmes (> DKK 5 million) with substantive elements of capacity building focusing on national priorities and ownership are distinguished from individual PhD and postdoc applications (< DKK 5 million), covering a single researcher.

### ***The Fellowship Programme (DFP)***

The DFP is in line with the guidelines on the development of competence and capacity, and the international declarations on development training. The DFP strategy gives guidance to program implementation with a wide set of partners, indicating priority objectives and services with DANIDA financial support for 2010 – 2012

### ***Building Stronger Universities in Developing Countries (BSU; 2011 – 2013)***

The BSU programme is a partnership between eight Danish universities and institutes for research and higher education in developing countries. BSU comprises cooperation between universities in Denmark and selected universities in Ghana, Kenya, Tanzania, Uganda and Nepal. It focuses on institutional capacity building, including strengthening the capacity and quality of PhD education, strengthening the capacity to conduct research and disseminating its results. The BSU structure promotes collaboration and interaction between four inter-related thematic platforms: Human Health, Growth & Employment, Environment & Climate and Stability, Democracy & Rights.

*UNIBRAIN (Universities, Business & Research in agricultural Innovation; 2010-2014)*

DANIDA and FARA launched the programme, aimed at strengthening a number of African universities and centres for capacity building to better respond to the needs of the economic

stakeholders and the business sector. This is to be done through incubation initiatives in Danida priority countries to create innovations, through support to graduate training in entrepreneurial and business skills, and by advancing graduate research-based knowledge relevant for the development of agriculture and agribusiness.

### ***Monitoring and evaluation***

Past capacity development efforts and thinking within DANIDA include:

- 2002 A learning exercise to create a comprehensive framework for analysis of capacity development issues and to identify methodologies to assess capacity development outcomes. This enabled the development of an analytical framework for evaluation of the impact of Danish support to develop the capacity of public organizations and institutes in sector development programmes.
- 2003 An evaluation methodology was drafted outlining 15 steps to assess capacity development.
- 2004 A pragmatic approach for donors to support development of the capacity of the public sector was described
- 2005 The Result-oriented Approach to Capacity Change (ROACH) focused on potential constraints and realistic conditions for changing and enhancing organizational capacity and capacities in key public sectors. It proposed an analytical framework that was methodologically tested in Ghana

### ***1. Overall objectives of support for capacity development***

DANIDA focuses on developing organizational capacity, strengthening the competence of the public sector and country systems giving particular attention to structural and institutional factors. It considers enhancement of accountability in the public sector and in the management of public funds priority areas for capacity development, and it highlights the importance of carefully balancing capacity development of local civil society initiatives and government agencies.

### ***2. Identification of capacity needs of organizations***

In DANIDA's vision Capacity Development has a greater chance to contribute effectively to sustainable development if undertaken by organizations instead of by individuals. Therefore, in the Danish approach organizations are taken as the unit of analysis for capacity development assistance. The capacity of an organization is defined as its ability to perform its functions efficiently, effectively, and sustainably in pursuit of organizational goals and outputs. To improve the capacity needs assessment of organizations, DANIDA developed ROACH (: the Result-Oriented Approach to Capacity Change, a framework for capacity development interventions in organizations in the public sector.

### ***3. Type of intervention***

As described in the general introduction paragraph on DANIDA's support programme for Capacity development, we can distinguish three main types of projects:

- Projects that provide grants for Courses and training of individuals, be it for MSc and PhD courses, on-the-job training, fellowships cum apprenticeships and/or alumni programmes, which resort under the DFP
- Academic/University partnerships and/or networks and platforms, collaborating on specific themes, issues, or research projects, like the BSU partnership, the projects channelled through the CGIAR institutes, and the pilot research cooperation programme PRPC, and
- Programmes for organisational development and institutional strengthening like UniBRAIN

#### **4. Developmental focus of capacity development initiatives**

Projects to build capacity in research are intended to assist partner organizations to upgrade their organizational performance to such a level that they can effectively contribute to poverty reduction and development in their own society based on in-house expertise and competence. Therefore DANIDA is promoting results-based interventions focusing on organization outputs and results (services as well as products). The projects address the way in which organizations interact and perform. They also address, or align with interests, incentives and power relations within and among the organisations, i.e. the political context in which capacity development takes place.

##### **Four dimensions shaping capacity and providing entry points for capacity development**

###### **functional dimension**

###### **Internal dimension**

procedures, rules & regulations, internal relations, operational links to suppliers, clients, peers, customers  
power distribution, accountability, management style, disclosure policies, material and non-material incentives, vested interests, conflicts

###### **external dimension**

timeliness of resources, results-based performance targets, supervisory bodies, formal accountability requirements  
vested interests, pressure from clients and customers, competitors, media attention, watchdogs

###### **political dimension**

Strategy, systems, structure, work

Corporate identity, leadership, values,

Legal framework, adequacy and

Political governance and supervision,

#### **5. Systems orientation**

DANIDA is switching from the project approach towards a programme approach, taking the organizations as the focal unit of analysis. DANIDA considers organizations as open systems and therefore it focuses its efforts in partner countries on a number of interlinked/subordinated organizations within sector or thematic programs. The BSU partnership programme and UNIBRAIN are exemplary for this approach.

#### **6. Sustainability**

According to DANIDA, organizations have to tackle capacity development themselves, while outsiders and donor can contribute by providing support. To be eligible for support from DANIDA, projects to develop capacity for research should focus on themes for which there is an explicit demand in the countries concerned, and be in line with the countries' own strategies on research and poverty reduction. In projects based on public private partnerships, the private companies involved should contribute in the project funding and particular attention is given to the design, implementation and follow-through of the exit strategy that should guarantee the sustainability of the project's results.

DANIDA makes explicit efforts to align its strategy with the national strategies so as to facilitate maximum embedding the initiative in the organization's institutional context, and to achieve synergy with capacity development support initiatives from other development partners. Project proposals should also contain an exit strategy to emphasize and reinforce ownership, and to foster future sustainability.

#### **7. Measurement of benefits**

DANIDA has developed several tools and guidelines for planning, implementation, and assessment of capacity development interventions. These include:

- 1) ROACH – Result-Oriented Approach to Capacity Change - framework for capacity

- development interventions and the level of organizations and public sectors;
- 2) A Guidance Note which includes a set of questions to be asked when screening the need for capacity support during the identification, formulation and appraisal of interventions;
  - 3) Capacity development outcome evaluation methodology. DANIDA emphasizes the importance to monitor and assess the results of capacity development interventions to consolidate lessons learnt and to share knowledge.
  - 4) In results-based capacity development interventions, the results are defined as organizational outputs and services. Although no absolute guarantee in itself, this considerably facilitates the monitoring of progress and the assessment of the outcomes and effects.

### 8. Institutional embedding

Capacity development based on the perspective of sector development reduces the chance to get stuck in a particular institution – e.g. one particular ministry – or in only the government structures with no, or ineffective linkage with other stakeholders and interested or affected parties in the sector – or beyond. Capacity development should be an integrated part of any policy or plan, and analysis and consideration of contextual factors should be acknowledged as fundamental for successful capacity development support. DANIDA’s Evaluation Department stresses the importance to analyse the way organizations are operating in and influenced by their institutional context. It also emphasizes the importance of cooperation with other partners and donors. Guidelines are given on how to conduct a situation analysis through a baseline survey.

Capacity development programmes should take into account a series of issues which, at first sight, apply to the beneficiary organisation(s) most involved in the development project or programme, but which - at second thought - are relevant also for the other stakeholders positioned in the physical and/or organizational environment of those organizations, such as:

- 1) Readiness and motivation for change;
- 2) The capacity and scope for improvement;
- 3) Ownership, coherence and accountability;
- 4) Capacity and willingness to mobilize accompaniment, to negotiate and adapt and assuming full responsibility at completion of the exit strategy.

Programs like UniBRAIN, BSU and, to a lesser degree, PRCP illustrate the recent shift in Denmark’s international cooperation from a focus on capacity development through projects and programmes centred on education and training of individuals, towards a broader approach to Capacity development strengthening organizations and the institutional context they are part of.

### FUNDING MECHANISMS ARD

Organisation	Funding	Budget 2009 [€]
Ministry of Foreign Affairs	ASPS, the Agricultural Sector Programme Support	
	IARCs, the International Agricultural Research Centres	4,702,152
	Consultative Research Committee for Development Research & FP	*16,438,356
	DDRN: The Danish Development Research Networks	* 3,012,699
Total		24,154,207

DFP: Danish Fellowship Programme  
 IARCs: IITA, CIMMYT, ILRI, ICRAF, IFPRI & ICIPE  
 The Danish Centres & Research Networks: - the Danish Seed Health Centre, The Forest & Landscape Centre, and the Institute for Health Research and Development

\* Both these figures include development research in other sectors than agriculture

## Appendix 8 - Mapping FINLAND

### ***Policy***

The Finnish development priorities are the promotion of global security, poverty reduction, human rights and democracy, prevention of global environmental problems, and promotion of economic dialogue. In the 2007 Development Policy Programme Finland focuses on the global effort to eradicate poverty through sustainable economic, social and ecological development.

Rural development ranks high on the Finnish agenda for international cooperation. In the Development Policy Guidelines for agriculture and food security (2010) specific action domains are defined for agriculture, agricultural research and capacity development, such as like value chain development, sustainable land management, mitigation and adaptation in response to climate change, promotion of the use of ICT, improved food security and nutrition, and encouragement of agriculture and rural innovation systems.

In Finland's overall policy in international cooperation NGO's have an important role to play. The Government strives to boost the effectiveness of operations and the general capacity of the NGOs while it also provides training to enhance the quality and effectiveness of development cooperation.

### ***Geographical priorities***

In general fewer countries are supported with more resources now. The defined support limit of three sector programmes or projects per country. Finland's long-term partner countries in bilateral development cooperation are Ethiopia, Kenya, Mozambique, Nepal, Nicaragua, Tanzania, Vietnam and Zambia. Other partner countries are: Bosnia-Herzegovina, China, Egypt, Montenegro, Namibia, Palestinian Authority, Peru, Serbia, Timor-Leste, and South Africa.

### ***Thematic and sectoral priorities***

Thematic development cooperation focuses on sustainable forestry and industry, water, the environment, the information society, strengthening the capacity to trade and furthering social stability, which are all sectors in which Finland can contribute additional value and expertise.

### ***Agricultural development and research***

In its multilateral cooperation Finland supports agricultural production to contribute to food security in developing countries, and the implementation of environmental agreements relating to rural development (climate, biodiversity, desertification). Support to research and projects is given through strategic partnerships, especially in relation to climate change, land administration and agricultural productivity. Finland provides funding to 4 CGIAR centres: ICRAF, ILRI, IFPRI and CIFOR. Moreover, Finland contributes to the funding of a large scale research programme on capacity development in Food Security in West and East Africa.

### ***Capacity development***

Although capacity development often is a component in interventions supported by Finland, in itself it is not a specific objectives of Finland's policy on international development cooperation. Therefore Finland has not formulated an overall policy on capacity development, nor has it adopted a final definition of the concept. Finland runs a student and teacher exchange programme called the North- South-South Higher Education Institution Network Program. During the pilot phase

(2004-06), 375 scholarships were granted to students and 206 to teachers - and the program has since been continued. For graduation all students must return to their home countries in order to support institutional development.

### ***Types of intervention***

Finland recognises that local ownership is fundamental in development processes and that capacity development should be included in national development plans. Therefore Finland stipulates as a condition for its sector programme that the responsibility for the whole initiative is with the target country's authorities and stakeholders, including the development of comprehensive development plans, and the partner country's existing administrative structures should be actively involved in implementation of the programme.

### ***Monitoring and evaluation***

Finland follows an output-oriented approach and monitoring of the initiatives takes place through jointly defined criteria. In case direct sectoral or general budgetary support is not possible, projects are supported according to the country's set priorities. This strategy aims at promoting enhancement of the partner country's own administrative structures and procedures. As condition attached to assistance partner countries are required to possess adequate capacity in order to realize the initiative and to be committed to good governance.

## **UNIPID**

### ***1. Overall objectives for capacity development***

In the 2007 Development Policy Programme Finland focuses on the global effort to eradicate poverty through economically, socially and ecologically sustainable development. Finnish development cooperation focuses on areas where Finnish expertise and experience can be best used to support the development programmes of the partner countries themselves.

### ***2. Identification of capacity needs***

Finland focuses its development cooperation in selected key sectors where it can contribute additional value and expertise. Priorities for capacity development are identified through sector specific dialogues with partner countries, and the degree to which the capacity needs identified are aligned with national priorities and reflected in national capacity strengthening policies and programmes is an important criterion in the screening of suggested programme proposals.

### ***3. Type of intervention***

Finland supports CD for ARD through multi-disciplinary approaches and by strengthening North-South partnerships. It seeks to support the development programmes of the partner countries and especially the programmes under the Comprehensive Africa Agriculture Development Programme.

### ***4. Developmental focus***

Capacity development initiatives for agricultural research differ in the extent to which they explicitly support developmental objectives. Some have a strong emphasis on scientific advancement or on increasing agricultural production. Others are geared more towards enhancing the productivity and income of small-scale producers.

### ***5. Systems orientation***

The **2005 Internal Guidelines** from the Ministry for Foreign Affairs (MFA) provide guidance to the staff on how to identify and formulate programmes and projects for capacity development. These guidelines highlight the importance of capacity development and gives full explanation how the design of such initiatives requires thorough analysis of actors, organizations and individuals, careful assessment of the normative context (i.e. vision, values and policies), the societal and institutional context (i.e. political, social and cultural), as well as the availability and condition of the resources and the facilities (including financial and intellectual) required.

## 6. Sustainability

Finland sets the following criteria for its sector programmes: Responsibility for the whole initiative is with the target country's authorities and stakeholders, including the development of comprehensive development plans, and the use of the partner country's existing administrative structures in implementation.

## 7. Measurement of benefits

Finland follows an output-oriented approach. A consistent effort is made to include Monitoring & Reporting in all projects matching the partner organisations' systems to Finnish information needs. The Ministry's project management guidelines are being adjusted accordingly using international standards tailored to the systems in the partner countries and own information needs. Upon suggestion of a Peer Review in 2007 the MFA Guidelines reviewed and updated its procedures and tools for capacity development.

## 8. Institutional embedding

Through application of strict selection criteria the MFA intends to maximize the probability that the initiatives in support of CD for ARD are well-anchored in the institutional context of the partner countries. Some of these criteria explicitly stipulate specific conditions to be met, such as:

- partner countries should be able to implement the initiative and be committed to good governance
- the political situation should be conducive to develop ownership
- partner organizations should show commitment to deal with development challenges and be prepared to build an enabling environment for development
- partner organizations should be free to engage third parties in the development initiative from the civil society, be it the public sector, the private sector, NGOs or other agencies

## FUNDING MECHANISMS ARD

Organisation	Funding	Budget [€]
Ministry of Foreign Affairs	CGIAT: ICRAF, ILRI, IFPRI, CIFOR	3,000,000
	Finnish universities and research centres through the academy of Finland	1,000,000
	Universities and research centres through commissioned development policy research projects	200,000
	Collaboration between CGIAR and Finnish partners	3,000,000
	Partner country institutions through the Institutional Cooperation Instrument for North-South collaboration	1,000,000
	Total	8,200,000

Since 2007 Finland has increased development cooperation funding allocated to agriculture. From 2006 – 2009 bilateral aid for the agricultural sector has increased from around 6 to 34 million €. The share of the agricultural sector in bilateral development cooperation funding has risen from just under 2% to over 6% in the same period.

## Appendix 9 - Mapping FRANCE

### ***Policy***

French development cooperation is the responsibility of the Ministry of Foreign and European Affairs (MAEE). The Ministry of Finance also plays an important role through its management of the French Development Agency (AFD). In 2009, a total of 56% (€9,048m) of French overseas development assistance (ODA) was provided through bilateral arrangements and AFD had responsibility for a large proportion of this. Just over half of the 44% of ODA delivered through multilateral channels was routed through the European Union, including the European Development Fund.

National research policy is largely determined by the Ministry of Higher Education & Research which also funds French research institutes involved in overseas development. The Ministry of Food, Agriculture & Fisheries plays a more active role in developing policies relating to agriculture and food security than comparable ministries in other countries do. It works on achieving coherence between agriculture and development policies and also contributes to trust funds for the FAO, World Bank and CGIAR. Strategic guidelines for international cooperation and development assistance policy are set by the Inter-ministerial Committee for International Cooperation & Development (CICID) chaired by the Prime Minister.

### ***Geographic and sector priorities***

CICID has identified 14 priority countries for ODA, most of which are in sub-Saharan Africa. This reflects the focus of a 2008 White Paper on Foreign and European Policy indicating Africa as a priority area for French ODA. The 14 countries were chosen using a set of economic and social criteria and also took into account cultural and linguistic ties with France. Five priority sectors have been selected for ODA: education, health, sustainable development, agriculture & food security, and growth. These sectors accounted for 56% of French ODA in 2009, with 7% allocated to agriculture and food security (MAEE, 2011). A total of 47% of bilateral aid went to sub-Saharan Africa in 2009.

### ***Agriculture and agricultural research***

In 2008, France played a leading role in setting up the 'Global Partnership for Agriculture and Food Security'. The Global Partnership set out a global framework for collective action on three themes: governance; science and expertise; and finance. Within this framework, France has supported the creation of the United Nations High Level Task Force on Food Security and seconded a government official to support its work. France has also indicated its support for the conclusions of the International Assessment on Agricultural Knowledge, Science and Technology for Development.

During its current Presidency of the G20, France has highlighted the importance of food security and commodity price stability. The new G20 Agriculture Ministers Action Plan on Food Price Volatility and Agriculture includes measures to strengthen research, innovation and dissemination. During a G20 Conference on agricultural research for development held in Montpellier in September 2011, a special session was held on capacity development. A key outcome was the recognition of greater investment in capacity development in order to maximise the benefits from increased support for ARD.



Almost uniquely in Europe, the French government has a continued commitment to maintain a strong ARD capacity in France. There are more than 4,000 scientific and technical staff in the Centre for Agricultural Research for Development (CIRAD) and the Institute of Research for Development (IRD) and these organizations are largely funded by the government. CIRAD conducts agricultural research in developing countries in the tropics and the Mediterranean and promotes sustainable rural development. CIRAD had an annual budget of €214m in 2010. IRD is a research institute with a broader mandate which includes health, the environment and natural resources but also implements agricultural programmes in collaboration with developing country partners. IRD's budget in 2010 was €237m in 2010. The National Institute for Agricultural Research (INRA) focuses largely on agriculture in France but also works on overseas development issues in partnership with other French agencies such as CIRAD and with developing country partners.

Current French policy is to strengthen linkages between research and education organizations. This led to the creation in 2009 of the Agreenium consortium which links INRA and CIRAD with the national agricultural faculties of AgroParisTech, Agrocampus Ouest in Rennes, and Montpellier, and the National Veterinary School of Toulouse. The aim of Agreenium is to strengthen the international role of French research and training in agriculture and related fields. The rationale is to provide a single operational management system for support mechanisms, partnerships and participation in international organisations and projects.

France also makes contributions to the Consultative Group on International Agricultural Research and the Global Forum on Agricultural Research. This is channelled through the Commission for International Agricultural Research which also represents France in European ARD fora such as the European Initiative for Agricultural Research for Development.

### ***Capacity development***

The MAEE 2011 strategy document contains several references to plans for capacity development in specific areas, although capacity development does not seem to be an over-arching theme. Capacity development is considered mainly in relation to 'state building' and strengthening civil society organizations. Referring to agriculture, the document refers in particular to support the poorest countries in developing their capacity to define and comply with sanitary and plant protection standards. In addition, the mandates of Agreenium and the state-funded research institutes include a strong focus on training and capacity development.

There is no specific strategy for capacity development which sets out principles or practices for implementation. France has an external action strategy for education in developing countries (MAEEc). The main focus of the strategy is on promoting universal primary education and equal access to education for boys and girls. A further objective is to support the development of integrated approaches to education that takes account of the needs from primary through to tertiary education and vocational training.

### ***Gender***

The Ministry of Foreign and European Affairs has a gender strategy which centres on advocacy for gender equality and the defence of universal rights and the inclusion of a cross-cutting approach to gender equality (MAEE, 2010). The Priority Solidarity Fund provides support for gender-related activities, including capacity development of women and women's organizations. In West Africa support through this fund is targeted at women involved in food processing and small business development.

### **Types of intervention**

The majority of capacity development interventions for ARD supported by the French government involve individual training. However, there are several initiatives where such training is placed in the context of wider organizational or institutional development. Some of the main capacity development interventions are described below.

*Long term degree programmes.* CIRAD and IRD have undergraduate and postgraduate degree programmes in association with part organizations in France. CIRAD, for example, allocates about €1.8m to PhD training each year and approximately 60% of the funds are for nationals from developing countries. In 2008, CIRAD awarded research grants to 40 PhD students and provided support to over 200 others in the form of operating expenses or grants to conduct work in a CIRAD laboratory.

*Professional development.* Some research and education organizations offer continuous training programmes for agricultural professionals. E.g., Montpellier Supagro runs certificate-level programmes in Agronomy and Food Safety and Quality. The International Centre for Development Oriented Research in Agriculture runs a three-month programme on '*Multi-stakeholder processes for knowledge-based rural innovation (IAR4D): capacity strengthening in ARD*'.

Through the BEST programme, IRD provides grants to researchers and technicians to work for short periods with teams in research or education institutes in France or elsewhere. The programme can be used to support intellectual enquiry, skills upgrading or vocational training. The Agropolis Foundation provides fellowships linked to research activities it is supporting. The Foundation also supports scientific platforms and training courses on topics of strategic importance.

*Support for research teams.* IRD manages a partnership programme (*Jeune Equipe AIRD*) on behalf of the Inter-Establishment Agency for Research for Development (AIRD) which aims to support and strengthen new research teams in developing countries. To qualify for support collaboration with at least one of the AIRD member organizations is required: CIRAD, CNRS, a French university, Institut Pasteur, INSERM, or IRD. The programme does not have an ARD focus and covers a wide range of thematic areas including water resources, vulnerability and climate change, '*productions and food safety*' and '*ecosystems and biodiversity*'. The goal is to assist the new teams to become world-class centers of excellence in their field and to link with established national, regional or international networks. The primary focus is on scientific excellence rather than developmental impact.

IRD also runs a programme for more experienced researchers to support links between French and citizens from developing countries to address developmental problems. This *Chaises Croisées* programme, providing support for up to one year with the option of renewing once, must have a capacity development component.

The ARIES-Sud programme, supported by the MAEE Solidarity Priority Fund, is another IRD partnership programme which has a stronger developmental orientation than the initiative in support of young research teams. Funding of up to €80,000 is provided to around 30 research teams to support scientific research and enhance training capacities. The funding supports the development of training modules and PhD curricula, travel expenditure for co-supervision of thesis research, and development of distance learning programmes.

The CORUS partnership programme funds scientific projects developed by research institutes and universities in France, Africa and the Indian Ocean. The emphasis is on supporting young researchers to develop their capacities within the setting of collaborative research teams.

### ***Monitoring and evaluation***

AFD has a performance management and evaluation programme which was introduced in 2007 and has two main objectives. The first objective is to identify lessons to improve future policies, programmes and projects; the second is to meet obligations for accountability of the use of funds. All projects are evaluated within one year after completion and the findings must be shared with all stakeholders. Evaluation criteria include appropriateness, effectiveness, efficiency, sustainability and impact. A summary of project evaluations conducted from 2007-2010 revealed that most projects had a high score on appropriateness, effectiveness and impact and that they were aligned with local needs (AFD, 2010). Overall, projects had lower scores on efficiency and sustainability, partly due to delays in implementation. The summary also states that “local capacity building and adaptation to contextual differences call for further attention.”

### **Programmes: various**

This section provides an overview of capacity development programmes for ARD supported by the French government.

#### ***1. Overall objectives of support for capacity development***

The primary objective of the majority of French-funded capacity strengthening programmes in agriculture is to strengthen the research skills of individuals, sometimes through support to research teams, to raise the standards of scientific excellence and enable them to contribute more effectively to solving developmental problems.

#### ***2. Identification of capacity needs***

Programmes vary in their approach to identifying capacity needs and there is often limited information in programme documents on how this is done. In several programmes it was not possible to find evidence of systematic consultation with local stakeholders or efforts to align the priorities of French overseas development policy with those of partner countries. However, a recent review and planning exercise coordinated by the Institute for Research and Development (IRD) with regard to its CORUS and ARIES-Sud programmes used a participatory approach. The CORUS programme promotes scientific partnerships between universities and research institutions in France and in selected partner countries in Africa. The ARIES-Sud programme provides support to research teams in partner countries to enhance their capacity to address development issues.

Between September 2010 and May 2011, IRD organized 11 workshops bringing together the CORUS and ARIES-Sud programme teams to share experiences and exchange ideas. The thematic workshop included round table discussions on ways to strengthen research capacity and the recommendations were used to define the strategic priorities and intervention mechanisms to support future research in Africa. A synthesis report on the workshop outcomes was published in September 2011.

#### ***3. Type of intervention***

French support for capacity development is mainly targeted at research scientists, ‘engineers’ and technicians. The bulk of this support is to enhance the skills of individuals or to improve their ability to work effectively in research teams. The former is largely addressed through postgraduate

training or short course provision. A commonly-used instrument for supporting research teams is a partnership project which involves collaboration between a French organization such as CIRAD or IRD and a developing country organization. Support is also provided for infrastructure development and for providing access to shared facilities; for example, through observatories or regional pilot programmes in which agricultural research may be one component of a broader theme.

#### **4. Developmental focus of capacity development initiatives**

Some capacity development programmes for ARD supported by the French government, such as the *Jeune Equipe AIRD*, have a strong scientific focus and the primary aim appears to be to enhance the quality of academic research. Others, such as the *ARIES-Sud* programme are targeted more directly at developmental issues.

#### **5. Systems orientation**

As the focus of many of the capacity development programmes is on generating new scientific knowledge they do not have a strong systems orientation and the involvement of non-research organizations tends to be limited. However, some programmes do have a more explicit systems orientation. For example, action research conducted by CIRAD through partnership programmes is designed to generate new knowledge and to strengthen individual and institutional capacities (Faure *et al.*, 2010). This research takes a systems perspective and often directly involves civil society organizations and other non-research actors.

#### **6. Sustainability and risks**

The emphasis placed on partnership programmes is designed to ensure that local capacity remains within partner organizations once financial support is withdrawn. However, sustainability may be less likely in the programmes which provide relatively short-term support. By contrast, longer term support (for example for programmes in national agricultural research institutes in francophone West Africa) has enabled research capacity to be developed, and initiatives undertaken, under conditions where national funding has often been limited.

#### **7. Measurement of benefits**

As already indicated, AFD has a performance management and evaluation programme under which all projects and programmes are evaluated and lessons identified to improve future policies. The standard OECD-DAC criteria are used in the evaluations and issues of local capacity and sustainability are examined. It is less clear that a systematic monitoring process is used during project or programme implementation which can assess progress towards achieving targets and facilitate sharing of lessons and experiences. However, one recent initiative which developed its own monitoring and evaluation system was the AFD-funded DURAS project. An innovative approach to monitoring was used which examined lessons from the provision of support for the development of research partnerships and changes resulting from innovation processes. (Chancellor, 2008). This M&E framework would serve as a useful starting point for future ARD initiatives funded by the French government.

#### **8. Institutional embedding**

This does not appear to be a major element of French support for capacity development for ARD.

## FUNDING MECHANISMS

Organization	Funding	ARD budget[€] 2008
Ministry of Higher Education & Research	CIRAD	141,000,000
	IRD	40,690,000
	Other research organizations (IMRA via FI4IAR, Cemagref)	355,000
	Contribution to CGIAR (scientific partnership)	4,100,000
	Contribution to CGIAR (direct grant)	450,000
Ministry of Foreign & European affairs	Fundign programmers for ARD • Priority Solidarity Fund (FSP)	9,800,00
	Contribution to CGIAR (direct grant)	850,000
Ministry of Food, Agriculture & Fisheries	Research & training in agriculture, food science and engineering for tropical countries	4,000,000
	Contribution to CGIAR (scientific partnership + direct grant)	600,000
	Research organizations (Cemagref)	120,000
Agropolis Foundation		500,000
Total		202,465,000

## Appendix 10 – Mapping GERMANY

### **Policy**

German development policy targets the Millennium Development Goals and focuses on education, health, rural development, good governance, climate protection and sustainable economic development (BMZ, 2010). The Federal Ministry for Economic Development and Cooperation (BMZ) has responsibility for the German government's co-operation with developing countries. BMZ's 2010 budget for food security and global environmental protection was €235,852m, which was 3.9% of its overall budget.

### **Agriculture and ARD**

Support to agricultural development and research geared to the needs of poor farmers is one of aims of Germany's poverty reduction strategy (BMZ, 2011) as part of its strategy on rural development and food security. Agriculture is seen as the *starting point and the engine of comprehensive development efforts*, while for rural development a broader approach is deemed necessary, involving strengthening of institutions, development of human resources, improvement of infrastructure and developing transparent and sustainable systems for natural resource management. Germany's support in ARD to countries in Africa concerning local ownership and the direction to be taken for support activities, is guided by CAADP.

This strategy highlights the developmental orientation of support for agricultural research and it suggests this to be strengthened through cooperation between international research centers. It also recognizes that national agricultural research facilities in developing countries should be enhanced, and the necessity to improve the way to incorporate agricultural research results into extension advisory services and training programs. In practice, German development cooperation has directed most support to international, rather than regional or national, agricultural research, targeted primarily on CGIAR research Centers, or associated Centers (GIZ, 2009).

### **Capacity Development**

Whilst there is no formal strategy for capacity development for agricultural research for development, an underlying principle of German development cooperation is to support capacity development. Improving training and employment opportunities for young people is a particular focus of capacity development efforts (BMZ, 2006). However, this is partly driven by the perceived need to move away from activities such as subsistence farming where the rewards and prospects for advancement are low.

Another cross-sectoral theme central in German development cooperation is Gender equality (BMZ, 2009). The Development Policy Action plan on Gender 2009-12 includes a systematic risk assessment for women in the sectors of water, agriculture, infrastructure and health. One component of the Action Plan relates to *Gender-specific challenges and responses to climate change* and specific actions include improved information supply and the development of gender-sensitive strategies for adaptation to climate change. This involves, inter alia, cooperation with national and international organizations and scientific institutions.

## DAAD, the German Academic Exchange service, and the EXCEED programme

### *Introduction*

The German Academic Exchange Service DAAD, a self-governing association of German universities, is the largest agency for international academic cooperation and exchange in the world. DAAD promotes linkages with overseas universities through exchanges of students, graduates and academics. Its programmes do not focus particular subject matter areas and both nationals and foreigners can apply. The programme *Higher Education Excellence in Development Cooperation (Exceed)* is the DAAD programme with the strongest development orientation.

### *1. Overall objectives of support for capacity development*

DAAD's cooperation with Africa - not geared to capacity development for ARD in particular - is aimed at:

- Supporting staff development
- Facilitating institution building and institutional linkages with German universities
- Strengthening higher education management
- Supporting Africa Regional Networks
- Encouraging German nationals to study and conduct research in Africa

### *2. Identification of capacity needs*

Exceed funds partnerships between institutes for Higher Education (HE) in Germany and in developing countries. The programme is specifically targeting support activities which contribute to the MDGs. In 2008-09 an international peer-review group selected a group of counterpart organizations as Competence Centres. However, the objective was to support linkage of German universities with a track record in areas of high developmental relevance with appropriate African counterpart institutes. The documentation available does not give information on how African stakeholders made inputs to this process.

### *3. Type of intervention*

DAAD provides support to educational cooperation with developing countries in three ways:

- Scholarships for individual students for postgraduate degree courses, research activities by junior scientists, staff development (in-country or in-region), and research visits for scientists (3 - 6 months). In the exchange programme 2009, 3,762 students from Africa and 1,453 students from Germany got a scholarship.
- University partnerships which may relate to co-operation on a specific theme, study programmes overseas and Centers of Excellence or Competence. DAAD supports five Centers of Excellence in Africa, but none of these involve food and agriculture or natural resources management.
- DAAD also supports five Competence Centres which involve partnerships between German and African universities to strengthen the capacity of HE institutes in Africa and to enhance the involvement of German HE institutes in development co-operation. For example, the University of Hohenheim collaborates with Makerere University in Uganda and Sokoine Agricultural University in Tanzania on Food Security, while the UAS Cologne and the Mondlane University in Mozambique collaborate in Natural Resource Management.
- The Bicultural programme has funded four Masters programmes, including an MSc in Integrated Water Resources Management at Cologne University providing scholarships to Arab students, and German students receiving support during their stay in Arab countries.

- Under the Anchor country programme Cologne University established a Master's programme in Environment and Resources Management with Mexico as the anchor country.
- Alumni programmes covering a range of activities including workshops, support for Conference attendance, networking and equipment donations.

#### **4. Developmental focus**

EXCEED aims at contributing to the MDGs and therefore has a strong developmental focus. The African Competence Centres supported under this programme are envisaged as future think tanks for development co-operation. The intention is that they will develop approaches for the solution of global challenges and that these will be utilised by policy makers, donors and practitioners.

#### **5. Systems orientation**

DAAD supports capacity development at individual, organizational and institutional levels. Scholarships for young academic staff and managers of Higher Education Institutes (HEI) are geared towards skills development, not necessarily linked to organizational or institutional strengthening. However, some other programmes, such as Exceed, do take a broader approach and combine elements of support at each of the three levels and promote linkage between HEI link with other actors in the system.

#### **6. Sustainability and risks**

From July 2009 each of the five Competence Centres receives up to € 1m of funding over a 5-year period. This support is invested in partnerships between established organizations and it does not involve setting up new structures. Longer term sustainability of the initiatives when there is no more external funding depends on how successful the Centres are in meeting the needs of policy makers, donors and practitioners. Five years seem to be a reasonable period of time for the Centres to generate outputs which demonstrate their value.

#### **7. Measurement of benefits**

DAAD commissions external evaluations through a public tender process. Surveys of grantees and supervisors are carried out and case studies are undertaken for specific areas and target groups.

As the establishment of the Competence Centers under the Exceed programme is quite recent, no information is available yet on measurable benefits. A recent survey on individual scholarships showed that former grantees from overseas, including developing countries, find access to training in skills not available in their home country the most valuable aspect of the studentship (Fohrbeck, 2008). Respondents reported positive impacts on subsequent careers and professional responsibilities, but lesser effects on income. The results also showed that only a minority achieves senior leadership positions.

Over 20,000 African scholars have been supported by DAAD and a previous programme administered by the German Democratic Republic. The largest numbers of scholars were from Ethiopia, South Africa, Nigeria, Kenya, Sudan, Tanzania, Cameroon, Uganda, Ghana, Angola and Mozambique. Alumni include Wangara Maathai (Nobel Peace Laureate and former Vice-Minister for Environment in Kenya) and Asha Rose Mtengeti-Migiro (former Foreign Minister in Tanzania and Vice-Secretary-General of the United Nations).



### 8. Institutional embedding

The scholarships and alumni programmes are focused on capacity development of individual students. The Bicultural programme and the Anchor Country programme are set up to develop specific MSc degree programmes. The purpose of the programmes mainly addresses capacity building for individuals and improvement of specific educational courses within the existing institutional context. However, the goal of the Competence Centres (and the Centres of Excellence) seems to go beyond the level of individual students and changes of course contents: that programme aims strengthening the organizational and institutional competence of the African HE institutes. Close scrutiny of this particular programme can illustrate the range and scope of activities necessary to create, strengthen and consolidate the conditions for this type of capacity development.

#### FUNDING MECHANISMS ARD

Organization	Funding	Budget [€]
Ministry for Food, Agriculture and consumer Protection (BMELV)	BMELV Research institutes	2,000,000
Federal Ministry for Economic Cooperation and Development (BMZ)*	Targeted funding for international Centres for Agricultural Research	13,000,000
Federal Ministry of Education & Research BMBF	Project funding	14,000,000
German Research Council (DFG)	various programmes: Collaborative research Centres, Research Training Group, Research Units, Individual Grants Programme, Research Fellowships	5,500,000
The German Academic Exchange Service(DAAD)	Development Cooperation	3,500,000
Eiselen Foundation	Research grants	250,000
	Total	38,250,000

© In 2008 BMZ provided a total of € 26.4 million for development-oriented activities

## Appendix 11 – Mapping GREECE

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The 5-year Development Co-operation and Assistance Program for 2011-2015 is under elaboration; latest (policy) documents stem from 2010 (concerning the year 2009) and form the basis of this mapping.

### ***Policy and programs***

Being a relative newcomer in development cooperation, Greece is an interesting country to analyze. The country has changed from aid recipient towards donor, and in the past decade, the country has organized and enhanced its *institutional structures*, its *financial resources* and its *strategic priorities* in the development field in a rather extensive manner. Yet, the Greek economy suffers the most severe crisis of recent decades, and the country will have to strike a balance between reviving its economy and achieving its international commitments. Greece will face some large challenges in terms of further developing its strategic approach to development aid, strengthening its aid delivery system and adapting to new aid instruments.

### ***Re-defining Greek Development Policy***

The current financial situation can be seen as an opportunity to re-define Greek Development Policy to raise its effectiveness. So far, Greece's ODA programs have been formulated through *top-down* policy-making heavily influenced by the international ODA frameworks. Greece is proceeding to a series of innovations, reducing the number of aid recipient countries, and focusing its activities to the MDGs connected with poverty, health and education. Moreover, the Ministry of Foreign Affairs started restructuring the *modus operandi* of HELLENIC AID to enhance its effectiveness, and improve the viability of activities, harmonization, managing for development results and aid predictability. Development policy will continue to directly link poverty reduction with the fundamental principles of good governance, respect of international law and human rights, active participation of civil society, and cross-cutting issues as health, education, gender equality and the environment.

### ***Geographical priorities***

Greece's geographic location drives the strong *regional focus* of its aid program. Yet, Initially concentrated in the Balkans, the Black Sea region, the Mediterranean and the Middle East, Greece has now expanded its presence in Sub-Saharan Africa, Southeast Asia, the Caribbean and in the Least Developed Countries (LDCs).

### ***Thematic and sectoral priorities***

Greece is giving priority to the MDGs and poverty reduction, humanitarian assistance and addressing the impact of climate change on human security. Greece is focusing on technical co-operation in *Social Infrastructure and Services*, in particular in activities that enhance social development, such as the promotion of medical care, strengthening primary and secondary education, support to water & sanitation, vocational training for young people and women for job creation, establishment of institutions, strengthening democratization and promotion of equal access for women in the development process

### **Capacity building**

Greece has no formal policy on capacity development, let alone on capacity development for ARD. It is also little explicit on its educational or research activities, or in terms of agricultural (research for) development. Current (policy) documents mention some elements of capacity development elements elaborated below. Hellenic Aid, the Directorate-General of the Ministry of Foreign Affairs, indicates that *capacity building* plays a decisive role to achieve the MDGs as reflected in Greece's Action Plan. It is important to note that the term "capacity building" is used (only) in association with technical cooperation. Hellenic Aid links capacity building to technical cooperation that 'includes the establishment of organizational and institutional structures which strive to ensure that skills and technology (or know how) transferred to recipient countries will have a substantial impact and will allow partners to implement relevant programs/projects without external assistance'. The services of Hellenic Aid are focused on (technical) training, technical cooperation and support of output-oriented activities, such as constructing school buildings. Furthermore, it sees its support to capacity building in partner countries through the formulation of their so-called 'Sectoral development strategies'.

### **Monitoring and evaluation**

So far, the Greece government has planned, but not yet set up and executed impact assessments of its aid.

### **The Greek Scholarships Programme**

Capacity development is only mentioned a few times in Greek policy documents (referred to as capacity building and technical cooperation), and it is not clearly defined or positioned in its programs. The Scholarship program might be the best example of Greek capacity building in practice, although the words 'capacity', 'building' or 'development' are not mentioned once. Up till 2011, the Greek Scholarships Program offers yearly 100 scholarships to foreign students from developing countries for graduate and postgraduate studies at universities and technological education institutes in Greece.

The program's objective is 'the creation of executives, capable to contribute, in the future, to the development of their country of origin'. The Greek education system is thereby seen as a powerful tool. Moreover, it aims to assimilate to other service programs of Hellenic Aid, such as those in infrastructure and professional training. Unfortunately, there is not sufficient information available on aspects of the developmental focus, the programme's sustainability, its systems orientation, the measurement of benefits or institutional embedding of the Scholarship Program. Moreover, it must be noted that, from 2011-2012 onwards, the Scholarship Program will no longer be offered by the Greek government.

### **ELIAMEP (The Hellenic Foundation for European and Foreign Policy)**

Another program that can (to a small part) be related to capacity building is ELIAMEP, an independent non-profit and policy-oriented research and training institute – yet it is not specifically related to Agricultural Research for Development. ELIAMEP aims to provide a forum for public debate on issues of European integration and international relations and to conduct scientific research that contributes to a better informed and documented knowledge of the European and international environment. ELIAMEP focuses primarily on *research concerning capacity building and training*, in the areas of peace-building activities and policies. An example of a research project of ELIAMEP that is (to a small extent) related to capacity building is their publication on *Climate*

*change*: Addressing the impact on Human Security, in which human, community and institutional capacity building are mentioned in relation to gender equality, climate change and human security.

Greek Total Official Development Assistance granted by Greece in 2009 was reduced to 0.19% of its Gross National Income (GNI) from 0.21% in 2008 and in real terms to 436.08 million € from 504.94 million €.

<b>Budget expenditure on ODA 2009</b>				
	Social infrastructure & services	186,54 M USD	63%	186,54
	Education	96,11 M USD	32%	96,11
	Agriculture, forestry, Fishing	3,82 M USD	2%	
Services	Technical Cooperation	189,24 M USD	64%	
	Other aid	72,80 M USD	24%	
	<i>Program aid</i>	23,61 M USD	8%	
	investments	11,29 M USD	4%	
		296 M USD	100%	296,00
				578,65

## Appendix 12 - Mapping ITALY

### Policy

#### *The Italian Development Cooperation system*

Within the Ministry for Foreign Affairs (MFA) the Directorate General for Development Cooperation (DGCS) is in charge of Italy's Development Cooperation. The MFA provides about 1/3 of Italian ODA, and so does the Ministry of Economy & Finance. Also the Ministry for Agriculture, Food & Forestry Policies (MIPAAF) and the Ministry of Education, Universities & Research (MIUR) are contributing to the funding.

In line with frameworks of international agreements, such as the MDGs and the AAA, the priorities in Italy's development cooperation are: good governance, economic development, health and social services, education and vocational training, and infrastructure for sustainable management of natural resources. Gender equality and child protection are considered cross-cutting issues of all development programmes.

DGCS strives to enhance synergy in Italy's international cooperation through horizontal cooperation (fulfilled by NGOs), and it applies a strategy to promote decentralized cooperation with regional and local authorities, municipalities, public and private foundations, associations, universities and research centres.

#### *Geographical focus*

Attention is given to strengthening regional approaches and strategies, in particular in crisis areas and fragile and post-conflict states. Recent funding restrictions led to a reduced number of countries situated in the Mediterranean, West Africa, the Horn of Africa, and Southern Asia, but before indicative allocations for Development Cooperation were 50% for Sub-Saharan Africa (Ethiopia, Mozambique, Niger, Senegal, Sudan), 25% for the Balkan, Mediterranean & Middle East (Bosnia-Herzegovina, the Former Yugoslavian Republic of Macedonia, Kosovo, Egypt, Palestinian territories, Tunisia), 15% for Latin America and the Caribbean (Bolivia, Ecuador, El Salvador, Guatemala, Peru), and 10% for Asia & Oceania (Afghanistan, Pakistan).

#### *Agriculture and ARD*

MIPAAF defines the strategic guidelines for international cooperation in the agricultural/Agrifood sector including agricultural research. Support programmes are characterized by a multi-sectoral approach to promote integrated rural development. To ensure sustainability over time technical assistance to farmers is accompanied by activities to strengthen technical competence of beneficiary communities and the institutes involved. The project Scientific and technological cooperation in Agriculture (2007 – 2009) is an interesting DGCS project focused on agricultural production.

Most of the research financed by MIPAAF is conducted in and for Italy itself, focused on smallholder farmers, particular attention being paid to mainstreaming gender and ensuring environmental sustainability. Also other organizations contribute to projects for ARD or with an ARD component, which are partly financed by MIPAAF. The priorities in such projects are food security, poverty reduction and sustainable development.

Many bilateral programmes for agricultural and rural development contain ARD components. Usually, most cooperation projects of the Istituto Agronomico per l' Oltremare (IAO) and to the Istituto Agronomico Mediterraneo di Bari (IAMB) have an ARD component, and contributions to IAO and IAMB are considered ARD funding. However, there is no over-arching ARD programme and there is a lack of coordination between the various programmes initiatives being developed.

### ***Capacity Development***

MIUR, the Ministry of Education, Universities & Research (MIUR) supports international cooperation in Higher Education between universities, providing financial support and coordination, considering education as a central factor in poverty reduction and employment growth. Participating in international forums the Ministry contributes to the development of common policies aimed at establishing a European Higher Education Area.

DGDC sees development cooperation as an integral part of academic curricula: skills and techniques can be developed through interactive teaching, training and applied research. It is a strategic priority to establish new partnerships and strengthening existing ones to increase access to the European Higher Education Area and research systems. The Italian universities, which by tradition have strong collaboration with universities abroad in particular with universities in Africa, significantly increased joint actions with several countries.

### ***Capacity development in ARD***

Upgrading technical skills through teaching, research and training has become a priority in development cooperation. Accordingly, in Italy universities, NGOs and other public and private organizations increased the number of courses, master's degrees, internships and distance education initiatives on issues of Cooperation and Development. Most ARD takes place through the IAO, which in collaboration with the University of Florence, offers 2 MSc courses specifically designed for ARD: a professional Masters in Irrigation Problems in Developing Countries focused mainly on Africa, and an MSc on Geomatics & Evaluation of Natural Resources. For the period 2007-2011 DGCS is funding the courses with a total budget of some € 3 million awarding scholarships to participants from selected developing countries. Priorities in ARD follow the geographical priorities, thus researchers from the Mediterranean area and Africa received most of the funding for Capacity Development and Research in Agriculture.

### ***Monitoring and evaluation***

In 2009 a DGCS working group defined the Italian aid effectiveness plan, updating the existing sectoral guidelines, and reorganising and strengthening the system to monitor and evaluate programmes and activities. Specific weight is given to evaluate the impact of development cooperation and the effectiveness of the financial support provided. ARD programmes undergo an ex-ante evaluation: the DGCS Technical Evaluation Unit, and an ARD Senior Advisor assess the quality of ARD project proposals. However, in the evaluation there is no specific focus on capacity development in ARD.

Assessment of the quality of the results of research conducted by universities, public and private research centres, and the effectiveness and efficiency of their performance, is the task of the National Agency for the Evaluation of Universities & Research (ANVUR), and gradually, the universities are adopting systematic and shared assessment procedures for each operational area.

## Italian Institutes and research centres focusing on (A)RD

Various Italian organizations and institutes are active on agricultural research and development. Since they are large in number and conduct interesting research on (A)RD, a short overview is provided in this appendix. The overview is not exhaustive, yet aims to portray an indicative overview of existing centres and activities.

- IAO, the Istituto Agronomico per L'Oltremare is the MFA organ for consultancy and technical assistance in Italian development cooperation on agricultural science and technology. IAO is involved in development cooperation on integrated rural development, environmental and natural resource management, food security, and the fight against desertification. On behalf of the DCDG, IAO it collaborates with the CGIAR providing technical assistance and promoting new partnerships on ARD. IAO also represents Italy in the EIARD, on Forums for Agricultural Research, the European Forum Steering Committee (EFARD), and the Regional Forums and the Global Forum (GFAR). It is also active in the European Research Area for ARD.
- The National Research Council (CNR) conducts research for scientific, technological, economic and social development.
- The Conferenza dei Rettori delle Università (CRUI) is an institute representing Italian universities. CRUI performs a function of orientation and strengthening of the system. Part of 'research and innovation' is admission of third country researchers for purposes of scientific research.
- The Istituto Agronomico Mediterraneo di Bari (IAMB): is a Centre for post-graduate training, applied scientific research and promoter of partnership actions in the framework of the international cooperation programmes. It gives training activities and courses, seminars and is aimed at improving the training quality by directly involving trainees in research, and providing technical and organizational support, as appropriate to partnership actions for design and implementation. It cooperates with several national and international institutions and organizations in a number of European, African, Asian and American universities.
- The Agricultural Research Council (CRA) is a National Research Organization which operates under the supervision of MIPAAF, with general scientific competence in agriculture, agroindustry, food, fishery and forestry. It is in charge of planning, promotion and coordination of scientific and technological research facilities and activities.
- The Food Department of CNR was established in the context of the different domains of scientific and technological research distinguished inside the National Research Council. The CNR Food Department coordinates the activities of 20 institutes in order to contribute to the advancement of scientific and technological knowledge to develop and improve a sustainable and innovative agro-food system.
- The Italian National Agency for new technologies, energy & sustainable economic development (ENEA) performs research, provides additional services, and promotes activities in its various action domains. It collaborates with organisations and institutes abroad in the same scientific and technological spheres; defines technical standards; takes part in major research programmes and international organisations; and provides expertise on request.
- The INRAN institute, being supervised by MIPAAF, conducts research, information and promotion in food and nutrition in order to protect the consumer and improving the quality of agri-food.
- INEA, the National Institute of Agricultural Economics, also supervised by MIPAAF conducts research, detection, analysis and forecasting in the field of structural and socio-

economic, agro-industry, forestry and fisheries. It is involved in technical assistance activities, M&E and structural and market policies.

- ISMEA, the Institute of Food Services for the Agricultural Market, functions, through subsidiaries, produces information services, as financial assistant to agricultural enterprises. Through training and the expansion of agricultural property, it fosters generational change in agriculture on the basis of a specific aid scheme.
- The Istituto Sperimentale Italiano "Lazzaro Spallanzani" is the scientific research centre in the field of animal breeding and selection. It also avails of the cooperation of Italian and foreign Universities and Research Centres for the development of service activities and research.
- Italy also hosts one of the CGIAR Centres (Bioversity International), the Secretariat of the CGIAR Science Council, and the Executive Office of the Alliance of the CGIAR Centres. Moreover, Italy hosts the Secretariat of the Global Forum on Agricultural Research (GFAR), located at FAO in Rome.

## **The Regional Integral Information System (RIIS) (1st phase 1999-2001; 2nd phase 2002-2007)**

### ***Introduction Istituto Agronomico per L'Oltremare (IAO)***

This mapping presents an IAO project, the Regional Integrated Information System (RIIS) in the Horn of Africa financed by MFA and implemented with IGAD, the Intergovernmental Authority on Development). Although somewhat dated, the project gives a good overview of a capacity development project implemented by IAO. The Project rationale was to reduce or take away the many obstacles hampering effective sharing of environmental information and to establish a mechanism for improved access to and facilitated sharing of data and information on environmental and natural resources in the IGAD region. Through organisation of national seminars, with the active participation of institutes with a mandate in environmental management and ITC, a full-fledged programme (RIIS Phase II 2002-2007) was formulated.

### ***1. Overall objectives of support for capacity development***

The overall goal of the RIIS is to contribute to food security and environmental protection by strengthening regional and national capacities in the use and management of information and by reducing the digital divide in the IGAD Region. The project aimed at establishing a Regional Integrated Information System to improve access and utilisation of geo-referenced data, to facilitate decision-making for planning and management of development activities and the capacity to quickly react to emergencies.

### ***2. Identification of capacity needs***

The documentation found on RIIS/IGAD does not provide information on the needs identification process, but suggests that most probably the needs identification was done by a team of international consultants on behalf of IGAD, the Inter-Governmental Authority on Development.

### ***3. Type of intervention***

The RIIS project addressed priority actions as identified in the WSSD Plan of Implementation concerning natural resource management as a base for sustainable development, in particular: capacity building, networking, and trans-nationality. The project was designed as a decentralised integrated information system built by a multi-component approach to create a network of institutes, data providers and as well as users. The various components are independent and



adapted to country-specific situations. Phase I included technical assistance to develop pilot instruments to improve the visibility of the institutes involved, demonstrating the feasibility of the system and specifying the next phase of the project.

#### **4. Developmental focus**

For its proper functioning RIIS depended on successful establishment of operational linkages with existing data / information providers and users, and their information management capacity. The level of success to be achieved in phase II was conditioned by the active adhesion of IGAD countries: to adhere to RIIS the institutes concerned should comply with a set of features and rules to participate in the Information Community. Availability of adequate ICT infrastructure, and the competence of the staff to deal with modern ICT facilities for data collection and processing determined to a high degree the project's performance.

#### **5. Systems orientation**

For proper functioning and operation, RIIS as a supra-national system for information management depends very much on the quality of collaboration among the hosting agencies in the countries involved (Djibouti, Eritrea, Ethiopia, Kenya, Somalia, Uganda). All these countries but Eritrea are also members of FEWSNET, a network of information exchange focused on demography, agricultural (food) production, and climatic conditions that has been rather successful since 1985; however, the scope for synergy with RIIS is not specified., which raises questions about the comprehensiveness of the project approach.

#### **6. Sustainability**

To achieve the level of operation required depends on the priority given to this facility by the governments of the countries involved. To derive full benefit of the system, the countries should keep up the technical commissions, institutional networks, and open forums which feed into the system and ensure the level of standardisation and compatibility of the different sub-systems. Given its supra-national origin, the ICT capacity and the level of functioning of the information gathering by the host organizations required, for the time being the sustainability of the system seems weak.

#### **7. Measurement of benefits**

The report describing phase II (2002 -2007) does not present an overview of the results achieved in phase I. Instead, it indicates a range of results aimed at, some of which seem to repeat objectives from the former phase, phrased as expected outcomes. This should have facilitated evaluation at completion in 2007, but no data were found.

#### **8. Institutional embedding**

The success of the programme hinges on proper institutional arrangements, and the performance of the institutional partners. In the documentation available the importance of such provisions is highlighted, but no specific suggestions are given how to make sure such measures are taken. Obviously, the situation varies from country to country, but it certainly merits more attention given its strategic importance.

## FINANCING MECHANISMS ARD

Organization	Funding	Budget [€]
Ministry of foreign Affairs	CGIAR	5,000,000
	IAO annual contribution	2,785,000
	IAO projects	3,432,000
	IAM Bari annual contribution	5,944,000
	IAM Bari projects	2,000,000
	Bilateral Cooperation projects (estimate)	2,500,000
	GFAR	100,000
	Total	21,761,000

Table - Italy - Support for Capacity Development in ARD

Institute	Title awarded	Admission Requirements	Partner Institutions	Other Info
Università degli Studi di Catania - Facoltà di Agraria	International Master ERASMUS MUNDUS in Sustainable Development in Agriculture" (Agris Mundus)	Bachelor's degree or equivalent in Agriculture or Rural Development	AGRINATURA	
	Master Internazionale di 1° livello in Innovazioni e sostenibilità delle produzioni agro-alimentari nell'area mediterranea	Bachelor's degree or equivalent in (Tropical) Agriculture	Institut Agronomique et Vétérinaire Hassan II (Morocco) and Università 7 Aprile (Libya)	Up to 24 participants, 12 of which from Libya or Morocco
Istituto Agronomico Mediterraneo di Bari (IAMB)	Joint Doctoral Programme - Agricultural Transformation by Innovation (AgTraIn)		University of Copenhagen, University College of Cork, Universidad Politecnica de Madrid, Wageningen University, Montpellier SupAgro	
	Master of Science Programme in "Land and Water Resources Management: Irrigated Agriculture"	High School degree + 4 years academic studies in Agricultural sciences, Agricultural engineering		Open to candidates of any nationality. Priority for scholarships will be given to applicants from Southern and Eastern Mediterranean and Middle East Countries. Students who have been awarded the CIHEAM MS degree have access to PhD studies in European, Arab and American universities.
	Master of Science Programme in "Integrated Pest Management of Mediterranean Fruit Tree Species"	High School degree + 4 years academic studies in Agricultural sciences, Biology & Biotechnology		
Istituto Agronomico per l'Oltremare	Master of Science Programme in "Mediterranean Organic Agriculture"	High School Degree + 4 years academic studies in Agricultural sciences		
	Professional Master in Irrigation Problems in Developing Countries	At least a three-year bachelor degree (or equivalent) in Civil and Environmental Engineering, Agriculture or related disciplines	University of Florence - Department of Agricultural and Forest Economics, Engineering, Sciences and Technologies (DEISTAF)	Up to 20 participants. 12 participants from eligible countries (for 2011: Ethiopia, Kenya, Sudan, Tanzania, Uganda and Mozambique) will be provided with return air ticket, food and lodging, insurance and pocket-money for the training period
Università di Bologna - Facoltà di Agraria	Master's Degree on Geomatics and Natural Resources Evaluation	University BSc in Agriculture, Forestry, Geology, Natural Sciences and related disciplines	University of Florence - Faculty of Agriculture	A limited number of scholarships is available for candidates from Egypt, Tunisia, Lebanon, Senegal, Ethiopia, Palestinian Territories
	Sustainable Development of Agricultural and Rural Areas of the Adriatic-Ionian Basin (Valorisation of Typical Agro-food Products)		UniAdriion, Adriatic-Ionian Interuniversity Network	Participants from the Western Balkans might benefit from a scholarship awarded by the Italian MFFAA - DG Development

**Table - Italy - Support for Capacity Development in ARD**

Institute	Title awarded	Admission Requirements	Partner Institutions	Other Info
Università di Padova - Facoltà di Agraria	MSc Course in Sustainable Tropical Forestry (SUTROFOR)	First university degree	University of Copenhagen, Bangor University, Dresden University of Technology, AgroParisTech-ENGREF	Erasmus Mundus Programmes
	MSc Course in Sustainable Forest and Nature Management (SUFONAMA)	First university degree	University of Copenhagen, Bangor University, University of Göttingen, Swedish University of Agricultural Sciences	
Università di Padova - Facoltà di Agraria	Joint Doctoral Programme : Forest and Nature for Society (FONASO)		University of Copenhagen, Swedish University of Agricultural Sciences, Bangor University, Dresden University, University of Göttingen, AgroParisTech	Erasmus Mundus Programmes
	Master professionnel international et certificat de formation supérieure agrinovia	MS equivalent	Université de Ouagadougou, Université de Limoges, Université de Lausanne	
Università della Tuscia	International Master "Environmental Science for Large Urban Areas"	First university degree	PACE University, Pleasantville Campus, New York	
	International Master Agro-ecology and Organic Farming"	First university degree	ENOAT, European Network of Organic Agriculture Teachers; UMB, Norway; SLU; Sweden; ISARA, France	

## Appendix 13 - Mapping THE NETHERLANDS

### ***Policy***

The Ministry of Foreign Affairs is in charge of the Dutch development cooperation, while Agriculture as a sector, is dealt with by the Ministry for Economic Affairs, Agriculture & Innovation (ELI).

Whereas the MDG, the Paris declaration and the AAA are guiding the multilateral cooperation activities, for the bilateral development cooperation four major themes have priority: Security and legal order, - Food security, - Water, and - Sexual and reproductive health & rights. Support to Education and health are used to support and strengthen the four priority groups.

Policy themes are being re-formulated and more emphasis is given to economic development, and strengthening the autonomy of developing countries, development of the private sector, and the so-called 3D-programme (defense, diplomacy, development). Internationally, the MDGs remain priority.

### ***Geographical priorities***

The number of bilateral partner countries was drastically reduced (from 33 to 15): Afghanistan, Bangladesh, Benin, Burundi, Ethiopia, Ghana, Indonesia, Kenya, Mali, Mozambique, the Palestinian territories, Rwanda, Sudan, Uganda and Yemen.

### ***Thematic and sectoral priorities***

The thematic priorities in the multilateral development cooperation for the Netherlands are Climate Change, Energy, Water and the Environment.

### ***Agriculture and agricultural research***

Wageningen University & Research centre (Wageningen UR) performs most of the ARD portfolio in the domains of agro-technology & food, plant sciences, animal sciences, environmental science and social sciences. In 2010 the Ministry of ELI contributed € 159 mln to the University and € 158 mln to the institutes for applied research.

National research priorities align with international agreements such as the WSSD, the convention on Biological Diversity, the Paris Declaration and the MDGs, in combination with Dutch development cooperation policy. Leading principles for ARD activities in development cooperation are a demand driven agenda-setting, participatory approaches in action-research, social learning in multi-stakeholder innovation processes, and a change from linear transfer of knowledge to interactive co-production of knowledge. Until quite recently capacity and institution building, through strengthening knowledge systems for development, was also a leading principle.

### ***Capacity development***

In the publication 'Less pretention, more ambition' (2010) the Scientific Council for Government Policies describes the current development policy in terms of globalization. It highlights the strategic importance and urgent need for capacity development in research and higher education, in particular in Africa. However, neither capacity development in general, nor in ARD in particular is described in more detail. Whereas agriculture is high on the agenda with food security and water being top priority, and with substantial attention to boost commercial production and value chains - no attention is given to strengthening agricultural research. With

budget cuts on education, attention for capacity development in ARD certainly has no priority [in policy letters, the concept of ‘capacity development’ is not even mentioned once].

### ***Types of intervention***

(if data available: ) Summary indication of some of the major programmes

### ***Monitoring and evaluation***

From 2008 until 2010, the Department for Evaluation of Policy & Operations of the Ministry of Foreign Affairs (IOB) performed an evaluation study on Dutch capacity development efforts. The evaluation comprised 26 case studies of programmes in support of Southern organization; 23 case studies of programmes supported by one of the 13 Dutch Development Partners, and 3 case studies conducted in Ghana, where the Dutch Embassy provides sector budget support. The purpose of the evaluation was to assess the effectiveness of the various modalities of capacity building.

## **Program: NICHE (NETHERLANDS INITIATIVE FOR CAPACITY DEVELOPMENT)**

### ***Introduction***

From 2002 - 2009 the Ministry of Development Cooperation (DGIS-BuiZa) ran two international programmes for capacity development in Education: NPT (the Netherlands Programme for Institutional Strengthening of Post-secondary Education and Training Capacity) and NFP (the Netherlands Fellowships Programme). NPT and NFP were the main instruments of the Dutch international education policy aimed at strengthening post-secondary education and training capacity in developing countries managed by NUFFIC, the Dutch organization for international cooperation in higher education (HE). From 2009 onwards, two other programmes took their place: NICHE, the Dutch Initiative for Capacity Development in Higher Education and the Renewed NFP for the period 2010-2013. NICHE focuses on sectors supported by the Dutch Bilateral Cooperation Programme, in the higher education sector in general or in cross-cutting themes. Dutch universities, academies and specialized knowledge centres provide technical assistance for training and education. For 2011 the government decided to commit a maximum amount of € 54 mln for new, multi-year NICHE projects which abide the criteria expressed in the “Policy guidelines on development cooperation” (November 2010). According to Dutch policies, the role of education and research in rural development in general, and in development of the agricultural sector in particular, are strategically intertwined, and it is therefore that many support programmes funded through NICHE are addressing capacity development at the interface of education, ARD and extension through a systems approach implying both the public and the private sector as well as involving civil society organizations and NGOs.

### ***1. Overall objectives of support for capacity development***

NICHE is aimed at building sustainable capacity of institutes in developing countries providing post-secondary education and training. NICHE sees capacity development as a process whereby people, organizations and the civil society mobilize, create, adapt and maintain capacity over time.

### ***2. Identification of capacity needs***

NICHE is a needs-based programme by design, it advocates a demand-driven approach, ownership of problems and solutions in the developing countries, flexible support mechanisms

and donor harmonization, All of this should imply that the beneficiaries are actively involved in the identification of their needs for capacity development. In NICHE, this implies that the national authorities, the Dutch embassies and NUFFIC jointly select sectors and themes to focus upon and that the needs identification includes national policy structures, sector and institutional capacity analyses, policy priorities and donor coordination mechanisms. The NICHE programme stipulates that demand is identified on the basis of policy analyses and existing local plans. If deemed necessary, NUFFIC conducts or supports additional studies and organizes stakeholder meetings to facilitate the identification process.

### **3. Type of intervention and implementation arrangements**

NICHE promotes capacity development through an integrated approach. Capacity is built through projects with partner organizations in participating countries training selected staff in interactive training methodologies, curriculum development, problem-solving, competence-based teaching, production of training materials, and assessment and evaluation techniques of learning progress.

NUFFIC awards grants to Southern and Dutch organizations jointly implementing NICHE projects. Basic characteristics of the NICHE programme: ownership of problems and solutions lies in the partner countries; the projects are in line with national policy priorities and the post-secondary education sector; and they fit also the goals of the bilateral development cooperation. Specific attention is given to gender and labour market needs. Furthermore the projects have to use existing local and regional expertise and steer toward outputs and outcomes. Project support has to be integrated, coherent and flexible to contribute to capacity development in a process of organizational learning in a sustainable way. On average, programme duration is 3 – 4 years with opportunities for extension or follow-up if required.

### **4. Developmental focus**

The NICHE programme is strongly focused on capacity developing activities in higher education in developing countries. Cooperating partners are jointly responsible for project implementation. The relevance and sustainability of project results is to be maximized through involvement of regional and local expertise for training, technical assistance and institutional collaboration. Institutes and organizations in partner countries are assisted by matching Dutch know-how with local or regional expertise. A variety of organizations is eligible for support, including institutions for post-secondary education, government ministries, national commissions and NGOs. NICHE pays special attention to Sub-Saharan Africa. Besides, it has four cross-cutting themes: gender, labour market, learning organizations, and integrated capacity development (ICD). NUFFIC pays specific attention to increase the participation of women in higher education to enhance their participation in decision-making processes at national level for sustainable development.

### **5. Systems orientation**

Integrated Capacity Development (ICD) is one of NUFFIC's cross-cutting themes. It is promoted at the individual, organizational and institutional levels simultaneously. ICD is necessary to foster enabling conditions facilitating organizational performance, acknowledging the formal and informal international, national and social rules. Usually institutional development is beyond the scope of a project, but in NICHE a component of interactive policy development can be included in the project design, which can be conducive to institutional change.

## 6. Sustainability

NICHE is conducive to a sustainable, integrated capacity development approach. As a rule, NICHE programmes are designed on a 3-year implementation period, with a possibility of 1-year extension if need be and resources allow. Cooperation with (local) partners who are in charge of the project's implementation is an essential condition for the project design so as to increase their sustainability under local conditions. Giving specific attention to insert the projects into local policies, seeking collaboration with other actors in the sector and requesting a feasible exit strategy, the programme stimulates good conditions to optimize the sustainability of the results to be achieved.

## 7. Measurement of benefits

### Monitoring progress

Yearly, NICHE's partners have to jointly develop work plans and to report on programme implementation, as part of the project monitoring system. The project's logical framework forms the basis for internal monitoring by the partners and external monitoring by NUFFIC. Programme outlines and implementation plans are subject to periodic review by the signatories to take account of the evolution of the conditions taking place.

### Evaluation

NICHE was launched in 2009, and there is no evaluation reported on this programme yet. However, an extensive evaluation study was conducted on the NICHE predecessors ((Van der Aa et al. 2007). This evaluation provides interesting lessons taken into account into NICHE.

## 8. Institutional embedding

In each country where NICHE is active, representatives of the national authorities, embassy staff and NUFFIC staff develop a programme outline to match national priorities with the sector policies already established. Thus a policy framework is elaborated to situate the NICHE programme comprising one of more sectoral domains. It is this policy framework that serves as a frame of reference for all parties involved throughout the project's lifetime and after its finalization.

### FUNDING MECHANISM ARD

Organization	Funding	Budget 2010 [€ ]
Ministry of Economic Affairs, Agriculture and Innovation	ELI research and capacity building programmes	8,462,000
Ministry of Foreign Affairs (DGIS-BuiZa)	Research and capacity building programmes	25,000,000
	Core funding CGIAR institutes CIFOR, ICARDA, IPGRI, ICRAF, ICLARM	7,500,000
NUFFIC Department for Human Resource and Institutional development		11,000,000
	Total	51,962,000

Source: ERA/ARD month/year [www.era-ard.org](http://www.era-ard.org)



## Appendix 14 - Mapping NORWAY

### **Policy**

Within the Ministry of Foreign Affairs (MoFA) development assistance is organized into two sections: NORAD and the Development Cooperation. NORAD is in charge of programmes with bilateral funding. The main purpose for international development cooperation is to improve economic, social and political conditions for the population of developing countries with specific emphasis on the poorest people. DCC is responsible for multilateral funding including agricultural research. Its objective is to fight poverty and promote social justice, focusing on environment and sustainable development, peace keeping, human rights, energy, good governance and the health-related MDGs.

The Norwegian Strategy for Development Assistance 2008 makes some reference to capacity development. It confirms that for long-term development cooperation it is a fundamental principle to support the growth of strong, democratic states able and willing to fight poverty and respect human rights. In international cooperation Norway aims at mainstreaming capacity development efforts into the sector programs and projects. Norway commits to increase budget support to selected partner countries to enhance their competence and capacity to deliver good quality services for the public welfare.

Capacity development is a key pillar of Norwegian development policy according to the Norway Memorandum to the OECD/DAC Peer Review (2008). In its Development Co-operation Manual (2005) NORAD states that Norway shall contribute to strengthening partner capacity to plan, implement and monitor programs for capacity development and to report on results. The manual does not specify how to address capacity development or how to measure the results of such intervention.

NORAD ordered a *Review and synthesis of lessons learned* from Institutional Cooperation and Capacity Building in the Environmental Sector in Development Cooperation in 2008. The review showed that in long-term development cooperation, Norwegian advisory staff tend to execute tasks themselves instead of assisting local counterpart staff to do so. The study also highlights the importance of human resource strategies and incentives for local staff, and the need to promote country ownership of and commitment to development interventions.

### **Geographical priorities**

Norway has development cooperation links with many countries all over the world: in 2009 Norwegian development assistance amounted to NOK 25.7 billion, and in 2010 Norway provided bilateral assistance to 114 countries in total. Among the 32 most important countries for Norway's overall development effort, there are 16 countries in Africa, 11 in Asia and the Middle East, 3 in Europe and 1 in Latin America. UMB, the University of Life Sciences of Ås, has built an extensive international network among 150 universities worldwide: with 15 universities in Africa, 27 in Asia and the Middle East, more than 80 universities in Europe, 14 in North America, 6 in South America and 2 universities in Oceania.

### **Thematic and sectoral priorities**

In its Strategic Action Plan for 2011-2014 UMB states that it is important to internationalize its research and education, establishing strong academic networks for international exchange and

capacity development. The action plan highlights the relevance of interdisciplinary approaches and the importance to integrate social and natural sciences. Other research guidelines stress joint capacity building with partner institutes, integration of the PhD and research programmes, linkage of MSc programmes to research themes, enhancing the multi-disciplinary working environment and the necessity to pay attention to the relevance and accountability of the research programmes

### ***Agriculture and agricultural research***

Support for international agricultural research is influenced by the Agricultural University of Norway (AUN) and NORAGRIC, the Norwegian Centre for International Agricultural Development. Three thematic areas for research conducted by NORAGRIC, are directly related to capacity development in ARD: Agricultural Development, Conservation & the Environment, Climate Change & Development, and Globalisation, Trade & Development. Two cross-cutting issues (Poverty and Gender) are also relevant in that respect.

In collaboration with the Sokoine university (Tanzania) recently 2 new programmes were launched in 2010: CCIAM, the programme on Climate Change Impacts, Adaptation & Mitigation; and EPINAV, the programme Enhancing Pro-poor innovations in Natural Resources and Agricultural Value-chains, while the programme for Higher education Research & Development, HERD, was started with a network of Universities in the Western Balkan.

### ***Capacity development***

The OECD/DAC Peer Review 2008 observes that Norway appears focused on mainstreaming capacity development into sector and thematic development policies and programs, and that the concept itself receives little attention in strategy and policy documents and guidance notes. The Peer Review signals further that currently capacity development is not explicitly mentioned as a priority issue in development co-operation, and that Norway does not have an official policy statement to guide the design and implementation of capacity development interventions.

### ***Norwegian support to higher education and research***

About 4% of the Norway's budget for development assistance is spent on higher education and research. NORAD engages in extensive cooperation with universities and colleges in developing countries, contributing about 200 million NOK per year for strengthening and developing higher research institutions in the South. A major part of this support is channelled through NUFU, the Norwegian Programme for Development, Research & Education financed by NORAD and administrated by SIU.

### ***Types of intervention***

Norway has a wide range of institutes and organization involved in international development cooperation. The main actors and programmes concerning capacity development in ARD are, in alphabetical order:

- **Noragric**, Norwegian Centre for International Agricultural Development, functions as UMB's Department of International Environment & Development Studies. Its aim is to contribute towards equitable development, sustained well-being of women and men, and sound environmental practices through collaborative activities that generate and exchange knowledge and provide education in the area of agricultural development, livelihood security and natural resource management. NORAGRIC plays an important role in the implementation of UMB's Strategic Internationalization Action Plan 2011-2014. Staff and

- students engage in institutional collaboration with partner institutes in Sub-Saharan Africa, South- & Southeast Asia, South-East Europe and South-America by interdisciplinary studies in a wide range of issues like poverty alleviation, livelihoods, gender, environmental management, land use, bio-diversity, property rights, peace building and post-conflict development.
- **NOMA**, Norad's Programme for Master Studies, provides financial support for MSc programmes in developing countries through equal partnerships between local and Norwegian HE institutes. It is financed by the Norwegian Agency for Development Cooperation and managed by SIU. NOMA's overall goal is to contribute to the education of staff in public and private sectors and in civil society at large in selected developing countries through building capacity at the MSc level in higher education institutions. Agriculture and/or rural development is not among the 6 thematic areas supported by NOMA
  - The **NOVA** University Network established in 1995, is a platform for cooperation in education and research between 7 Nordic Universities in Forestry, Veterinary and Agriculture from Denmark, Finland, Iceland, Norway and Sweden. NOVA starts up, administers and promotes cooperation in education and research between its member institutes, to enhance life sciences in the Nordic countries bringing together students, teachers and scientists. NOVA is building networks to develop innovative and high quality education, building capacity and generating knowledge to contribute to sustainable use of natural resources, food production, enhancing health, prosperity and well-being of people and animals. At present over 40 NOVA networks are covering a wide range of action domains, which led to numerous high quality courses and research activities for PhD and MSc students.
  - **NUFU**, a programme for Development, Research & Education administered by SIU under a framework agreement with NORAD is a programme for academic research and educational co-operation based on equal partnerships between institutes in the South (Sub-Saharan Africa, Asia, Central America and the Middle East) and in Norway
  - **SIU**, the Norwegian Centre for International Cooperation in Higher Education (SIU) is Norway's official agency for international programmes related to higher education
  - **UMB** is one of the main partners in NUFU. Currently, there are some 15 on-going NUFU projects at UMB. Among the NUFU partner institutes in the South there are single universities in Uganda, South-Africa, Mozambique, Vietnam, Nepal, the Palestinian Territories and Sudan, and there are 2 partner institutes in Ethiopia, Tanzania and Malawi.

### ***Monitoring and evaluation***

In NORAD's Evaluation of bi-lateral Development Cooperation over the period 2005-2010 three findings were paramount, irrespective of the type of cooperation, be it capacity building, humanitarian aid, peace-building or infrastructure development:

- 1) Often too little is known about the societies, where the development efforts are deployed, in particular concerning the internal functioning and power structure. Mismatch between the ambitions and the knowledge and information base commonly occurs, and most often the focus is on problems instead of on opportunities. Therefore in the project design it is difficult to build on existing structures, processes and practices, and take these into account during implementation.
- 2) To sustain results of capacity building and institutional strengthening, long-term commitment and continuity are essential, often stretching over one of two decades -

especially in the case of low-income countries.

- 3) Major lessons of the evaluation with immediate relevance to capacity building for ARD, are: 1) Better use should be made of local knowledge and capacity; 2) To be most effective programmes should be adequately staffed, apply good routines and with an adequate level of continuity, and 3) Long-term work and continuity are necessary to secure lasting results. The need for long-term assistance was underlined in the evaluation of NORAD's MSc degree and research programmes.

## **ARDEP: THE AGRICULTURAL RESEARCH AND DEVELOPMENT PROGRAMME**

### ***Introduction***

ARDEP is building on previous support projects for the Banda Agricultural College like PRIMARO (Poverty Reduction in Malawi using Agricultural Research & Outreach (2001-2005)). ARDEP had a long gestation and inception period mainly because it was difficult to elaborate a functional programme design, which required creating rapport and workable partnerships among the many actors involved. The novelty of ARDEP is its mode of operation. Its defining characteristic is involvement of multiple stakeholders across sectors into a coherent system of implementation to ensure concerted action towards common goals. The micro-projects, on which the programme is built, are based on demand-driven research and outreach from the ultimate beneficiaries at grassroots – the farmers. Extensive sensitisation and mobilisation have been necessary of both farmers and scientists. The micro-projects are fully integrated into government structures, especially those from the ministry of Agriculture & Food Security. ARDEP fits into the overall sector policy framework for agriculture: the Agricultural Development Programme.

### ***1. Overall objective***

To contribute to enhanced productivity in Malawi's agricultural sector with a view to improve the quality of life and social well-being of Malawians through a powerful, effective and efficient national research and outreach system.

### ***2. Identification of capacity needs***

ARDEP was designed in reaction on widespread comments originating from various departments of the ministry of agriculture, Chitedze Agricultural Research Station, NGOs, donors and other parties involved that the Bunda College of Agriculture lacked the capacity to engage in outreach activities directly relevant to the agricultural sector. Through a lengthy process of mobilization, awareness-raising, information exchange, negotiations and interactive decision-making all parties involved contributed to the final programme design.

### ***3. Type of intervention***

The intervention is a follow-up to previous projects that were mainly geared to institution- and capacity building (from the late 1990s until 2006). As a result of the previous support programmes Bunda Agricultural college has matured as a reputable university college. The motivation to change came from the college itself, because the staff realized it was in its own interest to engage pro-actively with society and take up an active role in contributing to Malawi's development strategies.

### ***4. Sustainability***

In the MTR conducted in 2008 the sustainability of the micro projects was found to be

reassuring, and the potential for scaling up is greatly enhanced by the way ARDEP is integrated into the existing structures in the sector. Almost all ARDEP micro projects fit into the climate change impact adaptation strategy, especially in dealing with food security and sustainable development at household level. They are susceptible to the occurrence of environmental events such as erosion and floods though. Given ARDEP's integration in the policy framework, into the established structures of the sector, the adoption of the bottom-up demand-driven model and the ownership observed at grass-roots level the sustainability prospects are very good.

### 5. Measurement of benefits

The MTR of ARDEP states it is too early to draw any definite conclusions on the level of success of ARDEP, given the fact that the pilot micro projects came into being only 1 or 11/2 year before. However, the MTR arrives at a series of observations in line with the findings of the evaluation of Norway's international development cooperation worldwide over a 5- years period (*Best practices & Innovative approaches to Capacity Development in Low Income Countries in Africa*; NORAD 2008:

- Local ownership and participation are critical for the success of capacity development projects;
- Because the context for capacity development to be sustainable is so important, considerably more resources are required for planning and performance monitoring than donors are used to;
- In capacity development specific attention is given to two operational dimensions: the social level, and the complexity of the tasks. The more difficult the task gets, the type of intervention required moves from skills training to strengthening managerial competence and facilitation of learning processes.

### 6. Institutional embedding

ARDEP fits very well into the overall policy framework of the national Agricultural Development Programme (ADP) – and conforms to its precepts. At district level and the Extension Planning Areas (EPAs) the ARDEP concept has been operationalized and become a suitable implementation mechanism, during ARDEP's implementation and beyond when external funding will have ceased.

#### FUNDING MECHANISM ARD

Organization	Funding	Budget [€ ]
DCC	CGIAR Fund Window 1; CIFOR, ICRAF REDD activities	110,000,000
	Global Crop diversity Trust (GCDDT) budget for multi – year period	50,000,000
	FAO multi-years project [per year]	25,000,000
NORAD Ministry of Foreign Affairs Ministry of Education & Research; NFR; SIU	Joint research programmes Inter-university cooperation	

Source: ERA/ARD month/year [www.era-ard.org](http://www.era-ard.org)

## Appendix 15 – Mapping PORTUGAL

### ***Policy***

For Portugal the guidelines contained in the Paris Declaration (2005), the Accra Agenda for Action (2008) and the MDGs are leading principles for its policy on international development cooperation, which is channelled through 3 ministries: through the Portuguese Institute for Development Assistance (IPAD) from the Ministry of Foreign Affairs (MNE), the Ministry of Agriculture, the Seas, the Environment & Land-use Planning (MAMAOT), and the Ministry of Education & Science (MEC). To contribute to sustainable development, especially through development of capacity and ownership by the partner countries, the Strategic Vision for Portuguese Development Cooperation (2010) mentions the following priority areas:

- Good governance, participation and democracy,
- Sustainable development and poverty alleviation, in particular in Education, Health, Rural Development and the Environment sectors,
- Economic growth

Within the MNE the IPAD manages Portugal's international aid coordinating a decentralized aid program across several ministries, universities, other public institutions, and municipal governments. IPAD's priorities are Portuguese-speaking developing countries other than Brazil. IPAD's bilateral aid programs include good governance, institutional strengthening; education; culture and Portuguese language; health & nutrition; and rural development. Under Rural Development IPAD provides support to initiatives in agriculture, environmental protection, water & sanitation, and renewable energy.

IPAD plays a central role in the de-centralized approach to international development cooperation: next to its own activities in international cooperation, the institute has to guide, coordinate and monitor the cooperation activities from other entities as well. Main actors involve units from the Central administration (ministries, other public agencies), from local authorities (municipal councils, municipality boards), civil society organizations (development NGOs, foundations) and institutes for Higher Education, Research, Science & Technology. IICT and INIAV are public institutions which channel their contributions through multi-lateral organizations like Agrinatura, CGIAR, EIARD and ERA-ARD.

### ***Geographical priorities***

Within the OECD/DAC Portugal focuses most of its international assistance to a limited number of countries: Angola, Cape Verde, Guinea Bissau, Mozambique, São Tomé e Príncipe and East-Timor, belonging to the Community of Portuguese speaking countries (CPLP), benefits of 65% of its ODA funds. Guatemala, Morocco, Afghanistan, Bosnia and Serbia are the main recipients among other countries that benefit of the remaining 35%.

### ***Thematic and sector priorities***

In bilateral development cooperation Portugal gives priority to Education and Good Governance: these domains receive 28% and 25% respectively of the funding. In the countries where most of the activities are concentrated, Portugal's comparative advantage is based on the similarity of the set-up of the administrative and legal institutions and the language. Most bilateral aid programs are geared to capacity development and channelled through technical assistance, training and fellowships. Poverty reduction is also a component of bilateral cooperation, in particular through support to social-economic development at community level. For the CPLP the priority is promotion of environmentally-sound production systems through sustainable

management of natural resources, with emphasis on food production at small family holdings, food security and poverty reduction, enhancing participatory approaches in development and research.

### ***Agriculture and agricultural research***

ARD activities are mainly developed by the Tropical Research Institute (IICT/MNE), Centrop (NGO), Portuguese Universities and INIAV (ex-INRB)/MAMAOT. These activities are mainly supported by the IPAD and the Department of European, bi- and multilateral Relations (DEBMR) of FCT (the Foundation for Science & Technology). IICT also represents PT in major international consortia/Platforms like EIARD, CGIAR and GBIF; INIAV represents Portugal at ERA-ARD, while Portugal participates in PAEPARD via Centrop; Centrop was recognized as NGO for Development since June 1, 2009, based on Higher Institute of Agronomy, aims primarily to promote and support sustainable development in tropical regions through participation in projects for development, scientific research, studies on Agriculture and Rural Development, dissemination and training staff related with technical, economic and social development.

### ***Capacity development***

Universities and science institutes are leading the development effort in capacity development in Higher Education and Research through intensive collaboration with institutes in the partner countries (average annual contribution to this sector: 52.5 M€), while the Governance sector receives some 47 M€ yearly, spent mainly on capacity development in Public administration and other government bodies (including the sub-sector Peace & Security, which also covers contributions to the UN and NATO).

### ***Type of intervention***

Previously Portuguese experts and trainers were fielded to increase the numbers of staffs in partner countries in education and research. Nowadays such staff is mainly deployed to develop the capacity of the local staff to ensure that the partner institutes acquire the competence required to ensure the sustainability of their functioning. A similar shift took place in the scholarship programme: since 2009 the number of scholarships for studying in Portugal decreased in favour of an increase of scholarships for studies in the partner countries themselves.

Portugal provides support to capacity Development in ARD through both multilateral and bilateral cooperation channels.

### ***Multilateral***

- CGIAR – In the period 2006 – 2010 the Portuguese contribution is mainly spent on projects conducted by CIMMYT, ICARDA, IRRI, ILRI and Bioversity International (USD 600,000/year). From 2011 onwards the support in this category goes to ILRI, IRRI, CRPs CCAFS and dryland cereals.
- CYTED – Together with Spain, Portugal contributes to the funding of the Ibero-American Programme for Science & Technology for Development, a programme for cooperation among 19 countries in Latin America (€ 250,000/year)
- ERA-NET – Portugal is strongly involved in the actions of ERA-NET participating in several platforms that play an important role in ARD activities. The goal of this participation is to achieve convergence of norms and elaboration of procedures to handle transnational calls.

### *Bilateral*

- Public institutions like IICT, INIAV, and institutes for Higher Education and NGOs like CENTROP are collaborating in capacity development for ARD with a number of institutes in several partner countries. The IICT is a founding member of AGRINATURA-EEIG.

### **Monitoring and evaluation**

IPAD, IICT and FCT carries out monitoring (by periodic reporting, field visits on location and participation in meetings with the implementing parties) of the projects it co-finances applying the criteria defined in the Indicative Cooperation Programmes signed by the parties involved. IPAD launched a pilot experiment to establish Strategic Monitoring Commissions (CAE), formed by representatives of the key actors involved and in charge of planning of strategic actions, project monitoring and proposing improvements deemed necessary. One of IPAD's priorities in international development cooperation is to promote a culture of evaluation (for learning) among all participants (sector ministries, local authorities, civil society, the private sector and other partners).

## **Programme for Agricultural and Rural Development (IICT, CENTROP)**

### **Introduction**

The Tropical Research Institute from Portugal (IICT: [www.iict.pt](http://www.iict.pt)) belongs to the Ministry of Foreign Affairs and devotes its activities to tropical regions, particularly at the Community of Portuguese Speaking Countries (CPLP). IICT follows the international development agenda aiming to reduce hunger and poverty until 2015 (MDGs). Around 200 scientists and technicians work in international cooperation towards the major global development issues. IICT represents Portugal in the major international ARD platforms like CGIAR, EIARD and Agrinatura.

CENTROP ([www.centrop.org](http://www.centrop.org)) is a NGO for Development chaired by researchers from the Higher Institute of Agronomy – Technical University of Lisbon and IICT. It aims primarily to promote and support sustainable development in tropical regions through the participation in projects for development, scientific research, studies on Agriculture and Rural Development, dissemination and training. CENTROP represents Portugal in PAEPARD II.

### **1. Overall objectives of support for capacity development**

The main objective of IICT/CENTROP is to promote local capacity in Agriculture and Rural Development at several levels (institutional, technical, scientific, undergraduate, and post-graduate). Main disciplines: agronomy, anatomy, biochemistry, biotechnology, ethno-botany and –agronomy, geography, phytopathology, physiology, post-harvesting technologies, integrated storage management, system's biology.

### **2. Identification of capacity needs**

“Indicative Cooperation Plans”: strategic plans (5 years) established by IPAD in strict alignment with the strategic plans of the target countries (CPLP).

Specific projects and requests based on bi- or multilateral arrangements from the targeted countries.

### **3. Type of intervention**

All interventions are developed in close collaboration with institutions from the targeted countries (mostly bilateral projects), namely:



- Specialized (problem-based) training (farmers, undergrad and post-grad students, technicians)
  - Courses development (technical, professional, BSc, MSc and PhD level)
  - Implementation of specific technologies
- Research collaboration (involving capacity development at the levels referred above)

#### **4. Developmental focus of capacity development initiatives**

Higher Education, Research Institutes and farmer's associations.

#### **5. Systems orientation**

In most cases: i) project approach focused on research or higher education institutions and farmers organizations; ii) thematic networks involving several institutions from Portugal and CPLP countries

#### **6. Sustainability**

Projects are designed to ensure sustainability.

#### **7. Measurement of benefits**

Guidance for good-practices and output-oriented approach according to international standards (e.g. lectures, courses, specific training actions, lectures, theses supervision, publications, communications). Output indicators are regularly evaluated by an external commission (steering committee and monitoring unit) and financing agencies.

#### **8. Institutional embedding**

The embedding of the activities foresee the creation of a functional network among the CPLP institutions involved as well as other international partners.

#### **FUNDING MECHANISM ARD**

<b>Organisation</b>	<b>Funding</b>	<b>Budget 2008 [€]</b>
IPAD (MNE)	Ministries and research institutes in partner countries	1,214,085
	Portuguese institutes and NGOs	689,507
	Union of Portuguese-speaking capital cities (UCCLA)	479,578
		45,000
DREBM/FCT	CGIAR (CIMMYT, ICARDA, ILRI, IRRI)	450,000
IICT	Agrinatura	13,000
CyTED		no information available

Source: ERA/ARD month/year [www.era-ard.org](http://www.era-ard.org)

Over the period 2005-2010 the Portuguese public development assistance amounted to 390 M€ per year on average, of which 60% was spent in bilateral collaboration programmes and 40% in multilateral programmes.

## Appendix 16 - Mapping SWITZERLAND

### **Policy**

For over 40 years Switzerland has been promoting research in and with developing countries and countries in transition as part of its development cooperation. In line with its mandate SDC (the national agency for Swiss Development Cooperation) has based its support for research on considerations of development policies. Thus SDC is contributing to international networks, as well as to programmes within the scope of its global and regional Cooperation.

The main focus in the research support programmes is on new findings and innovative approaches in areas like agriculture, agricultural development & food security, conflict & transformation, health, water, resource management, climate change, governance and gender.

### **Geographical priorities**

SDC is active in more than 50 countries worldwide: through bilateral development cooperation, in special regional programmes, in the framework of the North Africa strategy, in Central and Eastern Europe as well as the CIS, and contributing to EU partner countries.

The priority countries in bilateral cooperation are: Benin, Burkina Faso, Chad, Mali, Mozambique, Niger, Tanzania; Bolivia, Nicaragua and Peru; Bangladesh, Bhutan, Laos, Nepal and Pakistan, whilst special programmes in Afghanistan, Mongolia, North-Korea (to be finalized in 2012) and the West Bank & Gaza, Cuba, in the Great Lakes region and in Southern Africa .

### **Thematic and sectoral priorities**

Yearly SDC invests approximately CHF 50 m in research on innovations in agriculture, agricultural development and food security, conflict and transformation, climate change, water, resource management, health, governance and gender. The largest portion is spent on programmes coordinated through the CGIAR group, and the second and third largest sums are invested in the domains of environment and water management. SDC promotes application of knowledge and research to contribute to the solution of development problems, and to tackle global challenges in the effort to ensure that the international thematic policy dialogue is conducted based on the most recent findings. Knowledge gained by research is also directly used in the SDC programmes to enhance the quality of Swiss development cooperation.

### **Capacity Development**

For partner countries capacity development is critical to foster democratic ownership of knowledge, research and education and to achieve Switzerland's cooperation goals as expressed in documents such as the Bill to Parliament on *Continuation of Technical Cooperation and Financial Assistance to Developing Countries* (March 2008). Switzerland sees capacity development as a core task of its international cooperation, being a cross-cutting priority, and a means to assist the poor towards self-help and to reduce poverty.

In the paper *Capacity Development* (2006) SDC spells out what Capacity development entails, the principles it is based on, the terminology to describe it, and the guidelines for application. It is presented as a process with four interdependent dimensions: development of individual competence, of organizational aspects, networking, and development of system features. SDC emphasizes in particular the importance of development of organizations and organizational networks in a system perspective. In addition, capacity development is a concept, wider and more

comprehensive than information management, knowledge transfer or training only: it requires a continuous process of participatory learning, exchange of perspectives in a way that it is flexible, result-oriented and context-specific all at the same time.

### ***Types of Intervention***

Main programmes in support of research partnerships with developing and emerging countries

- **The NCCR North –South** NCCR North-South is a programme of one of the 20 National Centres of Competence in Research (NCCRs) established by the Swiss National Science Foundation (SNSF) funded by the SNSF, SDC and six Swiss universities. In partnership with Swiss research organizations and spread over more than 150 institutes in Africa, Asia, Latin America and Europe some 400 scientists carry out trans-disciplinary research in this programme.
- **Research partnerships with Developing countries** Both SDC and SNSF provide funds for research partnership projects between Swiss universities and research institutes in the South to build and strengthen the capacity of the partners so they can catch up and integrate into the international scientific community. Special emphasis is given to the scientific quality of the initiatives and their prospects for development relevant to the local setting.
- **Funds for Scientific Cooperation EPFL-SDC** This program is funding research projects conducted in partnership with a research unit at the Swiss Institute of Technology Lausanne EPFL, (École Polytechnique Fédérale de Lausanne) and a scientific institute in a developing country. Its primary goal is to contribute to building research capacity in the partner countries by promotion of interdisciplinary cooperation to help solving important problems.
- **Research Fellow Partnership Programme (RFPP)** The SDC RFPP supports PhDs and postdoctoral fellows in agriculture and forestry, and other areas concerning the use of natural resources. It is suited to partnerships between CGIAR institutes aiming at promotion of scientific competence and generation of knowledge relevant for development.
- **University Exchange Programme** The University Exchange Programme is aimed at promotion of the exchange between Swiss scientific institutes and sister institutes in developing countries to support mutual and shared learning through developing projects together.
- **Young Scientists** This programme finances field work for PhD candidates and postdoctoral students. Grant recipients are enrolled in Swiss universities and the project they work on must include a local partner institute.
- **Swiss Universities of applied science** This is a programme in support of initiatives taken by Swiss Universities of applied sciences to promote applied research and development in partnership with developing and emerging countries.
- **SCOPES, Scientific Cooperation between Eastern Europe and Switzerland** SNSF and SDC co-finance this programme that stimulates scientific cooperation between research groups in Switzerland and countries in Eastern Europe, the Western Balkan and Central Asia, with the goal to produce and exchange knowledge and to train scientists.

## SDC programmes

### **1. Overall objectives of support for capacity development**

The primary philosophy of SDC is to fight poverty through participatory programs, involving people in the process to create sustainable improvements in their lives. Its main intention is to improve access to education and basic health care, to promote environmental health, to encourage economic and governmental autonomy, and to improve equity in labour.

### **2. Identification of capacity needs**

SDC seeks to attune the support it provides to capacity development to the needs of its partners and end-users. Country level interventions on capacity development require a thorough understanding of existing competencies, knowledge and know-how of the various actors – so the lacking capacities can be built on the existing one. Therefore a participatory analysis of the actors is indispensable. Based on country-specific analysis and defined needs, SDC Headquarters supports the country offices and their partners in terms of policy and strategic guidance.

### **3. Type of intervention**

SDC considers technical cooperation – access to know-how, expertise and technology – as an instrument to support capacity development. It is a means to foster local knowledge and strengthen autonomous capacity for action. SDC's approach to capacity development is based on principles like ownership, flexibility, process-orientation and subsidiarity. In a paper on Capacity Development SDC states its intention to provide support through partner organizations and to use measures to explicitly strengthen partners in the South and the East to improve their competences, performance and ability to learn. SDC tries to support capacity development building on competencies and experience locally available.

Instruments. Partners are the agents of change. Therefore SDC seeks to remain an external actor in the process and it provides the following types of support:

- Facilitating access to know-how, experience, technology
- Making available financial resources for change management, or networking between organizations
- Stimulating the creation of platforms for learning and change for improvement.

SDC focuses its capacity development activities on organizations and networks of organizations in the Civil society and the private sector in response to the national capacity development priorities and strategies – including sector and thematic priorities.

### **4. Developmental focus of capacity development initiatives**

Development of competent institutions – central to sound management of public resources and effective service delivery – is a cross-cutting issue for Swiss development cooperation. Swiss cooperation has a long tradition of working in partnerships. Partnerships are flexible and evolving, built with local actors – governmental or nongovernmental – who are able to initiate, support and follow up on their own process of change. Operational support is country specific and responds to partner countries' development priorities. As much as possible, it is built upon local expertise.

### **5. Systems orientation**

#### **Tailor-made and context specific approaches**

SDC adapts its operational approach according to the region where it operates, depending on the specific context of the country concerned. SDC Country Offices in the Latin America Division

(2003), Pakistan (2003), India (2004), Peru (2005), Bangladesh (2006) and Nepal (2007) have explicit and context specific concepts for capacity development as part of their Cooperation Strategy.

### **Enabling environment**

For SDC capacity development of all actors and stakeholders is an essential component for a process of empowerment through active participation. This implies that capacity development is closely linked to and conditioned by good governance practices. Thus, it has to take into account that actors in the system and their behaviour are influenced by the specific context and the political, socio-economic and cultural frameworks in which they operate. The system also includes the tasks and functions of its actors, the relationships between them and the formal and informal incentives to maintain or change (parts of) the system. System support may consist of changing the rules for collaboration between the actors in a way that enables or even stimulates actors to develop their capacities successfully and achieve the level of performance required.

## **6. Sustainability**

Swiss international development cooperation is characterized by its long-term commitment, which is very conducive for programmes aimed at bringing about sustainable changes. SDC's approach stressing the essential role of the partner institutes and organizations as being the change agents themselves, while SDC restricts its role to being an external actor providing assistance from the outside is also a factor that is strongly stimulating and nurturing a pro-active attitude of the partnering institutes and organizations from the very start of any support programme, thus preparing continuation of the activities after its termination.

## **7. Measurement of benefits**

In Switzerland, according to article 170 of the Swiss constitution, all Federal Offices have to analyse the effectiveness of their activities. Since 2002 the SDC Senior management practices joint SDC/ SECO evaluations according to the DAC evaluation standards by evaluators recruited by the Corporate Controlling Section (CCS), which reports directly to the Director General.

In March 2008, the CCS, being aware of the fact that involving key stakeholders in the evaluation and formulation of the recommendations leads to a higher rate of implementation, invited the intended users of the evaluation to participate in a core learning partnership (CLP). The CLP commented on the evaluation design, accompanied the evaluation process, and gave feedback on the preliminary findings and the draft report. It validated the evaluation findings and conclusions, and elaborated the recommendations and lessons to be learned by SDC in the Agreement at Completion Point (ACP, 2009). Within SDC, the Research Desk drafted the response on behalf of the Senior Management. Both the ACP and the Senior Management Response were published with the final Evaluation Report in 2009.

### *Major Findings*

- Overall, it was concluded that the SDC funded research activities were satisfactory. Spending only a modest share of its funds in Switzerland, SDC has succeeded to stimulate a vibrant development research community capable to undertake relevant and high quality research
- In several areas, among which environmental sciences, agriculture, water, sanitation, health and several social sciences, strong capacity and critical mass have been built.
- SDC made major investments in building research capacity in developing countries and countries in transitions, in particular through promising North-South and West-East

research partnership models strongly appreciated by all parties.

- SDC also helped to develop some commendable models for research program management, as well as an effective funding mechanism with the Swiss National Science Foundation.

In spite of this positive record SDC's present approach to funding research is criticised:

- The research community in Switzerland points to a loss of technical competence (in SDC), and a loss of interest in research as an instrument for development;
- Within SDC the benefits of funding research is increasingly questioned, the fragmentation of the research portfolio is criticised, because it gets unmanageable, affected by personal and political interests, it suffers from lack of competition and cannot be monitored due to the weakness of information systems;
- Good intentions expressed in excellent research policy statements are obstructed by weak management practices preventing research activities being effectively harnessed;
- There is a particular disconnect between the investment made in research and the use of research findings at operational level.

In reaction to the findings and concerns raised by the evaluation the SDC senior management has redefined SDC's policies on research for development. It defined guidelines for investment in research by clearly prioritizing the research objectives. It spelled out the modalities and the criteria which the various types of research should comply with (including quality standards for results-based management of the various programmes, their organizational set-up and institutional positioning), it announced the need to redress the thematically and regionally unbound North-South programs / funds, and it launched measures to ensure more effective utilization of research results.

### **8. Institutional embedding**

Although SDC's approach to capacity development is focusing on organizational strengthening and establishing effective linkage among organizations, the importance of the institutional environment in which organizations and networks of organizations are embedded, is clearly recognized. This includes social and political rules, fundamental values, formal and informal norms, power structure and relations and incentive systems. By working through the partner institutions and limiting its contribution to external support, capacity development efforts necessarily have to work within the scope for change that is available within the institutional setting in the country concerned.

**Focus on coordination.** SDC emphasises coordination of capacity development interventions carried out by the various operational units within the Swiss cooperation system. In SDC's vision, these units should share a set of common principles such as process-orientation, long-term commitment, explicit context-specific adaptation and working in alliance to avoid uncoordinated efforts.

## FUNDING MECHANISM ARD

Organization	Funding	Budget 2008 [€]
SDC	Core funding (CGIAR, ICIPE)	8,150,000
	Restricted (bilateral) project and programme funding by SDC geographical divisions and global programmes)	5,800,000
	CABI core funding and projects with SDC managed by CABI	1,300,000
	Swiss Centre for International Agriculture – ZIL Research Projects managed by the North-south Centre of ETH Zürich	190,000
	Research Fellow Partnership Programme for Agriculture, Forestry and Natural resources (RFPP), managed by the North-South Centre of ETH Zürich	1,050,000
	Info-Resources and secretariat of SFIAT, the Swiss Forum for International Agricultural Research, managed by the Swiss College of Agriculture	275,000
SDC and SNSF	NCCR North-South – Research partnerships for mitigating syndromes of global change, managed by the Centre for Development and Environment, University of Bern	4,900,000
	Research Partnerships with developing countries	800,000
	SCOPES (Scientific cooperation between Eastern Europe and Switzerland)	300,000
Swiss College of agriculture	Swiss college of Agriculture (SCA), Fund for Research and Development (R&D)	70,000
Syngenta Foundation for Sustainable Agriculture	Syngenta Foundation for Sustainable Agriculture	2,600,000
	<b>Total</b>	<b>25,435,000</b>

## Annex: Projects for Capacity Development for ARD supported by the SDC

Country	Project title	Programme/partner institutes	Capacity development component	Budget (€)	Duration
Chad, Mali, Mauretania, Kyrgyzstan	One medicine for people and animals	NCCR, Uni Bern ARARI, SARI Uni Addis Ababa, Mekelle, Bahr Dar, Gonder, Dilla, Haramaya	Training academic and technical staff		Since 2001, founded on precursors since the 70-ies
Ethiopia	Soils for grain and the climate	Swiss Federal Institute of Aquatic Science & Technology, CEEITA Hanoi, SERD & AIT	MScs, PhDs		2002-2008
Thailand	Clean solutions to dirty problems Combatting water pollution	NCCR, CDE Bern	Developing capacity of researchers, technicians, local authorities, policy-makers		
Tajikistan	Planning the future ion the top of the world	GBAO, Academy of Sciences, Pamir Biological institute, State Directorate Protected areas, Aga Khan Development Network, Mountain societies Development support Programme	Strengthening the staff capacity of the institutes and Tajik organizations involved		2001-2006
Ivory Coast	Getting more from tropical potatoes Improving yam production	RFPP, ETH Zürich, CSRS, Cocody university Abidjan, Yamoussoukro Ecole Supérieure, IITA	PhDs, Diploma students, Network of ecophysicologists		2001-2010
Ghana	Hidden treasure in tree paradise	BUAS-AWC, KNUST	Research staff, BSc and MSc students	SDC/SNSF	2005-2008
Pakistan NWFP	Trust restores trees Set-up Joint Forest management committees	DSG Zürich, Sustainable Development Policy Institute SDPI Islamabad; Agricultural University Faisalabad	Staff state agencies, local population	SDC/SNSF	



## Appendix 17 - Mapping UNITED KINGDOM

### **Policy**

In the UK, agricultural research for development is the responsibility of the Department for International Development (DFID). DFID investments in agriculture research have been led by a number of strategies and policies, primarily the 2008 Research Strategy and the Strategy for Research into Sustainable Agriculture, which was approved in 2006. Since those documents were produced much has changed. DFID has responded to the priorities of the Coalition government, contained in a Structural Reform Plan (SRP) which sets out 5 themes for DFID. DFID has also been informed by the Government Chief Scientist's presentation of a major Foresight study on Future of Global Food and Farming. The 5 themes are: 1. Wealth Creation; 2. Direct Action to Achieve the MDGs; 3. Governance and Security; 4. Climate Change, and 5. Global Partnerships (including core contributions to the major multi-laterals)

DFID has therefore adjusted its programmes in line with the new government priorities and evidence, especially for the purposes of positioning and responding to future threats on global agriculture and food security. These include

- Scaling up investment in the development of new agriculture products. The crops, livestock varieties and farming systems that will be needed in order to maintain and enhance agriculture productivity with the same or less resources in the face of increasing climate change.
- Increasing understanding of agriculture innovation by testing interventions and delivery mechanisms, identifying what works and what doesn't work; supporting scaled up investment in getting technology into use much more rapidly in order to narrow the yield gap.
- Gaining a deeper understanding of the complex context in which agriculture innovation takes place.

DFID's programme of agriculture research and development will deliver against three of the five themes, much of which is embedded within multi-donor funding arrangements. These include building the capacity of southern partners, integrating research across the portfolio and strengthening the links between various programme partners, strengthening policy and climate change research, developing cross-sector linkages and scaling up investment in innovation, particularly with the private sector. Through its support to African research organisations and DFID will extend its contribution to the implementation of the Comprehensive African Agriculture Development Programme (CAADP). The programme is particularly strong in developing new technology and getting this into use.

DFID agriculture research and development is now committed to:

- Scaling up its investment in the uptake of research including developing new co-funding arrangements with the private sector.
- Strengthening policy engagement drawing on the intellectual leadership of the (SRFs) Research Fellows, specifically linking agriculture with post conflict livelihoods, economic growth and climate change.
- Investing in more high risk high pay-off research
- Integrating climate change and agriculture research, through the development of new research programmes.

- Strengthening the mainstreaming of gender across the programme
- Developing new ways of building the capacity of Southern partners within the programme.

### ***Geographical and sector priorities***

DFID will focus on South Asia and Africa where needs and potential for cross-boundary spillovers are greatest, and where it can best maximise linkage with other DFID investments, reducing its current engagement in South America.

The main priorities DFID's outlined in DFID's Business Plan for 2011-2015 are to honour international commitments and support actions to achieve the Millennium Development Goals; improve transparency and value for money in aid; boost economic growth and wealth creation; strengthen governance and security in fragile and conflict-affected countries; improve the lives of girls and women; and combat climate change. Support for agricultural development comes under the priority on economic growth and wealth creation. In 2010, approximately £86 million was allocated to agriculture, forestry and fisheries (DFID, 2011).

### ***Agriculture and agricultural research***

For DFID's Research and Evidence Division it is a key priority to strengthening the generation of policy relevant evidence through high quality research using this to support the development of new policy by the international development community, national governments and other stakeholders. The importance of understanding the social, economic and political context underpins many of the research programme objectives by providing an analysis of the context in which technological innovation and investment takes place and supporting the development of new policy. Good governance is especially important to formulating a conducive policy environment and effectively implementing policy agendas that make it possible to use agriculture for development. This entails focus on:

- What institutions, incentives and mechanisms are required to enable vulnerable citizens to have their preferences represented in agricultural policy?
- What institutional capacity and organisational structures will be required to develop competent policies, programmes, projects and practices for using agriculture research as a platform for poverty reduction?

In Africa, the Comprehensive African Agriculture Development Programme (CAADP) provides the overall framework for DFID's agricultural research initiatives.

### ***Capacity development***

As direct project support to capacity building in Africa draws to a close, capacity building and institutional development initiatives will be integrated into the Regional Research Organisations. DFID will explore the added value of a new stand-alone initiative on capacity building. Additional funding has also been provided to BBSRC Grant holders to ensure integration of capacity building into existing research programmes. DFID will review the effectiveness of this approach and ensure that all new programmes maximise opportunities for capacity building.

DFID believes that Capacity Building is much more than training and that it includes the following:

1. Human resource development, the process of equipping individuals with the understanding, skills and access to information, knowledge and training that enables them to perform effectively.
2. Organizational development, the elaboration of management structures, processes and

- procedures, not only within organizations but also the management of relationships between the different organizations and sectors (public, private and community).
3. Institutional and legal framework development, making legal and regulatory changes to enable organizations, institutions and agencies at all levels and in all sectors to enhance their capacities.

DFID's approach is based on emerging evidence that capacity building is a long term process and requires inter-connected interventions that increase supply of human resources with appropriate skills, knowledge and attitudes, whilst creating opportunities for trained people to learn-by-doing within their own environment. The absence of government funding for most tertiary institutions in Africa has contributed significantly to loss of research capacity in Africa and therefore by putting resources in SRO, DFID support will create opportunities for the researchers to engage in professionally challenging pursuits within Africa.

### ***Gender***

In its 2006 White Paper DFID placed gender equality and women's rights as priority issues in its development policy (DFID, 2006). This is reflected in a subsequent paper on mainstreaming gender in research which incorporated findings from the stakeholder consultation on the DFID research strategy. The paper includes a commitment by DFID's Research and Evidence Department to ensure that men and women benefit equally from capacity development opportunities. It also signals DFID's intention to support its research partners to acquire the capacity to undertake gender analysis in their research. The paper refers to several key issues for research relating to agriculture and economic growth, such as barriers to women's economic participation, policies supporting their access to the labour market, and labour-saving technologies that allows them to engage in other economic activities.

DFID has a gender equality action plan and progress is monitored annually (DFID, 2010). Monitoring at the programme and project level feeds into this and outcomes are made available in formal reports and through summary data on programme and project websites.

### ***Types of capacity strengthening intervention***

DFID utilizes various mechanisms to strengthen capacity in developing country organizations. The main types of intervention are:

- Organizational capacity strengthening for research and education organizations in sub-Saharan Africa. This channelled through the regional research organizations and via the project 'Strengthening Capacity for Agricultural Research for Development in Africa (SCARDA). See below for further details.
- Fellowships or studentships funded through support for organizations such as the International Centre for Insect Physiology and Entomology (ICIPE) or programmes such as the Futures Agriculture Consortium.
- Short courses, secondments and internships as components of agricultural research projects such as those funded in association with the UK Research Councils or activities undertaken by the CGIAR (see above).

### ***Monitoring and evaluation***

DFID utilizes a results-based management system and all programmes and projects are required to develop a logical framework and an M&E plan. The UK government is committed to developing

a strong evidence base for the provision of effective development to the poorest in society and this includes research and capacity strengthening activities. A strong evidence base is regarded as essential for determining priorities and identifying the most appropriate interventions. It is also seen as a means of ensuring value for money. All new research and capacity development initiatives supported by DFID are required to make a business case to justify the proposed investment.

In view of the importance it attaches to identifying and documenting evidence of impact, DFID is interested in exploring the most appropriate ways to monitor and evaluate the outcomes and impact of its capacity strengthening interventions. In May 2009, DFID hosted a workshop for organizations which fund and manage research and higher education capacity strengthening initiatives. One of the conclusions was the need to develop a theory of change for programmes and institutions and to use this as a basis for an M&E approach.

## **The Programme for Strengthening Capacity for Agricultural Research for Development (SCARDA)**

The initiative ‘Strengthening Capacity for Agricultural Research and Development in Africa’ (SCARDA) was developed in response to the recommendations of an assessment of the capacities of national agricultural research systems in sub-Saharan Africa. This study, which was commissioned by the Forum for Agricultural Research in Africa (FARA) and the three sub-regional research organizations, identified serious capacity gaps in research management and in technical expertise in key disciplinary and inter-disciplinary areas. DFID invited FARA to submit a proposal for a project which would begin to address these capacity gaps and SCARDA started in February 2007. The initial phase of the project was coordinated by FARA and implemented by ASARECA, CORAF/WECARD and SADC-FANR with support from regional and national service providers and the Natural Resources Institute (UK). Support was provided to 12 research and education organizations and their key partners in 10 countries in sub-Saharan Africa. In the current phase of the project, which is due to end in December 2011, the country focus has been maintained but increased emphasis is placed in coordination at the sub-regional, as opposed to the regional, level.

### ***1. Overall objectives of support for capacity development***

SCARDA aims to strengthen “the capacity and performance of participating national agricultural research systems in key areas of their Agricultural Research for Development functions”. It seeks to achieve this by working with ‘focal institutions’ and their core partners in selected countries in sub-Saharan Africa. Focal institutions are organizations selected because of their strategic role in contributing to agricultural innovation in their countries. The expectation is that through enhancements in their capacities national agricultural research systems will be better able to identify, generate and deliver research outputs that meet the needs of poor people.

### ***2. Identification of capacity needs***

The assessment of national agricultural research systems commissioned by FARA and the sub-regional organizations identified a generic set of capacity needs. These were explored in more depth at the national level during a six-month Inception Phase in SCARDA in which the views of representatives of the major ARD stakeholders, including policy makers, were canvassed. Following the selection of the 10 countries in which project activities were focussed, participatory institutional analysis was carried out in each of the ‘Focal institutions’. A methodology was developed to guide the analysis, although the degree to which this was followed varied in accordance with the time

that was available to implement it. A range of participatory tools were used to assess capacity needs and develop an action plan. In essence, the success of the approach relies upon the active involvement and support of staff and senior managers; consultation with external stakeholders; an acceptance of the need to learn and apply lessons; and the willingness to draw up a set of actions which aim to enhance organisational performance and which have measurable outcomes.

### ***3. Type of intervention***

SCARDA has two main components: Strengthening competencies and capacity in agricultural research management. And Strengthening the capacity of individuals and teams for professional development. The approach was to develop a holistic package of capacity strengthening interventions for each focal institution based upon their own specific requirements. Consequently, within the overall framework within which capacity needs were addressed there was scope for variation in the types of intervention and the way in which they were delivered. For example, some organizations attached considerable importance to postgraduate training to bring in new skills in areas where they lacked expertise. Other organizations attached more importance to strengthening linkages with partner organizations and sought to enhance their capacity to engage in innovation systems approaches through workshops, short courses and farmer participatory research.

In two of the sub-regions management training involved a combination of sub-regional workshops for sharing of ideas and experiences among senior managers and national level activities linked to the action plans of the individual focal institutions. This was complemented by mentoring support to senior managers by a team of external organizational development specialists. In the third sub-region, all activities were undertaken at the national level until the end of the initial phase when a sub-regional lesson learning workshop was held. The latter approach enabled more staff members to participate in the training which was based largely on developing core competencies. Mentoring support was also provided, but this was targeted at junior researchers and utilised mentors from within the focal organizations.

### ***4. Developmental focus of capacity development initiatives***

One of the main objectives of SCARDA was to strengthen the capacity of the target organizations to engage in demand-driven research, to link with other ARD actors, and to communicate research findings more effectively to end users. In some of the focal institutions, such as the National University of Lesotho and the Crops Research Institute in Ghana, these objectives were already part of a change agenda and they were enthusiastically pursued. In others, in spite of some initial scepticism, there was an increased interest in participatory approaches and innovation systems thinking as the project progressed. Although not all of the target organizations fully embraced the project's developmental aims, the general acceptance of the overall approach suggests that there are good prospects that it will generate developmental benefits for rural communities.

### ***5. Systems orientation***

The approach to assessing capacity needs, which included mapping the ARD system in the target countries and identifying gaps and opportunities in the focal institutions with the assistance of stakeholder analysis, was designed to provide a systems perspective to the project interventions. In some countries this led to a strong systems orientation, especially where ARD organizations developed a keen interest in innovation systems approaches. This was particularly evident in Botswana, Lesotho and Zambia where multi-stakeholder initiatives were launched in areas of common interest to researchers, farmers' organizations, NGOs, local authorities and private sector.

## 6. Sustainability and risks

SCARDA was designed as a relatively short-term initiative to develop and test an approach to capacity strengthening that would subsequently be promoted more widely by the sub-regional organizations. It was expected that the focal institutions would continue to implement capacity strengthening and allocate resources from within their own budgets to support this. Their ability to do this would be strengthened by an enhanced capacity to analyse their own needs, develop capacity strengthening plans and implement systems for measuring improvements in performance. The use of local organizations to deliver most of the capacity strengthening services was also designed to promote sustainability.

## 7. Measurement of benefits

The project developed a performance management system through a series of participatory workshops in each of the three sub-regions. This resulted in a set of indicators to measure progress and a plan for collecting the necessary information. The plan specified the monitoring tools to be used, the period over which they would be utilized and the persons responsible for implementing them. A learning strategy was also developed to guide the process of identifying and sharing lessons.

The project underwent an external mid-term output-to-purpose review which was commissioned by DFID. The review indicated that the project was likely to partially achieve its purpose by the end of the project period. It was considered unlikely to fully achieve its purpose due to a combination of initial delays in implementation and over-ambitious expectations in the available timeframe. But the review noted several positive outcomes, including examples of changes in practice and of improved performance in the focal institutions. In addition, most of the targets for numbers of staff trained, disaggregated by gender and age, were met or exceeded.

## 8. Institutional embedding

The approach adopted by SCARDA was geared towards fostering ownership of the project by the focal institutions and the strengthening of ties with their core ARD partners. Participation in the institutional analysis process and in the development, implementation and monitoring of a capacity strengthening plan aimed to ensure that the focal institutions would be able to continue to identify and address their capacity needs to meet changing requirements in the future. Employee surveys carried out in 2010 and 2011 suggest that there is widespread support among staff and senior managers for the capacity strengthening approach developed in SCARDA. However, it remains to be seen whether management will give capacity development the same priority as other programmes and whether they will allocate adequate resources to fund it.

### Allocation of the research programme budget by theme (2009–2011)

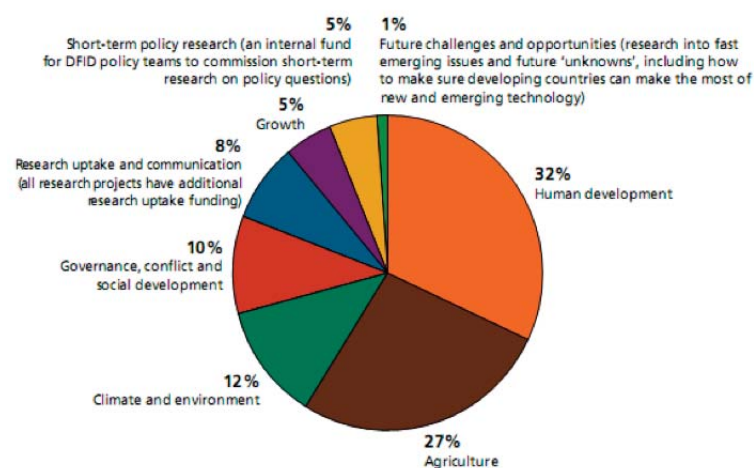


Figure - DFID funding for research in 2009-2011

Source: DFID Research Report (2009-10)

## Appendix 18 EU-ACP Educational Linkage programme (EDULINK)

The EDULINK Programme aims to promote co-operation between the countries of the African, Caribbean and Pacific Group of States (ACP) and the European Union in the area of higher education. EDULINK facilitates networking being higher education institutions to support the development of systems that are aligned with development priorities in the ACP countries. The programme has an explicit capacity development objective and supports institutional strengthening as well as enhancing technical and scientific capacities. Although the main beneficiaries are higher education institutes, the programme seeks to strengthen linkages between these institutes and other stakeholder groups; especially business and civil society. The programme is implemented through competitive Calls for Proposals.

The first phase of EDULINK (2006-2008) was funded through the 9th European Development Fund and two Calls for proposals were issued with a combined budget of 14 million euros. A total of six of the 33 projects that were funded related to agriculture (Table 4). A second phase of the programme (2009-2011) was funded through the 10th European Development Fund and one Call has been launched to date with a budget of 16 million euros (Table 4). Six of the thirty-four projects funded had an agricultural theme. A further Call, scheduled for September 2011, was postponed and the status of this Call remains unclear. A list of the titles of the twelve agricultural projects is shown in Table 5.

Table 4 Proposals submitted, and project funded, in the EDULINK Calls

Proposals submitted/call [#]	Passed concept note evaluation	Selected for funding	No. on agriculture	Euros [million]
1 <sup>st</sup> Call: 106	34	11	2	5
2 <sup>nd</sup> Call: 161	40	21	4	9
3 <sup>rd</sup> Call: 144	Not known	34	6	16

One of the themes in the first Call for proposals was ‘Building capacities in agriculture’ and the aim of the support was to enhance innovation capacity in order to reduce poverty in the ACP States. One of the two projects funded aimed to address this by developing the skills of university staff in rural innovation and by improving existing and creating new rural innovation curricula in selected universities in East Africa. The other project aimed to strengthen a regional network of veterinary faculties in East Africa by developing curricula for specialised post-graduate veterinary training by focusing on livestock disease control. Most of the projects with an agricultural focus funded in the two subsequent Calls also have strong elements of curriculum development and staff training

Table 5 Projects with an agricultural focus funded through the EU-ACP EDULINK programme

Call	Project title
1	Strengthening of University Capacity for Promoting, Facilitating and Teaching Rural Innovation Process
	Joint Master's Programme in Trans-boundary Animal Disease Management
2	Value Chains for Poverty Reduction in the Agri-Food Sector –Problem-Based Learning in Higher Education
	Strengthening Capacity of Universities in Eastern, Central and Southern Africa to Offer Quality Graduate Programmes
	Promoting Excellence in Ph.D. Research Programmes in East Africa
	Vocationalisation of Animal Sector Education: MSc Animal Product Processing, Entrepreneurship & Safety
3	Environmental Sustainability: Priority education and Research In the Tropics
	Institutional Capacity Building for Organic Agriculture in West Africa
	Linking Institutions for Veterinary Education
	Strengthening Agricultural and Rural Innovation Systems in Eastern, Central and Southern Africa: A Regional PhD Programme
	Creating a complementary Master's in agricultural policy and rural economy in West Africa
	European-African Network to improve HEIs in Agriculture and Forestry based on new Labour Market needs

The majority of the projects involve partnerships between European and developing country higher education institutes and other types of organization organizations and some involved collaboration between different regions within Africa and the Caribbean. This cross-regional dimension is designed to facilitate sharing of ideas and experiences to support learning. Learning is also promoted through annual stakeholder conferences at which representatives of project teams discuss their work. In 2010 and 2011 this exercise was held jointly with the EU-ACP Science and Technology programme which also has a strong capacity development element.

A mid-term review of the EDULINK programme was undertaken but the report is not publicly available. In the absence of any other monitoring and evaluation data it is difficult to comment on the progress made by the programme towards achieving its objectives. However, it seems likely that EDULINK has added value to existing initiatives within higher education institutes in ACP countries through its support for more demand-oriented, multi-disciplinary research and teaching. In particular, EDULINK has funded projects supporting research and teaching on value chains and innovations systems and projects in which the development of 'soft' and systems skills are being mainstreamed within universities.



AGRINATURA is a new alliance formed by 35 European universities and research organisations working in agricultural research, education, training and capacity strengthening for development.

AGRINATURA members are involved in a broad range of issues related to agricultural research and education for development contributing through their expertise and experience.

AGRINATURA focuses on initiatives that open up new opportunities for farmers to enhance food security and improve the agro-food sector in general, whilst reducing the negative impact of agricultural activities on the environment.

Thanks to AGRINATURA's unparalleled access to major research institutions and universities in Europe and the rest of the world, it is able to nurture scientific excellence through training and exchanges and further sustainable development in agriculture through joint research and education programmes and projects.

AGRINATURA formulates and implements research and education programmes and projects in developing and emerging economy countries on every continent.

At the practical level, AGRINATURA partners interact with a single office (the management unit) that:

- can widely inform the European ARD community of partnerships opportunities;
- can directly enter partnerships and consortia that can respond to the Agrinatura objectives;
- can mobilise necessary experts from 31 research, training and development organisations to work almost anywhere.

AGRINATURA assets are:

- global coverage of key issues in agricultural research for development, focusing mainly on developing countries and countries with emerging economies;
- a broad spectrum of complementary expertise in disciplinary and interdisciplinary research and development which allows AGRINATURA to work at the interfaces;
- solid experience in integrative and participatory approaches at different scales;
- translation of development issues into a researchable agenda;
- inclusion of development projects into on-going research and education programmes;
- partnership which goes beyond the function of services provider; regular and continuous contacts with project partners in the field before, during and after operation of programmes;
- extensive experience in capacity development and scientific support for the formulation of international development policies, and the search for project funding thanks to its collaboration with and support for partner institutions and stakeholders.



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