



Studies and policy briefs to inform European Agricultural Research for Development investments and policies

Policy Brief on Capacity Development for agricultural research for development.¹

January 2012

1. Summary and main messages

2. Introduction

2.1 Objectives of the study

2.2 Methods

2.3 Key concepts

3. Findings and conclusions

3.1 Analysis of present ARD policies

3.2 Analysis of programmes and projects

4. Challenges and opportunities for capacity development in ARD

5. Recommendations

Acknowledgements

Acronyms

1. Summary and main messages

This paper discusses issues related to support for capacity strengthening for agricultural research for development (ARD) by member countries of the European Initiative for Agricultural Research for Development. It summarises the findings of an analysis of the policies, programmes and projects in capacity strengthening for ARD of fourteen European countries. These policies, programmes and projects were previously examined in relation to a common set of criteria covering aspects of needs identification, design, implementation, assessment, documentation and sharing of information. The findings are discussed in the context of emerging opportunities and challenges for capacity development for ARD and recommendations are made for improvements in the way that support is provided.

¹ This policy brief on "Capacity development for agricultural research for development." has been developed by Agrinatura in the framework of the action "Fostering European Aid Effectiveness for Agricultural Research for Development". Main authors are Tim Chancellor (T.C.B.Chancellor@greenwich.ac.uk) and Ruud Ludemann (Ruud.Ludemann@wur.nl). This action is funded by the Food Security Thematic Programme of the European Union, through a delegation agreement with the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), and implemented by the European Initiative on Agricultural Research for Development (EIARD).

This policy brief is intended to share knowledge and promote more efficient ARD policies. It does not necessarily reflect the official position of EIARD or of individual EIARD members.

Main messages

- Increasing support to capacity development for ARD is needed if the investment in ARD are to generate sustainable returns;
- Capacity strengthening initiatives should have a stronger focus on organizational and institutional strengthening as opposed to individual training;
- Multi-stakeholder initiatives should be encouraged as they are likely to lead to larger impacts than those targeted exclusively towards research organizations and institutes of Higher Education;
- Greater attention should be given to applying participatory methods of identifying capacity needs and facilitating the institutionalisation of capacity strengthening processes and outputs;
- Currently, the planning, monitoring, evaluation and impact assessment of capacity strengthening initiatives is weak and greater efforts are needed to design and adopt harmonized approaches and to share relevant information;
- Greater attention should be given to encouraging young people, especially women, to enter agriculture as a profession and there should be a stronger focus on vocational training utilising a combination of distance and face-to-face learning.
- Although the agriculture sector is facing many challenges, there are also opportunities to enhance the benefits of capacity strengthening for ARD. Several new regional or inter-regional capacity strengthening initiatives are under discussion and EIARD members are well placed to help shape the direction of these initiatives. Most importantly, EIARD members should explore how these initiatives can be used to improve the coordination of programmes and projects to strengthen capacity development for ARD and facilitate the dissemination of experiences and good practice.

2. Introduction

The aim of the European Union's Food Security Thematic Programme (FSTP) is *"to improve food security in favour of the poorest and the most vulnerable, and contribute to achieving the first Millennium Development Goal"*. The EU, through the FSTP, is supporting the European Initiative on Agricultural Research for Development (EIARD) providing assistance to develop *"coherent, coordinated, relevant and effective European policies for and investments in agricultural research for development that support the food security agenda"*. As a contribution to achieving this outcome, a series of studies and policy briefs is being prepared on key issues within EIARD's strategy. One of these issues is capacity development for agricultural research for development, which is the subject of this paper.

2.1 Objectives of the study

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"*². EIARD envisages that this goal will be reached through more effective European investments in ARD and partnership with developing and emerging economy countries, and enhanced support to capacity development in those countries. Therefore, EIARD considers capacity development to be central to attaining its ARD objectives. EIARD also recognizes that European agricultural research and education organizations have strong expertise in capacity development that could be utilized for the benefit of developing countries.

A more detailed report reviews the current policies and programmes of EIARD members in relation to capacity development and makes recommendations on future directions³. In this policy brief, the

²EIARD Strategy for 2009-2013. EIARD, 2008.

³Capacity Development in Agricultural Research for Development. Ludemann et al., 2011.

main issues are summarised and recommendations are made on how EIARD and its member countries can enhance the impact of their capacity development interventions.

2.2 Methods

To explore European policies and practices in capacity development for ARD first a literature review was conducted. Then a framework was developed to analyse the policies and programmes of the EIARD countries. Within this framework a set of criteria was drawn up to identify and compare the approaches to capacity development practised. These criteria are:

- the overall objectives of the policies and programmes;
- the way needs for capacity development were identified;
- the focus of the collaboration projects/programmes for Capacity development in ARD;
- the comprehensiveness of the approach to Capacity development or systems orientation;
- the type of intervention and implementation arrangements;
- sustainability and risks;
- how benefits of the capacity development efforts are measured; and
- the institutional embedding of the programmes and projects for capacity development in ARD

This framework was applied to one or more major programmes for each of the fourteen European countries for which information could be obtained⁴. In case suitable information was available, other important programmes were listed but not described in detail. Policies and actions relating to gender and youth were highlighted and examples of good practice in capacity development were identified. 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.

2.3 Key concepts

ARD and agricultural innovation systems. For the purposes of this study, we have used the definition of ARD proposed by EIARD in its current strategy⁵. This definition emphasises the multi-dimensional and multi-sectoral nature of ARD in addressing the agricultural development challenges of Developing and Emerging Economy Countries and the socio-cultural and biodiverse landscapes, food systems and ecologies in which agriculture is embedded. 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. There is a distinction between curiosity-driven research solely aimed at advancing scientific knowledge and research designed to have clear social relevance. EIARD recognizes that research organizations are part of a wider group of organizations that aim to bring new processes, technology and knowledge into social and economic use as part of an agricultural innovation system. This innovation system is influenced by the institutions and policies in which the organizations are embedded.

Capacity development. For organizations within an agricultural innovation system to fulfil their functions effectively, it is important that their respective capacity needs are identified and addressed. We have adopted the definition of capacity development for ARD 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. It emphasises that capacity development may be at the individual, organizational or institutional level and we have used this typology in our analysis.

⁴ These countries are Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Italy, Netherlands, Norway, Portugal, Switzerland, and United Kingdom.

⁵ See Annex 1 (page 12) of the EIARD Strategy for 2009-2013.

3. Findings and conclusions

3.1 Analysis of present ARD policies

Geographic and thematic and focus. Most EIARD countries have a set of priority countries with which they engage in development cooperation and in recent years these have reduced in number. The Netherlands, for example, has 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. This concentration of donor support in 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 assistance to countries in Southeast and East Asia has been reduced. Overall, support to countries in Eastern Europe has increased and there is a stronger focus on sub-Saharan Africa where there has been limited progress towards achieving the MDGs. In spite of the growing support to sub-Saharan Africa, several countries in West and Central Africa receive very limited development assistance. In some cases, this reflects political instability or poor governance in these countries. Nevertheless, EIARD should review whether there is scope for initiatives on capacity development for ARD to be extended to cover countries such as the Central African Republic, Republic of Congo, Gabon, Liberia, Sierra Leone and Togo.

Agriculture is a core theme of development cooperation in only a small number of EIARD countries, such as Belgium, the Czech Republic (depending on the partner country), France and Switzerland. However, several other countries consider agricultural development to be an important component of other themes such as rural development (for example Austria and Germany). Similarly, whilst few countries have specific strategies on capacity development for ARD, capacity development is frequently seen as a cross-cutting theme which supports interventions across a range of sectors (for example, Greece). One of the consequences of this situation is that initiatives with a component on capacity development for ARD may be located in different government departments (as is the case in Belgium, Czech Republic and Italy, for example). This provides a challenge for the collection and synthesis of information on such initiatives which is then not easily available to decision makers for review and planning purposes.

Delivery mechanisms and levels of intervention. Most EIARD countries provide support for capacity development for ARD through a combination of multilateral channels and bilateral arrangements. One of the most commonly used means of multilateral support for ARD is core or programmatic funding for the Consultative Group on International Agricultural Research (CGIAR). It is not possible to identify the exact proportion of this funding which is used for capacity development, but this is relatively small. Most of the capacity strengthening undertaken by CGIAR organizations is technical training of individual researchers, although the proportion of trainees from agricultural extension and farmer organizations has increased in recent years⁶. Capacity development is referred to in the current CGIAR strategy, but little progress has been made to develop a capacity development platform that was envisaged⁷.

The 'roadmap' of the Global Conferences on Agricultural Research for Development (GCARD) of the Global Forum for Agricultural Research (GFAR) highlights the importance of capacity development⁸. However the roadmap lacks concrete actions in this area and capacity development is not high on the agenda for the next global conference to be held in Uruguay in October 2012. EIARD should explore how it can encourage the adoption of capacity development initiatives within the framework of the GCARD roadmap. One option is to work with regional organizations such as the Regional Universities Forum for Capacity Building in Agriculture, the African Network for Agriculture, Agro-forestry and Natural Resources Education and equivalent organizations in Asia and Latin America⁹. These networks, which already receive some support from a small number of

⁶ *Evaluation and impact of training in the CGIAR*. CGIAR, 2006.

⁷ *A Strategy and Results Framework for the CGIAR*. CGIAR, 2010.

⁸ *The GCARD road map: transforming agricultural research for development systems for global impact*. GCARD, 2010.

⁹ Such as the Southeast Asian Regional Centre for Graduate Study and Research in Agriculture .

EIARD countries, have a key role to play in strengthening the capacity of institutes for higher education to conduct ARD and produce graduates with suitable skills.

Most EIARD countries also support capacity development for ARD in developing countries through bilateral agreements. Educational programmes which provide fellowships for individuals at the undergraduate or postgraduate level are the most commonly used form of bilateral support. Most of these programmes do not focus on ARD, but include it as one of a range of sectoral priorities. A partnership programme, in which collaboration is supported between organizations for research and education in European and in developing countries, is another widely used mechanism.

A limitation of many of the programmes targeted at the individual level is that they are not linked to organizational or institutional development. Therefore study programmes of students are not necessarily aligned with the priorities of research and education organizations in developing countries and students may not contribute to the agendas of these organizations after they graduate. However some countries, such as Austria in its APPEAR programme, now require studentships to be linked to the research projects that they support. A small number of countries, with Switzerland as a notable example, go further and have a clear strategy for supporting capacity development at different levels in a mutually reinforcing way. The Swiss Development Cooperation (SDC) views capacity development as a process with four interdependent dimensions. SDC aims to strengthen individual competences, organizational performance, networks, and the system within which they function¹⁰.

Approaches to teaching and learning. An emphasis on systems approaches is particularly relevant for ARD in view of its multi-dimensional nature and the variety of actors who engage in it. In order to apply systems approaches, scientific and technical information has to be integrated across different disciplines and ARD practitioners need to be equipped with a range of “*system skills*” in areas such as entrepreneurship, facilitation, leadership and communication. This enables them to successfully engage in effective multi-actor partnerships, plan activities, solve problems and monitor progress. Competence in these domains can best be acquired by learning in real-life situations and in the context of group interaction. However, many organizations for education and research in developing countries continue to rely on outmoded curricula and traditional modes of teaching and research with a strong disciplinary focus. This means that students are poorly prepared for the challenges of the workplace and employers are not able to recruit graduates with suitable skills. EIARD countries should indicate support for systems approaches in their policies and make provision for capacity development programmes in which appropriate methods are used for learning, teaching and research and, where appropriate, curriculum development.

Identifying capacity needs. Little evidence was found that programmes for capacity development are based on a comprehensive analysis of interdisciplinary needs and of the demands of the labour market in the agricultural sector and related sub-sectors of the local, regional and national economy. In general, when new programmes are designed, the strategic priorities of the partner organizations and institutes in developing countries are aligned with those of the EIARD donor country. Some initiatives, such as the NICHE project funded by the Netherlands and EPINAV supported by Norway, also commission additional studies and engage in stakeholder meetings. This type of approach should be used more widely so that programmes have local ownership and meet clear needs. The consultations should include an analysis of the requirements of the labour market in the agricultural sector or related sub-sectors of the local, regional and/or national economy.

Gender issues. Many EIARD countries view gender issues as a priority in their overseas development initiatives and some, such as Germany and UK, have concrete action plans to mainstream gender in their programmes. Attention to gender issues is often one of the evaluation criteria in capacity development programmes but 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.

¹⁰ *Capacity Development in SDC.* Swiss Agency for Development and Cooperation, Working Paper, April 2006.

To improve gender outcomes in support to research and education organizations, there needs to be a stronger focus on addressing 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 be replicated more widely. Another 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. Gender analysis can reveal useful information on differences in how men and women are affected by particular issues. It may also identify factors constraining women's participation in economic activities and help to propose measures that support their access to the labour market.

Engaging with young people. Few young people in developing countries view agriculture, including agricultural research, as a preferred career. Rural unemployment is usually high and the potential rewards are generally greater in other professions. There is still a considerable amount of drudgery involved in small-scale farming and there is limited access to finance for local enterprise development; for example, to support activities which might add value to local produce. For these reasons, 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.

New approaches are needed to attract young people into agriculture and the educational system has to evolve so that it responds accordingly. 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.

The recent rapid increase in access to the internet, and the dramatic expansion of mobile phone usage in rural areas, 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.

Young professionals in agriculture need more opportunities to gain experience and develop their expertise early in their careers. In many organizations, the capacity needs of younger staff are often neglected. One way to change this culture is for research and education organizations to mainstream mentoring in their operations. The Young Professionals Platform for Agricultural Research for Development (YPARD), a network of young agricultural researchers which facilitates information sharing and interaction between members¹¹, will shortly launch a new mentoring programme. This is designed to contribute to the development of young professionals by providing them with support, expertise and networking opportunities. EIARD countries should work with YPARD to identify ways to provide coordinated support for mentoring programmes in their target countries.

3.2 Analysis of programmes and projects

For each of the 14 European countries covered in the mapping exercise, information was collected on selected programmes or projects on capacity strengthening for ARD. Some of the main findings from the analysis of programmes and projects are summarized below.

Systems orientation. The table shows the extent to which each of the selected programmes and projects has a systems orientation. Almost all of the initiatives are regional or multi-regional in nature. Whilst many of them support individual training through fellowship grants for individual students and professionals, several initiatives are also targeted towards organizational development. A smaller number include institutional strengthening as an objective, with three

¹¹ See the YPARD website at <http://ypard.net>

projects (UniBRAIN, EPINAV and PAEPARD) having a strong orientation towards institutional strengthening. Where partnerships between organizations are supported, the majority involve linkages among universities and research institutes. However, an increasing number of capacity strengthening initiatives support partnerships between a wider range of organizations such as non-government organizations, the private sector and farmer organizations. This suggests that there is a growing recognition among European countries that innovations in the agricultural sector arise from the interaction of a wide set of actors and that they all need to be engaged in the research process if impact is to result.

Table Degree of systems orientation in selected European programmes and projects on capacity development for agricultural research for development

[1 = strong systems orientation to 5 = not (or hardly) systems-oriented]

	1 Strong systems-orientation	2 Organizational development with some institutional strengthening	3 Intermediate	4 Mostly individual, with some organizational development	5 Individual training
Austria			APPEAR ¹		
Belgium				IUC	
Czech Rep ²				Moldova	Mongolia
Denmark	UniBRAIN		BSU	PRCP	
Finland	UniPID				
France		DURAS			
Germany			Exceed		
Greece					scholarships
Italy				RIIS	
Netherlands		NICHE		NPT	
Norway	EPINAV, ARDEP		PANTIL		
Portugal			CYTED	CENTROP	
Switzerland		NCCR North-South		SCOPEs	RFPP
United Kingdom		SCARDA			
European Union	PAEPARD				

¹ See List of acronyms for full titles

² Projects designed and administered at country level

Types of intervention. As already indicated, fellowship grants remain an important component of capacity strengthening initiatives but these are increasingly linked to organizational development. In programmes such as APPEAR (Austria), IUC (Belgium), UniPID (Finland), Exceed (Germany) and CYTED (Portugal and Spain) support is provided to specific counterpart institutes of European

organizations. The aim is to enhance their capabilities to enable them to function as Centres of Excellence within their respective regions. Where participation in formal education offered by institutes for Higher Education is supported, this is increasingly accompanied by interactive training approaches. Programmes which seek the active involvement of non-traditional ARD actors (UniBrain, DURAS, NICHE, ARDEP, NCCR and SCARDA) often include elements of joint action-research in the counterpart countries. This serves to ensure that capacity strengthening is rooted in the local context and contributes effectively to local needs.

Needs assessment. A variety of approaches are used to assess capacity needs during the design of capacity strengthening programmes and projects. For example, in the NICHE programme capacity needs are assessed through tripartite meetings among policy-makers, embassy staff and donors. In the SCARDA project local consultants were commissioned to undertake scoping studies at a national level, followed by detailed institutional analysis in the target organizations with the assistance of external facilitators. There are no comparative studies showing which approach is likely to be most effective but it is clear that a systematic needs assessment with major involvement of local partner organizations is more likely to lead to beneficial outcomes; for example, through increased staff retention and more sustainable research programmes within counterpart organizations.

Institutional embedding. The importance of a thorough needs assessment is linked to the requirement for a clear exit strategy and institutional embedding of capacity strengthening initiatives. Some countries such as Belgium have identified shortcomings in these areas, whilst others such as Norway, Denmark, Finland and Switzerland have taken concrete steps to remedy the deficiencies perceived. One way to encourage stronger ownership of capacity strengthening initiatives among local organizations is to engage them actively in the administration and management of the programme or project. Another example of good practice is to set up governance arrangements that involve the participation of a wider range of interested stakeholders to be brought into the process from the initial design stage, as is being done in some of the NUFFIC projects.

Measurement of benefits. Many of the capacity strengthening programmes and projects do not have well developed procedures for monitoring progress or assessing outcomes and longer term impacts. This may be partly due to the inherent difficulties in measuring the benefits of capacity strengthening which may take a long time to become apparent and which are also likely to be influenced by other factors. However, evidence from Australian-funded initiatives suggests that the returns to investment from support for capacity development can be high, like in the case of a project on pigeon-pea breeding in India, for which a cost-benefit ratio of 1:28 for the capacity development component was documented. Approaches such as those used by the Australian Council for International Agricultural Research need to be used more widely and the findings made publicly available¹².

More attention is needed to develop and implement participatory monitoring and evaluation and impact assessment procedures. This will strengthen learning within capacity strengthening initiatives and will also allow their efficiency and effectiveness to be assessed, thereby leading to enhanced accountability to stakeholders. At a European level, it is also important that the essential features of national and European Union initiatives should be periodically collated, summarized and made readily available in easily understandable formats. This is an essential pre-condition for the sharing of information and good practice which will contribute to improved coordination of capacity strengthening initiatives.

4. Challenges and opportunities for capacity development in ARD

Major challenges for ARD lie ahead. Farmers will have to adapt to a changing climate, degrading natural resources and increasingly stringent regulatory systems to meet the demands for safe and high quality food. At the same time, economic returns from farming are low and many farms are too small to survive as businesses without additional income from other sources. Young people

¹²A framework for assessing the Impact of Capacity Building, by Templeton, D.J. a contribution to the conference of the International Association of Agricultural Economists in Beijing, August 2009

migrate to urban centres to find more remunerative employment and agricultural research is not viewed as a career of choice. Current educational systems, particularly in Africa, are not producing graduates with the skills and attitudes needed to solve the problems now faced by farmers¹³.

Although these challenges are daunting, there are also opportunities to be grasped. The rapid expansion of telecommunication networks, and greater access by households to sources of energy, are opening up new ways for large numbers of people in rural communities to access, exchange and deliver information. This is creating exciting new opportunities for supporting learning by young people and for upgrading the skills of people making their living in the agricultural sector who have had limited scope to do this through other means. There is considerable potential for utilising public-private partnerships for strengthening the capacity of farmers, agricultural extension and advisory services and providers of inputs and rural finance through a combination of distance learning and face-to-face approaches.

Encouragingly, there is now widespread recognition that increased support for agriculture is essential if global food supplies are to be secured and the livelihoods of large numbers of people improved. It is also realised that investments in capacity development in agriculture over the last two decades have been too low to have substantial impact and that major new initiatives are needed to stimulate sustainable agricultural growth. Crucially, governments in some developing countries are beginning to commit more resources to agricultural research and capacity development although there are large differences between countries in Africa¹⁴. At the Pan-African Ministerial Conference on Higher Education in Agriculture held in Uganda in November 2010, thirteen 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 Diaspora¹⁵.

New regional mechanisms for supporting capacity development for ARD are currently under discussion. One of these initiatives relates to support for tertiary education for ARD in Africa through the mechanism of a World Bank Trust Fund. Another, the Tropical Agriculture Platform, is an initiative welcomed by the G20 countries aimed at facilitating the generation and sharing of knowledge among ARD stakeholders. These proposed initiatives are in line with the GCARD roadmap which drew on inputs from European and developing country stakeholders through the recommendations of the International Workshop on Challenges & Innovative Processes for Capacity Strengthening in Agriculture for Development held in Montpellier in March 2010¹⁶. EIARD countries should take the opportunity to help shape the direction of these initiatives, placing particular emphasis on how they can be used to improve the coordination of capacity strengthening programmes and projects and facilitate the dissemination of experiences and good practice.

5. Recommendations

Based on the foregoing analysis, the following recommendations are made to EIARD members to enhance the effectiveness of their support for capacity strengthening for ARD.

1. Match the increasing levels of support for ARD with proportionate investments in capacity strengthening in target countries and commit to longer periods of support. Unless this is done, the returns from increased investment in ARD will be low and will not be sustained over time.

¹³ *A study of Agricultural Graduates in Eastern, Central and Southern Africa: Demand, Quality and Job Performance Issues.* by Blackie, M., Mutema, M. & Ward, A Report for the SCARDA project, 2010.

¹⁴ *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.

¹⁵ The Conference communiqué and other papers may be accessed at: <http://ruforum.org/content/proceedings-ministerial-conference-higher-education-agriculture-africa-chea>

¹⁶ For further information see: <http://www.agrinatura.eu/Activities-Projects/Communication-and-lobbying/CAPMAP-2010-2020/>

2. Focus more attention on organizational and institutional development than on providing scholarships for individual training. Where individual training is supported, priority should be given to students who are linked to relevant organizations in developing countries and the topics should be aligned with their ARD priorities.
3. Design programmes in which there is support for enhancing the management, as well as the scientific quality, of research and education organizations and for linking them more productively with other actors in agricultural innovation systems.
4. Involve relevant stakeholders in the design of capacity development programmes to increase the likelihood of generating impact. In the case of initiatives supporting Higher Education in ARD, ensure that teaching curricula are developed in partnership with employers of agricultural graduates and that learning and teaching methods reflect the set of skills that they require.
5. Allocate more resources to planning, monitoring and evaluation of new capacity strengthening initiatives and use this as a mechanism for supporting learning. Commission a study to investigate different methods of assessing impact in capacity strengthening initiatives for ARD and identify opportunities for harmonizing approaches among member countries.
6. Incorporate gender analysis as an integral part of programme design and make provision for gender learning as a core activity within participatory monitoring and evaluation systems.
7. Improve the documentation, availability and dissemination of information on capacity development for ARD, including details of the impact that has been generated by EIARD investments. Assess the scope offered by the new regional initiatives which are currently under discussion, such as the World Bank initiative on Higher Education on ARD in Africa and the proposed Tropical Agriculture Platform, for facilitating this sharing of information and knowledge.
8. Capitalize on the expanding telecommunications networks and increased access to sources of energy to develop novel ways to support capacity development in rural areas. Promote the use of distance and e-learning, in combination with face-to-face learning through measures such as day-release schemes, to reach larger numbers of people and enable persons in employment to upgrade their skills.
9. Rebalance the portfolio of capacity strengthening initiatives to provide more support for vocational training for young people in developing countries. Develop programmes that include support to develop business management and entrepreneurial skills as well as guidance on the use of new information and communication technologies.
10. Increase support for measures aimed at encouraging women to choose agriculture as a profession, including the provision of mentoring schemes that can help them to overcome the special challenges they face in educational institutes and in the workplace.

Acknowledgements

The authors would like to thank contact persons in each of the European countries covered in the study who provided relevant information. This paper has been produced with the financial assistance of the European Union. The contents are the sole responsibility of Agrinatura and can under no circumstances be regarded as reflecting the position of the European Union.

Acronyms

APPEAR	Austrian Partnership Programme in Higher Education & Research
ARD	Agricultural Research for Development
ARDEP	Agricultural Research and Development Programme
BSU	Building Stronger Universities
CENTROP	Programme for Agricultural and Rural Development
CGIAR	Consultative Group on International Agricultural Research
CYTED	Ibero-American Programme for Science & Technology for Development
DURAS	Promoting Sustainable Development in Agricultural Research systems
EIARD	European Initiative on Agricultural Research for Development
EPINAV	Enhancing Pro-poor Innovations in Natural Resources and Agricultural Value-chains
EXCEED	Higher education Excellence in Development Cooperation
FSTP	Food Security Thematic Programme
GCARD	Global Conferences on Agricultural Research for Development
IUC	Inter-university Council (Belgium)
MDGs	Millennium Development Goals
NCCR	National Centres of Competence in Research
NICHE	Netherlands Initiative in Cooperation for Higher Education
NPT	Netherlands Programme for Institutional Strengthening of Post-secondary Education and Training Capacity
NUFFIC Education	Netherlands Organization for International Cooperation in Higher Education
PAEPARD	Platform for African-European Partnership in Agricultural Research for Development
PANTIL	Programme for Agricultural & Natural Resources Transformation for Improved Livelihoods
PRCP	Pilot Research Cooperation Programme
RFPP	Research Fellow Partnership Programme
RIIS	Regional Integral Information System
SCARDA Africa	Strengthening Capacity for Agricultural Research for Development in Africa
SCOPES	Scientific Cooperation between Eastern Europe and Switzerland
SDC	Swiss Development Cooperation
UNiBRAIN	Universities, Business and Research in Innovation
UniPID	Finnish University Partnership for International Development
YPARD	Young Professionals Platform for Agricultural Research for Development