

African agricultural innovation in a changing global environment

5th African Agriculture Science Week and FARA General Assembly

Ouagadougou, Burkina Faso 19-24 July 2010



Forum for Agricultural Research in Africa
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Introduction

The 5th African Agriculture Science Week and FARA General Assembly were organized at the Ouaga 2000 International Convention Centre in Ouagadougou, Burkina Faso, from 19 to 24 July 2010 under the theme *African Agricultural Innovation in a Changing Global Environment*.

The specific objectives:

- Highlight advances in agricultural research for development (ARD).
- Review progress and share lessons learnt since the 4th General Assembly in Johannesburg, South Africa.
- Determine the African regional ARD agenda for the next three years.
- Showcase events promoting African agriculture innovations.


The African Agricultural Science Week and General Assembly provided the occasion to increase stakeholders' knowledge of the challenges, opportunities and successes in African ARD. It also promoted a greater awareness of the roles and contributions of different stakeholders and enhanced networking and interaction. Moreover, it brought attention to the key contributions of ARD in Africa, especially in Burkina Faso. Finally, it provided the opportunity to review and endorse FARA's programme for the next three years and to elect new FARA Executive Board members, including a Chairperson and a Vice-Chairperson.

The theme *African Agricultural Innovation in a Changing Global Environment* was discussed under three sub-themes, and each sub-theme was broken down into three sub-topics.

Sub-theme 1: *Investment in agricultural innovation in the post-financial crisis era*

- Sustaining development assistance for African agriculture in the context of the global financial crisis and planning for the post crisis era
- Increasing and sustaining private sector investments in science and technology for agricultural innovation
- Changing mindsets and delivering impact from investment in agricultural research





Sub-theme 2: *Knowledge centres and networks to cope with the challenges of globalisation and climate change*

- Empowering rural communities with opportunities for learning to enable innovation and coping/adaptation capacity to emerging challenges
- Experiences and best practices in strengthening Africa's capacity to build its own capacity
- Targeted communication for policy and institutional changes

Sub-theme 3: *Resilience of African agricultural trade to domestic and external shocks*

- Protectionism and subsidies in agriculture at a time of global recession: which way for Africa?
- The dilemma of short and long term trade-offs between biofuel production and food security in Africa
- Trade-related capacity building for agricultural commodity market access

These sub-themes addressed major challenges, including emerging issues, and produced key messages and recommendations for action by FARA's constituents. Several side events were organized by the broad-based stakeholder constituency of FARA. A Market Place and Poster Sessions were also used to showcase ARD results and outputs. The key messages and recommendations are presented below for each sub-theme.

Highlights of addresses

President's Address:

HE Blaise Compaoré, President
Burkina Faso

Welcome to Burkina Faso.

For many decades, the food crises that have hit Africa – the most recent one in 2007 – have caused higher rises in food prices than any of us expected. If this scenario continues unabated, a strong decision will have to be made when Africa's population reaches about 2 billion in 2050.

It is quite ironic that these crises have come about from low food production because Africa has huge farmable lands and abundant biodiversity. The challenge we need to address is to become more productive by embracing modern agriculture. This will bring about an increase of food and strengthen our capacity to feed our populations while remaining competitive in global markets. Specialists are unanimous in their agreement that only by improving agricultural production can we ensure independence in food security.

Development actors and decision makers agree that scientists must ensure that the improvements in agricultural innovation to be derived from research will benefit all Africans. That is why I welcome the topic of the 5th African Agriculture Week and FARA General Assembly: *African agricultural innovation in a changing global environment*.

Burkina Faso is working to develop its agriculture using modern techniques and we are very happy to share the outcomes of our successes with other countries. Research and technical innovation in agricultural



His Excellency Mr Blaise Compaoré, President of Burkina Faso, inaugurates the FARA General Assembly



President Compaoré at the Opening Ceremony with African Ministers, FARA Board Members and distinguished guests.

production also address our concern about climate change. We need to think beyond the classical green revolution as we make our agricultural production more operational. That is why we need to avail of the best practices in the world as well as providing a broad education for African producers.

In 2008, Burkina Faso adopted an emergency plan for realising food security by improving yields in overall production in order to meet the needs of our population by 2015. The focus of our plan is innovation that contributes to poverty reduction. I assure you of our determination and commitment to work on food security in Africa and the world.

Our plan has three focus areas:

1. Intensify agricultural research and adopt new agricultural techniques and technologies.
2. Process products to increase value-chain opportunities.
3. Fight for competitiveness in global markets.

I take note of the presence of development partners and other international agencies at this prestigious assembly. The presence of so many eminent personalities translates into a firm commitment to build strong economies in Africa. My friends, only a good and stable political environment can offer farmers the possibility to generate the wealth of advances emerging from the research establishment.

I am convinced that from this meeting the deliberations will provide new guidelines for African countries to address agricultural issues while complementing development issues. I wish you resounding success in your deliberations.

Thank you.

Making innovations work for farmers

Dr Namanga Ngongi, President

Alliance for a Green Revolution in Africa




I am very pleased to be here today to participate as member of this panel on *International investments and initiatives in agricultural research*. Innovations in agriculture are needed, but more importantly how those innovations are working for smallholder farmers and how they are helping to drive Africa's Green Revolution are more important considerations. Innovations and making them work for farmers will accelerate the attainment of the new vision for Africa's agriculture that we all share – highly productive, efficient, competitive and sustainable – thus enabling Africa to become food secure and prosperous. A revolutionary break from the tedious backbreaking low input/low output of the subsistence agriculture inherited from our grandparents.

Today is different and tomorrow should be even more different. Thanks to research and innovative technologies and new ways of doing things, African agriculture is transforming into a dynamic, profitable sector, attractive to young people with ambition and drive. African companies are investing: producing quality seeds and fertilizers; developing food processing businesses, market information systems, and financial products to serve farmers and agricultural enterprises. The CAADP compacts have gained momentum and are fully recognised by the international community. Wider markets are being established through regional economic communities. Institutions of higher learning and research are being strengthened through a variety of initiatives, national and international.

The Alliance for a Green Revolution in Africa (AGRA) is one such international investment and initiative. It was established by the Rockefeller Foundation and the Bill and Melinda Gates Foundation in response to the call by African Heads of State at the Maputo Summit of 2003 following the establishment of CAADP and their engagement to devote 10 percent of national budgets to agriculture and to spur and sustain a 6 percent rate of growth in that sector. AGRA was established with the sole purpose of providing support to research and innovations with the objective of triggering an African Green Revolution.

Innovation is at the very heart of this successful smallholder farming sector that is emerging here in Africa. Innovation in African agricultural research and development is at the centre of the Green Revolution. But let me be clear, it is innovation based on science and technology that is truly African developed and Africa appropriate. In this connection I am proud to recognize a distinguished African scientist, Dr Monty Jones, the father of NERICA, Executive Director of FARA, who has contributed enormously to this innovation effort.



Innovation begins with seeds. We have seen many advances in productivity with seeds of improved varieties of crops that have significantly increased yields in sub-Saharan Africa. The challenge here has always been the smallholder farmers' lack of access to high-yielding, yet locally adapted varieties of staple food crops. One breakthrough, NERICA, has been mentioned already. Others include the new variety of hybrid maize which, with AGRA's support to the work of INERA, Institut National de l'Environnement et de Recherches Agricoles, has been commercialized and is now being distributed through Nafaso and Agra Productions here in Burkina Faso. This is taking research products out to the farmers.

Innovations are making a difference. We see the results in improved yields; we see the results in farmers deriving higher incomes from their production and we see the results in farmers being able to access credit so they can invest in their farms: buy more and better seeds, fertilizers, cows and other inputs. And so the cycle begins again until Africa is food secure. We have to remember that the ultimate prize here is the ability of Africa to feed itself and get rid of the specter of hunger and malnutrition from the continent. A dynamic agriculture sector can also serve as the engine for economic growth of the continent.

But we still face challenges in human resources to innovate and ensure innovation products reach farmers. A much greater investment effort in human resources development is needed. We must also build our scientific capacity to document and disseminate the results of our research. Only in this way will we be able to build a body of knowledge necessary to stimulate the innovation we need for Africa's Green Revolution. We know the appetite is there for more robust research here in Africa but we cannot meet the demand. Our countries also have to put in place policies and programs that enhance retention of our limited pool of trained personnel rather than accelerating the brain drain from the continent.

More often than not, emphasis is placed on the level of financial resources required than on national will, both public and private sector, and the clear definition of priorities through transparent and inclusive dialogue. This is indeed an error. National authorities need to establish policy environments that ensure that the main food producers in Africa, women, have access and secure land use rights, that land use planning provides youths with access to reasonably sized parcels of land and the means to work them, that linkages are built between crop and livestock production systems for a more sustainable agriculture, and that financial institutions are supported to provide credit at affordable rates.

We can feel proud of our contribution to triggering and sustaining Africa's Green Revolution when we agree on what needs to be done and marshal the will and determination to see it through. Let us go home from this august gathering with the will to ensure that, within our lifetime, hunger and poverty can become history through the development of African agriculture.

Mr Chairman, Excellencies, distinguished participants, you and I *can* make a difference.

Thank you.

Keynote Address

Fostering agricultural innovation in Africa: strategies for a changing global environment

Prof Calestous Juma, Professor


Professor of the Practice of International Development, Belfer Centre for Science and International Affairs, Harvard Kennedy School



Agriculture and economic development are intricately linked. It has been aptly argued that no country has ever sustained rapid economic productivity without first solving the food security challenge. Evidence from industrialised countries indicates that agriculture stimulated growth in the nonagricultural sectors and supported overall economic well being. Economic growth originating in agriculture can significantly contribute to reductions in poverty and hunger. While future trends in developing countries are likely to be affected by the forces of globalisation, the overall thesis holds for much of Africa.

Much of our understanding of the linkages between agriculture and economic development has tended to use a linear approach. Under this model, agriculture is seen as a source of input into other sectors of the economy. Resources, skills and capital are presumed to flow from agriculture to industry. In fact, this model is a central pillar of the 'stages of development' that treat agriculture as a transient stage toward industry phases of the economy. This linear view is being replaced by a more sophisticated outlook that recognises a far more prominent role for agriculture.

The Green Revolution continues to be a subject of considerable debate. However, its impact on agricultural productivity and reductions in consumer prices can hardly be disputed. Much of the debate over the impact of the Green Revolution ignores the issue of what would have



happened to agriculture in developing countries without it. On the whole, without international research in developing countries, yields in major crops would have been higher in industrialised countries by up to 4.8 percent. It is estimated that crop yields in developing countries would have been up to 23.5 percent lower without the Green Revolution and that equilibrium prices would have been between 35 and 66 percent higher in 2000. But in reality, prices would have remained constant or risen marginally in the absence of international research. This is mainly because real grain prices actually dropped by 40 percent from 1965 to 2000.

It is not a surprise that African countries and the international community continue to seek to emulate the Green Revolution or recommend its variants as a way to meet current and future challenges. More importantly, innovation-driven agricultural growth has pervasive economy-wide benefits as demonstrated through India's Green Revolution. It is for this reason that agricultural stagnation is viewed as a threat to prosperity. Over the last 30 years, agricultural yields and the poverty rate have remained stagnant in sub-Saharan Africa (SSA). Prioritising agricultural development could yield significant, interconnected benefits, particularly in achieving food security and reducing hunger, increasing incomes and reducing poverty, advancing the human development agenda in health and education, and reversing environmental damage.


In SSA, agriculture directly contributes to 34 percent of GDP and 64 percent of employment. Growth in agriculture is at least two to four times more effective in reducing poverty than other sectors. Agricultural products also compose about 20 percent of Africa's exports. Given these figures it is no surprise that agricultural research and extension services can yield a 35 percent rate of return, and irrigation projects a 15-20 percent return in SSA.

Even before the global financial and fuel crises hit, hunger was increasing in Africa. In 1990, over 150 million Africans were hungry; as of 2008, the number had increased to nearly 250 million. Starting in 2004, the proportion of undernourished began increasing, reversing several decades of decline, prompting 100 million people to fall into poverty. One third of people in SSA are chronically hungry – many of whom are smallholders. High food prices in local markets price out the poorer consumers—forcing them to purchase less food and less nutritious food, as well as divert spending from education and health and sell their assets.

Half of African countries with the highest levels of hunger also have among the highest gender gaps. A review of several studies suggests that agricultural productivity in SSA could increase by 10-20 percent if such gaps were reduced in school and in the control of agricultural resources.

Only 4 percent of Africa's crop area is irrigated, compared to 39 percent in South Asia. Much of rural Africa is without passable roads, translating to high transportation costs and trade barriers. Over 40 percent of the rural population lives in arid or semi-arid conditions, which have the least agricultural potential. Similarly, about 50 million people in SSA and 200 million people in North Africa and the Middle East live in areas with absolute water scarcity. Cropland per agricultural population has been decreasing for decades. Soil infertility has occurred due to degradation: nearly 75 percent of the farmland is affected by excessive extraction of soil nutrients.

One way that farmers try to cope with low soil fertility and yields is to clear other land for cultivation. This practice amounts to deforestation, which accounts for up to 30 percent of greenhouse gas emissions globally. Another situation leading to increased greenhouse gas emissions is limited access to markets: more than 30 percent of the rural population in SSA, the Middle East and North Africa live more than five hours from a market; another 40 percent live between two to four hours from a market.



Fertilizer use in Africa is less than 10 percent the world average of 100 kg. Just five countries (Ethiopia, Kenya, South Africa, Zimbabwe, and Nigeria) account for about two thirds of the fertilizer consumed in Africa. On the average, SSA farmers use 13 kg of nutrients per hectare of arable and permanent cropland. The rate in the Middle East and North Africa is 71 kg. Part of the reason why fertilizer usage is so low is the high costs of imports and transportation: fertilizer in Africa is two to six times the average world price.

The challenges facing African agriculture will require fundamental changes in the way universities train their students. It is notable that most African universities do not specifically train agriculture students to work on farms in the same way medical schools train students to work in hospitals. Part of the problem arises from the traditional separation between research and teaching, which the former carries out in national research institutes and the latter in universities. There is little connection between the two in many African countries. This needs to radically change so that agricultural education can contribute directly to the sector.


Advances in agricultural biotechnology represent an area of growing interest for African countries. Biotechnology, technology applied to biological systems, has the promise of leading to increased food security and sustainable forestry practices, as well as improving health in developing countries by enhancing food nutrition. In agriculture, biotechnology has enabled the genetic alteration of crops, improved soil productivity, and natural weed and pest control. Unfortunately such potential has largely been left untapped by African countries.

The emergence of Africa's regional economic communities (RECs) provides a unique opportunity to promote innovation in African agriculture in a more systematic and coordinated way. Of all Africa's regional agreements, the African Union (AU) formally recognises eight RECs. The launching of the East African Common Market in July 2010 represented a significant milestone in the steady process of deepening Africa's economic integration. It is a trend that complements similar efforts in other parts of Africa. It also underscores the determination among African leaders to expand prospects for prosperity by creating space for economic growth and technological innovation.

The facilitation of regional cooperation is emerging as a basis for diversifying economic activities in general, and leveraging international partnerships in particular. Many of Africa's individual states are no longer viable economic entities; their future lies in creating trading partnerships with neighbouring countries. Many African countries are either relatively small or landlocked, thereby lacking the financial resources needed to invest in major infrastructure projects. Their future economic prospects depend on being part of larger regional markets.

One of the key aspects of technological development is funding. Currently, Africa does not have adequate and effective mechanisms for providing support to research. Many countries have used a variety of models, including independent funds such as the National Science Foundation in the USA and the National Research Fund of South Africa. Others have focused on ensuring that development needs guide research funding and, as such, have created specific funding mechanisms under development planning ministries.

While this approach is not a substitute for funding to other activities, it distinguishes between measures designed to link technology to the economy from those aimed at creating new knowledge for general learning. What is critical, however, is to design appropriate institutional arrangements and supporting funding mechanisms that bring knowledge to bear on development.



Creating incentives for domestic mobilization of financial resources, as a basis for leveraging external support would be essential. Other innovations in taxation, already widespread around the world, involve industry-wide levies to fund research, in similar lines as the Malaysian cess mechanism to fund research. Malaysia imposed cesses on rubber, palm oil, and timber to fund the Rubber Research Institute, the Palm Oil Research Institute, and the Forestry Research Institute. A cess on tea helps fund research on and marketing of tea in Sri Lanka. Kenya levies cess on its tea, coffee, and sugar industries, for example, to support the Tea Research Foundation, the Coffee Research Foundation, and the Kenya Sugar Board.

These initiatives could be restructured to create a funding pool to cover common areas. Reforming tax laws is an essential element in the proposed strategy. Private individuals and corporations need targeted tax incentives to contribute to research funds and other technology-related charitable activities. This instrument for supporting public welfare activities is now widely used in developing countries. It arises partly because of the lack of experience in managing charitable organizations and partly because of the reluctance of finance ministries to grant tax exemptions, fearing erosion of their revenue base.


The effectiveness of innovation funding depends on choosing the right instrument for each situation – and perhaps, in some situations, developing a new instrument specifically suited to the task. Prizes are distinctive in that they are additional and temporary sources of funding, they are used when needed to elicit additional effort, and they can reveal the most successful approaches for reaching a particular goal. For this reason, a relatively small amount of funding in a well-designed prize program can help guide a much larger flow of other funds, complementing rather than replacing other institutional arrangements.

Promoting a growth-oriented agenda will entail adjustments in the structure and functions of government at the regional, national and local levels. More fundamentally, issues related to science, technology and innovation must be addressed in an integrated way at the highest possible levels in government. There is therefore a need to integrate science, technology and innovation in all aspects of government.

The intensity and scope of coordination needed to advance agricultural innovation exceeds the mandate of any one ministry or department. As noted elsewhere, Malawi addressed the challenge of coordination failure through the presidential control of agricultural responsibilities. The case for high-level or executive coordination of agricultural functions is evident when one takes into account the diverse entities that have direct relevance to any viable programmes.

Successful implementation of science, technology and innovation policy requires civil servants with the capacity for policy analysis – capacity that most current civil servants lack. Providing civil servants with training in technology management, science policy and foresight techniques can help integrate science, technology and innovation advice into decision-making. Training diplomats and negotiators in science and technology also can increase their ability to discuss technological issues in international forums.

The RECs offer a unique opportunity for Africa to start rethinking the governance of innovation so that the region can propel itself to new frontiers and run its development programmes in an enlightened manner that reflect contemporary challenges and opportunities. The focus of improvements in governance structures should be at least in four initial areas: (1) high-level committee on science, innovation, technology and engineering; (2) regional science, technology and engineering academies; (3) office of science, technology and innovation; and (4) graduate school on innovation and regional integration.



African countries have in recent years been focusing on creating or strengthening their national academies of science and technology. So far, 16 African countries (Cameroon, Egypt, Ethiopia, Ghana, Kenya, Madagascar, Mauritius, Morocco, Mozambique, Nigeria, Senegal, South Africa, Sudan, Tanzania, Uganda and Zimbabwe) have developed national academies. There is also the non-governmental African Academy of Sciences (AAS).

A new economic vision for Africa's agricultural transformation – articulated at the highest level of government – should be guided by new conceptual frameworks that define Africa as a learning entity and not a desperate case requiring emergency responses. This shift will entail placing policy emphasis on emerging opportunities such as renewing infrastructure, building human capabilities, stimulating agribusiness development, and increasing participation in the global economy. These areas that constitute what can be called 'the learning economy' should be the foundation upon which to base international development partnerships. In other words, development learning should inform the formulation of Africa's foreign policy.

Contemporary history informs us that the main explanation for the success of the industrialized countries lies in their ability to learn how to improve performance in a diversity of social, economic and political fields. In other words, the key to their success was their focus on practical knowledge and the associated improvements in skills needed to solve problems. They put a premium on learning.

One of the most reassuring aspects of a learner's strategy is that every generation receives a legacy of knowledge that it can harness for its own use. Every generation blends the new and the old and thereby charts its own development path, making debates about innovation and tradition irrelevant. Furthermore, discussions on the impact on intellectual property rights take on a new meaning if one considers the fact that the further away you are from the frontier of research, the larger is your legacy of technical knowledge. The challenge therefore is for Africa to think of research in adaptive terms, and not simply by focusing on how to reach parity with the technological front-runners. Understanding the factors that help countries to harness available knowledge is critical to economic transformation.

The advancement of information technology and its rapid diffusion in recent years could not have happened without basic telecommunications infrastructure. In addition, electronic information systems, which rely on telecommunications infrastructure, account for a substantial proportion of production and distribution activities in the secondary and tertiary sectors of the economy. It should also be noted that the poor state of Africa's telecommunications infrastructure has hindered the capacity of the region to make use of advances in fields such as geographical information sciences in sustainable development.

The emphasis on knowledge is guided by the view that economic transformation is a process of continuous improvement in productive activities. In other words, government policy should be aimed at enhancing performance, starting with critical fields such as agriculture, while recognizing inter-disciplinary linkages.

This type of improvement indicates a society's capacity to adapt to change through learning. It is through continuous improvement that nations transform their economies and achieve higher levels of performance. Using this framework, with government functioning as a facilitator for economic learning, agribusiness enterprises will become the locus of learning, and knowledge will be the currency of change.

From Johannesburg to Ouagadougou: Highlights of the journey and implications for continental initiatives

Prof Monty Jones, Executive Director

Forum for Agricultural Research in Africa (FARA)



Major developments over last 3 years

Over the past three years, Africa has borne the brunt of fuel, food price, financial and economic crises. Renewed interest in the sector that constitutes the bedrock of African economies – agriculture – has been kindled at the highest decision-making levels. International focus has been illustrated by the World Bank Development Report in 2008, the recent African Union Summit on agriculture, ongoing CAADP implementation, the L'Aquila G8 declaration, the UK-China Summit, and the IPCC Climate Change Report in 2007 and Copenhagen conference.

In 2006, Africa's population passed the 1 billion mark, with more than 44 percent of the continent's population under 15 years of age. Development partners have responded to all these challenges with a call for embedding research

with wider development agenda and a more inclusive agricultural research for development (ARD) system. This perceived need gave rise to the CGIAR reform and GCARD in Montpellier.

The information revolution has led to improved access to markets, extension and financial services, as well as deepening regional integration, especially with regard to the African Union and the regional economic communities (RECs). Increased South-South cooperation has also increased with the emergence of Brazil, China and India as economic and technology powers. Increased foreign investment in Africa's agriculture and natural resources is now the order of the day.

How is Africa changing within the changing global environment?

Recent developments are converging with outcomes from long-term actions to produce impacts unfamiliar to Africans. The frequency of reports proclaiming a positive outlook for Africa is increasing. Half the African countries are on course to meet the MDG target of halving poverty by 2015, FDI in Africa grew from USD 10 billion in 2000 to USD 53 billion in 2009, and the rate of growth is accelerating. The sustained political stability brought about by these developments means that the continent can now be referred to as a *Lion* instead of a problem.

Dynamic environment and innovation

A dynamic environment presents both opportunities and challenges, calling for innovation to address the challenges and take advantage of opportunities. Has the ARD community adequately positioned itself to respond to the challenges and opportunities?

Mindset changes required to enhance innovation

First, Africans need to start viewing themselves from a more balanced perspective of both strengths and weaknesses. We need to recognise that rest of the world needs Africa's markets and resources as much as Africa needs its assistance. Accordingly, our resource mobilisation should emphasise investment rather than charity.

Second, we need to recognise that research on its own, however outstanding, will not deliver the desired impact. It needs to be embedded in the wider development framework. Research should be embedded in innovation which is in turn embedded in development. We are more effective working in partnership rather than in isolation.

Third, we must be proactive in reacting to emerging threats and opportunities before they materialise. We need increased emphasis on spotting and taking advantage of opportunities. We need to expand from a problem-solving approach to embrace new opportunities, and this attitude should permeate to education and training.

Fourth, we must be sincere about our commitment to research across the value chain. How much are research systems investing in post-production research, including product development? A more successful engagement of the private sector lies in research attention to issues further down the value chain.

CAADP: Framework for Africa's Agricultural Development

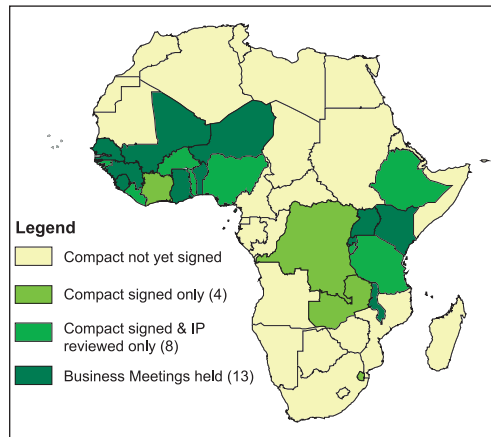
CAADP's Pillar IV, agricultural research, technology dissemination and adoption, is led by FARA in collaboration with SROs and AFAAS. CAADP offers entry points for continental initiatives to align their programmes with national and regional agricultural development strategies.

FARA's Value Proposition

The provision of a strategic platform to foster continental and global networking that reinforces the capacities of Africa's agricultural research systems. This includes supporting networking among continental initiatives to increase their impact and supporting engagement of continental initiatives in CAADP processes.

Conclusions

Because innovation is an essential coping strategy in the dynamic environment of our times, mindset changes are required to enhance Africa's capacity to undertake it. CAADP provides strategic entry points for harmonisation of activities under continental initiatives, and FARA supports continental networking to enhance the effectiveness and impact of ARD.



Status of CAADP process implementation at country level as of 22 July 2010.

African agriculture science highlights from scientific partners

Speaker: *Dr Papa Abdoulaye Seck, Director General*
Africa Rice Center

Projections show that the world population will increase from about 6.8 billion people in 2010 to 9.1 billion by 2050. According to FAO, the global food production must increase by 70% in order to feed the world population. The challenge of nourishing the world has never been as demanding as now, especially in the face of soaring food prices and climate change.

Despite significant increases in domestic cereal production in many countries during 2008 and 2009, Africa continues to depend heavily on food aid and global cereal markets for its leading food staples (rice and maize). Until those conditions change, the continent will remain vulnerable to recurring food crises. However, we believe that the continent will play a significant role in global food security. Unlike Asia and Europe, where the availability of potential land and water for agriculture is declining, Africa still possesses a large reservoir of underutilised agricultural land and water resources. By strengthening our complementary advantages and pooling our resources, our intelligence and our efforts, we can generate knowledge and technology that can have tangible impact in Africa.

That is why the Africa Rice Center (AfricaRice) – which is a pan-African organisation as well as an international centre supported by the Consultative Group on International Agricultural Research (CGIAR) – is excited to be one of the architects of the Global Rice Science Partnership (GRiSP). An example of the new CGIAR, GRiSP seeks to align rice research activities worldwide. This means bringing together the national programmes, the advanced research institutes, the CGIAR centres and other international partners to do research differently and better. The International Rice Research Institute (IRRI) is leading GRiSP and AfricaRice has the responsibility to lead the implementation of GRiSP in Africa.

The advantage of such a collaboration is that it allows us to reach out to the entire continent, have critical mass, address more rice-related problems, and at the end of the day we can expect higher impact among the most relevant stakeholders. As the representative of the CGIAR in this forum, it is my vision that such an approach and initiative be developed for Africa.



Views and innovations from the civil society group

Sylvie Christel Mbog, President
Sub-Saharan Africa NGO Consortium

NGOs have supported grass root communities in various innovative ways by identifying, characterising and disseminating technical and technological innovations. One example is the manufacture of a traditional incubator for guinea fowl eggs, a partnership between Profeis, Adaf Galle and the Department of Agriculture of Ghana. Similarly, support for a partnership between ODECO Cameroun, IITA and FEOPROPACE in the multiplication of plantain tree sprouts has been encouraged by adapting and disseminating research results on the multiplication of plantain tree sprouts.



Recommendations

Regarding the dissemination of research results: Establish profitable partnerships between all stakeholders and direct research according to producers' needs.

Regarding innovations: Identify, characterise, promote and disseminate producers' knowledge and know-how.

Regarding GMOs: Evaluate their advantages, disadvantages and constraints to enable producers to make an informed choice. Simultaneously, strengthen the capacity of NGOs and extension officers for an appropriate qualitative and quantitative monitoring supported by reliable statistical data.


Developing Partners Statement

Speaker: David Radcliffe
European Commission



FARA's current development partners include the African Development Bank, Brazil, CIDA, DANIDA, DFID of the United Kingdom, European Commission, France, IDRC, Italy, JIRCAS, Netherlands, Syngenta Foundation, USAID and the World Bank.

The development partners congratulate FARA for a successful Fifth African Agricultural Science Week and FARA General Assembly and expresses sincere thanks for the hospitality of the Government of Burkina Faso in hosting these events.



The presentations and fruitful discussions this week have generally struck a note of optimism. While serious challenges to attaining the MDGs in Africa remain, there have been encouraging signs of improved economic performance, agricultural growth and poverty reduction in many African countries. CAADP is now playing a pivotal role in revitalising African agriculture and we applaud the fact that Burkina Faso has invested 15% of the national budget on agriculture and has signed a CAADP compact on 22nd July.

Recent improvements in agricultural performance indicate that Africa is on the right track and justify continued investment and support from the donor community. However the scale of challenges such as by the adverse impacts of climate change, degradation of land and shortage of water resources, and virulence of plants and animal diseases is increasing. There is no room for complacency and all the stakeholders in African agricultural research for development, including donors will have to redouble efforts to stay ahead of the game and maintain progress towards MDG 1 – to reduce income poverty and hunger.

FARA plays a unique role in strengthening agricultural research for development in Africa. FARA has been appointed by NEPAD as the lead institution for CAADP Pillar IV, represents Africa in the GFAR – the Global Forum for Agricultural Research and, through its network support functions, coordinates and provides guidance to agricultural research in the sub-regions of the continent.

FARA finds itself in a much stronger financial situation than was the case only one year ago, and has more robust governance mechanisms, taking account of registration in Ghana and revisions to the Constitution and Governance Manual. After some delays, the Multi-donor Trust Fund came on stream in September 2009 with funding from the European Commission and Canada (CIDA). Funding from the Netherlands and from DFID was crucial in enabling FARA to continue operations during the period prior to the approval of the MDTF. Development partners are pleased to note the steadily rising trend in the utilisation of funds by FARA for projects and core activities and that some of these projects are now showing results. There is still scope for further improvements in the rate of uptake of funds by projects but as some of these projects are new, such as PAEPARD that was launched this week, we expect implementation of activities to further increase in the latter half of this year.

FARA needs to look towards future challenges. Development partners are most interested in results that link to sustainable impacts on food security, poverty reduction and agricultural growth in Africa. Even allowing for its unique role, FARA must be able to successfully compete for funding with other research and development institutions. FARA needs to demonstrate clearly where it positions itself on the continuum between research and impacts on the ground, to clearly indicate comparative advantage and the value it adds to the operation of its component and partner institutions, including the sub-regional organisations and NARS. It will be important to operationalise a rigorous monitoring and evaluation system and with indicators and milestones so that progress towards results and outcomes can be clearly identified.

The GCARD process introduced a new paradigm for agricultural research for development based on collective action of stakeholders to achieve results and impact. This provides the

opportunity for improved alignment. FARA, and the sub-regional organisations that are FARA's members, need to position themselves so that they can both contribute to and gain from joint programmes with research institutions and other stakeholders such as farmers' organisations, civil society and the private sector. The mega-programmes of the CGIAR are now at the top of the agenda and there is a clear opportunity for FARA and its component SROs to bring in the regional perspectives, including regional priorities, into mega-programme design. Valuable lessons may be drawn from the existing Sub-Saharan Africa Challenge Programme in this context. Noting the importance of women in household food security and family income generation in Africa, and FARA's own gender balance in its professional staff, FARA is also well placed to promote the mainstreaming of gender in agricultural research for development programmes in Africa.

The recent acceleration in the CAADP process provides another challenge and opportunity for FARA. FARA needs to ensure that CAADP Pillar IV and especially the FAAP principles , dealing with research, technology dissemination and innovation, is reflected in CAADP country compacts and action plans, that the FAAP guidelines remain up to date with respect to contemporary challenges and that CAADP countries receive necessary support during pre- and post compact stages of CAADP. The development partners eagerly await the action plan that FARA is currently preparing in consultation with AU-NEPAD and with its SRO partners to take forward this work.

Lastly we would like to end by congratulating Dr Tiémoko Yo on his appointment as the incoming Chair of FARA and to thank Dr Denis Kyetere, the outgoing Chair, for his hard work in guiding FARA through the last three years. We also express our appreciation of Dr Monty Jones, Executive Director of FARA, for his continued dedication and commitment.

Private Sector Statement

Speaker: Mr Sanusi Deen

Pan African Agribusiness & Agroindustry Consortium, PanAAC

The African private sector Organisation (PanAAC) believes that the implementation of CAADP calls for the integration of the private sector in the Post-Compact implementation at country levels. Capacity building and knowledge sharing will provide the key driving forces in the realisation of all CAADP pillars.



To ensure its full collaboration, PanAAC will work to create country focal points and seek integration of its activities within programmatic areas through engagement with NARS and policy institutions in member countries. PanAAC will work with UniBRAIN to support capacity

building and integrate business incubation in the learning systems of all countries in Africa through regional institutions, farmer initiatives and country focal points. PanAAC will harmonise the integration of ICTs to drive the communication and collaboration of the various initiatives towards the realisation of the CAADP goals. PanAAC will seek private investment partners to boost investment activities in the agricultural value chains of member countries. PanAAC welcomes and supports IAR4D as an effective platform for African agricultural development and will collaborate in all possible ways in pilot and eventual upscaling of the anticipated proven concept.

In sum, PanAAC believes that the dissemination of research findings will resolve key challenges for a unified implementation of CAADP programmes in the agricultural sectors of African economies.

AARINENA Statement

Speaker: Dr Ibrahim Hamdan, Executive Secretary

Association of Agricultural Research Institutions in The Near East and North Africa (AARINENA)

AARINENA's mission is to contribute to the enhancement of agricultural and rural development in the West Asia North Africa region, to promote the exchange of scientific and technical experience and information, and to strengthen collaboration within and outside the region.

In order to fulfill this mission, nothing is more important than inter-regional cooperation. Experiences – both successes and failures – in one region can serve as lessons for implementing actions in another. Regional cooperation and collaboration will enforce and facilitate implementation of regional research priorities. Regions should link their efforts by sharing knowledge to reach the real end users of research efforts, the farmers. Advocacy to policy makers for securing political support on the importance of ARD through inter-regional collaboration is therefore a must for any successful impact.

AARINENA's technical networks have become a generic model for the establishment of functional mechanisms for collaboration and enhancement of communication and exchange. When resources are limited, networks become more effective means for the optimal utilisation of indigenous expertise and available resources. AARINENA's networks include partnerships on date palm, cotton, olive, medicinal plants, water use efficiency, biotechnology and plant genetic resources. Dr Hamdan concluded his presentation with a request that GFAR take a more active role in promoting inter-regional cooperation.



FORAGRO Statement

Speaker: Dr Mario Allegri,

Forum for the Americas on Agricultural Research and Technology Development (FORAGRO)

FORAGRO is a consortium of universities, national research institutes, NGOs, farmer associations, international research centres and the private sector. The involvement of FORAGRO in hemispherical dialogue began in Cartagena, Colombia, in 1997, and was most recently evidenced in Montivideo, Uruguay, in 2008. Two of the six proposals slated for implementation at the Montivideo meeting were to intensify regional links with GFAR and other regional for to enhance cooperation between continents, and to promote new strategic partnerships with the CGIAR centres.



The development of a cooperation culture between continents and regions through mechanisms that share technical and scientific information is essential. The exchange of experiences of institutional innovations and the development of networks for multinational collaborative action will lead to the formation of world networks for specific research issues. GFAR is of great significance in bringing the regional fora together. The Montpellier Road Map for Change that arose from the GCARD in 2010, specified collective research and knowledge-sharing actions as the way forward in transforming and strengthening agricultural research and extension systems.

Latin America and Africa face similar challenges. But because the continents share a vision of common future, business opportunities abound. Key research themes shared include strengthening of agricultural research institutions, transferring agriculture and livestock technologies, applying modern tools and technologies, and managing soil/conservation agriculture.

EFARD Statement

Speaker: Dr David Radcliffe, Executive Secretary

European Forum on Agricultural Research for Development (EFARD)

Europe's contribution to ARD is significant. Europe provides the majority of donor funding. Additionally, Europe provides in-kind contribution through research and academic organisations, and share a concern for poor smallholder farmers. EFARD was founded in 1997 as an informal mechanism without its own financial resources. Its activities are supported through projects and the European Commission provides in-kind support.



Major achievements since 2005 include the launching of the Platform for African-European Partnership on Agricultural Research and Development (PAEPARD), an inter-regional stakeholder platform. EFARD has also provided cooperation and coordination of ARD in Europe as well support to the younger generation of ARD stakeholders through an initiative called Young Partners for ARD (YPARD).

New opportunities for inter-regional cooperation include implementation of the Montpellier Roadmap and bolstering the EU-Africa partnership in eight thematic areas. EFARD supports new inter-regional platforms that reach out to Asia and Latin America through triangular networks (Europe-South-South). It has identified two key funding opportunities – one in development (the Food Security Thematic Programme [FSTP]) and one in research (the Framework Programme [FP7]). Finally, EFARD seeks greater collaboration with the private sector with a view towards responsible investment and public-private partnerships.

ASARECA Statement

Speaker: Dr Seyfu Ketema, Executive Director

Association for Strengthening Agricultural Research in East and Central Africa (ASARECA)

The Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA), which has 10 members (Burundi, DRC, Ethiopia, Eritrea, Kenya, Madagascar, Rwanda, Sudan, Tanzania and Uganda), echoes the African vision of AU/NEPAD: regional agricultural production should grow at an annual rate of 6 percent by 2015. This will be achieved by developing dynamic agricultural markets among nations and between regions, which in turn will enable the sub-region to be a net exporter of agricultural products.



One important example of technical progress in the ASARECA sub-region is the empowerment of farmers through value chain innovations with commodities such as rice, potatoes, maize, bananas and indigenous vegetables. The transfer and dissemination of proven technologies in post-conflict countries, such as up-scaling NERICA adoption in Southern Sudan and northern Uganda, continues to achieve results. Another important milestone is the strengthening of quality protein maize (QPM) agro-enterprises for improved household incomes, which has also made breeder seed available to seed companies.

Increasing sorghum utilisation and marketability through food diversification is another important ASARECA focus. Recipes for using sorghum flour for bread, cakes and biscuits have been developed, and in Tanzania these products are produced by small-scale processors as cottage industries and marketed with premium prices in supermarkets. And in Uganda,

sorghum varieties are being evaluated for the brewing industry. On the plant protection front, important advances have been made to combat diseases such as *Xanthomonas* wilt in banana and cassava brown streak disease.

Support for training has enabled 34 SCARDA-sponsored students to pursue their MSc degrees at five universities in three countries in a range of disciplines, and short courses in laboratory safety, plant disease diagnosis, optimal seed production and integrated pest management have also been offered to selected students.

A major achievement in the sub-region since the Johannesburg GA has been the signing of the East African Agricultural Productivity Program (EAAPP) by four countries: Ethiopia, Kenya, Tanzania and Uganda. EAAPP's objective is to strengthen and scale up regional cooperation in the generation of technology, training and dissemination programmes for regional priority commodities.

But there is much more that needs to be done. The challenges posed by climate change – reflected by disappearing snow on Mt Kilimanjaro, persistent droughts, widespread flooding and soil degradation – and by rising food prices that particularly hit the urban poor but also keep farmers in a net food buying dilemma, are daunting.

During the first half of this year, ASARECA has made significant progress in validating the innovation platform for technology adoption (IPTA) approach. These include IPTA 1: Access to quality planting material/seed improved varieties; IPTA 2: Improved practices for grain production; and IPTA 2: value addition/processing. We actively seek opportunities for accelerated and wider uptake through engaging with the private sector, and for developing a knowledge hub where mutual learning and experience sharing can take place between stakeholders within and across IPTAs.

CORAF/WECARD Statement


Speaker: Dr Paco Sérémé, Executive Director

The Conseil Ouest et Centre Africain pour la Recherche et le Développement Agricole / West and Central African Council for Agricultural Research (CORAF/WECARD)

The Conseil Ouest et Centre Africain pour la Recherche et le Développement Agricole / West and Central African Council for Agricultural Research (CORAF/WECARD) was created in 1987 to promote sub-regional collaboration. Its purpose is to create synergies, mobilise resources and solve common problems linked to agricultural research and development. It is the largest of Africa's SROs with 22 member countries: 8 in the Sahelian zone, 9 in the coastal zone, and 5 in the Central African zone. The estimated total population of the sub-region is 320 million, roughly one third of that of the African continent.

In 2007, the CORAF/WECARD Strategic Operational Plan for 2008–2013 was adopted. CORAF/WECARD's contribution to achieving the objectives of the CAADP agenda is in conformity





with the agricultural policies of the RECs. Its vision: Sustainable reduction in poverty and food security in WCA through increase of economic growth induced by agriculture and sustainable improvement in main areas of the agricultural research system. Its mission: Sustainable improvement in agricultural productivity, competitiveness and markets in WCA by satisfying the main demand addressed to the research system of the sub-region by target groups.

CORAF/WECARD's approach to its work is programme-based and derived from IFPRI studies, which represents a shift from project- and network-based mechanisms. The SRO, which is centrally managed, enables its programme managers to develop and coordinate high-quality priority programmes and projects. Recent institutional changes include the adoption of the new IAR4D paradigm, the establishment of new governance systems, restructuring of the membership of the Governing Board, strengthening of technical staff, establishment of an efficient M&E system, and the establishment of an institutional change management process.

Appreciating that strategic alliances and partnerships are vital for the institutional health of CORAF/WECARD, the SRO has signed agreements with each of the relevant regional economic communities (RECs): ECOWAS, UEMOA, ECCAS and CEMAC. Scientific partnerships have been forged with three CGIAR centres (ICRAF, ICRISAT and ILRI) as well as two advanced research institutes (CIRAD and CSIRO). Technical and financial partnerships have been signed with CILSS, USAID, IDRC and AusAID. CORAF/WECARD's partnership with FARA is intimate with involvement with virtually all of FARA's projects.

Major programmatic achievements include the 35 platforms established under different programmes; support for 38 MSc students (22 percent of them female); support for over 200 NARS staff including research scientists, technicians and administrators; more than 1000 agricultural research stakeholders trained in different projects; and 4 policy briefs (3 on milk trade and 1 on biosafety).

Challenges confronting CORAF/WECARD include membership of the two remaining countries in the sub-region (São Tomé and Príncipe and Equatorial Guinea); launching a non-staple crops programme; securing additional funding to complete the operational plan; pursuing institutional change at the grass-roots level; preparing an enabling environment for implementation of the operational plan; launching and implementation of seven programmes; diversifying partnerships; and improving ownership of the SRO by our stakeholders.

Women and Young Professionals in Science Competitions

Excellence in science and innovation and effectively communicating the results to achieve high impact are important for enhancing agricultural performance and socio-development in Africa. The 2009/10 Africa-wide Women and Young Professionals in Science Competitions, which were sponsored by AGRA, ANAFE, CTA, FARA, NEPAD and RUFORUM, recognised outstanding researchers engaged in communicating the outputs of their technologies and approaches to farmers and advocating for policy change to optimise the benefits derived from their scientific endeavours. Recognition and promotion of the achievements of women scientists and young professionals will motivate them to undertake more pioneering research and attract increased investments by African governments as well as the international community. The secondary goal is to increase the visibility of agricultural research as a valuable and promising career option.

Nonetheless, agricultural research is taking place in Africa and making a difference. It therefore behoves us to highlight significant achievements and contributions in agricultural research. Beginning in 2008, a consortium of the African organisations mentioned above initiated two competitions to promote excellence in agricultural research, science and innovation by rewarding African women scientists and young professionals whose work showed demonstrated actual or potential impact on agriculture and rural livelihoods. The 2009/10 competition was the second in the series.

The objectives of the competition were to:

- Create awareness amongst women and young professionals of their potential to contribute to Africa's development and the opportunities to fulfil their personal goals and ambitions through careers in science and agriculture;
- Demonstrate the critical role of women and young professionals in science, technology and innovation at the community, national, regional and global levels;
- Send strong signals to the women and young professionals that their efforts and initiatives are gaining recognition; and
- Motivate women and young professionals and foster their commitment to excellence in research, science, technology and innovation and to communication of the outputs for increasing the impact of research on socio-economic development.

The competitions were launched in August 2009. There were three stages of the evaluation process. Extended abstracts were solicited and reviewed by an expert panel drawn from CTA, FARA, AGRA, ANAFE and RUFORUM, followed by the submission and evaluation of full scientific papers of abstracts



Winners of the Women in Science Competition

1st Prize: Dr Sarah Lubanga Mubiru of Uganda for her work on Development of 'ENDIISA' decision support tool for improved feeding of dairy cattle in Uganda



2nd Prize: Dr Theresia Luvuno Munga of Kenya for her work on Breeding for cassava brown streak disease resistance in coastal Kenya



3rd Prize: Ms Esperance Benedicte Zossou of Benin for her work on Technological and institutional innovations triggered by farmer-to-farmer rice parboiling video in central Benin

4th Prize: Mrs Lalini Unmole of Mauritius for her work on The sustainable approach for the management of the legume pod borer *Maruca vitrata fabricius* on bean in Mauritius

5th Prize: Ms Eunice Wamuyu Githae of Kenya for her work on Genetic diversity of gum Arabic-producing *Acacia Senegal* varieties in Kenya using inter-simple sequence repeats (ISSR) and chloroplast simple-sequence repeat markers

Winners of the Young Professionals Competition



1st Prize: Ms Sandrine Nguiakam of Cameroon for her paper *Cours des matières premières, recettes budgétaires et croissance économique: cas de la Côte d'Ivoire*



2nd Prize: Mr Kevin Zowe Mganga of Kenya for his work on *Reseeding – a gateway to rehabilitation success, food security and sustainable rural livelihoods in drylands Africa*



3rd Prize: Dr Aneeza Soobedar of Mauritius for her work on *Looking at wastes as valuable resources – an example from the sugarcane industry in Mauritius*

4th Prize: Dr Robert Kajobe of Uganda for his work on *Development of appropriate surveillance systems for honeybee pests and diseases for improved production of honey and other bee products in Uganda*

5th Prize (tie): Mr Michael Kwabena Osei of Ghana for his work on the *'Morphological characterisation of African eggplant (Solanum species) in some African countries*

5th Prize (tie): Ms Wendkhouni Sabine Marie Flore Doamba of Burkina Faso for her paper *Variation de l'activité biologique dans les parcelles aménagées en cordons pierreux de la province du Kouritenga au Burkina Faso*

Award Winners

Winners of the IMPRESSA Awards



1st Place: Prof Sheunesu Mpeperekwi of Zimbabwe for his outstanding soya bean research and outreach, which has made a significant contribution to food and income security in his country.



2nd Place: Prof Belay Kassa of Ethiopia for his outstanding leadership and networking. Through his efforts, funding was made available for equipping the laboratories and providing training at Haramaya University.




3rd Place: Prof Mary OO Abukutsa of Kenya, an authority on indigenous African vegetables, for her work on NERICA and her supervision of undergraduate and graduate students.

The Awardees gather for a group photograph



***Congratulations to all the award winners!
Thank you for all you have done to empower African farmers!***



that met the established criteria and the oral defense of the top submissions by an independent jury. The full papers were also evaluated by an external consultant – Dr Fetien Abay Abera of Mekelle University, Ethiopia.

A total of 100 abstracts were received in response to both science competitions from entrants attached to universities, research organizations, companies and NGOs from 15 African countries. Of the 41 top entrants asked to develop their abstracts into full papers using approved guidelines, 27 were shortlisted (18 young professionals and 9 women) to compete for the top 5 places in each category. These scientists were required to make oral presentations which were evaluated by an independent team of experienced, multi-disciplinary judges drawn from African universities and research organisations. The finals were held during the 5th Africa Agriculture Science Week and FARA General Assembly in Burkina Faso, 19–20 July 2011. The following criteria were used at all stages of the competition:

- Logic and content including research design, statistical analysis and presentation of data, interpretation of results and conclusions
- Communication – written and oral presentations and strategies used for sharing the outputs with key stakeholders including farmers and policymakers
- Impact (demonstrated or potential) on productivity, livelihoods, farmer empowerment, women and youth
- Innovativeness and originality

The independent team of judges based their evaluations solely on the oral presentations made during the finals. The expert panel and external consultant based their evaluation solely on the written submissions – abstracts and full papers. The evaluation scores from the expert panel, external consultant and judges were then collated to select the overall winners for the top five prizes in each category.

The most important lesson learnt from the competitions was that great diversity exists in the various approaches to solving the problems Africa faces. The research initiatives showcased by the competitions ranged from developing low-cost ICT technologies to characterising agro-biodiversity with indigenous resources, from improving animal feed to addressing climate change. Major variations were observed in the design, methodology and communication strategies.

The science competitions helped to raise awareness and provided a platform for the young professionals and women researchers to share experiences and encourage collaboration with other African scientists. The opportunity to have the papers scientifically edited, published and disseminated in print and electronic formats as outputs of the competitions also contributed to building capacity as an added benefit to the African knowledge base.

The diversity of the research topics presented in response to the competitions calls for multi-disciplinary knowledge and skills of judges and expert panelists. This was addressed to some extent in the second round of the competitions but more can be done and the expert panel should be expanded for future competitions. The strategy employed in engaging previous awardees of the first science competitions in the second round as mentors, keynote speakers, panelists and judges was encouraging and should continue.

In conclusion, the competitions provided an overview of current agricultural research and development activities across Africa. Africa's research could benefit from improved teamwork among scientists across disciplines. However, African scientists must also be afforded the opportunity to build self confidence and demonstrate their expertise in the various scientific spheres. The 5th FARA General Assembly endorsed the science competition as an integral part of its triennial African Agriculture Science Week.

Subtheme 1: Investment in agricultural innovation in the post-financial crisis era

General Assembly Resolution on Subtheme 1

The General Assembly (GA) recognised that although investments in and opportunities for African agricultural research and development (ARD) have increased since 2000, they are unstable and fragile. While total numbers of research staff have increased, qualification levels remain low.

Advocacy for the ARD agenda of development agencies should therefore reflect African needs and priorities and strive to achieve equitable and sustainable partnerships. More quantitative information on performance of agricultural science and technology is needed to provide insights. In order to accomplish this, platforms to facilitate innovative partnership with Europe are needed. Simultaneously, investments are required to increase capacity to access funding opportunities. FARA and its partners in the sub-regional research organizations (SROs) and the national agricultural research systems (NARS), as well as other stakeholders, will use evidence obtained through ARD on trends and impacts of investments in agricultural research.

The GA further recognised that public-private partnerships (PPPs) are essential in bringing technological innovations to smallholder farmers, and that policies are needed to effectively regulate – but not hinder – access to technologies and transfer agreements. Required action: Improve access to knowledge, business and market information.

The GA further recognised the importance of establishing the Coordinating Council for Agricultural Research and Development for Southern Africa (CARDESA) and building a regional agricultural policy for Southern Africa. CARDESA needs strong policy coordination, public action and investments towards deeper regional integration of southern African countries. This requires the establishment of a development fund to support investment plans.

Changing mindsets and delivering impact from investment in agriculture research


Speaker: David Howlett, Executive Director

Africa College: a research partnership on food security and human health between Leeds University, IITA, ICIPE and NARES in East and Southern Africa

Questions to be asked include: What do we mean by impact? What are the implications of the financial crisis? How do researchers achieve impact?

We must seek direct impact on the economy. Scientific advancement should engender new methods and understanding if our goals of taking millions of people out of poverty and





reducing environmental impact are to be met. This will involve the training of graduates and post graduates, influencing policy and increasing public understanding. Our efforts must be undertaken on all levels – local, national, continental and global.

Impact may be achieved in a short period but often takes years. Some impacts can be achieved unexpectedly. Excellent research makes impact more likely but will not necessarily lead to significant impact. Importantly, it is invariably difficult to attribute impact.

Agriculture must be a key factor on the agenda to help achieve food security in the face of climate change. Political and public desire to see positive change and impact from investments means that returns to agricultural research have been good but impacts have not been good enough. We need research that benefits millions of people at risk of hunger and poverty.

The financial crisis has led to pressure on public sector finances and budget cuts. In the UK, universities are cutting staff. Increased pressure demonstrates impact and value for money. Before and after the recession we need to demonstrate impact.

Major reform (e.g. the CGIAR and strengthening of SROs) must occur to enable a change of approach and mindset. We need to understand and use research results, and we need clarity on what we as researchers are producing and the best pathways to achieve impact. This means devoting time and money to communications and working as teams and with partners in research and innovation. We must not confine our focus to peer-reviewed papers. The important thing is to maintain scientific excellence and the reward results and impact.

Impact pathways identify those who may benefit from or make use of the research. We need to ask ourselves how will beneficiaries benefit from and make use of the research, and how data, knowledge and skills will be communicated and disseminated.

Risks abound. One is to focus on ‘easy’ research with high chances of success but with low impact. Another is to drop blue skies research and pay less attention to basic research. Especially important to recognise and avoid is the tendency to hide failure and by so doing fail to learn from mistakes.

We are now starting to see increased funding from governments and donors, but if at the next General Assembly we don’t have new impacts to report and we only talk about strategies and plans, we will have collectively failed. As Dr Jones said, we must change mindsets and seize opportunities.

Open space outcomes

Regional economic integration: the case of the SADC regional agricultural policy

Organizer: SADC-FANR

Regional Agricultural Policy

Participants felt it desirable to define common objectives and measures that guide, promote and support stronger policy coordination, public action and investments towards deeper

regional integration in Southern Africa. A development fund to support regional investment plans deriving from national investment plans is necessary to make a regional agricultural policy binding on its members and stakeholders.

Coordination of a Regional Agricultural Research and Development Agenda

The establishment of the Coordinating Council for Agricultural Research and Development in Southern Africa (CARDESA) by SADC re-affirms the critical role played by SROs as rallying points for regional integration in coordinating agricultural R&D.

SROs are best placed for promoting partnerships between the public and private sectors and civil society because they have comparative advantage in providing necessary linkages and collaboration. SROs need autonomy in management of human and financial resources free from political interference while maintaining the principles of subsidiarity and inclusiveness and financial sustainability.

Launching of the Platform on African European Partnership for Agricultural Research and Development (PAEPARD)

Organizers: FARA, EFARD

Chair: *Prof Monty Jones, Executive Director*
Forum for Agricultural Research in Africa (FARA)

AGRINATURA presentation

On behalf of European partners involved in PAEPARD, Dr Paolo Sarfatti, Director of the Czech Republic-based European Alliance on Agricultural Knowledge for Development (AGRINATURA), presented his organization as a new alliance formed by 35 universities and research organisations from 18 European countries working in agricultural research, education, training and capacity strengthening for development. He added that it is currently the main gateway between Europe and emerging economies in the fields of agricultural research and education for development.

FARA presentation

Dr Monty Jones, Executive Director of FARA, presented a background of PAEPARD. The major lesson learnt from the first phase (1 April 2007 to 30 September 2008) was that it did not involve non-research stakeholders, notably farmer organizations, the private sector and NGOs. PAEPARD II was therefore designed to avoid this gap. He emphasized that for the implementation of activities of the second phase, the lead institutions were chosen alternatively from Africa and Europe to achieve balance between African and European partners.

EC presentation

On behalf of the European Commission (EC), Dr David Radcliffe stressed the importance of PAEPARD II in attaining the MDGs through ARD. He echoed Dr Jones's statement that

non-research stakeholders must be involved, adding that Africa needs to strengthen its human resource capacity, hence the involvement of European partners. Dr Radcliffe noted that EC support for PAEPARD amounts to € 5.5 million over 3 years.

Expectations of all partners

Advocacy for the European ARD agenda must better reflect African needs and priorities if equitable participation of African research and non-research stakeholders in ARD projects is to be achieved. This will require greater involvement of farmer organisations, civil society and private sector as well as equitable and sustainable African-European partnerships. If these goals are met, Africa will dramatically increase its capacity to access funding opportunities

Second Biocircle training course of FARA about FP7

Organizers: FARA, Biocircle

Chairs: *Dr Pea Oberhagemann*, Life Sciences, Germany; and
François Stepman, PAEPARD

Background

The event during the FARA General Assembly has tried to create awareness of the European Commission (EC) financing mechanism Framework Programme 7 (FP7) and what it offers for agricultural research scientists in Africa. The event revolved around the methods used to promote partnerships, such as national roundtables, brokerages, twinning and tailor-made training programmes. They are designed to stimulate dialogue to better define specific areas of mutual interest and benefit.

Representatives of small and medium enterprises (SMEs) were keen to know how they could join a consortium and related to European FP7 coordinators.

After a welcome address and opening remarks by François Stepman, a video interview with Dr Monty Jones, Executive Director of FARA, was shown. The video featured collaboration among stakeholders and dependency on external funding.

Statements about the various constraints encountered working with EU researchers/programmes included:

- Collaborating with European researchers only serves the European research agenda (pro/con)
- FP7 is too bureaucratic
- Farmer's don't benefit of the KBBE projects
- Small and Medium Enterprises (SMEs) can participate in FP7
- It is normal that the EC funding schemes ask for own contributions (cost sharing)

Dr Oberhagemann introduced FP7 with a slide presentation on African participation and success rates. This was followed by a video interview with Kevin Uruma, Director ATPS , entitled *Why is FP7 useful for Africa?* Mr Stepman then introduced Project AFTER – African Food Tradition Revisited and showed a video interview with AFTER Project Coordinator, Dr Dominique Pallet.

Key issues and recommendations

African participation in knowledge-based bio-economy (KBBE) must increase. To do this, FARA will increase the number of training workshops on FP7 for African contact points under the Biocircle 2 project (2011–13). FARA will disseminate information on FP7 calls.

PAEPARD will facilitate innovative partnerships for 3 relevant topics: the role of aquaculture in improving food security and eradicating poverty, the reduction of post-harvest losses for increased food security, and a new generation of researchers for neglected zoonoses at the animal-human interface. Another decision taken was that PanAAC would facilitate the participation of SMEs.

Importantly, African countries with local Contact Points for FP7 show higher participation. These levels of participation translate into greater support from European donors. Of the 31 countries with participants submitting proposals for funding between 2007 and 2009, 48% of EC contributions went to six countries with local Contact Points: Egypt (82 participants with eligible proposals, 8 of which are funded); South Africa (79 participants with eligible proposals, 19 of which are funded); Morocco (73 participants with eligible proposals, 9 of which are funded); Tunisia (67 participants with eligible proposals, 6 of which are funded); Kenya (34 participants with eligible proposals, 6 of which are funded); and Algeria (16 participants with eligible proposals, 1 of which is funded).

Outcome of the training was widely disseminated through FARA and PAEPARD blog posts (<http://paepard.blogspot.com/2010/07/biocircle-facilitating-better.html>). These links to the FP7 call are available on line: CORDIS (http://cordis.europa.eu/fp7/partners_en.html) ; BIOCIRCLE (<http://www.biocircle-project.eu/dnn4/home/tabid/61/Default.aspx>); and BIO-NET (<http://www.ncp-bio.net>) (national contact points on Agricultural research in Europe).


Recent trends in the agricultural R&D environment in SSA

Organizer: IFPRI-ASTI

Chair: *Dr Ibrahim Hamdan,*

Executive Secretary, Association of Agricultural Research Institutions in
the Near East and North Africa (AARINENA)

This event focused on recent trends in the overall agricultural R&D environment in SSA and how Agricultural Science and Technology Indicators (ASTI) and the outcomes and impacts of Pillar IV of the Comprehensive Africa Agriculture Development Programme (CAADP) can be linked to FARA's recently completed monitoring and evaluation (M&E) strategy. The event was



attended by a large number of representatives from agricultural R&D agencies, sub-regional organizations, NGOs, donor organizations and other stakeholders.

Facilitated by the International Food Policy Research Institute (IFPRI), ASTI compiles, analyses and publicises data on trends in agricultural R&D in low- and middle-income countries worldwide. In 2009, ASTI embarked on updating its dataset for SSA. Though ASTI data collection had not yet been fully completed in all of SSA at the time of the FARA Science Week and General Assembly, some preliminary survey results and key trends were presented during the side event.

The ASTI/FARA side event began with a general overview of ASTI and a presentation on recent trends in agricultural R&D capacity across Africa by Nienke Beintema. Preliminary data reveal that the total number of agricultural research staff across Africa has increased in recent years, but large differences exist between countries. Many of the capacity increases occurred in higher education agencies, rather than national agricultural research institutes. Despite the fact that overall agricultural R&D capacity rose during the 2000–08 period, average staff qualification levels have deteriorated in a number of countries. The non-replacement of retiring research staff and the aging pool of well-qualified researchers are major areas of concern in these countries. In contrast, other countries have an increasingly young research staff pool, often trained to the BSc level with limited training opportunities and mentoring by more experience staff. On a positive note, the share of female agricultural scientists has increased since the turn of the millennium.

Gert-Jan Stads of ASTI discussed trends in agricultural R&D spending and funding in SSA. He stated that overall investment levels appear to have increased since 2000, though many countries have reported sharp declines. Agricultural R&D spending as a percentage of agricultural GDP has also increased since 2000. These overall averages, however, mask significant cross-country differences. Ghana, Nigeria, Tanzania and Uganda, for example, all reported dramatic increases in their overall agricultural R&D investments between 2000 and 2008, while Eritrea, Niger, Senegal and Zambia experienced striking declines. A large number of countries have extremely fragile agricultural R&D funding systems and remain very donor-dependent. The completion of large donor-funded projects in those countries can have a tremendous impact on overall investment levels. Overall, however, the share of donor and development bank funding in agricultural R&D has declined since the turn of the millennium. Many countries, in their efforts to find innovative ways to finance their agricultural R&D, are investigating the efficacy of competitive funds, internally generated resources and contracting research to the private sector.

Finally, Leonard Oruko of FARA stressed that quantitative information is important to assist in measuring the performance of agricultural science and technology systems. His presentation stressed the importance of continued efforts to measure R&D investment and capacity trends and impacts in line with the CAADP agenda. This requires that standardised data collection and analysis be embedded through an integrated M&E system for CAADP Pillar IV activities as well as the development of capacity to analyze and disseminate R&D trends and impacts at the national and regional levels.

These three presentations were followed by a question-and-answer session and an animated discussion. It was agreed that additional in-depth assessments are needed to provide better

insights into the underlying trends and issues related to agricultural research capacity and investment. The final Africa-wide ASTI survey results, as well as approximately 30 country notes and underlying datasets, will become available on the ASTI website (www.asti.cgiar.org) in the fourth quarter of 2010.

Public-private partnerships for stewardship of agricultural innovations in SSA – legal, ethical and social-economic considerations

Organizer: AATF

Chair: *Dr Ephraim Mukisira, Director*

Kenya Agricultural Research Institute (KARI)

Background

Public/private partnerships (PPPs) in agricultural development aim to capitalise on the potential synergies that can be generated and harnessed when public and private sector organisations work together towards shared goals. To enable successful partnerships, experience shows that in addition to agreeing the roles and responsibilities of each partner, there are more subtle and potentially fragile elements of legal, confidentiality, ethical and social-cultural nature that must be attended to with utmost sensitivity and professionalism to spur enduring partnerships.

The commitment of African governments and regional organisations towards increasing agricultural productivity has been articulated in various strategic papers. Partnerships between the private sector, with its proven capacity to bring technologies to farmers in the form of seeds and other agricultural inputs – and public sector, with its capacity for agricultural research and a firm commitment to smallholder farmers' needs – are central to attaining these agricultural goals.

In recognition of the importance of PPPs, the African Agricultural Technology Foundation (AATF) hosted a side event where experts shared their experiences in this delicate yet crucially important process. The side event explored the impact of intellectual property (IP) legislation, challenges for commercialisation of GM crops and biosafety capacity in Africa, stewardship of innovative technologies, and trust-building models for PPPs in agro-biotechnology development.



Participants agreed on five outcomes.

1. Impact of national IP legislation on African agricultural research

Responsible IP management is an effective engine for agricultural technology transfer. However, Africa has limited capacity to deal with increased requirements for IP legislation. *Africa should therefore develop standardised technology transfer agreements to manage the increase in requirements for IP policies on agricultural research.*

2. Impact of strict liability and regulatory challenges on commercialisation of GM crops in Africa

Liability and redress provisions are necessary for the responsible development and deployment of safe and environmentally friendly GM products in Africa. However, strict liability and redress policies are a disincentive to introducing technologies to small-scale farmers. *Africa should therefore develop biosafety policies that effectively regulate but do not prevent access to technologies by farmers.*

3. Stewardship for sustainable technology transfer to farmers in SSA

Stewardship is central to the efficient development and sustainable use of appropriate agricultural products by farmers. However, capacity is limited for stewardship of innovative agricultural technologies from production to dissemination. *A value chain approach is therefore needed for product development, testing, dissemination and commercialisation. Additionally, there is need to strengthen capacity in stewardship.*

4. Trust-building and PPPs in agro-biotechnology development

PPPs in agricultural development have gained increasing popularity. However, complexities of these partnerships due to controversies around GMOs and skepticism of private sector involvement in humanitarian projects could result in public distrust, thereby putting the success of the partnership at risk. *Consideration of trust-building approaches around ethical, social, cultural and commercialisation performance of PPPs can improve management, accountability, and transparency to help build trust and mitigate risk. Due recognition should be accorded to partners to enhance participatory project development and deployment and actualise commitment to the Maputo declaration.*

5. Public acceptance and communication of GM crops – the OFAB experience

Outreach opportunities where biotechnology stakeholders can network, share knowledge and experiences and explore new avenues for collaboration in bringing the benefits of biotechnology all across Africa such as the Open Forum on Agricultural Biotechnology in Africa (OFAB) can enhance understanding and support public acceptance of GM crops. However, there is continued controversy around biotechnology due to misinformation. *Enhancement of innovative science-based promotion of biotechnology and strengthening of biotech communication capacity in Africa is therefore necessary.*

Subtheme 2: Knowledge centres and networks to cope with the challenges of globalisation and climate change

The GA recognised that awareness and use of knowledge and know-how of communities has increased. However, accessing and sharing information on the best ways to improve productivity and protect farm investments remains difficult. African ARD systems do not adequately link research, education and outreach to development activities.

Greater investments are therefore needed for all stakeholders to strengthen capacity to utilise tools and platforms and to expand their use beyond the internet. This will involve the actualisation of frameworks, plans and strategies for rural empowerment as well as investment in strengthening ARD and greater accessibility of ARD outputs.

Required action consists of encouraging support from community-led integration of agricultural practices, extension, research and policies. Partnerships between communities, researchers and NGOs on adaptation strategies must be supported so that a programme for scaling up and out of the integrated agricultural research for development (IAR4D) concept along the CAADP Pillar IV framework can be developed. Human capital development for ARD must be developed through regional capacity strengthening initiatives that maximise resource use, rationalisation and benefits, and agri-business growth should be stimulated by catalysing innovation incubation and functional linkages between universities and industry.

The GA further recognised that Africa-wide competitions help to motivate women and young scientists and bring out the best talent, and in so doing serve to identify skill gaps. More opportunities for women scientists and young professionals are needed. FARA, CTA, RUFORUM, ANAFE, AGRA and other partners must continue to recognise, reward and involve outstanding women and young scientists in Africa.

Agricultural advisory services are critical to achieving the CAADP agenda. The African Forum for Agricultural Advisory Services (AFAAS), which provides a framework for linking actors these services, requires resources to mobilise and influence policies to foster effective agricultural advisory services. Support to AFAAS to develop its capacity to facilitate agricultural innovation is therefore crucial.

Misconceptions, limited understanding, poor attitudes and cultural issues concerning gender issues persist. An enabling policy environment for gender mainstreaming therefore needs to be created, including policy audit and reform on gender to improve balanced gender performance.



Climate change presents yet another important threat to Africa's agricultural prosperity. Fortunately, collaboration among agriculture scientists and climate scientists is improving and informing climate change policies. A redoubling of efforts to produce technologies and accurate weather forecasts is needed to help farmers cope with climate change. Researchers must produce and present evidence to national and regional policy makers on the place of agriculture in climate change policies. One example of this is to build on AfricaAdapt's initiative to set up a knowledge platform on climate change that can inform and harmonise policies and identify research issues.

Recognising that because crop pest outbreaks are increasing, the GA expressed support for a preventive culture. This includes mapping and building capacity of players in crop pest outbreak prevention and response.

Finally, the GA recognised that developing livestock and fish value chains is of paramount importance to food and nutrition security. The balance between the impact and benefits of increased production and the environmental implications must be articulated. A coherent strategy for scaling out successful country interventions across sub-regions is therefore needed.

Empowering rural communities with opportunities for learning to enable innovation and coping/adaptation capacity to emerging challenges


Speaker: Prof Venâncio Simão Massingue, Minister of Science & Technology
Mozambique

The integration between traditional and scientific knowledge can be crucial for identification of problems and finding suitable solutions for the global climate change effects, especially in less developed countries. The lack of modern technologies for climate prediction and modeling in developing countries calls upon the need for popularization of science and for the increase of access to science by rural communities. The combination of scientific and indigenous measures for coping climate change challenges can produce suitable solutions to overcome the constraints faced by rural communities.

Mozambique has been suffering from the effects of extreme climatic events, caused by low or high levels of water across the country, such as floods, droughts, land degradation and cyclones – all driven mainly by climate change.

In Mozambique several measures have been taken to address this issue. These include assigning priority status to environmental sustainability by the Mozambique Science, Technology and Innovation Strategy (MOSTIS) and the creation of the Research Group in Climate Change in the Faculty of Sciences of Eduardo Mondlane University, as well as the creation of the Mozambican Network for Ecological and Environmental Research (RIEAM) and various scientific investigations.

Some of the challenges faced by rural communities that can be associated with climate changes are low soil fertility, land and water degradation, loss of biodiversity, erosion, rising groundwater levels and increasing air temperatures. Practices by communities that produce



negative effects on the environment include uncontrolled fires, unsustainable agricultural practices and deforestation for wood and charcoal production. Our experience has shown that, based on interactions between scientists and communities, challenges can be translated into opportunities through the implementation of solutions generated by scientific knowledge.

The Mozambican National Adaptation Programme of Action (NAPA) outlines clear and simple information on urgent and immediate needs with regard to climate change impact and adaptation priorities. The main actions proposed by NAPA are the following:

- Strengthening of the early warning system
- Strengthening capacity of agricultural producers to deal with the adverse effects of climate change
- Improvement of knowledge and strengthening of the management of river waters
- Promotion of actions to limit erosion and to develop sustainable fisheries
- Promotion of actions that will contribute to the mitigation of greenhouse gases
- Promotion of public education and information dissemination on climate change
- Improvement of coordination between the various groups that work on issues related to the evaluation of climate change vulnerability and hazard risk reduction
- Promotion of the integration of climate change into decentralised district planning

Because exposure of Mozambique to the risk of natural disaster will increase significantly during the next 20 years, it is vital that the Government act immediately to incorporate risk planning and investment in infrastructure by establishing a national plan for response to climate change. The role played by both knowledge centers and networks to assist communities and governments in designing appropriate strategies to cope climate change is enormous. The importance of involving rural people, particularly women who are most involved in the management of natural resources, in setting priorities and making decisions, is of paramount importance.

Finally, it is important that, through knowledge centers and networks, communities be empowered with knowledge concerning the risks of natural disasters and measures that can be taken to reduce or nullify their impact.

Experiences and best practices in strengthening Africa's capacity to build its own capacity

Speaker: E Adipala
RUFORUM Secretariat

Agricultural development policy in Africa is increasingly informed by the use of agricultural innovation systems to understand how societies generate, exchange, and use knowledge and information. African Green Evolution strategy to build African capacity is proposed which builds on the best and which is directed by farmers' needs and informed by the commercial, social, and ecological environments of the continent and provides gains, not only for the better off

producers, but also for the poor and excluded. It is supported by well-informed, knowledgeable and skilled human resources and institutions, exploring opportunities for improving the status quo and strategically guiding future direction.

Two factors stand out – teamwork and quality. Success is achieved by building capacity along the value chain so that all participants have an understanding of the constraints and opportunities that exist. A clear focus on quality enables participants to differentiate their activities and to gain a reliable benefit from their collaboration. Finally, none of the examples is costly, and all have proven sustainable. The evidence is clear that strong leadership, especially from African specialists, together with supportive guiding policies and linkages to the best of international science, can release the potential to address the pervasive poverty of Africa. The Green Evolution Strategy is one in which researchers and technology transfer specialists are innovative and active in developing partnerships and networks that can carry the best of their outputs quickly and efficiently into the hands of the poor. African universities have a central role in creating this change.

Targeted communication for policy and institutional change: lessons from CTA

Speaker: *Michael Hailu, Director*
CTA

Agriculture is the main engine for economic growth and poverty alleviation in Africa, contributing on average 28% of GDP, employing 65% of the labour force and serving as a source of livelihoods for up to 86% of the rural population. However, the sector continues to underperform despite the multiplicity of policies and programmes in place at national, regional and international level.



But why is agriculture failing to make a difference in reducing poverty and improving the livelihoods of rural communities? Are more policies or better coordination and implementation of existing policies needed? The agri-food system is complex and the varying levels of knowledge and skills of the multiple actors including donors, policymakers, scientists and farmers and sometimes conflicting policies and interests are well known. Policies and institutions must continuously evolve such that an enabling environment is created to support innovation and adoption for bringing about improvements in performance. Targeted and well-executed communication strategies and programmes, which evolve with the active engagement of the various actors – from policy to field level and across thematic issues – are needed so that information and knowledge sharing can take place for effective transformation of the agricultural sector. Through active collaboration with its partners, CTA aims to provide lessons for mobilising diverse stakeholder groups so that they become agents of policy and institutional change.



Knowledge Share Fair on networking tools

Organizers: FARA, ASARECA, CORAF/WECARD, SADC-FANR

Background

A 2-day event on networking tools was organised by FARA's Networking Support Function on improving access to knowledge and technologies. The event responded to the Africa Connect 2007 Conference and Food Security decisions within the context of both CAADP and the Framework for African Agricultural Productivity (FAAP). The discussions focused on improving two key NARS-based institutional arrangements:

- Agricultural information, communication and knowledge management tools for accessing and using information
- Facilitating the adoption of technologies and best bet practices

Objectives

The event was organised to learn and share co-creation and co-learning concepts to build and strengthen knowledge networks and to provide space for FARA's national partners to share networking tools used to coordinate, facilitate or manage country platforms. It is important to listen and learn from international initiatives on how they empower local communities across Africa and endeavour to understand how research knowledge can compliment local, regional and continental initiatives.


The event provided evidence of the establishment and functionality of two FARA tools, eRAILS and Innovation Platform for Technology Adoption (IPTA). It called for greater investment to strengthen capacities to utilise these tools by stakeholders at all levels as well as the expansion of facilities (especially internet access) to enhance the effective use of the tools. It called for synergies among stakeholders to facilitate effective networking.

RAILS learning teams

Learning teams have been established by RAILS in many countries and comprise multiple relevant stakeholders. The teams can facilitate the mainstreaming of Africa-driven information and communication tools and products. At the beginning, team members included largely supply-side ARD actors. Based on the experience gained, the demand side of the ARD actors, with producers and entrepreneurs at the centre, is receiving greater attention. The e-RAILS content has been very useful in documenting and disseminating best practices and success stories to motivate actors and catalyse action at the field level.

Innovation platform

The innovation platform for technology adoption (IPTA) has been internalised by ARD actors at country level and a number of public and other ARD institutions have formally adopted IPTA



as a partnership tool to facilitate adoption of agricultural innovations. It was recognized that diverse skills on IPTA exist at various places across SRO and NARS institutional arrangements, hence the need to access and share this expertise among participating countries.

Capacity strengthening

Various networking tools have been made available and the set of skills needed to apply these by ARD actors are being developed at all levels. However, literacy levels and wider access to web-based tools remain fundamental challenges. In particular, facilitation and advocacy skills of the RAILS learning teams to effectively engage the diverse competencies and capabilities of the ARD actors need to be strengthened, and the skills of ARD actors to efficiently mobilise and stimulate learning and enterprise development among IPTA actors using participatory approaches and dissemination pathways must be improved.

Facilitating Synergy and Networking

Multiple actors are actively collaborating and networking using tools and products for information and knowledge management. The availability of multiple stakeholder pages on e-RAILS, peer-to-peer learning, information needs of women producers and entrepreneurs, and improving internet access are key to improving networking and enhancing synergy among ARD actors.

Investments in Information and Communication Technologies

Resource availability for advancing information and communication networking tools at the various levels of the SRO-NARS institutional arrangement as well as at the respective NARS organizations is not receiving adequate attention. Information and communication networking tools, however, catalyse action and contribute to food security and increased incomes of the resource poor. Underfunding affects the documentation, dissemination and informed choice about productivity enhancing agricultural best bets (technologies, best practices, innovations, approaches and tools for the benefit of the resource poor).

New directions for agricultural knowledge centres and networks in strengthening capacities for African agricultural innovation

Organizers: FARA, RUFORUM, ANAFE, SUPAGRO, University of Free State

Background

The capacity strengthening side event was organized by FARA in conjunction with the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM), the African Network for Agriculture, Agro-forestry and Natural Resources Education (ANAFE), the University of the Free State (South Africa), AGRINATURA, Montpellier SupAgro (France), the Technical Centre for Agricultural and Rural Cooperation (CTA, Netherlands), the International Centre

for Development Oriented Research in Agriculture (ICRA, Netherlands), Internationale Weiterbildung und Entwicklung gGmbH (InWent, Germany) and VSN International Ltd (UK).

The thematic focus of the side event was underpinned by several key initiatives. These included emerging approaches to organisational agricultural research capacity strengthening in Africa (e.g. experiences from FARA's Strengthening Capacity for Agricultural Research and Development in Africa [SCARDA] project) and the 2009 RUFORUM/CTA African Agriculture Faculty Deans meeting that identified key action points for increased engagement of African universities in agricultural R&D. The rebound of agriculture to the fore of the contemporary development agenda requires increased investment in agricultural education and innovative partnerships between northern and southern universities. This requires new thrusts in agricultural development focusing on value chains that entail significant changes in curricula and approaches to capacity building. The current focus must shift towards an innovation systems approach that delivers development solutions based on mobilisation of consortia and harnessing available capacities in and outside of Africa (e.g. Universities, Business and Research in Agricultural Innovation [UniBRAIN]). The 2010 GCARD meeting that discussed and approved the Capacities' Montpellier Action Plan (CAPMAP 2010–20) calls for the revamping of capacity building systems. And last but not least, the need to build capacity to catalyse and consolidate implementation of CAADP Pillar IV must remain a primary focus.

The discussions at the side event were guided by these and other issues to ensure concerted action and targeted advocacy for research capacity strengthening and formulation of enabling policies for institutional change. The event consisted of five sessions involving high-level panel discussions, keynote presentations, thematic discussions and an exhibition.

The meeting advanced a framework for concerted action by a range of African institutions, international agencies, researchers, communities and government agencies at different levels – all geared at strengthening the capacity needed for revamping the agricultural sector.

Outcomes

1. Need to intensify action through regional capacity strengthening initiatives


Consolidate, upscale and outscale achievements from regional capacity strengthening initiatives as major mechanisms for promoting organizational and institutional change. Preconditions that will support reform in institutions and develop partnerships that recognise diversity must also be in place. The ultimate aim is to enhance innovation performance.

2. Intensifying agricultural education in SSA

Two major recommendations were made. The first called for the realisation of CAPMAP. The meeting noted that CAPMAP is a worldwide process to gather together projects and initiatives under a joint banner. The second called for the intensification of capacity strengthening by universities and their networks.

3. Linking university education, research and business in sustainable agriculture

The meeting noted that agribusiness success is needed to boost growth of the agricultural sector. It was also noted that the strategy of catalysing partnerships between universities



and the private sector following the concept of innovation incubators needs support. On the basis of these and other discussions it was recommended that the UniBRAIN approach to promoting agricultural innovation and improving tertiary agribusiness education in Africa by linking universities with business and research through university-led agribusiness incubators be promoted and lessons captured for up-scaling purposes. FARA and its partners must advance proposals for providing all interested parties with easy access to continually updated information on ongoing and pipeline initiatives for strengthening Africa's capacity to build capacity in agriculture and natural resources and identify the critical gaps and a business plan to guide investment on a continent-wide scale.

4. Engendering agricultural research and development

The meeting noted that misconceptions about gender roles undermine the design, implementation and sustainability of development initiatives, especially those involving MDG 3, which promotes gender equality and empowerment of women, remains a challenge for Africa.

Recommendations

An enabling policy and structural environment for gender mainstreaming through policy audit and reform, restructuring and budgeting must be created. Enrolment, retention and performance of women in higher education, organisations and agricultural development activities must be increased by consolidating, mentoring, social support programmes, remedial training and affirmative action.

Partnerships between local and international institutions must be engaged and intensified so that capacity among ARD and rural development agencies to address gender concerns in agriculture and rural development can be advocated, promoted and strengthened. Finally, M&E systems for performance management of gender-targeted interventions in agriculture and other development initiatives, including mutual accountability, must be developed.

Agricultural biodiversity in Africa

Organisers: FARA, Biodiversity International

Background

Dr Denis Kyetere highlighted his delight that FARA had initiated the conference and the creation of a new initiative to champion issues of agricultural biodiversity (ABD) for Africa. Dr Monty Jones (Executive Director of FARA) and Dr Emile Frisson (Director General of Biodiversity International) presented the keynote addresses. Dr Jones focused on FARA/CAADP perspectives on challenges and pathways to food and nutrition security, while Dr Frisson focused on ABD as an asset for improving nutrition and health in SSA. Both speakers highlighted the crucial



importance and potential of ABD for development in Africa, while regretting that inadequate focus and attention has been given to this resource.

Invited thematic papers on six components of ABD (crops, livestock, fish, domesticated trees, soil biota diversity and pollinators) were presented during plenary sessions, followed by highly interactive discussions. Working groups on each of the six thematic areas further discussed key issues and identified key proposals for action by FARA stakeholders.

The conference further benefited from presentations and discussions, on strategic cross-cutting elements relevant to ABD conservation and sustainable use in Africa. The presentations covered climate change, knowledge management, international policy and legal frameworks, ABD in tertiary education, and informatics and documentation.

Key messages distilled from presentations

1. Diversity in Africa's genetic resources represents critical assets and opportunities for meeting the challenges of food security, nutrition and, in particular, adaptation to climate change.
2. Knowledge and documentation on the different components within ABD (animal, fish, crops, trees, below-ground biodiversity and pollinators) is inadequate.
3. Africa's vast diversity of genetic resources, including neglected and underutilised species, need to be promoted by government agencies and further developed through value chain approaches and linkage to markets.
4. ABD management should be more than just conservation in genebanks. Sustainable management and use needs to be given more emphasis. The concepts of conservation through use, on-farm management and use of genetic resources should be promoted.
5. Some agricultural practices (e.g. excessive pesticide use and focus on narrow ranges of improved varieties to the neglect of diversity of locally adapted varieties) threaten Africa's useful diversity in crops, livestock, pollinators and soil biota.
6. The impact of climate change on diversity of Africa's local genetic resources and food availability is of great concern. Diversity in our genetic resources is an essential tool in adaptation to climate change.

Key proposals for ABIA

There was great excitement and support for FARA's establishment of a continental ABD initiative for Africa (ABIA). This was seen as a timely development 'that should have happened yesterday.'

ABIA will support efforts of SROs, NARS and partners in R&D on ABD in Africa. It will build partnerships for action, seek resources, and commission research. It will engage in advocacy

for right policies and for R&D in agricultural biodiversity. Bioversity International will be a technical partner with FARA in the implementation of ABIA.

The key products to be generated through ABIA include political level policy intervention (nationally, regionally, AU/NEPAD, donors), advocacy and public awareness to promote proper management and sustainable use of genetic resources in Africa. Strategic studies and analysis on key ABD issues (policy briefs) and support to Africa's negotiators in international policy fora on genetic resources and agricultural biodiversity are needed in order to mainstream ABD into tertiary education and universities. Establishment of farmer/community platforms in ABD use must be supported, and knowledge management in Africa's ABD, including indigenous knowledge capture, must be nurtured.

Declaration

In a declaration endorsed at the end of the conference, participants:

Convinced of the value of conservation and sustainable use of genetic resources for food security, good nutrition and health as well as livelihood improvement of Africa's people;

Aware of the paucity of national capacity and investment in R&D to fully implement the conservation and optimally explore the value and contributions of the wide diversity of local genetic resources; and

Convinced that FARA is best placed to undertake much-needed political level policy and advocacy roles to give greater impetus to the conservation and use of Africa's diversity of GR for the benefit of the population;

Urged FARA's 2010 General Assembly to use the occasion of the celebration of the year 2010 as the UN International Year of Biodiversity to formally resolve to take concrete and urgent steps in promotion of the functioning of ABIA.

It also called on donor organisations to support and partner with FARA in the urgent implementation of the FARA-led programme on ABIA in Africa. A sense of urgency was declared, in order to halt the further deterioration of this resource and to help unleash the potential of ABD for development in the continent.

Sub-Saharan Africa Challenge Programme: proof of concept

Organizer: FARA

This 2-days event was attended by over 120 ARD stakeholders. Experiences and lessons learnt from the eight countries of the three pilot learning sites were shared by 80 experts implementing international agricultural research for development (IAR4D) within the SSA CP.

Additional presentations were made by a selection of those who have adopted IAR4D, including several government representatives, NGOs (local and international) and private agro-industries.

Presentations showed diversity of adoption of IAR4D and its benefits to all stakeholders in ARD. Stakeholders recommended that the scientifically rigorous proof of concept, which comes to an end in December 2010, should be taken to conclusion in spite of abundant evidence of adoption of IAR4D. The programme for scaling up and scaling out of the IAR4D concept should be developed along the CAADP Pillar IV framework to spread the benefits to countries throughout SSA.

Experiences and best practices of CIRAD and its French, European and international partners in strengthening Africa's capacity

Organizer: CIRAD

The workshop brought together approximately 40 participants to explore the theme: *How to strengthen Africa's capacity through shared actions and partnership.*

The first part was devoted to a presentation of the ARD system in Europe and France by Paolo Sarfatti, Director of AGRINATURA, and Christian Hoste, Deputy Director of Agreenium. Jean-Luc Khalfaoui, Director of European and International Relations of CIRAD, then presented the new geo-partnership strategy of CIRAD in Africa based on the concept of open partnership platforms for research and education.

The second part was devoted to the presentations of three examples of priority platforms: CRDPI in Congo (presented by Aubain Saya, Scientific Director); AGRHYMET in Niger (presented by Seydou Traoré, Program Director); and CARBAP in Cameroon (presented by Jean-Daniel Ngou-Ngoupayou, Acting Director).

The third part was devoted to the discussions and recommendations and showed the interest of the participants for the emergence of new forms of partnerships.

The concept of open partnership platforms for research and education, according to approaches that CIRAD applies within the framework of its new geo-partnership strategy, was discussed. This concept is inspired from the concept of *Bases Centres* and of Centre of Excellence developed in particular by CORAF/WECARD. The group recommended that FARA and the SROs make an assessment of the current situation and needs related to research and education platforms in order to address key challenges of agriculture in Africa. The development of such platforms requires some key conditions to ensure their success:

- *Involvement of NARS.* These platforms must be useful to and fit within the NARS. They must be at the heart of the system and not apart from it.
- *Close interaction between research and education.* These platforms must integrate their activities. This requires the strong involvement of African universities to ensure training of the new generation of African researchers who are strongly lacking in the NARS.
- *Open partnership.* These platforms must be open to all partners from research, public sector, civil society, private sector, from North and South, as well as from international centres. In this regard, new forms of governance are needed, based on equity, flexibility and efficiency.

- *A regional dimension.* A regional dimension is the most suitable to address effectiveness and efficiency. It often requires a long building and appropriation process that must be supported by strong political will of the countries involved.
- *Sustainability of funding.* These platforms need sustainable financial support on behalf of the African countries, their intergovernmental organizations, bilateral and international organizations. It requires an evolution towards a programmatic approach, which is quite different from a project approach.
- *Alignment on the African priorities.* The programming of these platforms must be aligned to the continental African programs to contribute to their achievement, ensure their relevance and avoid a dispersion of committed efforts by all partners.
- *Impact on development.* From the start of the design process, the programming of these platforms must take into account the evaluation of their expected impact on rural development of African countries, and be monitored and evaluated to ensure their proper implementation.

The participants recommended that PAEPARD II include a thorough delineation of its expected impact and develop a set of indicators two major objectives: first, involvement of actors from civil society and private sector in the programming of agricultural research and the implementation of R&D activities; second, the promotion of research projects involving all development stakeholders.

Climate change and agriculture


Dr Lindiwe Sibanda, FANRPAN

Organizers: FANRPAN and FARA

Climate variability and future climate change are major threats to Africa's prosperity now and in the future. The priority is to provide farmers with technologies and accurate weather forecasts to help them cope with climate variability as a first step in adapting to climate change.

Policies, plans and investments are needed at national, regional and global levels. Agricultural researchers have not been good at working with climate scientists to produce evidence to inform climate change policies. But this is changing. Last year in Africa, and globally, our evidence helped put agriculture on the agenda of climate change negotiations. Agriculturalists must do more to influence climate change negotiations, and to influence the design of national adaptation and mitigation plans and investments.

We must redouble our efforts to produce technologies and accurate weather forecasts to help farmers cope with existing climatic variability. At the national level, researchers need to produce and present evidence to policy makers and negotiators on the place of agriculture in climate change negotiations.



Researchers need to provide evidence to AU/NEPAD, FARA and RECs to develop policies and common positions on climate change and agriculture. FARA should build on its current work on climate change (e.g. AfricaAdapt) to set up a platform to share knowledge on climate change to inform policies, help harmonise positions and identify research priorities on climate change issues in Africa. International and advanced research organizations need to enhance their partnerships with African research institutions to share knowledge on climate change adaptation and mitigation.

Enhancing the accessibility of research outputs through more coherent knowledge centres and networks

Organizers: FARA and FAO

The side event began with brief descriptions of key challenges and opportunities in communicating the outputs of agricultural science in Africa. A participatory session then analysed the key benefits and incentives to individual scientists of making their research outputs truly accessible. The benefits to researchers identified were grouped into broader categories: greater personal recognition, increased access to resources for their research, practical use of research outputs, contributing directly to the advancement of science and to rural development, and increasing peer networks.

The incentives identified were greater practical support in research communication from their institutions, greater opportunities for career progression and personal benefit, and obligatory institutional requirements for reporting and communication of research outputs.

The two principal initiatives in Africa facilitating greater accessibility and applicability of agricultural research outputs were described. These are the Regional Agricultural Information and Learning System (RAILS) and the global Coherence in Information for Agricultural Research for Development (CIARD), as well as their roles in addressing the region's challenges in this area. Participants called on the RAILS and CIARD initiatives to advocate with all national actors in agricultural research the need for more coherent approaches to knowledge sharing and communication of the outputs of agricultural science in support of innovation, and specifically to support development of national capacities. Specifically, these initiatives should facilitate the sharing of sound institutional strategies and policies, should provide access to innovative tools and practices in the form of pathways for putting research into use, and should offer learning resources and events to enhance awareness and skills of all categories of individual stakeholders including policymakers, researchers, and information/knowledge professionals.



Rural and Agricultural Advisory Services – How to foster African and Global Synergies for Rural Development?

Organizers: AFAAS and GFRAS

Background

In spite of national and international development efforts, rural poverty and global hunger persist. Rural and agricultural advisory services (terms used as synonyms to extension) can be used to transform rural livelihoods. Although suffering from under-resourcing, they have demonstrated positive impacts. Due to rising food prices, interest in agriculture and advisory services are increasing. This is an opportune time to institutionalise a mechanism to foster and to improve advisory services in Africa and world over. Both AFAAS and GFRAS were created to contribute to this process.

The African Forum for Agricultural Advisory Services (AFAAS) is a platform for developing innovative approaches aimed at improving the delivery of AAS and their responsiveness to user demands. It operates within the framework of CAADP Pillar IV, which advocates the enhancement of livelihoods of African farmers and pastoralists. CAADP Pillar IV, of course, is spearheaded by FARA.

The Global Forum for Rural Advisory Services (GFRAS) was created to facilitate interactions and networking, support the development and synthesis of evidence-based approaches and policies, provide a voice for advisory services within the global policy dialogue, and promote the creation of an enabling environment for improved investment in RAS.

Expected outcomes of the initiative include enhanced networking, collaboration and partnership between AFAAS/GFRAS and participating organizations; enhanced support for AFAAS's national and regional activities; and response of GFRAS and AFAAS activities to the needs and demands of African rural advisory services.

Participants of the side event acknowledged the importance of rural and agricultural advisory services. They expect GFRAS and AFAAS to foster networking, advocacy, resource mobilisation and coordination of efforts. In doing this, GFRAS and AFAAS shall remain slim in structure and avoid bureaucracy.

Networking needs to be fostered both on African level (amongst African stakeholders) and on the global level between African stakeholders and actors in other regions and continents. Networking should contribute to sharing of experiences and learning as a tool to improve the access to information

for extensionists and other stakeholders involved in rural and agricultural advisory services. Networking should especially contribute to improvements in human and capacity development, especially of social groups such as mid-career professionals and female extension staff. It should also nurture system development – creating evidence on which approaches work and which do not – as well as methodological development, including cross-cutting issues in rural advisory services such as gender, thus improving access of female smallholders to advisory services.

Moreover, policies need to be influenced both on African and on global level so to raise awareness of policy makers and to improve the position of extension in the overall development agenda. Financial resources need to be identified at global level. GFRAS can broker the interaction of national chapter with donor organisations through AFAAS. Efforts in the field of rural advisory services and extension exist, but they are scattered. There is therefore a need to coordinate and harmonise efforts and approaches while accepting plurality.

Africa-Brazil partnership: using ICT to improve information and knowledge sharing and exchange and accelerate rural development


Organizers: FARA and EMBRAPA



Prof Monty Jones of FARA and Dr Paolo Duarte of EMBRAPA signing a Memorandum of Understanding

Brazil has produced a number of videos on agricultural research results, techniques, nutrition and rural development. A good number of these videos are relevant and could be broadcast in Africa to increase rural knowledge and revitalise the agricultural sector. Collaboration has already begun between Brazil and several francophone countries, including Madagascar, Senegal, Cameroon, Côte d'Ivoire, Republic of Congo and Benin. The selected videos will be broadcast and new videos (and websites) produced.

A media network (TV, infocentres, etc.) will broadcast the existing content on a large scale. Our mission will be to ensure a permanent link with the partner in Brazil, to translate documents and broadcast programmes in Africa. Capacity strengthening will be provided and equipment will be put at the disposal of the main actors to produce new content.



Subtheme 3: Resilience of African agricultural trade to domestic and external shocks

The GA recognised that Africa has the potential to meet both its food and fuel needs from biomass, and that there will never be agricultural improvement in Africa without energy. What is needed is ‘energy farming’ where households have access to the resources they require. FARA has a leading role to play in promoting links between various stakeholders and networks in the domains of agriculture, forestry, bioenergy and food.


The importance of sanitary and phyto-sanitary (SPS) certification on food safety and on animal and plant health was also addressed. SPS approaches across countries and sub-regions should be harmonised. Similarly, intra-regional and international trade should be supported to ensure the supply of safe food and improve resilience to shocks. Action along these lines will address the agendas of both CAADP Pillars II and IV.

The GA also stressed the urgency of building social capital to achieve sustainable intensification through farmer field schools and involvement of women. Sustained commitment, strategic relationships, and closer attention to social, cultural and economic factors are all needed to effect change in mindsets and to sharpen focus on foresight. Stakeholders will need to take advantage of opportunities, engaging the private sector in the value chain and engaging regional and global institutions to support medium- to long-term strategic planning.

Protectionism and subsidies in agriculture at a time of global recession: which way for Africa?

Speaker: Augustine Langyintuo,
AGRA

In Africa, agriculture is the mainstay of the economies, accounting for over 45 percent of regional gross domestic product (GDP) and nearly 60 percent of export earnings. For the 76 percent of the 987 million Africans living in rural areas and employed in agriculture, the performance of the agricultural sector can mean a difference between improved livelihoods and staying trapped in hunger and poverty. FAO estimates that increasing agricultural productivity by 10 percent can reduce poverty by 4 percent in the short run and 19 percent in the long run. Yet agricultural productivity growth in Africa has been disappointing. As a consequence, around 50 percent



of Africans have been living on less than USD 1.25 per day since 1981 and the number of poor people, in absolute terms, has nearly doubled. A staggering 265 million are undernourished.

For many African governments, improving agricultural productivity and lifting millions out of poverty is a major goal of their development policies, but how best to achieve that remains a challenge – a challenge exacerbated by the global economic crises of 2008. The recent economic recession that resulted in commodity prices crash, dwindling investment, direct transfers, and general demand collapse has significant implications for agricultural productivity growth and trade for Africa that relies heavily on the exports of primary products, foreign direct investment and transfers from overseas. The crisis has the potential to make a precarious situation of declining per capita food production, poverty, and food insecurity even worse. African agricultural products are likely to be even less competitive on the global market as long as farmers in the developed world continue to receive protection while those in Africa do not.

While arguing for smart input subsidies to enhance agricultural growth and trade in Africa, we must recognise the critical role of political will and the need for a paradigm shift in the administration of development assistance, away from costly food aid to more efficient and sustainable inputs support programs in making the change happen. Governments should invest in distribution infrastructure and networks as well as building the technical and commercial capacities of smallholder farmer institutions to predictably and competitively procure and distribute subsidised improved inputs through the private sector.

Trade capacity building for agricultural commodity market access in Africa

Speaker: Adrian Mukhebi,
KACE

Trade capacity building (TCB) is defined as assistance for implementing and/or strengthening processes and institutions that enable developing countries to more fully and effectively prepare for and negotiate comprehensive trade agreements, implement the commitments undertaken in these agreements, and adjust to the new circumstances in such a way that they minimise the potential negative impacts and maximise the potential benefits of such agreements. TCB includes assistance to negotiate, implement, and benefit from trade agreements, such as agreements within the World Trade Organization (WTO), and regional and bilateral free trade agreements. TCB can take the form of workshops, on-the-job training, data collection, feasibility studies, infrastructure upgrades, and efficiency improvements in trade procedures.

There are four phases of TCB:

- *Pre-negotiation.* Includes enhancing capacity for the preparation of a national trade capacity strategy, training in negotiating trade agreements, training in trade disciplines and scenario development for assessment of the probable outcomes on certain trade negotiations.

- *Negotiation.* Involves strengthening institutional capacity for trade negotiations, enhancing the understanding of technical negotiating issues, enhancing inter-institutional coordination among public, private and civil society institutions involved in trade, and strengthening public, private and civil society sector consultations for trade.
- *Implementation.* Involves enhancement of capacity for implementation of policy, regulatory and institutional reforms required by concluded agreements, establishing or strengthening trade-related scientific/technical capabilities of staff and facilities required for trade, and trade training for public, private and civil society sectors.
- *Adjustment.* Involves enhancing capacity for export promotion and investment attraction programs, trade-related infrastructure development, trade-related fiscal reform, trade adjustment, labour re-training, outreach activities to enhance understanding of the trade agreements among stakeholders, small business development to enhance competitiveness, agricultural development to diversify and increase production, and add value to production chains and export baskets, and strengthening governance and property rights necessary for the trade agreements.

African countries lack sufficient physical, institutional and human capacity to effectively participate in and benefit from global trade. As a result, Africa's share of global trade currently estimated at 3% is miniscule relative to its proportion (about 17%) of global population. In addition, over 90% of Africa's exports comprise of primary products. Furthermore, Africa's bargaining position at the negotiating table is often weak. To improve and sustain its share of global trade, African countries require TCB in all its four phases. In today's globalised economy, Africa must trade or perish! For development, Africa must depend on *trade*, not *aid*!

Bioenergy and food production in Africa

Organizer: FARA

Bioenergy does not necessarily imply the use of biofuels. It is broader and should include modern types of energy into the energy mix of the communities, as was highlighted by a FARA-commissioned study on Africa and bioenergy.

Participants of this side session agreed that the various stakeholders in the bioenergy sector need to collaborate and integrate for decision making and for action on the ground. Bioenergy does not necessarily imply biofuels, it is broader and there is need to include modern types of energy into the energy mix of the communities.

They concluded that because there will never be significant agricultural improvement in Africa without energy, the target to aim for should be 'energy farming'. Only when access to the resources needed become available at the household level will agricultural productivity improve.

Participants also agreed that FARA has a role in promoting links among different stakeholders and networks in various sectors, including agriculture, forestry, bioenergy and food.



Global food and farming futures: sustainable intensification

Organizer: UK Foresight group

This workshop explored how to scale up productive and sustainable agricultural systems in Africa. Results from 40 case studies showed the importance of building social capital in achieving sustainable intensification through farmer field schools, involvement of women and other strategies.

The workshop identified best practices in sustainable intensification, as well as the opportunities and investments needed to move forwards. Importantly, it also discussed the barriers to sustainable intensification.

The participants recommended sustained commitment, strategic relationships, and closer attention to social, cultural and economic factors as soon as possible.

Sanitary and phyto-sanitary capacity building

Organizers: CABI and COMESA

Sanitary and phyto-sanitary (SPS) regulations are a critical component for monitoring food safety and animal and plant health. Participants deliberated over the various issues arising from SPS concerns and produced the following key messages.

FARA stakeholders must expand their SPS capacity to support intraregional and international trade, ensure the supply of safe food, and improve resilience to shocks (e.g. new diseases and pests). SPS issues need to be included in the CAADP process by supporting Pillar II (Improved Market Access), harmonising SPS approaches, and fostering collaboration between producers, traders, researchers, regulators and other stakeholders, both nationally and regionally.

Promoting access to regional and international markets for Africa's agricultural commodities

Organizers: FDA and FARA

This side session was a roundtable for civil society organizations (CSOs) and farmer organizations (FOs). The conclusions of the roundtable were fourfold. First, CSOs and FOs should establish private funds and microfinance institutions that will cater to the need of smallholder farmers. Second, building institutional capacity and the voices of the ultimate beneficiaries (CSOs and FOs) for advocacy is essential and understanding of the political context is important. Third, enhanced agricultural value addition and market access depend

on government willingness to partner with the private sector and CSOs in agricultural production and trade promotion initiatives. Government, private sector, CSOs and FOs should all work towards this goal. Fourth, governments should put in place favourable ICT policies that will bring down ICT tariffs to make market information services available to smallholder farmers at affordable prices.

Conclusion: General Statement

The GA accorded overall recognition of the networking support provided by FARA initiatives and projects (AfricaAdapt, ABBPP, SABIMA, DONATA, RAILS, PAEPARD, SCARDA, SSA CP) as well as to the response demonstrated by international initiatives to African priorities and alignment to CAADP and Pillar IV. We need a mindset change. Africa needs a more balanced perspective of its strengths and weaknesses. Alone, agricultural R&D will not achieve much – it needs to be part of the wider development framework. Africa needs to shift from short-term, urgent responses to long-term foresight. Spotting and taking advantage of opportunities is required and sincerity about commitment to research across the value chain is urgently needed.

In short, the FARA General Assembly's firm consensus is that African-led agricultural innovations are poised to move the continent *from laggard to lion* in food production and economic development.

Four of the five persons who have chaired FARA's Board attended the GA. Left to right: Dr Tiémoko Yo (from 2010), Dr Denis Kyetere (2007-10), Ms Njabulo Nduli (2005-07) and Dr Papa Seck Abdoulaye (2003-05). Only Prof Joseph Mukiibi (1999-2003) is missing.



CAADP Day and Ministerial Roundtable: Post-Compact CAADP implementation: the African private sector and investments in agriculture



Theme: Post-Compact CAADP implementation: the African private sector and investments in agriculture

The 2010 CAADP Day was an inclusive dialogue platform that brought together African political leaders, CAADP champions, farmers, civil society organisations, the private sector, think-tank institutions, representatives from the diaspora and the development partners. Deliberations reinforced discussions and supported key decisions and proposals in support of private sector engagements with CAADP. The overall vision of the CAADP Day was to broaden the political space and investment climate for CAADP to agriculture by paying particular attention to the role of the private sector, as well as to showcase the work of CAADP itself. The event highlighted the engagement and actions of progressive African countries such as Rwanda, Mozambique, Sierra Leone and Burkina Faso.



CAADP Day

Dr Hanns-Christoph Eiden, President of Bundesanstalt für Landwirtschaft und Ernährung (BLE), the official representative of Germany's Minister of Agriculture, was a panelist during CAADP Day. Dr Eiden emphasised the importance of integrating the Africa agenda into Germany's own development agenda.





FARA General Assembly Business Meeting

Highlights

- The next General Assembly will be held in 2013 in the North African sub-region at a venue to be chosen by constituted members of the North African Sub-Regional Organisation (NASRO).
- New officials were elected: Chairman of the FARA Executive Committee, Dr Tiémoko Yo of Côte d'Ivoire, and Vice-Chairman Prof Dr Ayman Farid Abou-Hadid of Egypt.
- The meeting was chaired by Dr Denis Kyetere, Chairman of the FARA Executive Committee, and attended by about 400 delegates.

Progress Report since the 4th General Assembly

Dr Denis Kyetere,
Chairman of the Board

In an address delivered on his behalf by Dr Aggrey Agumya, the Technical Advisor to the Executive Director of FARA, the Chairperson presented a status report on the implementation of the 10 resolutions adopted at the 4th FARA General Assembly held in Johannesburg in June 2007. The resolutions were:

1. To promote intra-African in staples and international trade in high value products
2. To develop endogenous innovation capacity
3. To maximise impact of ARD by providing policy makers with evidence-based pragmatic options
4. To endorse the Secretariat's NSF structure as a sound means of working with stakeholders
5. To strengthen capacity of research management, agricultural sciences and actors across the value chains
6. To develop veterinary capacity, initiate livestock disease surveillance, epidemiological and response systems, and interlink them with their human disease counterparts to enable nations to cope with disease outbreaks
7. To focus on the broad and systemic issues in capacity strengthening so as to identify causes rather than symptoms, and to ensure that capacity strengthening initiatives reflect established demands while addressing gender and age imbalances and inequities
8. To support and strengthen civil society organizations to help them fulfill their missions

9. To regard research on peri-urban agriculture as a mainstream activity
10. To mainstream indigenous science into ARD

Overall, significant progress was reported on the implementation of each resolution. It was noted, however, that despite commendable efforts by the Global Horticulture Initiative and the International Water Management Institute to promote peri-urban agriculture, these research thrusts were still not attracting the attention they deserve from the ARD community.

The FARA Secretariat needs to evolve a monitoring framework that clearly identifies the results expected from future GA resolutions, the parties responsible for achieving each result, and the corresponding indicators of performance.

What we've done and where we are

Prof Monty Jones, Executive Director
Forum for Agricultural Research in Africa (FARA)

Prof Jones focused on achievements by FARA stakeholders, partners and the Secretariat since the last General Assembly in June 2007 and what should be the way forward for the next three years to 2013.

Highlights of the achievements include intensified advocacy for increased investment in agriculture, especially by African Leaders, articulation of the FAAP principles in national and regional agricultural strategies, and advocating for African interests. One result of these interventions was a resolution by member states of the African Union in July 2009 to increase investment in agriculture.

Providing technical assistance to countries involved in the CAADP process was another achievement. Similar assistance was provided in institutional strengthening to NASRO, CCARDESA, AFAAS, PanAAC, PAFFO, NGO-C, CIARD and ABIA, among others. Most of these institutions are now functional. Various information exchange platforms and infrastructure were developed, including AfricaAdapt, the FARAnet and discussion groups (D-Groups).

Strategic alliances were formed or strengthened through various initiatives to enhance the exchange of knowledge, skills and technology. Some of these were between Africa and Europe (PAEPARD), Brazil (Africa-Brazil), China (Africa-Britain-China) and Japan (CARD).

Another key milestone was the development and approval of the Medium-term Operational Plan (MTO) for 2008-2012 and the securing of funding for its implementation through a World Bank- managed Multi-donor Trust Fund (MDTF).

Concerning priorities for the way forward, the emphasis for R&D should be placed on developing strong and visionary leadership, influencing the development of favourable public policies, harnessing human and institutional capacities to adapt knowledge and technologies to local circumstances, and a balanced treatment of all stages of the value chain with special emphasis on product development. Developing the capacity to cope with risks such as climate

change and increases in food prices, as well as harnessing the skills and knowledge of Africans who are excelling outside Africa, were cited as additional priorities.

Prof Jones also highlighted the need to deepen the engagement of FARA's constituents by improving the application of the subsidiarity principle and enhancing the capacity to track the value added at various levels (from local to continental). Recognising these gaps, FARA proposes a two-pronged approach: first, provide a platform for continental initiatives in advancing the CAADP Pillar 4 agenda in both pre- and post-compact processes; second, enhance African ownership by increasing African investment in the organisation (both the Forum and the Secretariat).

The presentation was concluded with the affirmation of FARA's pivotal position in turning around Africa's agriculture and its overall development. With visionary leadership it is possible for Africa to turn around in the same way that Lee Kwan Yu's visionary leadership turned Singapore around in the 1960s.

FARA Programmes for 2010–2013

Dr Ramadjita Tabo, Deputy Executive Director
Forum for Agricultural Research in Africa (FARA)



Dr Tabo presented FARA's proposed programmes for 2010–2013 to members for approval. All the programmes aim to support the implementation of CAADP Pillar IV and will be implemented through the Secretariat's Networking Support Functions (NSFs) and the Monitoring and Evaluation Function. The activities within each NSF were chosen based on activities that follow a logical sequence and deliver results, activities that generate maximum returns at lowest cost, activities that scale up and scale out success stories, and activities that achieve impact in the shortest possible time (quick wins) for the MTOP results.

Programme activities within NSF1–Advocacy and Resource Mobilisation include support for the integration of CAADP Pillar IV objectives in sub-regional and national productivity programmes, NARS reform process, and enhanced advocacy and resource mobilisation for agricultural research.

Within NSF 2–Access to Knowledge and Technologies, programme activities will concentrate on improving mechanisms for the delivery of knowledge and information, establishing more gender-sensitive platforms for knowledge management, and technology adoption.

The programme of activities within NSF 3–Regional Policies and Markets will focus on synthesising and disseminating tools and approaches for formulating appropriate policies and decision-making options.

NSF4—Capacity Strengthening activities will include establishing and updating capacity needs for agricultural innovation and identifying initiatives to address these needs, including the development and implementation of gender mainstreaming.

With respect to forging Partnerships and Strategic Alliances, NSF5 will synthesise and disseminate guidelines for establishing effective partnerships and strategic alliances for ARD as well as establishing, strengthening and supporting appropriate innovation platforms.

FARA's Monitoring and Evaluation Strategy will be implemented through the establishment of appropriate performance monitoring systems at all levels, improving the capacity of implementing partners' in performance monitoring and establishing the outcomes and impacts of selected R&D investments.

Finally, cross cutting and emerging issues related to climate change, gender mainstreaming, environmental sustainability and biofuel/bioenergy will be included in relevant programmatic approaches in consultation with key stakeholders.

RESOLVED: The FARA Programmes for 2010–2013 were approved for implementation.

Approval of Recommendations from Plenary


Myra Wopereis-Pura, Director

NSF2—Access to Knowledge and Technologies, FARA

Ms Wopereis-Pura tabled for approval recommendations from the Plenary Session held on 22 July 2010. Discussions during Plenary revolved around the three subthemes of the General Assembly and all the side meetings that had taken place during the week. The main theme for the week was *African Agricultural Innovation in a Changing Global Environment*.

Recommendations under Subtheme 1, *Investment in agricultural innovation in the post financial crisis era*, included: developing platforms to facilitate innovative partnerships with Europe; making more investments to increase African capacity to access global funding opportunities; using evidence from R&D and impacts to advocate for investments in ARD; improving access to knowledge, business and market information; and establishing a development fund to support investment plans.

Recommendations under Subtheme 2, *Knowledge centres and networks to cope with the challenges of globalisation and climate change*, included: supporting community-led integration of agricultural practices, extension, research and policies; supporting inclusive technology innovation; establishing targeted partnerships between communities, research and NGOs on adaptation strategies; developing programmes for scaling up and out of the integrated ARD (IAR4D) concept along the CAADP Pillar IV framework, intensifying human capital development for ARD through regional capacity strengthening initiatives to maximise resource use, rationalisation and benefits; promoting agri-business growth by catalysing innovation incubation and functional linkages between universities and industry; continuing to recognise and reward outstanding African women and young scientists; supporting AFAAS to



develop its capacity to facilitate agricultural innovations; undertaking policy audit and reform on gender to improve balanced gender performance; producing and presenting evidence to national and regional policy makers (AU/NPCA, FARA, RECs) on the place of agriculture in climate change policies; building AfricaAdapt to set up knowledge platforms on climate change to inform and harmonise policies and identify research issues; mapping and building capacity of players in crop pest outbreak prevention and response; and articulating a strategy for scaling out successful country interventions across different contexts.

Recommendations under Subtheme 3, *Resilience of African agricultural trade to domestic and external shocks*, included: promoting linkages among different stakeholders and networks in agriculture and forestry, bioenergy and food; integrating the actions of CAADP Pillars II and IV in food safety; engaging private sector in the value chain; and strengthening capacity for foresight planning by engaging regional and global institutions to support medium- to long-term strategic planning.

Ms Wopereis-Pura's presentation was well received and a vibrant discussion followed that featured the several suggestions. One of these was that resolutions must be couched in language that reflects that they are resolutions and not actions. Another was that the current emphasis on awarding women in *agricultural science* should move to women in *science*, and that farmers must also be considered for awards. Another suggestion was that the resolution on access to finance must reinforce the approach for soliciting such support and should consider the involvement of banking institutions. The approach for soliciting support from African member states, suggested another delegate, should be through the CAADP process. Countries must be encouraged to sign up to FARA membership.

RESOLVED: The recommendations from the Plenary Session of the 5th FARA General Assembly were approved for implementation.

Ratification of the Amendments to the FARA Constitution and Governance Manual

Brenda Semevo, Legal Affairs Officer,
Forum for Agricultural Research in Africa (FARA)

Ms Semevo tabled the amendments to the FARA Constitution and Governance Manual for ratification. Articles amended were:

- The Preamble to help clarify FARA's date of origin
- Provisions to clearly define the criteria for membership in the Forum
- Mode of becoming a member of FARA and the benefits thereof
- Provisions on gender balance to help achieve and retain a fair gender balance on the Board
- Re-definition of the composition of the Executive Committee of the Board of Directors to expand membership to make it more representative

- Expansion of the composition of the Board to include expertise in governance and financial matters
- Provisions to harmonise all of FARA's governance documents and to retain the supremacy of the Constitution

RESOLVED: The amendments to the FARA Constitution and Governance Manual were ratified.

Ratification of FARA's incorporation in Ghana

Following a directive by the Board, FARA was incorporated in Ghana. This directive was to ensure compliance with Article 2 of the FARA Constitution which reads:

The seat (headquarters) of FARA shall be established in any country in Africa. Subsidiaries may be established in jurisdictions within and outside Africa subject to approval by the Board.

Certificates of Incorporation and Commencement of Business were issued by the Registrar of Companies on 19 April 2010 and 20 April 2010, respectively. The Legal Affairs Officer of FARA tabled these two certificates for ratification by members.

RESOLVED: The incorporation of FARA in Ghana was duly ratified.

Ratification of the appointment of the FARA Chairperson and Vice-Chairperson

Dr Paco Sérémé, Executive Director
CORAF/WECARD

Dr Sérémé presented two appointments to FARA members for ratification.

- Dr Tiémoko Yo as the next FARA Chairperson for the 2010–2013 term. Dr Yo is the current Director-General of Côte d'Ivoire's Centre National de Recherche Agronomique (CNRA).
- Prof Dr Ayman Farid Abou-Hadid as the next Vice-Chairperson for the 2010–2013 term. Prof Abou-Hadid is President of Egypt's Agricultural Research Centre (ARC) and Chairman of the North African Sub-regional Research Organization (NASRO).

The appointments were declared as being consistent with the provisions of the FARA Constitution which provides that these positions must rotate every three years among the sub-regional research organisations.

RESOLVED: The appointments of Dr Tiémoko Yo as FARA Chairperson and Dr Ayman Abou-Hadid as FARA Vice-Chairperson are ratified.

Re-election of FARA Board of Directors

The Legal Affairs Officer of FARA tabled the list showing the composition of the Board of Directors for the next three (3) year term. Below are the details of the Board categories and respective tenure.

RESOLVED: The composition of the FARA Board of Directors for the next three years shall be:

Name	Regional /Stakeholder Representation	National of	Tenure
Tiémoko Yo	FARA FORUM (Chairperson)	Côte d'Ivoire	July 2010–2013
Ayman Abou-Hadid	NASRO (Vice-Chairperson)	Egypt	July 2010–2013 (1 st term)
Monty Jones	FARA Secretariat	Sierra Leone	2002–2012
Habib Amamou	NASRO	Tunisia	July 2010–2013 (1 st term)
Ephraim Mukisira	ASARECA	Kenya	March 2009–2012 (1 st term)
Seyfu Ketema	ASARECA	Ethiopia	2010–2013
Margaret Nyirenda	SADC-FANR	Malawi	2010–2013
Paco Sereme	CORAF/WECARD	Burkina Faso	2010–2013
Abubakar Yusuf	CORAF/WECARD	Nigeria	Jul 2010–2013 (1 st term)
Sylvie Christel Mbog	NGO	Cameroon	2008–2011 (2 nd term)
Lucy Muchoki	Private Sector	Kenya	July 2010–2013 (2 nd term)
Abdoulaye Pape Seck	Scientific partners	Senegal	July 2010–2013 (2 nd term)
Haile-Gabriel Abebe	African Union Commission	Ethiopia	2008–2011 (1 st term)
European Commission	Development partners	Belgium	July 2010–2013 (1 st term)
TBD	World Bank	TBD	TBD
TBD	Farmers' organisations	TBD	TBD
TBD	Governance expert	TBD	TBD
TBD	Finance expert	TBD	TBD

Statement by outgoing Chairperson

Dr Denis Kyetere

Dr Kyetere thanked all stakeholders and partners for giving him the opportunity and mandate to lead FARA for the past three years. Stating his conviction that he was leaving the institution in good hands, he added that big challenges were ahead and thus leadership and stakeholders cannot afford to be complacent. He recommended that immediate past Chairpersons should be invited to the FARA General Assembly immediately following the end of their mandate as their institutional memory can continue to make useful contributions. Dr Kyetere then handed over the insignia of office to the incoming Chairperson.

RESOLVED: The immediate past Chairperson is to be invited to the FARA General Assembly immediately following the end of his/her tenure.



Dr Kyetere handing over the gavel of office to Dr Yo

Statement by incoming Chairperson

Dr Tiémoko Yo

In his acceptance speech, Dr Yo expressed confidence in Africa's potential to harness its resources and deliver excellent results. An example of such successful harnessing of resources was the 2010 World Cup Finals hosted by South Africa.

The week-long activities of the 5th FARA General Assembly and the enthusiastic participation by stakeholders, he observed, are all the evidence that is needed that FARA has demonstrated that it can serve as a platform of discussions.

On behalf of the African and international community, he thanked the Government of Burkina Faso for successfully hosting the event. He thanked stakeholders, partners and members for the confidence shown by the unanimous ratification of his appointment. He commended the outgoing Chairperson for his dedication to FARA and tireless efforts to strengthen FARA's governance and credibility and assured stakeholders of his understanding of the responsibility and expectations ahead and pledged efficiency, excellence and transparency in the management of FARA.

Dr Yo added that it is unacceptable that a well-resourced continent like Africa continues to experience extreme poverty. Noting that FARA has a clearly defined strategy of actions aligned with the CAADP pillars, Dr Yo stated that we should ensure that achievements in agriculture will lead to mindset changes to help our people feed themselves.

He ended by stating that the code of conduct, during his term of office will be to improve governance, transparency and efficiency.

Statements from selected stakeholders and partners

Pan-African Farmers Forum (PAFFO)

The President of the Réseau des Organisations Paysannes et de Producteurs de l'Afrique de l'Ouest (ROPPA), Mr Djibo Bagna, on behalf of PAFFO, expressed gratitude for the invitation to participate in the 5th FARA General Assembly and to the Government of Burkina Faso for providing facilities. He congratulated Dr Kyetere for his achievements and for supporting farmers' participation in FARA activities during his term. To Dr Yo he extended similar congratulations and assured him of farmers' support in achieving his vision. In the face of increasing food insecurity and poverty, there is evidence that Africa can feed itself if its resources are harnessed adequately. He observed, however, that policies are not always supportive, and added that more investment in Africa is needed. PAFFO's request, said Mr Bagna, is for support in building the capacities of research institutions, especially with regard to research on markets.



NGO Consortium (NGO-C)

Madam Aissetou Kanoute, speaking on behalf of NGO-C, reported that during its a one-and-a-half-day workshop to, the consortium was able to reflect and develop a roadmap for the future. It was agreed that an interim committee will be set up to resuscitate NGO-C, revise its constitution and organise a General Assembly. They also agreed to strengthen collaboration between NGO members of the Consortium and to encourage smallholder farmers to take advantage of innovations. The Consortium also requested capacity building on research methods that have proved effective.

Private sector

Dr Sanusi Dean, Chairman of the Sierra Leone Chamber of Agriculture and Enterprise Development, speaking on behalf of the private sector, stated that the Pan-African Agrobusiness and Agro-Industry Consortium (PanAAC) firmly believes that the implementation of CAADP calls for the involvement of private sector in post-Compact activities. He added that capacity strengthening and knowledge sharing provide the key for the realisation of all the CAADP pillars. PanAAC, he said, will create country focal points to liaise with policy and other institutions. He suggested that the need to utilise ICT towards the realization of CAADP goals has been recognized by FARA as exhibited by the launching of Universities, Business and Research in Agricultural Innovation (UniBRAIN). Dr Dean concluded by pledging PanAAC's support to FARA.

SROs and RECs

Madam Njabulo Zwane, Group General Manager of Illovo Sugar Limited, speaking upon the request of SADC/FANR, re-affirmed the commitment of the SROs and regional economic communities (RECs) to the CAADP framework and what it stands for as well as the Framework for African Agricultural Productivity (FAAP) principles. She stated that the role of the SROs and RECs is to provide a forum that mobilises people to come together for discussions. She commended FARA's support to the annual FARA-SRO retreat and expressed a strong commitment to gender mainstreaming. She added that stakeholders in the CAADP process need to work closely to achieve impact at the farmer level.

Development partners

Addressing delegates on behalf of FARA's Development Partners, Mr David Radcliffe, Senior Policy Advisor at the European Commission, congratulated stakeholders for a successful General Assembly and thanked the Government of Burkina Faso for graciously hosting the event. He stated that Africa is on the right track but there are increasing challenges and thus no room for complacency. FARA, said Mr Radcliffe, is now more financially sound and has a more robust governance system. Development Partners are keen on seeing the impact of FARA's work as this will justify further funding. Because competition for the scarce financial resources available is getting tougher, each stakeholder needs to demonstrate its comparative advantage and value addition. It is time, he continued, to operationalise the monitoring and evaluation system so that progress towards outcomes can be tracked.

FARA has an advantage with its current role within GCARD, and noted that GCARD had introduced a new paradigm shift. The CGIAR Mega Programmes are top of the agenda, and FARA and the SROs must bring their regional perspectives as well as SSA CP into discussions. The recent acceleration in the CAADP process is an opportunity, and FARA needs to ensure that the FAAP is integrated in the investment plans as well as pre- and post-Compact processes. He observed that it may be time to consider a review the CAADP document to update it where relevant.

Approval of venue and date – 6th FARA General Assembly

The venue and date for the FARA General Assembly is pre-determined by the provisions of the FARA Constitution. It provides that the venue should be rotated among the four African sub-regions and that the event should be held triennially. Below is the rotation to date presented by the Executive Director of FARA.

Date	Venue	Host SRO
2002	Maputo, Mozambique	SADC
2003	Dakar, Senegal	CORAF/WECARD
2005	Entebbe, Uganda	ASARECA
2007	Johannesburg, South Africa	SADC
2010	Ouagadougou, Burkina Faso	CORAF/WECARD

Prof Jones requested the approval of North Africa as the sub-region to host the 6th African Agricultural Science Week and FARA General Assembly. The year requested for the event was 2013.

RESOLVED: The 6th Agricultural Science Week and FARA General Assembly will be held in 2013 in the North Africa sub-region. The host country will be determined through a competitive bidding process.

Closing of the Business Meeting

Honourable Laurent Sedogo, Minister for Agriculture and Hydraulics
Burkina Faso

The Honourable Minister congratulated the incoming FARA Chairperson on his election and wished him success. He appreciated all the assurances he had given and reminded him that those assurances will form the basis of his assessment by stakeholders at the end of his three-year term. He expressed gratitude to the outgoing Chairperson for ably managing his role. The past six days offered a platform for discussions and reflections on how to improve productivity, value addition and access to markets. He expressed the need for all relevant recommendations to be implemented within the next three years. Burkina Faso Day showcased the innovations in the country and he thanked delegates for participating.



On behalf of the people of Burkina Faso, he thanked the Forum for selecting his country to host the General Assembly and the delegates for attending the meeting. He commended the members of the National Organizing Committee (NOC) for all the preparations and apologised for any shortcomings. On behalf of the President of Burkina Faso, His Excellency Blaise Compaoré, the Honourable Minister declared the meeting closed.

Acronyms and abbreviations

AARINENA	Association of Agricultural Research Institutions in the Near East and North Africa
AATF	African Agricultural Technology Foundation
ABBPP	African Biotechnology and Biosafety Policy Platform
ABIA	ABD initiative for Africa
AFTER	African Food Tradition Revisited
ARD	agricultural research and development
AFAAS	African Forum for Agricultural Advisory Services
AfricaRice	Africa Rice Center
AGRA	Alliance for a Green Revolution in Africa
AGRHYMET	Agriculture, Hydrology, Meteorology (Niger)
ANAFE	Agro-forestry and Natural Resources Education
ASTI	Agricultural Science and Technology Indicators
AU	African Union
CAADP	Comprehensive Africa Agriculture Development Programme
CARBAP	Centre Africain de Recherches sur Bananiers et Plantains (Cameroon)
CCARDESA	Coordinating Council for Agricultural Research and Development for Southern Africa
CEMAC	Communauté économique et monétaire de l'Afrique centrale
CGIAR	Consultative Group on International Agricultural Research
CIARD	Coherence in Information for Agricultural Research for Development
CIDA	Canadian International Development Agency
CILSS	Comité inter-étate pour la lutte contre la sécheresse au Sahel
CIRAD	Centre de coopération internationale en recherche agronomique pour le développement
CORAF/WECARD	Conseil Ouest et Centre Africain pour la Recherche et le Développement Agricole / West and Central African Council for Agricultural Research
CSIRO	Commonwealth Science and Industrial Research Organisation
CSO	civil society organisation
CTA	Technical Centre for Agricultural and Rural Cooperation
DANIDA	Danish International Development Agency
DFID	Department for International Development (UK)
DONATA	Dissemination of New Agricultural Technologies in Africa
EAAPP	East African Agricultural Productivity Program
EC	European Commission
ECCAS	Economic Community of Central African States
ECOWAS	Economic Community of West African States
EFARD	European Forum on Agricultural Research for Development
FAAP	Framework for African Agricultural Productivity
FARA	Forum for Agricultural Research in Africa
FO	farmer organisation
FORAGRO	Forum for the Americas on Agricultural Research and Technology Development
FSTP	Food Security Thematic Programme
GA	General Assembly
GCARD	Global Conference on Agricultural Research and Development
GFAR	Global Forum for Agricultural Research
GFRAS	Global Forum for Rural Advisory Services
GRiSP	Global Rice Science Partnership

IAR4D	integrated agricultural research for development
ICRAF	World Agroforestry Centre
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
ICT	information and communication technology
IDRC	International Development Research Centre
IFPRI	International Food Policy Research Institute
ILRI	International Livestock Research Institute
INERA	Institut national de l'environnement et de recherches agricoles (Burkina Faso)
IPTA	innovation platform for technology adoption
IRRI	International Rice Research Institute
JIRCAS	Japan International Research Center for Agricultural Sciences
KBBE	knowledge-based bio-economy
M&E	monitoring and evaluation
MOSTIS	Mozambique Science, Technology and Innovation Strategy
MTOP	Medium-term Operational Plan
NAPA	National Adaptation Programme of Action
NARS	national agricultural research system
NASRO	North African Sub-Regional Organisation
NEPAD	New Partnership for Africa's Development
NERICA	New Rice for Africa
NGO	non-governmental organisation
NOC	National Organizing Committee
PAEPARD	Platform for African-European Partnership on Agricultural Research and Development
PanAAC	Pan-African Agrobusiness and Agro-Industry Consortium
PAFFO	Pan-African Farmers Forum
PPP	public-private partnership
ROPPA	Réseau des Organisations Paysannes et de Producteurs de l'Afrique de l'Ouest
QPM	Quality Protein Maize
RAILS	Regional Agricultural Information and Learning System
RECs	regional economic communities
RIEAM	Mozambican Network for Ecological and Environmental Research
RUFORUM	Regional Universities Forum for Capacity Building in Agriculture
SABIMA	Strengthening Capacity for Safe Biotechnology Management in Sub-Saharan Africa
SADC-FANR	Southern African Development Community—Food, Agriculture and Natural Resources Directorate
SCARDA	Strengthening Capacity for Agricultural Research and Development in Africa
SMEs	small and medium enterprises
SPS	sanitary and phyto-sanitary
SRO	sub-regional research organisation
SSA CP	Sub-Saharan Africa Challenge Programme
TCB	trade capacity building
UEMOA	Union économique et monétaire ouest-africaine
UniBRAIN	Universities, Business and Research in Agricultural Innovation
USAID	United States Agency for International Development
WCA	West and Central Africa
WTO	World Trade Organization
YPARD	Young Partners for Agricultural Research and Development