



## **Joint EU-Africa initiatives on the role of science, technology and innovation in promoting food and nutrition security and sustainable agriculture<sup>1</sup>**

*A Side-event to the EU-Africa High Level Policy Dialogue on Science, Technology and Innovation on 28 November 2013*

**SOFITEL Brussels, room Paul Henri Spaak I**

**Place Jourdan 1, 1040 Brussels**

### **Report**

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## Summary of the event

A half-day meeting in the Brussels Sofitel, adjacent to the European Commission's Centre Borschette, provided an ideal chance for an informal exchange of ideas and reflection around cooperation in food and nutrition security just prior to the second, formal Africa-EU high-level policy dialogue on STI (HLPD) on the same theme. In their words of welcome Dr Elisabeth Lipiatou, head of the EC's unit on international cooperation with Africa, and by Dr Hakim Elwaer, Director of the African Union's department for Human Resources, Science and Technology spoke of our shared values and common research interests. Illustrating the already extensive cooperation in science and technology between the two continents Dr Lipiatou referred to the EU's seventh Framework Programme, in which alone there has been well over 1000 African participants in 600 projects and reminded participants that we are always looking for ideas for future joint initiatives. The HLPD, explained Dr Lipiatou, will be about increased collaboration, coordination of joint research, and will emphasize the will of our two continents to share research. Reflecting on joint activities in which there is genuine partnership based on co-ownership and co-funding Dr Elwaer referred to the revision of Africa's science and technology Consolidated Plan of Action and to the Comprehensive Africa Agriculture Development Plan, both providing continentally endorsed frameworks for cooperation and emphasised the need for improved translation of research outputs into new goods, technologies and services.

Open to all and co-chaired by Professor John Wood, Secretary General of the Association of Commonwealth Universities, and Dr. Yemi Akinbami, Executive Director of the Forum for Agricultural Research in Africa, the side-event gave the stage to examples of current and future initiatives from the Africa-EU cooperation landscape, representing between them several funders and funding programmes: the ACP-EU S&T programme, EU's current framework programme (FP7), the African Union's research grants programme (ARGP), the EU's food security thematic programme of the Development Cooperation Instrument (DCI), and the pool of funders supporting the CGIAR.

Diverse in nature, the six initiatives presented the 80+ tightly-packed participants with a range of perspectives on the contributions of scientific research and technological innovations to African and European interests in food and nutrition security. Quite apart from the technical details however, each initiative raised notable issues of policy relevance, such as the challenges and barriers facing the implementation of outputs of scientific and technological cooperation.

The **PAEPARD platform**, run by the Forum for Agricultural Research in Africa (FARA) and supported by the EU's Development Cooperation Instrument is all about brokerage; marshalling ideas and bringing people together around key demand-led research topics identified by African farmers' organisations. PAEPARD sees a fragmented landscape, an absence of well-elaborated national policy resulting in an excess of donor competing and contradicting initiatives, and calls for far better coordination.

Also operated by FARA, the **Sub-Saharan Africa Challenge Programme of the CGIAR** has been testing an innovation platform concept as a response to its analysis of the impediments facing agricultural research for development. Results indicate that this new approach, in which all the important elements of the innovation cycle and value chain interact, has superiority over conventional research for development approaches, as measured by returns to farmers.

Pesticidal plants can provide farmers with a valuable alternative to synthetic pesticides but they need validation, optimisation, quality control, and supportive government oversight. **The ADAPPT project**, supported by the ACP-EU S&T programme is conducting research into overcoming some of the disadvantages of plant pesticides and has built a large network of actors in which capacity building and farmer training are key elements. Simple solutions identified by ADAPPT such as the use of liquid soaps to improve efficiency of active ingredient extraction. New projects are being elaborated to look at other hurdles, such as assuring the propagation of adequate plant material.

Examining the process of bi-regional research cooperation in food security is a task of the **CAAST-Net Plus**, a network of African and European government science authorities, supported by the EU's FP7 to promote cooperation. The project identifies a number of systematic weaknesses in the cooperation landscape, including for instance the inadequacy of translational activities mentioned by Dr Elwaer in his opening words, and proposes broad-based interventions to address these and other failings, some of which the project itself will be developing with collaborators in coming years.

Participants learned that the overall objective of the **IntensAfrica initiative**, currently in planning stages, is to improve the food and nutrition security and the livelihoods of African farmers and to enhance the resilience of their natural resource base by providing documented knowledge and evidence on effective pathways of sustainable intensification of African agri-food systems. Co-designed by African and European partners, the objective will only be achieved by the pooling of resources and expertise at European and African level, building on the wealth and diversity of existing partnerships in a large number of agro-ecological situations, socio economic contexts, and policy environments.

The final presentation of the morning, from a project supported by the **ARGP**, presented an example of a public-private partnership in the development of novel, bio-intensive eco-friendly management strategies for controlling thrips, a serious constraint to grain legume production in Africa. Available management strategies for thrips are largely pesticide based which are neither healthy for the environment or consumers nor affordable to smallholder farmers in Africa. Furthermore, since thrips are known to gain resistance to commonly used pesticides, pesticide use can become ineffective. Through partnership with a private biopesticide producer a fungus that kills the thrips has been successfully commercialized in five African countries. Regulatory frameworks for biopesticides are essential to the wider adoption of these environmentally friendly products, with regionally integrated policies providing incentives to producers for wider registration.

With African agriculture in need of intensification to deliver food and nutrition security in a sustainable manner, while European agricultural yields are plateauing it might seem that there are radically different food security issues to be addressed on the two continents. The presentations showed that while differences exist, there are abundant issues ripe for collaboration and notably around the topics that constitute the framework conditions within which research cooperation operates.

It was evident from the presentations and discussions for instance that to efficiently deliver food and nutrition security, the science and the technology components can't be separated from the components of innovation cycles and value chains, including the roles of finance and funding partners, taxation and incentives, the regulator environment, public procurement, markets, infrastructure, entrepreneurs and the private sector and the end-users/farmers. It is crucial

therefore that in supporting collaborative projects, full attention be paid to their integration to the innovation cycle.

Another topic that emerged during discussion, and which affects all scientific collaboration, was that of data, and the allied topic of open access publishing. Data and open access publishing are big issues these days, and especially the availability of and access to publically-funded data. Vital data is lost when projects end and an active data management plan should become part of any project that is funded by public sources. 'Open data access' initiatives are emerging globally. For example the Research Data Alliance, explained co-chair Professor John Wood, already involves participation from 70 countries to foster such collaboration and to gain further outputs from existing data bases).

The discussion of data extended to touch on the needs for common methods of capturing information as well as the sharing of information and being part of a partnership, then moved onto the persistent issue of S&T indicators.

The private sector was a frequent subject of the discussion, recognising a widespread acceptance that their engagement in the process of STI cooperation is a key to innovation and achieving sustainable outcomes. Yet from the diversity of opinions voiced, it was evident that there remains much that concerns us in relation to the broad public-private sector relationship.

The fertile discussion illustrated the diversity of issues and commonality of interest around the use of STI in food and nutrition security. After thanks to speakers and participants from the two co-chairs, Professor John Wood, Secretary General of the Association of Commonwealth Universities, and Dr. Yemi Akinbami, Executive Director of the Forum for Agricultural Research in Africa, Drs Elwaer and Lipiatou drew the meeting to a close, reminding us again of our common responsibilities and of the shared benefits from collaboration, and of the golden opportunity presented by the HLPD to further consider this theme and to build a roadmap for future cooperation.

To see abstracts of the showcased initiatives go to <http://www.caast-net-plus.org/object/event/672>