



**9th Meeting of the Advisory Committee
on
Science and Technology for ACP Agricultural & Rural Development**

Science, Indigenous Knowledge and Innovation: Implications for ACP Agriculture

Draft Workshop Programme

November 22-26, 2010

Background

The ACP S&T community has a critical role to play in assisting the 79 member countries that make up the ACP Group of States in rethinking and re-strategizing efforts to ensure the effective and efficient use of knowledge, science, technology and innovation (ST&I) for addressing the complex mega challenges confronting their agricultural and rural sectors in the 21st century. Members of the ACP ST&I community must be proactive and convene and participate in multi-disciplinary and multi-stakeholder regional and international platforms, identify and set new research priorities and integrate and synthesize knowledge from multiple sources for the public good. They must also play a more critical role in informing and influencing national, regional and international policies and programmes to support ACP countries in building resilient ecological and economic systems.

In 2009, the Advisory Committee on S&T for ACP Agricultural and Rural Development (AC) deliberated on the megatrends and major technological challenges impacting on the future of agricultural science and innovation in ACP countries 2010 - 2020. Bio and nanotechnologies, information and communication management systems, coping with the diverse effects of climate change and green agricultural innovations were identified among the major technological challenges while increasing water shortages, growing food insecurity, and population growth were identified among the megatrends. The low priority of agricultural development on political agendas and the financial crisis were listed among the most important negative megatrends. Insufficient ACP scientific and technological capability was acknowledged and the AC members recommended that improvements be made. They prioritized ICTs, biotechnology and genetic engineering and postharvest technology among the key scientific disciplines for ACP agricultural development in the future. They further recommended that indigenous knowledge and skills be incorporated in the search for new technologies and other solutions to spur agricultural innovation and economic development.

Within this context, and the new development paradigm which places emphasis on indigenous/traditional/local knowledge as an essential resources for sustainable development, it is an opportune time for the AC to reflect on the issue of indigenous

knowledge, assess its uniqueness and determine how best to valorize its contribution to the science and innovation agendas for the sustainable intensification of ACP agriculture, food security and product diversification into new and added value products. The AC must also propose policies, strategies and best bet options for strengthening the linkages between scientific (formal/westernized) knowledge and all other types of knowledge including indigenous/traditional/ local knowledge for responding to the mega-challenges and addressing the development needs of the ACP community.

The theme for the 9th AC meeting is “Science, Indigenous Knowledge and Innovation: Implications for ACP Agriculture” and it will be preceded by the annual e-consultation. This is appropriate as AC members continue their efforts to advocate for policy and institutional change and adequate financial resources, for undertaking innovative research and teaching and adapting existing knowledge in support of socio-economic development. The definition, articulation and promotion of scientific knowledge as being inclusive and the shared recognition of the need for continuous engagement with policymakers and other stakeholders and greater linkage between science and society are very relevant to future innovation in and development of agriculture which remains the mainstay of several ACP economies.

Objectives

The main objectives of the 9th AC meeting are as follows:

1. To achieve shared understanding and consensus on the definition of indigenous/local/traditional knowledge and its relevance to transforming the formal science agenda and innovation systems for addressing the mega challenges facing ACP agricultural and rural development.
2. To share knowledge, experiences and best practices and identify opportunities and constraints for systematically integrating indigenous knowledge in the ACP agricultural science, research, education and training agenda in support of agricultural innovation.
3. To reflect on ethical issues concerning the documentation, publication and exploitation of indigenous knowledge for science, education, innovation and development.
4. To identify and prioritize policies, strategies and programmes at organizational, national, regional and international levels for making science more inclusive and valorizing indigenous knowledge through its integration in science, research and tertiary education programmes for spurring ACP agricultural innovation and economic development.
5. To reflect on proposals for the CTA ST&I strategies 2011 programme including the Advisory Committee, determine the future impact and propose methods for evaluation.

Expected Output:

A report which includes a range of well defined and clearly articulated policies, strategies and options for making science more inclusive and better integrating indigenous knowledge in the ACP science and innovation agenda to enhance their contribution to sustainable agricultural, rural and economic development. This report will be widely disseminated through the various electronic media of the AC members.

Outcomes:

AC members committed to deepening and promoting linkages between traditional/indigenous and formal knowledge systems (science) and mobilizing resources for ACP agricultural science, research, education and training in collaboration with CTA and other partners to further advance the ACP science and innovation agenda for achieving economic and ecological sustainability.

Impact pathways for evaluating the future impact of the AC identified and endorsed.

Day 1 - November 22, 2010: Business Meeting

8:30 Focus: CTA ST&I Programme and Strategic Partnerships

Chairperson – Professor Aggrey Ambali, NEPAD S&T, South Africa (tbc)

8:30 – 8:45 Welcome Remarks – Mr. Michael Hailu, Director, CTA, The Netherlands

8:45 – 9:00 Introductions

9:00 – 9:15 Workshop Overview - *Judith Ann Francis*, Senior Programme Coordinator, Science and Technology Strategies, Planning and Strategic Services Department, CTA, The Netherlands

9:15 - 9:45 CTA and Science, Technology and Innovation 2011 Programme, *Judith Ann Francis, CTA*

9:45 – 10:00 Discussion

10:00 – 10:30 Coffee Break (including Group Photo shoot)

10:30 – 12:30 CTA and ST&I Partners' Platform – Priority Areas for Collaboration with CTA on S&T in 2011 & Beyond

ANAFE, AGRA, AgriNATURA, CARDI, CARICOM, CCST, CORAF-WECARD, NEPAD, NUC, RUFORUM, UWI, USP, YPARD (short 10 minute presentations on main programme achievements of each partner for 2010 and priorities for collaboration in 2011)

12:30 – 13:00 Discussion – **Building Synergies on Strategic Thrusts through Partnership:** Increasing Outreach, Effectiveness and Impact of the ACP S&T Agenda for ACP Agricultural and Rural Development

13:00 – 14:30 **Lunch**

Focus: Business Meeting Continued: The Advisory Committee

Chairperson –

14:30 – 15:30 Discussion - **Terms of Reference, Composition and Future Impact of the Advisory Committee on S&T for ACP Agricultural and Rural Development**

15:30 – 16:00 Coffee Break

16:00 – 18:00 **Official Opening Ceremony – CTA/NPCA Week** “Innovation for Sustainable Futures” (Separate programme will be provided later)

Keynote presentation: ***Science, Indigenous Knowledge & Innovation – Challenges for Development***’ - Prof Jacobus Eloff recommended for inclusion in the Official Opening Ceremony (tbc).

18:30 – 20:00 **Cocktail Reception**

Day 2 Tuesday November 23, 2010

Focus: Making Science more Inclusive: Building on Indigenous Knowledge Systems

Chairperson – Prof. Dyer Narinesingh, Dean Faculty of Science and Agriculture, University of the West Indies (UWI), Trinidad & Tobago (tbc)

8:30 – 9:00 **Keynote Address** - Making Science more Inclusive: The History of Knowledge Production - *Dr. Gerard Toulouse, Director of Research, Department of Physics, Ecole Normale Superieure (Paris), France*

9:00 – 9:30 **Keynote Address** - Promoting Indigenous Knowledge in the Biosciences and Biotechnology for Development of the Bio-economy - *Prof. Yonah Seleti, Chief Director, National Indigenous Knowledge Systems Office, South Africa*

9:30 – 10:00 Discussion

10:00 – 10:30 Coffee Break

Focus: Breaking the Glass Ceiling: Linking Indigenous Knowledge and Science - Lessons from Traditional Medicine

Chairperson – Professor Biman Prasad, Professor of Economics & Dean, Faculty of Business and Economics, University of South Pacific, Fiji (tbc)

- 10:30 – 10:50 Documenting and Evaluating Traditional Medicines: Impacting on Livelihoods – *Prof. Ameenah Gurib-Fakim*, Chair in Organic Chemistry, University of Manutius, Mauritius
- 10:50 – 11:00 Discussion
- 11:00 – 11:20 Validating Traditional Medicines: Creating Value from Indigenous Resources – *Prof. Emias Dagne Haile*, Lecturer, African Laboratory for Natural Products, Ethiopia
- 11:20 – 11:30 Discussion
- 11:30 – 11:50 Advancing Indigenous Therapy Systems through Science: Identifying the Active Principles in Traditional Medicines – *Prof. Jacob Ogweno Midiwo*, Executive Secretary NAPRECA, University of Nairobi, Kenya
- 11:50 - 12:00 Discussion
- 13:00 – 14:30 **Lunch**
- 14:30 – 15:00 **Report of the 2010 Advisory Committee e-Consultation** – Science, Indigenous Knowledge and Innovation: Implications for ACP Agriculture, *Judith Ann Francis*, CTA
- 15:00 – 17:30 **Working Group Session 1** - Making Science more Inclusive: Linking Science, Indigenous Knowledge and Innovation for ACP Agricultural and Rural Development
- Focus** – Conceptual & Ethical Issues, Challenges and Opportunities.

Key Questions

- (i) Is the ACP science and technology agenda inclusive enough to embrace other actors, their perspectives and all forms of knowledge? If not, why not? Should it be and if yes, how can it be made more inclusive?
- (ii) Is there a difference between indigenous and scientific knowledge and if yes, what are the fundamental differences? Or are they interconnected? Or is there a convergence and if so where?
- (iii) What is the added value of integrating indigenous knowledge with scientific knowledge in the agricultural transformation and development processes in the ACP region?
- (iv) What strategies are necessary to increase awareness of the added value of indigenous knowledge and promote the benefits?

- (v) Will documenting and publicizing indigenous knowledge lead to loss of control by the communities who own the knowledge? If yes, what are the risks? What is the role of the scientific community in minimizing the risks? Or is there a role?

Day 3

Wednesday November 24, 2010

Focus: Knowledge Convergence - Indigenous Knowledge, Science, Biodiversity and Sustainable Development

Chairperson – *Prof. Hamidou Boly*, President of Polytechnic University of Bobo Dioulasso, Burkina Faso (tbc)

- 8:30 - 9:30 Presentation of Session 1 Working Group Reports
- 9:30 – 10:00 Discussion
- 10:00 - 10:30 **Coffee Break**
- 10:30 - 10:50 Conservation of Aquatic Resources in Coastal and Fresh Water: Building on Traditional Knowledge of Ghanaian Women Fisherfolk - *Dr. Rose Emma Entsua-Mensah*, Deputy-Director General, Council for Scientific and Industrial Research (CSIR), Ghana
- 10:50 – 11:00 Discussion
- 11:00 – 11:20 Unsustainable Fisheries: from a Different Angle: Science, Arts, Local Knowledge and Youth – *Prof. Stella Williams*, Representative of Mundus Maris Science, Art and Sustainability of the Seas, Nigeria
- 11:20 – 11:30 Discussion
- 11:30 – 11:50 Developing Production Systems for Neo-tropical Animals: Valuing Indigenous Resources through Research & Training – *Dr. Gary Wayne Garcia*, Senior Lecturer in Animal Production, The Open Tropical Forage-Animal Production Laboratory, Department of Food Production, Faculty of Science and Agriculture, UWI, Trinidad & Tobago
- 11:50 - 12:00 Discussion
- 12:00 – 12:20 Harnessing our rich Plant Biodiversity: Valuing Indigenous Resources for Food, Health and Environmental Sustainability through Science and Innovation - *Prof. Puffy Soudy*, Associate Professor, Department of Science and Technology, University of Pretoria, South Africa
- 12:20 – 13:00 Discussion

- 13:00 - 14:30 **Lunch**
- 14:30 – 17:30 **Working Group Session 2 – Lessons for Policy:** Linking Science, Indigenous Knowledge and Innovation in Research, Teaching and Development Agendas for ACP Agricultural and Rural Development
- (i) How can the use of indigenous knowledge systems be systematized within the research and training agendas of ACP research organizations and universities? Should it? Who will benefit and how? Who will lose? Are there ethical and other issues to be considered?
 - (ii) Several researchers/organizations have started integrating indigenous knowledge into their research, teaching and development strategies and programmes. Are there lessons to be learned? What are the pitfalls to be avoided and what are the best practices to move forward with in reshaping the ACP agricultural agenda to meet 21st century challenges?
 - (iii) What are the policy lessons and what advice and strategies does the AC have for influencing national, regional and international policy agendas?
- Day 4 – Thursday November 25, 2010**
- Field Trip (venue to be finalized)**
- Day 5 - Friday November 26, 2010**
- Focus: Science, Indigenous Knowledge and Innovation - Key Messages for the ACP Region**
- Chairperson – Prof. Agnes Mwang’ombe**, Principal College of Agriculture, University of Nairobi, Kenya (tbc)
- 8:30 - 9:30 Presentations of Session 2 Working Group Reports & Feedback on Field Trip
- 9:30 – 10:00 Discussion
- 10:00 - 10:30 **Coffee Break**
- 10:30 – 12:30 Key Messages
- Finalization of Draft Communiqué
- Remarks – AC Member & NEPAD and CTA Representatives
- 13:00 - 14:30 **Lunch**

14:30 – 17:30

Official Closing Ceremony CTA/NPCA Week “Innovation for Sustainable Futures” (Separate Programme will be provided later)