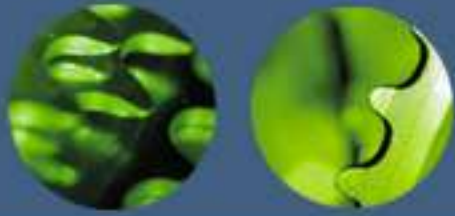




Building S&T Partnerships in Africa

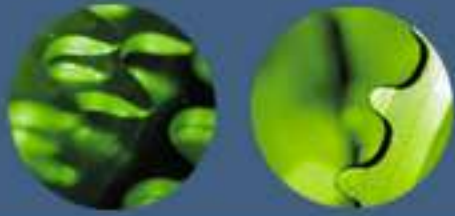
**ANNELINE MORGAN
DIRECTOR: AFRICA COOPERATION**

27 SEPTEMBER 2012



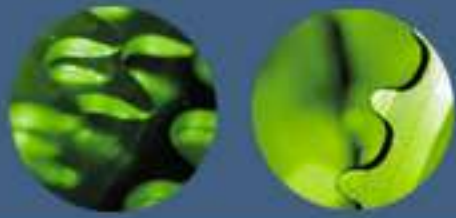
Presentation outline

- Foreign Policy mandate
- SA-Africa Partnerships
- Cooperation Drivers and Mechanisms
- Funding Opportunities
- Multilateral & Regional Cooperation
- Support for Regional & Continental Initiative
- Africa-EU 8th Partnership
- Global & Regional Programmes
- Political Support
- Global Research Facilities in Africa
- Challenges in Africa
- Conclusion



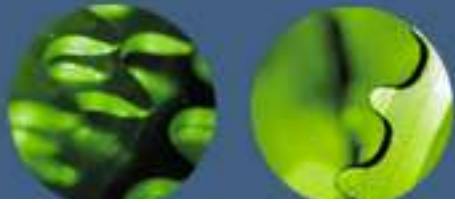
Why cooperate with Africa?

- **S&T foreign policy mandate.**
- **African Political leadership's recognition of S&T as a goal to attain MDGs and socio-economic growth-recognised AU Summit of 2007**
- Harness and apply STI for sustainable socio-economic development
- Ensure that Africa contributes to the global pool of scientific knowledge and technological innovations



Africa as a partner for STI

- Ensure net flow of knowledge, capacity and resources into South Africa and the African continent from the North and South.
- Participate in international S&T platforms regional, continental, and global level with a view to influence S&T policy debates.
- Position Africa as a “gate way” and preferred destination and location for STI
- **Through S&T partnerships - Ensure that Africa contributes to the global pool of scientific knowledge and technological innovations.**
- Promote Africa as preferred destination for S&T investment and location of Global Research Infrastructure e.g. SKA, HESS, SALT, AVN/VLBI, ICGEB
- Harness and apply STI for sustainable socio-economic development (2007 AU Summit - African Political leadership’s recognition of S&T as a means to attain MDGs and socio-economic growth)
- Leverage resources and strategic partners from the North and South

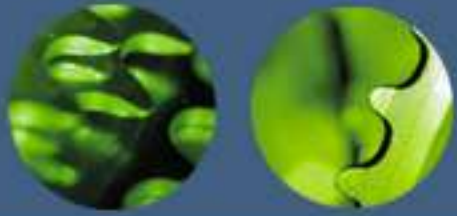


SA – Africa Partnerships



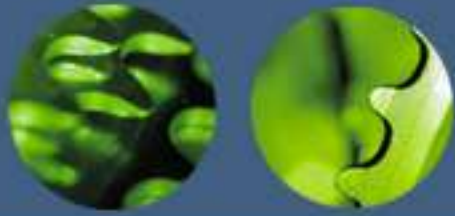
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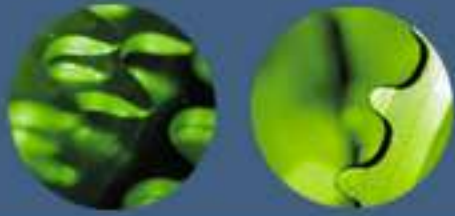
Cooperation Drivers

- S&T partnerships
- Knowledge exchange in STI
- Human Capital Development
- Development and access to research infrastructure
- Regional integration



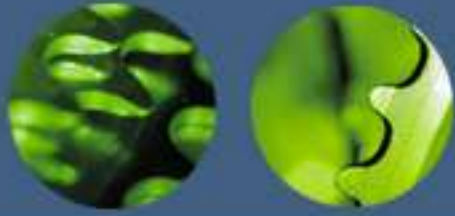
Cooperation Mechanism

- **Joint research projects (Joint Funding)**
 - Kenya, Mozambique, Zambia, Namibia, Algeria, Egypt, Angola
 - Over an estimated 60 bilateral projects funded to date estimated value of R40 million
- Regional cooperation – CPA implementation
- Seminars/ Workshops/Conferences/Policy Dialogues
- Inter Institution Cooperation (e.g universities etc)
- Technical Exchange –exchange programmes
- Technical Assistance –Policy, Institutional Advise
- Knowledge sharing
- Access to Research Infrastructure (Labs etc)

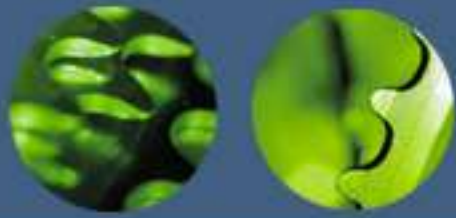


Other Funding Opportunities

- AU Scientific Awards
- AU Research Call
- EU Framework Programme (Horizon 2020)
- Development Funding (e.g Trilateral Projects)
- Trilateral Projects- partnerships with bilateral partners from the North
- African Renaissance Fund (DIRCO) – support for AVN



MULTILATERAL AND REGIONAL COOPERATION

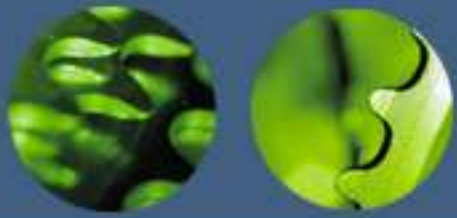


Africa's Consolidated Plan of Action

Overview: The kick off the AU/NEPAD Africa's Science and Technology Consolidated Plan of Action (CPA) implementation and domestication started after its endorsement immediately after its endorsement by the African Union Summit of Heads of State and Government in 2006, Sudan.

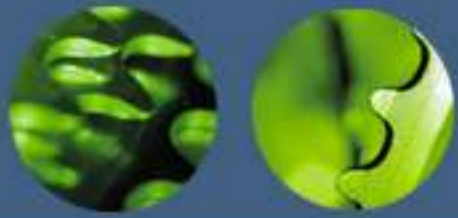
Main pillars are:

- (i) knowledge production,
- (ii) capacity building,
- (iii) technological innovation.



Objectives of the CPA

- Improve infrastructure for R&D in the continent
- Build and use Africa's scientists, technicians and engineers
- Turn ideas/knowledge into products and services
- Improve quality of policies for science and innovation
- Increase African demand for science and technology



AU/NEPAD CPA Cluster Priorities

Cluster 1: Biodiversity, Biotechnology and
Indigenous Knowledge

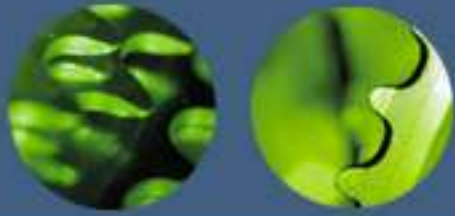
SANBio, BECA-NET, WAB-NET, NAB-NET

Cluster 2: Energy*, **Water** and Desertification

Cluster 3: Materials Science, Manufacturing,
Laser Technologies and Post-Harvest
Technologies (**ALC**)

Cluster 4: ICTs and Space Sciences- (SKA*)

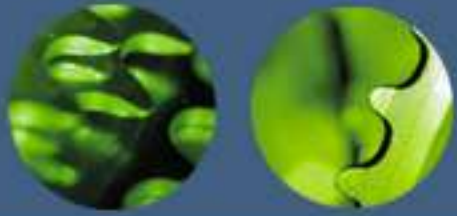
Cluster 5: Mathematical Sciences (**AIMS. AMI-NET***)



Support for Regional & Continental Initiatives

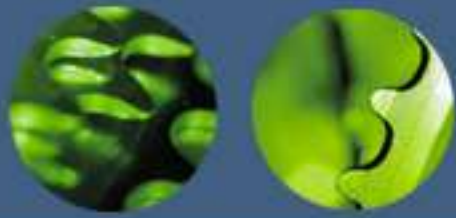
- SA-DST is supporting a number of regional and Continental S&T initiatives such as the AU/NEPAD Flagships of the CPA
- DST is providing financial support for the following:
 - **Africa Biosciences Initiative/Network (Southern, East, West & North Africa) – Finland**
 - **Water Sciences Network (COE) –France, EC (JRC), Bill & Melinda Gates Foundation**
 - **Continental-Laser Sciences programme (ALC)**
 - **Continental-Mathematical sciences programme (AIMS) – Estimated 360 African Students graduated from the AIMS programme**
 - **AIMS-NETWORK, Senegal, Uganda, Nigeria, etc**

Regional and continental programmes – support R&D, HCD and access to Infrastructure -Estimated investments of R60 million over the past years – excludes leveraged Funds from International partners – Finland, EU-JRC*



Regional Projects

- **Technology Transfer Capacity Development Programme: Germany- SA- Namibia-Zambia and Botswana**
- **SASSCAL – Climate Change: Germany- SA-Angola-Namibia-Zambia and Botswana**



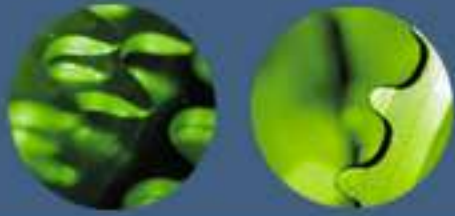
Other Continental Initiatives

ANDI- African Network for Drugs Diagnostics

- Launched in January 2011
- Minister of Science and Technology-Minister Pandor nominated as Co-Chair for ANDI together with Kenyan Minister of Health

Goals

- Increase R&D collaboration among African Institutions
- Foster public-private partnerships within Africa to support the development & manufacturing of new drugs and health products
- Generate and manage IP & explore innovative mechanisms to encourage and reward local innovation, including research in IK
- Promote long term economic sustainability through supporting R&D

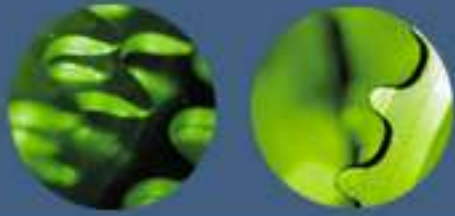


Africa-EU 8th Partnership

Africa–EU Partnership

Partnership 8: Science, Info Society & Space

- AU Research Grant
- AU Kwame Nkrumah S&T awards
- GMES-Africa
- AERAP



Global and Regional Projects

- **International Centre for Genetic Engineering and Biotechnology (ICGEB)**
 - RSA won the bid to host the African Component of the ICGEB and is hosted at the University of Cape Town
 - Supports Research, HCD
 - Access to world class Research Infrastructure
 - Some African members: SA, Tanzania, Nigeria, Namibia, Angola, Tunisia, ---
- **Square Kilometre Array (SKA)**
 - Partner countries: Mozambique, Kenya, Namibia, Ghana, Botswana, Madagascar, Mauritius
 - SKA Bursary Programme – aims to build capacity in astronomy
- **AVN/VLBI**
 - Ghana, Mozambique, plans for Botswana

**DECISION TO SUPPORT THE SQUARE KILOMETRE
ARRAY (SKA) PROJECT ON THE AFRICAN CONTINENT
Doc.EX.CL/584(XVII)**

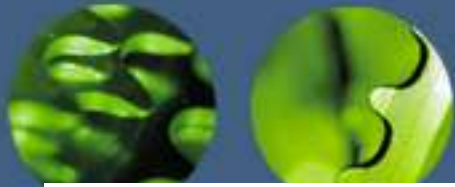
The Assembly,

1. **ENDORSES** the recommendation of the Executive Council with regard to the Square Kilometre Array (SKA) Project provided for in the Report of the Fourth Ordinary Session of the African Ministerial Conference on Science and Technology (AMCOST IV), held in Cairo, Egypt, from 8 to 11 March 2010;
2. **ACKNOWLEDGES** the importance of science, technology and innovation emanating from the SKA Project in development of our knowledge-based economies and driving human capital development programmes;
3. **APPRECIATES** the efforts of the Republic of South Africa in coordinating Africa's bid to promote space related science and technology matters on the continent;
4. **ENDORSES** the African bid to host the SKA on the African continent, thereby providing the world with the unique instrument for frontier research and discovery, cementing Africa's commitment to contribute to global scientific excellence and enterprise;
5. **ALSO ENDORSES** the Republic of South Africa's bid to host, in collaboration with Botswana, Ghana, Namibia, Madagascar, Mauritius, Mozambique, Kenya and Zambia the Square Kilometre Array (SKA) Project on the African continent;
6. **CALLS ON** Member States, the Commission and the Regional Economic Communities to fully cooperate with the Republic of South Africa on this project by providing the necessary support to this bid;
7. **ALSO CALLS ON** Africa's development partners and the global scientific community to support the African SKA bid, both directly and in all relevant forums where such support would promote the success of the bid.

**DECISION ON THE AFRICAN SQUARE KILOMETRE
ARRAY (SKA) PROJECT
Doc. Assembly/AU/14(XVIII) Add. 7**

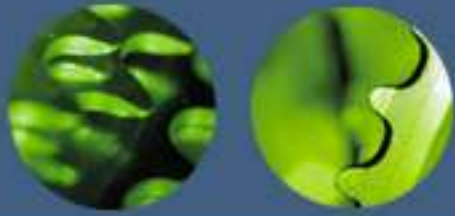
The Assembly,

1. **RECALLS** its Kampala Decision Assembly/AU/Dec. 303(XV) endorsing the African bid to host the Square Kilometer Array (SKA) on the African continent;
2. **WELCOMES** the progress made by Republic of South Africa in submitting the final African SKA bid documents to the Founding Board of the SKA;
3. **ALSO EXPRESSES ITS GRATITUDE** to Botswana, Ghana, Namibia, Madagascar, Mauritius, Mozambique, Kenya and Zambia under the coordination of the Republic of South Africa, for providing diplomatic, regulatory, technical and logistical support for this bid;
4. **ENCOURAGES** the parties concerned to intensify efforts and continue to support the on-going processes and mobilize the support of the international community;
5. **STRESSES** the significant potential of investment in African Radio Astronomy initiatives, such as the planned African Very Long Baseline Interferometry (VLBI) Network, to rapidly enhance Africa's science and technology capacities, and therefore;
6. **PROPOSES** the inclusion of Radio Astronomy as a priority focus area for Africa's international science and technology partnerships, such as the Eighth Africa-European Union (EU) Partnership on Science, Information Society and Space;
7. **CALLS UPON** other Member States, the Commission, and the Regional Economic Communities (RECs) to support the African SKA bid both directly and in all relevant forums where such support would promote the success of the bid, leading towards the final decision expected to be made in 2012.



Global Research Facilities in Africa



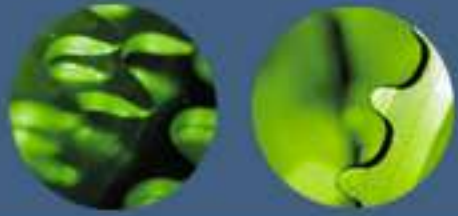


Ghana Dish



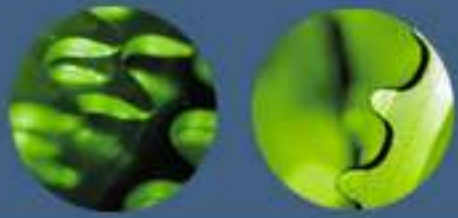
AFRICAN INSTITUTE FOR MATHEMATICAL SCIENCES





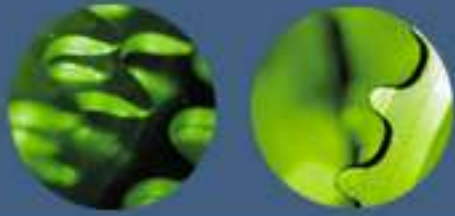
What can developing countries offer to global partnerships?

- Comparative advantage:
 - Geographic - e.g. “Southern Skies”
 - Resource – e.g. biodiversity
 - Knowledge – e.g. deep mining in South Africa
 - “Misfortune” – e.g. diseases such as HIV-AIDS, Malaria
- Global inclusiveness – needed to address global problems – e.g. climate change
- Leveraging socio-economic impact of research infrastructures – advance fight against poverty – global sustainable development agenda



Some Challenges in Africa

- In 2007 AU Summit called for member states to invest 1% of GDP for R&D
- In 2007 , Mombasa, AMCOSTIII called for the establishment of the Science, Technology and Innovation Fund by the AU-still not established
- Lack of funding for R&D (SA currently at 0.98% of GDP)
- Lack of R&D infrastructure
- Lack of appropriate institutions e.g Funding Agencies to support Research, Development and Innovation
- Lack of sustainable support infrastructure e.g. energy, ICT



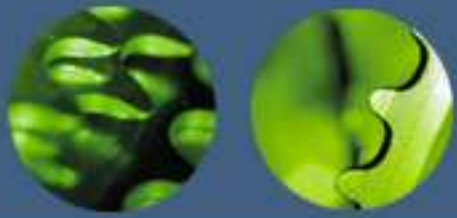
Conclusion

- Promote North-South and South-South partnerships
- Strengthen regional & continental cooperation
- Enhance multilateralism as international instrument for S&T cooperation
- Explore trilateral partnerships
- Tap into Diaspora
- Harness and apply STI for sustainable socio-economic development
- Ensure that Africa contributes to the global pool of scientific knowledge and technological innovations
- Contribute to HCD in Africa
- Facilitate access to research infrastructure
- Exchange of knowledge and experience



science
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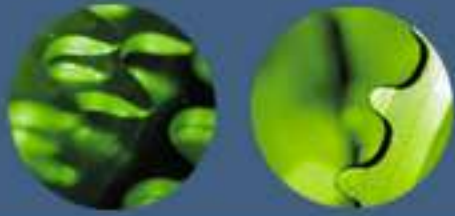
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SKA will change Africa's image

Quote: Minister Pandor, 31 August 2012

“ We want to change the character of Africa. Until now, people have come here to examine us, how poor Africa is and what kind of diseases we have here”.



THANK YOU

**“A Better South Africa in a
better Africa and a better
world**

