

## International Year of Planet Earth Meeting of Science Theme Leaders and African Chairs of National IYPE Committees.

Pretoria: 18-19 May 2009

Communicated by Tom Beer

This meeting was organised by Sospeter Muhongo, who is Chair of the IYPE Science Programme Committee. Sospeter is also the Regional Director for the ICSU Regional Office for Africa (ROA) so that the meeting, though ostensibly about IYPE issues, actually dealt with the ROA Science Plans as well.

There are 10 Science Themes of the IYPE. Only three Theme Leaders attended: Tom Beer (Australia, Hazards Theme Leader), Frauke Kraas (Germany, Megacities Theme Leader), John Dodson (Australia, Climate Theme Leader). In addition, the Health Theme was represented by Prof. Theo Davies, and the Groundwater Theme and Deep Earth Theme sent written reports. Most of the themes are on track to prepare 'Legacy Volumes' to be published by Springer later this year.

The meeting started (Session 1) with the Science Theme presentations. These were then followed by Session 2 consisting of twelve presentations from National IYPE Committees (Botswana, Ethiopia, Lesotho, Mozambique, Namibia, South Africa, Sudan, Mauritius, Tanzania, Uganda and Zambia) reporting on progress in their countries. Given that IYPE runs from 2007-2009 (with 2008 being the Year itself) it was a slight surprise to find that some national committees were 'nominal' and were still reporting on plans to establish themselves. In general, IYPE activity, where it took place, was "Outreach" rather than "Science". South Africa, however, reported on an exciting initiative that combined the two – the African Corridors Project. More details are given in Appendix 1.

There followed two general presentations: One on YES2009, the first congress of Young Earth Scientists to be held in Beijing, 24-28 October 2009. The second general presentation was by Dr Hassina Mouri, Secretary-General of the Geological Society of Africa (GSAf).

Session 3 consisted of five updates on ROA Projects as follows:

Project HD01: Geo-hazards; Prof G Mulugeta (Uppsala University, Sweden)

Project HD02: Hydro-meteorological hazards and disasters Prof A Konare (University of Cocody, Cote d'Ivoire)

Project SE02: Increase in access to high quality, reliable and affordable energy in a sustainable manner: Renewable Energies-Bio-energies; Dr E Seiller (South African Bioenergies Association, South Africa)

ICSU ROA Science plans: a) Hazards and Disasters in Africa, b) Health and Human Well-being in Africa. Dr A Enow (ICSU ROA)

ICSU ROA Science plans: a) Sustainable Energy in Africa, b) Global Environmental Change (including Climate Change and Adaptation) in Africa. Dr D Nyanganyura (ICSU ROA)

Commentary and Discussion (Session 3)

Both Mulugeta and Konare are in the process of developing programs and this development follows from the ICSU ROA Science Plan for Hazards that Mulugeta chaired. Mulugeta has developed 5 projects:

1. Seismic
2. Volcanic
3. Landslides

4. Pollution and Coasts  
5. Integrated Modelling  
And Konare has developed four:

1. Drought
2. Flood
3. Fire
4. Dust

Mulugeta noted that only the seismic and volcanic projects have progressed. This seems to mean that he has identified people to do the work; namely:

- Genene Mulugeta. Chair. (Geodynamic modelling, Earth System Science).
- Christopher J.H. Hartnady. (Seismology, modelling)
- Samuel Ayonghe. (Volcanicity, remote sensing)
- Effiom Edem Antia. (Oceanography, Env. Pollution)
- Kifle Woldearegy. (Land slides)
- Andrzej Kijko. (Seismology, mining)
- Ray Durrheim.(Seismology).

Given how difficult it is to achieve things in Africa, I am impressed with how much Sospeter Muhungo and Genene Mulugeta have accomplished. Even simple tasks have a high degree of difficulty when undertaken in sub-Saharan Africa.

#### Session 4

Session 4 consisted of a plenary discussion on whether the African IYPE initiative should be continued and, if so, how. This has been summarised by the Chair as follows:

1. **Decision:** Africa will continue with the activities of the Year (i.e., the 10 broad themes – Science, Outreach & Fundraising). This is partly because many of the African NCs have just begun to be active and hence they will find themselves having unfinished tasks at the end of the Year. They propose to continue beyond 2009, more specifically, 2009-2012.
2. **Decision:** Africa will embark on the mega project initiated by Prof Maarten de Wit and Dr John Anderson (South Africa), on "Africa Alive Corridors."
3. **Decision:** Africa's IYPE NCs should operate under the tutelage of Africa's Ministries responsible for S&T and/or any other national umbrella that is found to be suitable to the country in question.
4. **Decision:** A Regional (Africa) coordinating body/committee should be in place and that this body will be composed of representatives from the 5 sub-regions of Africa (preferably, of NC Chairs) and a representative from the Geological Society of Africa. They will select their own Chair
5. **Suggestion:** IYPE NCs should be named as National Committees of Planet Earth.
6. **Suggestion:** A request has to be sent to Germany requesting to use the IYPE logo beyond 2009.
7. **Suggestion:** A global coordinating body/committee should be in place, composed of representatives from all the continents active in post IYPE activities. Each continent will have 2 representatives on this committee.

#### Discussion

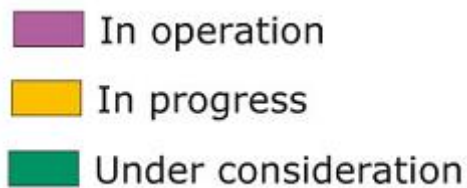
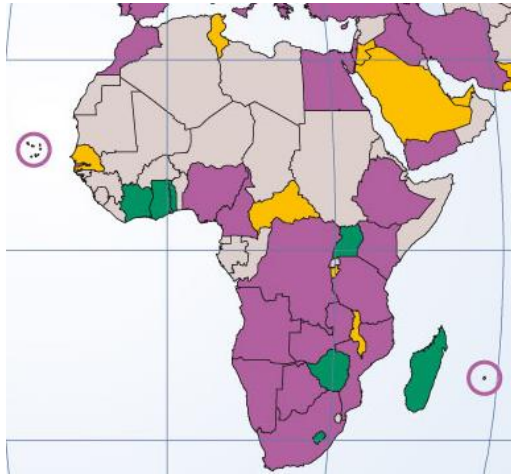


Figure 1 – Map of African National IYPE Committees as at 1 March 2009

The official map of African IYPE Committees indicates a strong presence in Southern Africa (including Mauritius). It was thus appropriate that the meeting was arranged in South Africa and attended predominantly by Southern Africans. Though some committees have been active in Outreach (Tanzania, Ethiopia, Namibia, South Africa, Mauritius) it was disappointing to discover that the committees in Mozambique, Sudan, and Uganda should have been marked in yellow (in progress) in Figure 1 rather than in purple (in operation).

The difficulties in undertaking Science (or Outreach) in Africa were illustrated by some of the reports. Though the Mauritius Committee is active, formal permission for its existence has not yet been received from the Government. Botswana had been sent US\$4,500 from the UNESCO Office in Zimbabwe but has been unable to locate the funds. Political instability in Zambia disrupted activities – but also meant that the Chair of the National Committee became the President of the Republic.

Appendix 1

Africa Alive Corridors  
An initiative of  
**Africa Earth Observatory Network (AEON)**  
*Geological Sciences, University of Cape Town, Rondebosch 7701, South Africa*

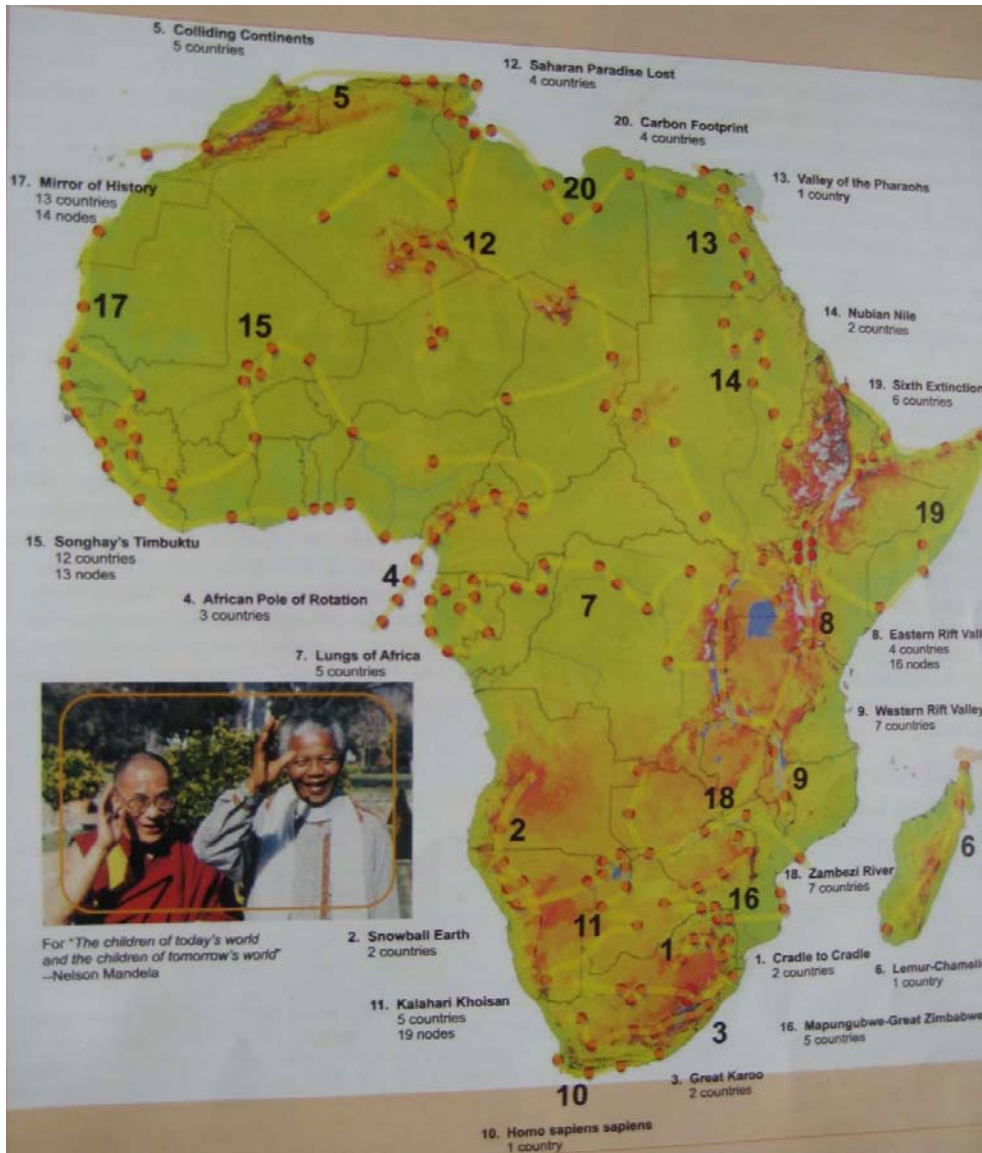


Fig. A1: 20 African “corridors” have been identified as sites of significant geoscientific, historical and/or cultural significance.

The African Corridors Project identifies African sites, with Corridor 1 being the oldest, and Corridor 20 the most recent. The aim is to undertake geoscientific, historical and/or cultural studies at each of the sites.