

Intra-African Cooperation in Chemical Sciences: The experiences of NABSA and some lessons

Berhanu M. Abegaz, Coordinator,
NABSA

<http://www.nabsaonline.org>

Outline

- Introduction
- Analytical services to African Scientists
- Research training
- Research cooperation
 - Regional
 - Medical Research Council – Cape Town
 - University of Pretoria
 - International
 - CESRIKI Program – Botswana – Madagascar – Zimbabwe – OSU and RU (USA)
 - GIBEX program
- Conclusions

Introduction

- Founded in 1992 in Gaborone, during the 5th ICCA
- Signatories
 - Thomas Odihambo – ICIPE, Kenya
 - Shem Wandiga UoN, Nairobi
 - Berhanu M. Abegaz, AAU, Ethiopia
 - David Key, UZ, Zimbabwe
 - Negussie Retta, AAU, Ethiopia
 - Walter Benson, IOCD, USA

Objectives of NABSA

- To promote the development of scientific activities in Africa by offering analytical, bioassay and CD-ROM literature support services.
- To cooperate with active scientists in a joint short-term intensive-research undertaking by inviting them to the reasonably well equipped laboratory in Botswana.
- To promote the professional development of young scientists by arranging sub-regional symposia

NABSA Officers

● In the University of Botswana

- Prof. Berhanu M. Abegaz - Coordinator
 - Dr. Merhatibeb Bezabih - NMR services
 - Prof. Mathew N. Nindi - Mass Spectral services
 - Mr. Edgar Mfosi - Admin/research assistant
-

● External

- Prof. J. O. Midiwo - Nairobi
- Prof. Ermias Dagne - Addis Ababa
- Prof. P. Rasoanivo - Madagascar

Analytical Services to African Scientists

- Lack of Equipment is a major constraint in Africa
- UB's willingness to share facilities

Analytical services to African Scientists

● Type of services

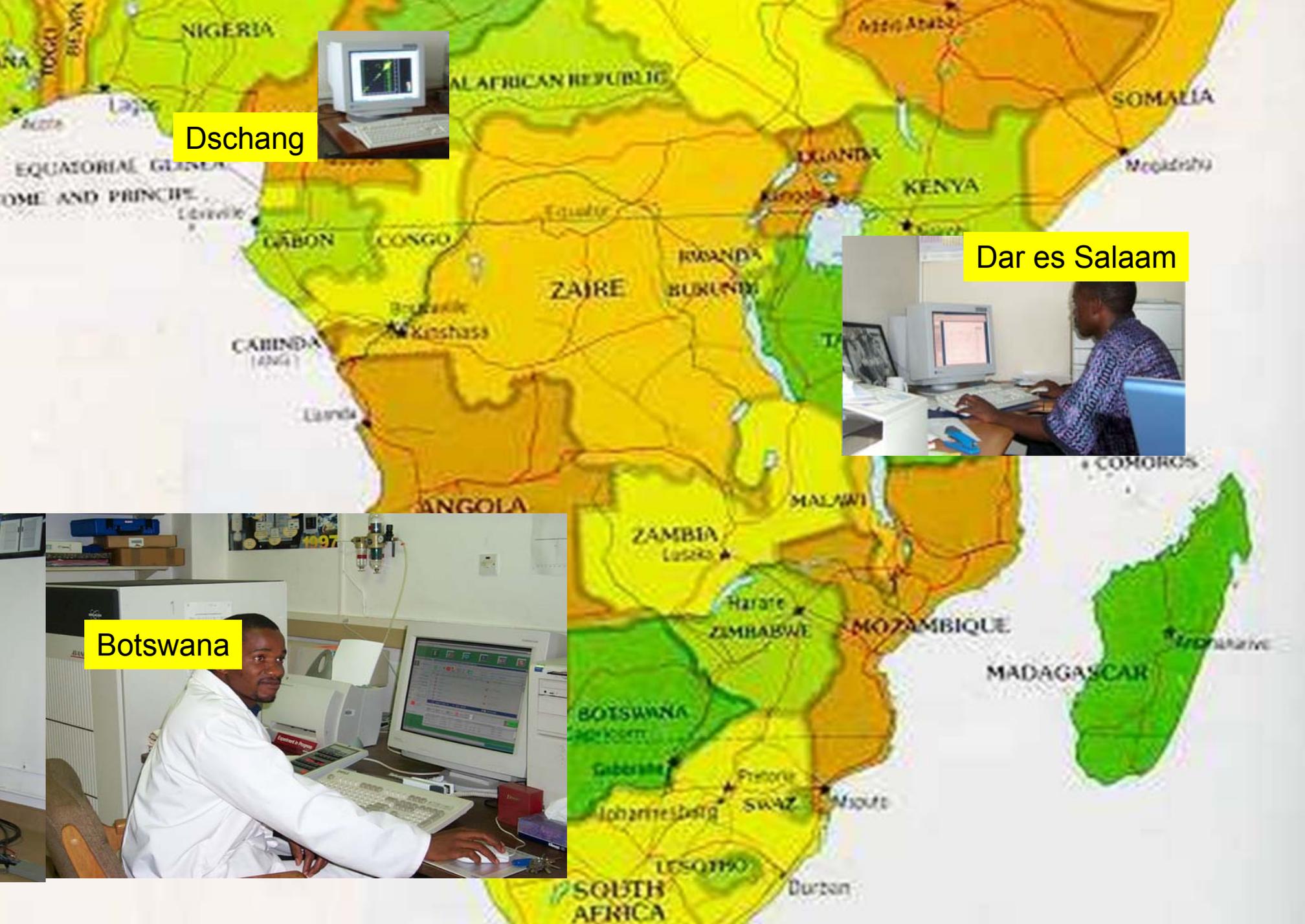
➤ Spectroscopic services

- ✓ Nuclear Magnetic Resonance (NMR)
- ✓ Mass Spectrometric Services

➤ Biological assays

- ✓ Antiplasmodial and antimalarial assays
- ✓ Mosquito larvicidal assays
- ✓ DDT resistance reversal
- ✓ Chloroquine reversal assays

● Literature



Dschang



Dar es Salaam



Botswana



NABSA Service Recipient Countries

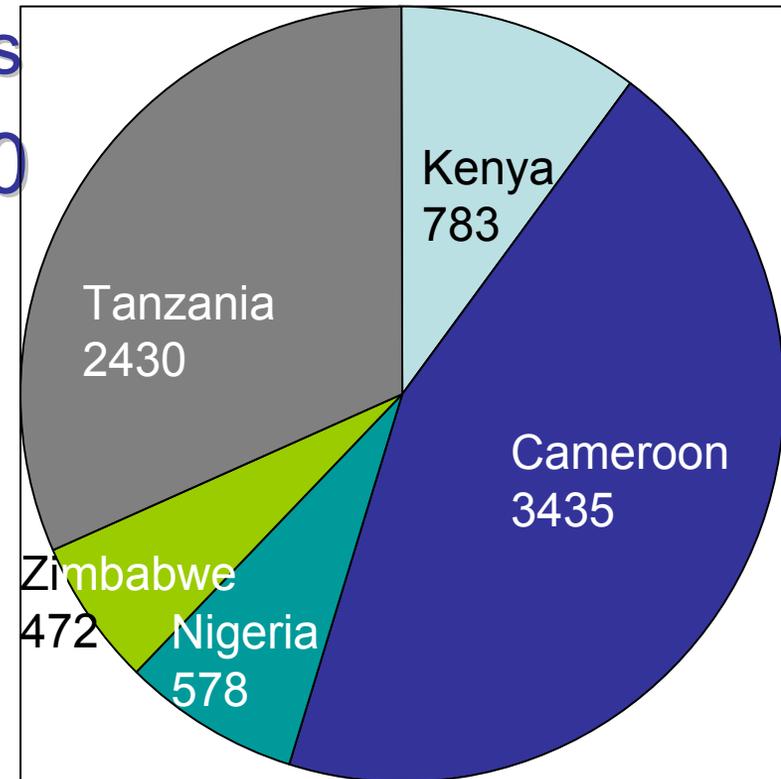
8300 NMR AND
1741 MASS SPECTRA
OFFERED TO
12 COUNTRIES DURING
2000-2006



NMR services during 2000-2006

- Five out of 12 countries received 92% (7698) services
- Total for the period was 8300

Country	Joint publications
Cameroon	35
Zimbabwe	4
Nigeria	2
Kenya	0
Tanzania	0



Research training

- E. Dongo -Cameroon
- B. Ngameni -Cameroon
- H. Camden -Cameroon
- M. Tscheuendem
-Cameroon
- S. Kouam -Cameroon
- T. Idowu -Ile-Ife
- S. Famuyiwa -Ile-Ife
- T. Kazembi -Zimbabwe
- A.Ahmed -Sudan

Country	# of PhDs
Cameroon	5
Nigeria	2
Zimbabwe	1
Tanzania	several
Others	?

Research cooperation

● Regional

- Medical Research Council – Cape Town – Malaria project
- University of Pretoria – Weeds project

● International

- cesrIKi Program – Botswana – Madagascar – Zimbabwe – OSU and RU (USA) – Malaria project
- GIBEX program – Trypanosomiasis project

Intra-African Research cooperation with other African Scientists



Prof P. Rasoanivo

Cape town
Dr. G. Matsabisa

Conclusions

- Networks can be cost-effective and efficient.
- Networks are viable mechanisms to enhance higher education
- NABSA success is attributed to the fact that it is driven by active scientists.
- NABSA has learned the advantages of shared benefits from collaborative research.

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