

**Report on
Individual and Institutional Capacity Building in Taxonomy and Collection Management**

as provided by the

**Belgian Focal Point to the Global Taxonomy Initiative
Royal Belgian Institute of Natural Sciences – Rue Vautier 29 – 1000 BRUSSELS - Belgium**

1. Coordinates trainee

Name: Bernard Agwanda

Country: Kenya

Date of arrival and departure in / from Belgium: Arrival 5th March; Departure 26th March

Number of training days: 20 days

Location of training (e.g. RBINS, RMCA, RBG, ...): RBINS & Antwerp University

Taxon for which training was received: Rodents

2. General Information

Describe concisely how you have learned about the Belgian GTI Project. Through EAFRINET updates

Describe concisely why you needed capacity building in taxonomy and collection management. Because I'm entrusted with mammal collections in my Museum (National Museums of Kenya) but I lack technical capacity to curate them. Am also employed to conserve mammals and to do research on mammals as well as to advise the country on conservation issues. I'm however unable to effectively provide adequate advice to the public and government on mammals especially small size but numerous ones such as rodent group, because of lack of taxonomic skills.

Describe concisely what training you have received and how this training can be related to taxonomy and /or curation.

The training I received include:

1. Global taxonomy Initiative and Belgian Focal point in perspective: set up networks
2. General biodiversity, its pattern and conservation: levels of biodiversity; assessment/measuring biodiversity
3. Taxonomy: approaches
4. Nomenclature: rules and guidelines
5. Databasing: tools and management
6. Global Conventions relating to the environmental conservation

Describe concisely how your gained capacity will help you in your professional duties.

I will be able to manage natural history collection better. For instance I now understand the important value of type series specimens, which must be well preserved and labelled. One important thing I learnt is molecular analysis for taxonomy. Am now able to extract, purify DNA and perform PCR. I'm able to analyze the sequences for Phylogenetic and taxonomic studies

Describe concisely how your gained capacity will be implemented in your institution.

I must state that am already at home and I have received DNA sequences my colleagues wants me to analyze for them: thanks to Dr. Erik Verheyen for training me on this. Am giving a seminar for my staffmates on my taxonomy and general principles(dissemination of the acquired skills. Curation of rodent collection will have to a process. I will mobilise my staff mates in the mammals department to identify type series specimen. Each time we get to type localities we will make careful collections and seek to determine identities.

Certainly I will introduce in my department the culture of:

1. preserving a tissue for DNA analysis for each specimen especially from type locality
2. preserve wet collection specimens in pocketed poly-bags put in jars filled with ethanol(as in Tervuren museum)
3. Put unique labels on type specimens and regulate use on them to avoid deterioration arising from frequent handling

Did the received training come to terms with your taxonomic and / or curatorial needs? Yes though time was too short to complete some important aspects e.g biometric techniques

Describe concisely if you or your institution need other training. Certainly I cannot be an expert in taxonomy just after a 3-week training. I therefore need further training! This may need intensive practical work samples and extensive continuous interaction with my trainers, possibly through a joint research. My institution bosses (management) also need training on collection management and value so that they can place adequate priority and efforts.

Describe concisely what infrastructural (e.g. lab material, library,) and human resources your institution already has. My institution has in place, molecular lab with average equipment for DNA analysis, especially extraction and purification. What lacks are storage equipments and Sequencer. We have a basic library but needs internet connection and supply of journals

Describe in detail what other infrastructural resources you or your institution need to become fully operational. Completion of equipping the lab: acquiring PCR machine, cooling equipment, microscopes for karyotyping and craniometry

Describe how you think the Belgian Focal Point to the GTI can further construct capacity for you or your institution. I think an exchange program where Belgian GTI experts visit our institution to help in train and advise, and our staffs visit Belgium could be one of the best way. This could help us on identifying priorities and learning from their examples. The other important way will be for the Belgium GTI to help in fundraising to acquire taxonomic research equipment and training. This could be in proposal writing and identification of funding agencies.

THIS QUESTIONNAIRE MUST BE SUBMITTED ELECTRONICALLY (OR BY FAX) WITHIN ONE MONTH AFTER THE OFFICIAL CLOSURE OF THE TRAINING.

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