

Partnerships for the Global Taxonomy Initiative

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Introduction

Since its inception in 1993, BioNET-INTERNATIONAL (hereafter BioNET) has been dedicated to promoting taxonomy to meet sustainable development and conservation needs, particularly in less industrialised countries. Recognising the urgency and variety of taxonomic needs, BioNET supports the meeting of locally defined taxonomic priorities via capacity building, technology transfer and technical partnerships amongst taxonomists and between the taxonomic sector and other users of taxonomy.

BioNET has aligned its programme to support the Global Taxonomy Initiative (GTI), in particular the GTI work programme adopted in 2002 in decision VI/8, the importance of which was recognised in the Plan of Implementation agreed at the 2002 World Summit on Sustainable Development. While the GTI provides the context for taxonomic work in support of the Convention, BioNET recognises that other high-level developments since 2002 also have significant implications for the taxonomic sector. Taxonomic expertise, resources, research, information and services are vitally important for meeting the 2010 biodiversity target and a number of the Millennium Development Goals (Table 1).

Successes of the partnership approach

BioNET's support to Parties in implementing the GTI programme of work has included successes in each area of the programme where the potential of BioNET is recognised: needs assessments, awareness raising, regional cooperation and the coordination and delivery of capacity building. Underpinning BioNET's contributions to the GTI are its affiliated sub-regional Locally Owned and Operated Partnerships (LOOPs), comprising institutions and individuals in government-endorsed partnerships that implement donor and government-supported activities, providing a cost-effective mechanism for meeting user needs by building, strengthening and sharing taxonomic resources regionally.

Strengthening regional partnerships. Significant progress has been made with establishing five more LOOPs since 2002. Of these five, three LOOPs have been formally established with governmental endorsements – ANDINONET (Andean countries), EASIANET (East Asia) and NAFRINET (North Africa) – bringing the total to nine LOOPs established since 1993. The governments of two further sub-regions –

South Asia and Mesoamerica - are formally considering LOOP establishment. Each of the five recently initiated LOOPS have been specifically designed to meet CBD and GTI needs. National GTI and / or CBD focal points have had leading roles in designing the LOOP strategies and work programmes.

Needs assessments. BioNET has contributed to the assessment of taxonomic priorities and capabilities at the national, regional and global levels. While not equivalent to a detailed assessment of needs of the many users of taxonomy, the establishment of each LOOP involves the presentation and regional synthesis of national statements on taxonomic priorities. Once established, LOOPS provide a mechanism to deliver assessments of the taxonomic needs of particular users. In examples of a user-needs assessed at the regional scale, BioNET-ASEANET and Australian partners undertook and published in 2002 assessments of the taxonomic needs of Southeast Asia in relation to Plant Pathogenic Organisms and Arthropod Pests. Globally, BioNET's Third Global Taxonomy Workshop (2002), organised in collaboration with the CBD Secretariat, UNESCO and the Secretariat of the International Plant Protection Convention, included presentations on user needs in taxonomy from leading organisations in the conservation, agriculture and trade sectors.

Building taxonomic capacity. Recent coordination and implementation of capacity building activities has included: (a) providing fellowships and arranging short-term training (e.g. for an East African insect curator) and doctorate studies (e.g. a West African biocontrol expert and East Asian mycologist); (b) organizing and delivering technology transfer workshops in Southeast Asia and Southern Africa on the use of new technologies and tools, e.g. Lucid keys and Discover Life guides; (c) establishing a group to further the conservation, study and sustainable use of palms of the Andean countries; (d) delivering a short course to public health entomologists from the Andean countries in the taxonomy and identification of problem insect groups and (e) establishing and organising technical support for a pest and invasive species alert, advice and information service in the Caribbean.

Public awareness, communication and networking. BioNET published in 2004 a series of case studies – Why Taxonomy Matters - that illustrate the societal and economic impacts of taxonomy across many sectors. In a special focus on the critical role of taxonomy in preventing, controlling and mitigating the impact of invasive alien species, BioNET also published a set of case studies - Taxonomy targeting invasives - in collaboration with the Global Invasive Species Programme and the Invasive Species Specialist Group of IUCN, the World Conservation Union. BioNET's monthly electronic bulletin and website serves as a popular mechanism for dissemination and exchange of information, news and announcements relevant to the GTI, including information on training courses, funding opportunities and relevant strategic initiatives.

Constraints

Despite the achievements of many actors, the taxonomic needs of the GTI, 2010 target and MDG remain significant. LOOP establishment, capacity building and other BioNET achievements demonstrate a proof-of-concept of the BioNET model, i.e.

taxonomic institutions / technology providers / technical partners / end-users / funders working in partnership to meet national taxonomic needs through capacity building and cooperation regionally and internationally. With committed partners, the sharing of taxonomic resources, expertise and information across borders is both possible and practical. Fuller realisation of BioNET's potential to support the GTI is constrained by the need for new and continuing resources and capacity to strengthen our existing regional networks (GTI Planned activity 6, decision VI/8). The 2004 External Review of BioNET, led by leading experts in biodiversity and the Convention and commissioned by the Swiss Agency for Development and Cooperation, emphasised this need and the potential to realise significant further benefits from the previous investments in BioNET.

Conclusion

Assessing its position and the needs of the GTI, BioNET has re-focused its programme with the aim of addressing the acute and continuing need of the taxonomic sector, particularly in less industrialised countries, for project development support and empowerment. With a large Global Network of LOOPs in place and with extensive global level partnerships and recognition, BioNET will strive to further mobilise its partnership in support of the GTI.

**Table 1 –
Linkages between taxonomy and the Millennium Development Goals**

Development Goals		Value of Taxonomy
Goal 1: eradicate extreme poverty and hunger	1.1	Agriculture, forestry, fisheries and horticulture need the taxonomic sector and its products. Many different organisms have beneficial roles e.g. in soil fertility and pollination; others are pests that decrease productivity. The taxonomic sector provides the basis for knowing and hence better managing species that can enhance or protect productivity.
	1.2	Taxonomists are the first line of defence, providing expertise needed to maximize productivity, ensure ecological sustainability and minimize production losses. Crop pest management is of particular importance due to continuing high losses to production, and resulting food shortages, increased poverty and malnutrition.
Goal 6: Combat HIV/AIDS, malaria & other diseases [and indirectly Goal 4: reduce child mortality; Goal 5: improve maternal health]	6.1	Having the capacity to identify, understand disease vectors and reservoirs is increasingly important and is central to attempts to reduce the frequency of outbreaks of human and animal illness that result from the greater mobility of diseases and pests globally.
	6.2	Taxonomy is key to: <ul style="list-style-type: none"> ❑ The identification of pathogens that cause infectious diseases ❑ Understanding and curbing disease-causing and carrying vectors. ❑ Identifying taxa with medicinal properties.
Goal 7: Ensure environmental sustainability	7.1	Taxonomy is central to the aims of the Convention on Biological Diversity (CBD). Taxonomists underpin biodiversity monitoring and use. They contribute to conservation strategies by identifying areas of high species diversity; listing species under threat of extinction, identify species that may be of value (or harmful) to mankind and improving understanding of ecosystem function.