# Global Musa Network – MusaNet

Modus Operandi Updated April 2021

### 1. Background

The safeguard of *Musa* diversity and the maximum use of its potential are slowed down by a lack of global collaboration in sharing of resources, exchange of technologies and information. Its long-term security requires the mobilization of all stakeholders to ensure a more efficient and effective global system of conservation and use.

The Global *Musa* Network (MusaNet) was established in 2011 as a global collaborative framework for *Musa* diversity and a partnership of all key stakeholders, aiming at ensuring the long-term conservation on a cooperative basis, and facilitating the increased utilization of *Musa* diversity globally.

# 2. MusaNet Goal, Purpose and Objectives

# Vision for MusaNet:

A world, in which *Musa* diversity is secured, valued and used to support livelihoods through sustainable production.

Goal:

To build upon existing strengths in the global, regional and national collections by bringing people to optimize the effort to conserve, add value and promote the use and safe distribution of a wide range of *Musa* diversity as the foundation for further breeding or direct use by farmers.

#### Purpose:

To provide a collaborative framework to support the implementation of the Global Strategy for the Conservation and Use of *Musa* Genetic Resources.

# Objectives:

- Ensure the secured conservation of the entire *Musa* genepool by assessing the diversity conserved and filling gaps, with an emphasis on threatened material.
- Strengthen the capacity of partners for the cost-effective long-term conservation and management of germplasm collections and facilitate access to useful *Musa* diversity in improvement programmes and by other users.
- Enhance the value of *Musa* diversity for breeding, through effective collaborative characterization, evaluation and pre-breeding efforts.
- Raise awareness with key partners on the importance of *Musa* diversity conservation, documentation, exchange and sharing the benefits arising from their use.
- Set priorities for research, breeding, and use of *Musa* diversity, ensuring critical links with the Regional Networks.

#### 3. MusaNet Membership and Structure

MusaNet welcomes members from a wide range of *Musa* research interests. Membership is on an expertise basis and not on institutional or country representation basis. The strategic framework of MusaNet is provided by the Global Strategy for the Conservation and Use of *Musa* Genetic Resources. The networking structure of MusaNet consists of a Coordinating Secretariat, an Expert Committee and 7 Thematic Groups in which experts discuss and propose solutions on critical thematic areas of *Musa* 

research. Critical links with the 3 Regional Research Networks are ensured with representation in the Expert Committee.

### Global Strategy for the Conservation and Use of Musa Genetic Resources

A Global Strategy for the Conservation of *Musa* Genetic Resources was developed in 2005 with the involvement of national, regional and international partners with the aim to bring urgent and critical assistance to unique germplasm and ensure their sustainable long-term conservation for use. The Global Strategy sets priorities and engages partners and users and facilitates the sharing of knowledge between researchers and end-users. Stakeholders, including donors, partners, and beneficiaries, have provided extensive input into the development of the strategy. Donors such at The Global Crop Diversity Trust uses the strategy to guide the allocation of funds to priority activities identified in the strategy.

Following on from the first meeting of MusaNet in March 2011, the Global Strategy was extensively updated in 2016. The Strategy provides a framework and roadmap to be used by the *Musa* community for the efficient and effective conservation of the globally important collections of *Musa* and to strengthen the utilization of the genetic resources. It covers numerous topics, with 12 chapters divided into four main parts: Diversity, Identity, Management and Use. Each chapter contains the three sections: *Where we are, Where do we want to go,* and *How will we get there*.

MusaNet provides the mechanism to ensure the efficient coordination and implementation of the Global Strategy and stimulate the involvement of partners.

Link to the Global Musa Strategy

#### MusaNet Expert Committee

To facilitate the functioning of MusaNet, an Expert Committee and a Coordinating Secretariat were nominated. The Expert Committee is composed of the following members:

- The MusaNet coordinator and assistant coordinator
- The 14 Co-chairs of the 7 Thematic Groups (2 per Thematic Group)
- A coordinator and representative of each of the 3 Regional Networks: Asia and the Pacific (BAPNET), Africa (MusAfrica) and Latin America and the Caribbean (MUSALAC)

Currently the scientists composing the Expert Committee are:

<u>Secretariat</u>	
Nicolas Roux	MusaNet Coordinator
Rachel Chase	Assistant Coordinator

#### Thematic Group Co-Chairs

John Thomas	Co-Chair, Conservation Thematic Group
Ines van den Houwe	Co-Chair, Conservation Thematic Group
Jeff Daniells	Co-Chair, Diversity Thematic Group
Julie Sardos	Co-Chair, Diversity Thematic Group
Sebastien Carpentier	Co-Chair, Evaluation and Use Thematic Group
Kodjo Tomekpe	Co-Chair, Evaluation and Use Thematic Group
Angelique D'Hont	Co-Chair, Genomics Thematic Group
Mathieu Rouard	Co-Chair, Genomics Thematic Group
Max Ruas	Co-Chair, Information and Documentation Thematic Group
Lavernee Gueco	Co-Chair, Information and Documentation Thematic Group

Danny Coyne	Co-Chair, Production Systems Thematic Group
Guy Blomme	Co-Chair, Production Systems Thematic Group
Pricilla Marimo	Co-Chair, Value Chain Thematic Group
Gerard Ngoh Newilah	Co-Chair, Value Chain Thematic Group

**Regional representatives** 

Sijun Zheng	Regional Coordinator for Asia and the Pacific
Uma Subbarya	Regional Representative for Asia and the Pacific
Beatrice Ekesa	Regional Coordinator for Africa
Aman Omondi	Regional Representative for Africa
Miguel Dita	Regional Coordinator for Latin America and the Caribbean
Jorge Sandoval	Regional Representative for Latin America and the Caribbean

The role of the Expert Committee is:

- To guide the overall planning of MusaNet priorities and activities supporting the implementation of the Global *Musa* Strategy.
- To review workplans and membership across the Thematic Groups, to ensure complementarities and good synergies with other networks and initiatives.
- To provide overall technical and policy guidance to the operations of MusaNet.
- To evaluate and approve new candidatures based on their willingness but also their motivation and commitment to MusaNet.
- To review progress made by the Thematic Groups and takes decisions regarding their general scope and the establishment or modify the terms of references of Thematic Groups if necessary.
- To approve and provide guidelines for *ad hoc* activities and project proposal.
- To assist the Secretariat to seek funding for collaborative activities.
- To raise public awareness about MusaNet and its activities.
- To help establish the rules of MusaNet (*Modus Operandi*)

#### Coordination Secretariat

The Expert Committee will be chaired by the MusaNet coordinator and assistant coordinator. The Alliance-Bioversity International-CIAT operates a small Secretariat for the overall coordination of MusaNet, with the following responsibilities:

- 1. Provide support to Thematic Groups and Expert Committee to ensure that agreed workplans are carried out.
- 2. Facilitate communication through the MusaNet website and email list server for each Thematic Group and Expert Committee.
- 3. Gather and distribute information and provide progress reports on a regular basis
- 4. Initiate *ad hoc* activities in accordance with Expert Committee's guidance
- 5. Organizing Thematic Group and Expert Committee meetings
- 6. Raise public awareness about MusaNet, its goal and activities

#### Additional role of the Alliance Bioversity International-CIAT

The Alliance Bioversity International-CIAT will also contribute to MusaNet with the following:

- Provide scientific and technical advice on issues discussed and debated in the Thematic Groups and Expert Committee.
- Provide information of genetic resources through the management of the *Musa* Germplasm Information System (MGIS).

- Contribute to the global system by ensuring the cost-effective long-term conservation and management of the global collection of *Musa* genetic resources held in trust in the global public domain at the International Transit Centre (ITC).
- Processing germplasm for virus pre-indexing; therapy; indexing and genetic integrity monitoring via ITC.
- Contribute to scientific publications.

# MusaNet Thematic Groups

MusaNet is composed of seven Thematic Groups focusing activities in the following thematic areas:

- Thematic Group 1: Conservation and Safe Exchange of Germplasm
- Thematic Group 2: Genetic Diversity Taxonomy and Characterization
- Thematic Group 3: Germplasm Evaluation and Use
- Thematic Group 4: Genomics
- Thematic Group 5: Germplasm Information and Documentation
- Thematic Group 6: Production Systems
- Thematic Group 7: Value Chain (marketing and nutrition)

The role of the Thematic Groups is:

- To agree on priorities for collective actions in the thematic area
- To develop workplans with agreed tasks, milestones, real measurable indicators, responsibilities and timeframes
- To formulate project proposals for collaborative activities
- To develop products/knowledge/tools
- To assist the Secretariat and the Expert Committee in looking for donors to support particular elements of workplans and ad hoc activities
- To contribute to raising public awareness about MusaNet and its activities.

# Composition of the MusaNet Thematic Groups

The Thematic Groups are intended to have between 15 to 25 members proposed on an expertise basis. Each Thematic Group elects two co-chairs. One of the co-chairs must be Alliance Staff in order to ensure the sustainable coordination of the network. Membership including co-chairing will be reviewed annually based on changes and the need to bring in additional members. In case of resignation of a co-chair, the Secretariat, together with the other co-chair, will coordinate a Thematic Group's consultation to elect a new co-chair. Members should, as much as possible, bring in a complementary expertise and should ensure a balanced regional and institutional representation. Members should have clear understanding of the commitment the participation entails in supporting the activities of the group.

# The role of the co-chairs of each of the Thematic Group is:

- 1. To oversee the development and implementation of the Thematic Group's workplan.
- 2. To encourage involvement of all members in the Thematic Group's initiatives.
- 3. To propose, in agreement with Thematic Group members, new memberships, new ideas and project proposals to the expert committee.
- 4. To be proactive in proposing activities, following priorities indicated in the Global Strategy and proposed by the Expert Committee.
- 5. To communicate regularly with the Thematic Group members on key issues for feedback and on progress of activities in the workplan.

- 6. To attend the regular Expert Committee meetings (at least one co-chair per Thematic Group should attend to be organised between the co-chairs).
- 7. To organise conference calls with the Thematic Group's members when necessary to discuss specific issues.
- 8. To support special MusaNet meetings (on a needs basis) by developing the agenda in consultation with the Secretariat and the Group members.

NB: The Alliance staff co-chair will take on the majority of responsibilities outlined above, helped by the non-Alliance staff co-chair.

# Regional Networks

The three Regional Networks (Asia and the Pacific (BAPNET), Africa (MusAfrica) and Latin America and the Caribbean (MusaLAC)) play a crucial role in the implementation of the Global *Musa* Strategy and to be sure that the activities respond to regional research priorities. To ensure full participation of Regional Networks in MusaNet, two members of each network are represented in the Expert Committee: a Regional Coordinator (Alliance staff) and a Regional Representative (elected by the regional network). Members of Regional Networks are also encouraged to participate in Thematic Groups based on expertise and to ensure a good regional coverage and representation.

# The role of the Regional Network Coordinator and Representative is:

1. To attend the Expert Committee meetings and inform the EC on the activities and needs of their region

3. To help in prioritizing expressed overall needs in the region by holding regular meetings with the country members of the regional network

4. To share information with the regional network members including the seven themes: germplasm conservation, diversity characterization, germplasm evaluation and use, information and documentation, genomics, production systems and value chains.

5. Closely coordinate and communicate with the other regional representative/coordinator.

NB: The Alliance staff Regional Coordinator will take on the majority of responsibilities outlined above, helped by the Regional Representative (who is normally elected by the regional network members).

#### Communication and meetings

Communication will be mainly carried out through regular email communication and through the MusaNet website (www.musanet.org). The secretariat will assist MusaNet, ensuring a regular exchange of information within the thematic groups, across groups and with external initiatives. MusaNet will look for opportunities to meet considering already planned meetings where a number of members are planning to attend to ensure cost-efficiencies.

#### Decision-making process

Decisions by the Expert Committee and the Thematic Groups members will be made on a majority basis. Proposal for inclusion of projects in line with the agreed Global Strategy, activities and tasks by any members of MusaNet should be first proposed to the co-chair of the related Thematic Group who will encourage discussion and decision by the members. The co-chair will then propose, project ideas or project proposals to the Expert Committee who will approve at a majority basis. It is for the Expert Committee to contact donors and not the Thematic Group members to contact them separately since that would give the donor a sense of lack of coherence/internal coordination within MusaNet.

#### Funding of activities

There are three types of activities according to funding level:

<u>A type activities:</u> Research activities that require in kind time contribution from scientists to for example develop a document (e.g. Technical Guidelines for the Safe Movement of Musa germplasm) <u>B type activities:</u> Research activities corresponding to relatively small amount to complement to finalize a project, to prepare a project or seed money to allow thematic groups to carry over a minimum set of concrete actions (e.g. workshop organization, conduct a survey or genotyping a subset of accessions)

<u>C type activities:</u> Research activities corresponding to projects submitted to a donor for its funding or responding to a call for proposals (third party funding) that are of interest to MusaNet members (e.g. BBTV project funded by BMGF).