

SEMINARS

DAY 1 SEMINAR | October 16th 2023

Joaquim Chissano Conference Center, Maputo City

8:00 - 9:00 REGISTRATION

9:00 - 9:15 INITIAL REMARKS AND PROGRAM PRESENTATION

SEMINAR PRESENTATIONS

9:20 - 9:45 | Paulino Botão & Khiusha Uaila | ASSAMBA

The current bamboo scenario in Mozambique and ASSAMBA's vision

09:50 - 10:15 | Luis Buchir | APA Maputo

The role of environmental protection areas in the development of communities

10:20 - 10:45 | COFFEE BREAK

10:50 - 11:15 | Fred Hornaday | Bambu Batu & Planboo

Bamboo and Carbon Credits through Biochar Production and Agroforestry

11:20 - 11:55 | Elsard de Boer | Harmonergy Lda

Land Regeneration: Assessing impact and fostering constructive development

12:00 - 12:25 | Panel Discussion

Bamboo as a tool for environmental protection and regeneration

12:30 - 13:55 | LUNCH

14:00 - 14:25 | IOM representative

Presentation title to be confirmed

14:30 - 14:55 | Luis Gama & Manuel Saporto | AsIB

Bamboo: bridging Europe with Africa

15:00 - 15:25 | Panel Discussion

Bamboo as a catalyst for cross-corder connections and knowledge exchange(?)

15:30 - 15:55 | COFFE BREAK

16:00 - 16:25 | Natalia Reategui | Forest Engineer

Bamboo shoots as complementary food for a healthy household

16:30 - 16:55 | Eva Samalea | MANA Bamboo

Potential of bamboo in humanitarian crisis and sustainable development

17:00 - 17:25 | Juan Ignacio (Nacho) Martinez | UN HABITAT

The use of bamboo and other traditional building materials in the construction of schools, housing and other infrastructure in Mozambique

17:30 - 17:55 | Panel Discussion

Bamboo's multifaceted role in supporting sustainable living and development

18:00 - 18:15 | FINAL REMARKS

DAY 2 SEMINAR | October 21st 2023

Kaya Kweku Conference Room, Ponta do Ouro

10:00 - 12:30 WORKSHOPS RESULTS EXHIBITION & NETWORKING

12:30 - 14:00 LUNCH

SEMINAR PRESENTATION

14:00 - 15:00 | Jaime Peña | Arquitectura Mixta

Architecture and universal geometry: experiences with Bamboo

15:00 - 16:00 | Esperança Chamba | ASSAMBA

To be confirmed

16:00 - 18:00 WORKSHOPS RESULTS EXHIBITION & NETWORKING

COURSES

Location | Theory modules: Kaya Kweru Resort, Ponta do Ouro | Practical Modules: to be confirmed, Ponta do Ouro

Understanding Carbon Credits & Biocharcoal Production

LECTURERS

- Fred Hornaday

COURSE OVERVIEW

- **Theory module | October 17th | 9h-12h**
 1. Biochar terminology; definition of biochar; how it differs from charcoal
 2. Types of biochar – raw, enhanced, activated
 3. Biochar applications
 4. Production methods (SoilPit, Drums, Kon-Tiki); Costs and benefits of each
 5. Packaging and storage
 6. Analysis of bulk density and composition
 7. Introduction to Carbon Accounting & Emissions Trading
- **Practical Module | October 17th | 14h-18h**
 8. Personal protective equipment
 9. Bamboo Preparation for Biocharcoal Production
 10. Bamboo production Kon-Tiki method
 11. Operational risks;
 12. Packaging & storage;
 13. Demonstration of flame-cap kiln.

RECOMMENDED CLOTHING AND PERSONAL PROTECTIVE EQUIPMENT

- Sunhat
- Sunglasses;
- Long-sleeved cotton trousers and shirt (NOT polyester)
- Cotton or leather gloves
- Sturdy closed shoes

Growing and managing bamboo & Bamboo shoots in the diet

LECTURERS

- Paulino Botão
- Esperança Chamba
- Natalia Reategui

COURSE OVERVIEW

- **Theory module | October 18th | 9h-10h**
 1. Bamboo anatomy and morphology
 2. Optimal species for obtaining bamboo shoots
 3. Nutritional value of bamboo shoots
 4. Introduction to silviculture for obtaining bamboo shoots
- **Practical Module 1: Silviculture and harvest | October 18th | 10h-11h**
 5. Management of bamboo clusters pre-shooting season.
 6. Harvesting rate of bamboo clusters for bamboo shoots
 7. Harvest techniques.
 8. How to maintain a healthy bamboo cluster
- **Practical Module 2: Processing and preparation | October 18th | 11h-12h**
 9. Bamboo shoot peeling
 10. Different uses for each part
 11. Cooking
- **Practical Module 3: ASSAMBA's farm | October 18th | 16h-18h**
 12. Nursery visit
 13. Bamboo propagation techniques: seedlings and seeds

RECOMMENDED CLOTHING AND PERSONAL PROTECTIVE EQUIPMENT

- Sunhat
- Sunglasses;
- Sturdy closed shoes

COURSES

Location | Theory modules: Kaya Kweru Resort, Ponta do Ouro | Practical Modules: to be confirmed, Ponta do Ouro

Manufacture of bamboo furniture and crafts

LECTURERS

- Ernesto Guambe

COURSE OVERVIEW

- **Theory module | October 19th | 10h-12h**
 1. Bamboo importance, cultivation areas and main characteristics
 2. Craftsmanship and its Socioeconomic Importance
 3. Bamboo species suitable for furniture and craftsmanship
 4. Non-toxic and environmentally friendly bamboo preservation techniques.
 5. Examples of contemporary architectural projects using bamboo
- **Practical Module | October 19th | 14h-18h**
 1. Overview of tools and equipment needed
 2. Safety precautions when working with bamboo
 3. Selecting and preparing bamboo for furniture and craftsmanship
 4. Bamboo joinery methods for furniture and craftsmanship
 5. Techniques for finishing bamboo furniture, including sanding, staining, and sealing.

MANDATORY PERSONAL PROTECTIVE EQUIPMENT

- Protective glasses
- Gloves
- Sturdy closed shoes

*Participants are responsible for bringing their own PPE

RECOMMENDED CLOTHES

- Long cotton trousers
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Building with Bamboo

LECTURERS

- Jaime Peña
- Andrade Guarda

COURSE OVERVIEW

- **Theory module 1 | October 20th | 9h-12h**
 1. The sustainability and environmental benefits of using bamboo
 2. Types and species of bamboo used in construction
 3. Selecting and preparing bamboo poles for construction
 4. Non-toxic and environmentally friendly bamboo preservation techniques.
 5. Design principles and considerations for bamboo structures
 6. Examples of contemporary architectural projects using bamboo.
- **Practical Module 1 | October 20th | 14h-18h**
 7. Overview of tools and equipment needed for bamboo construction.
 8. Safety precautions when working with bamboo.
 9. Structural properties of bamboo.
 10. Bamboo lashing, splitting, and connecting techniques.
 11. Building a small-scale model
- **Theory module 2 | October 23th | 9h-12h**
 - Selected bamboo species detailed characteristics(size, suitability, durability,etc)
 - Cultural Significance of Bamboo
 - Traditional and modern bamboo joinery methods.
- **Practical Module 2 | October 23th 14h-18h | 24th to 26th 9h to 12 and 14h to 18h**
 - Building a real size bus stop cover

MANDATORY PERSONAL PROTECTIVE EQUIPMENT

- Hardhat
- Protective glasses
- Earplugs and gloves
- Sturdy closed shoes

*Participants are responsible for bringing their own PPE

RECOMMENDED CLOTHES

- Long cotton trousers

SPEAKERS & LECTURERS BIOGRAPHIES

Fred Hornaday

US based bamboo specialist since 2006, he has travelled the world, collaborating with bamboo growers and producers on six continents. His unwavering commitment to sustainable resources has focused mainly on Africa and Latin America, where bamboo presents a promising solution for environmental and economic challenges. Bamboo's incredible potential to rejuvenate landscapes and mitigate carbon emissions fuels Fred's advocacy.

Paulino Botão:

Based in Germany, he is a Mozambican Environment and sustainable development consultant with over ten years of experience in environmental management and business development. He holds a Masters in Environmental Studies and Sustainability by ISCTE. He is co-founder and president of the Bamboo Friend Association (ASSAMBA).

Esperança Chamba

Based in Mozambique, she is a forester and environmental specialist at IIAM (Mozambique Agricultural Research Institute). She has been researching natural ecosystems for years, aiming to implement improved management systems for the sustainable use of forest resources. She is co-founder and vice-president of ASSAMBA.

Luis Buchir

He is the administrator of the Environmental Protection Area (APA Maputo), skilled in Sustainability, Strategic Planning, Research, Management, and Project Planning and with a PhD focused in Natural Resources Management and Policy from Universidade Federal do Paraná.

Natalia Reategui

Based in Germany, she is a forest engineer with more than 15 years of experience in bamboo management and research, including taxonomy, plantation, silviculture, bamboo shoot transformation, capacity building and bamboo ecology and value chains.

Jaime Peña

A Colombian architect who graduated from the University of San Buenaventura in Cali, he is the Main Creation Director at Arquitectura Mixta, a studio focused on bio-architecture with natural materials. His architectural journey revolves around establishing a harmonious connection between architecture and the natural world, aiming to create sensory-rich environments accessible to all socioeconomic and cultural backgrounds

Andrade Guarda

Mozambican bio builder with over 13 years of experience building with natural materials and vernacular techniques, such as super adobe, rammed earth, wattle & daub and construction in bamboo. He was a class monitor in several bioconstruction modules in institutions such as the Tibá Institute or Pindorama Institute in Brazil.

Luis Gama

Portuguese architect and urban planner, based in Switzerland. He is a co-founder of the Iberian Bamboo Association, a non-profit organization aims to promote the use of bamboo as a high-performance material with an excellent ecological balance in the European market

Manuel Saparotti

Co-founder of the Iberian Bamboo Association and CEO at Cool Bamboo, an enterprise that supplies products and services for sustainable tourism, promoting environmental health, wellbeing, and the concept of global responsibility.

Juan Ignacio (Nacho) Martinez

Architect and Urban Planner with 12 years of professional experience designing and implementing projects in countries in transition, with a focus on the Maghreb region and Mozambique. He specialized in disaster risk reduction architecture and community projects in post-disaster areas, implementing projects through a participatory approach in urban and rural communities in Mozambique.

Eva Samalea

Spanish architect and humanitarian that focuses her efforts bridge architecture, education, development, and humanitarian aid. She is chair of the Iberian Bamboo Association and founder of MANA Bamboo. In Mozambique, Eva served as Shelter Cluster Coordinator for the Northern Region, addressing insecurity and the influx of displaced population. Currently, Eva is the Shelter/CCCM Deputy Cluster Coordinator for the Cyclone Mocha Emergency Response in Myanmar.

Elsard de Boer

Elsard is ahead of the Harmonergy LDA, an initiative that transforms small-scale agricultural land in Mozambique, converting poor soils into fertile farms. They empower Mozambican youth by providing land and developing a proof of concept for low-budget agricultural businesses.

Khiusha Uaila

Architect and urbanist with over 9 years of experience and an MSc in Architecture, Urbanism and Climate Action. Passionate about bioconstruction, green infrastructure and participatory approaches. Founder of Xi Bassile, a startup focused on nature-based solutions for urban infrastructure with a focus on stormwater management. Co-founder and vice-president of the Direction Board of the Bamboo Friends Association.

Ernesto Guambe

Mozambican art professor and founder of the Mozambique Artisan Network Association (ARAM)

Betinho & Yamikane

Craftsmen based in Cabo Delgado