TECHNISCHE UNIVERSITÄT DRESDEN

WOODCLUSTER

National Bio-Economies based on Farm-Wood-Production:

Narrowing the East African Wood Supply Gap

East African Countries have a high demand of wood for fuelwood, construction material and diverse products. This need cannot be supplied. The ongoing deforestation by humans leads to a destruction of forests and landscapes that puts ecosystems and people's livelihoods at risk.

Wood Cluster

The **WoodCluster** project focuses on these dynamics and resulting problems. It aims to narrow the East African wood supply gap by elaborating sustainable solutions during the project time 2017-2021. The consortium is a South-South-North network with partners from Ethiopia, Tanzania, Uganda and Germany.
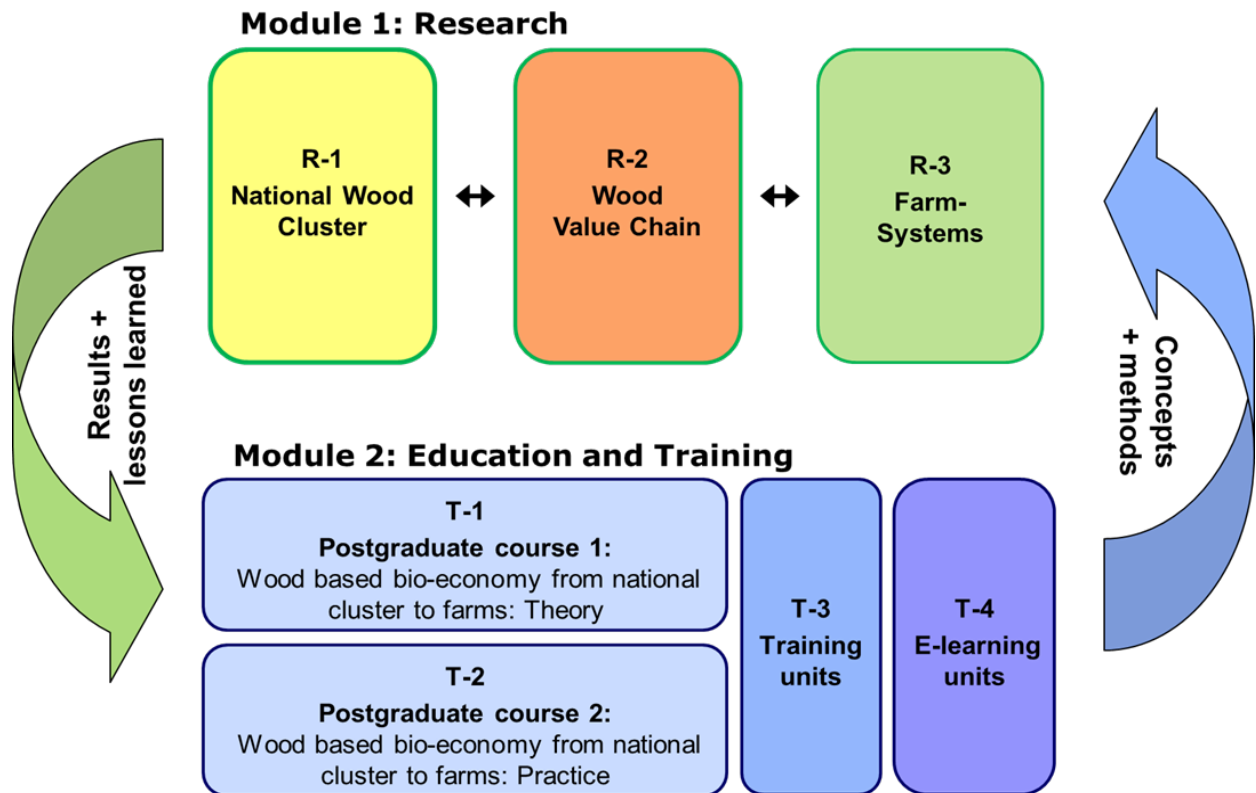
Project Region

Ethiopia
Uganda
Tanzania

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Trees on farms and wood processing in Uganda   (© E. Auch)   **Wood market and demand for construction in Ethiopia   (© M. Domke)**

Project Architecture

The project is composed of two modules, *M1 Research* and *M2 Education and Training*. They have an individual planning and funding frame, but are complementary modules. The aim is to deliver results within both fields and create additional, fruitful cooperation effects.

Module 1: Research

Results + lessons learned

| R-1 National Wood Cluster | ↔ | R-2 Wood Value Chain | ↔ | R-3 Farm-Systems |

Concepts + methods

Module 2: Education and Training

T-1 Postgraduate course 1: Wood based bio-economy from national cluster to farms: Theory

T-2 Postgraduate course 2: Wood based bio-economy from national cluster to farms: Practice

T-3 Training units

T-4 E-learning units

M1 Research

The research part covers three wood levels: national wood cluster, wood value chains, and farm wood production. R-1 comprises the *macro-level*. Actors and their linkages are described, and input-output relations between sectors documented. Future development and potentials are derived. R-2 comprises the *linkages* between national and regional level and local production units. Special focus is put on linkages with small producers and the commercialization of their products. R-3 represents the production sphere of *small farms*, with farming system and livelihood analysis.

M2 Education and Training

The teaching aims to improve education with newly elaborated *postgraduate courses* on bio-economy, theory and practice (T-1+2), that are implemented in all partner universities. Additionally, *training courses* (T-3) shall drive a capacity building through knowledge exchange between academics, decision makers and practitioners. An *e-learning course* (T-4) shall be developed based on the postrgraduate coursed and extend the teaching service of the partner universities.

Activities

Participatory methods are the core of the WoodCluster project. They built on experiences and instruments developed in previous collaboration projects. They are adjusted to the current context and developed further. For an in-depth research, a set of actors is connected during the full project period.

National Scenario Workshops

Bridging the science-policy gap through a discourse among multiple stakeholders and decision-makers from government, research and private sector. Research findings from local to the national dimensions are integrated. **WoodCluster** applies it for the diagnosis and scenario development of the wood sector at national level.

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Participatory Innovation Platforms (PIP)

Integrating multiple stakeholders in decision-making and empower local users by focusing on endogenous triggered change. **WoodCluster** applies PIPs for the diagnosis of timber value chains and possible solutions.

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Socio-Economic Field Laboratories

Participatory and flexible methods to conduct research, and induce social learning by bringing local stakeholders and academics together. **WoodCluster** applies it for the farming system and livelihood analysis. One research site per country is studied over the whole project period.

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Enhancing Teaching for Young Scientists & Practitioners

Linking research and teaching creates synergies through exchanging concepts, methods, and empirical data. **WoodCluster** integrates outcomes from student research to provide case studies for teaching and training units for students and practitioners. Annual field schools are practical teaching elements, where students collaborate with farmers.

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Participating Universities

Ethiopia

Hawassa University,
Wondo Genet College of Forestry and Natural Resources
Prof. Dr. Tsegaye Bekele

Germany

Technische Universität Dresden
Institute for International Forestry and Forest Products
Prof. Dr. Jürgen Pretzsch, Dr. Maxi Domke

Hochschule Rhein-Waal
Faculty of Life Sciences
Prof. Dr. Dietrich Darr

Tanzania

Sokoine University of Agriculture
Faculty of Forestry and Nature Conservation
Prof. Dr. Felister Mombo

Uganda

Makerere University
College of Agriculture and Environmental Sciences
Dr. Justine Namaalwa

Project team from Uganda, Germany, Tanzania and Ethiopia (© M. Domke)

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