The Department of Geosciences and Natural Resource Management (IGN) conducts fundamental, interdisciplinary and strategic research in the fields of geography, geology, as well as in forestry, landscape and urban planning and management. The department has a comprehensive portfolio of research and educational programs with direct relevance for development in the Global South. A general theme for both research and education is the interaction between natural resources and human activities in a development perspective. The primary research areas are Africa and Southeast Asia but research is also taking place in South Asia, Latin America and the Pacific.

**Research:** IGN research in developing countries covers a wide range of topics and is organised around the following clusters: Environment and Society in Developing Countries, Tropical Trees and Landscapes, Forest Genetics and Diversity, and Economic and Social Transformations. The research at IGN has the following aims:

- To understand the human dimensions of global change, including land use and land cover change, natural resource management and livelihood strategies, climate change mitigation and adaptation, including adaptation in urban agglomerations with a focus on urban planning, water resilience and nature based solutions.
- To examine socio-economic aspects of development processes with a particular interest on the interaction between agricultural transformation, agro-industrialization, migration, rural-urban linkages and urbanization.
- To develop theory and methodologies for earth observation and monitoring of land surface processes.
- To develop methods for conservation and utilization of genetic resources of trees in order to improve access to reproductive material for all kinds of tree planting and habitat restoration.
- To incorporate quantitative and genomic tools in population genetic, ecological, domestication and eco-physiological studies.
- To disseminate knowledge on sustainable management and improvement of the resilience of forests to climate change and towards introduced pests and pathogens.
- To propose sustainable systems of groundwater based irrigation.

**Competencies:** IGN is highly skilled and experienced with implementation of its research and educational activities in close collaboration with international partners as well as local and national institutions in developing countries. Capacity building and collaboration primarily constitute the engagement with external stakeholders.

**Capacity building:** Activities aim to expand and consolidate capacity at partner institutions with a view to (i) education and training, (ii) research and (iii) integration of research results into policy and implementation (research into practice). IGN’s capacity building is both implemented through specific projects (e.g. Building Stronger Universities (BSU) in Tanzania and Nepal) as well as integral parts of other research projects.

**External collaborations and networks**

Research is implemented in close co-operation with many external partners and networks in both private and public sectors, e.g. World Agroforestry Centre (ICRAF), Danida, the European Union, Global Land Project Sustainable Land Use, etc. Cooperation with the external stakeholders, i.e. companies and authorities, is assigned high priority at IGN. The overall aim is that IGN’s knowledge will contribute significantly to the management and governance of societal challenges within the research topics. IGN seeks to fuel innovation where research results make the basis for new solutions and create development and added value through collaborative projects, consultancy for professionals and public-sector services.