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The role of federal scientific institutions: topics relevant for forest research

Typical Congolese forests are complex ecosystems that fulfil multiple socio-economic and environmental functions. As a result, sound management aimed at their effective conservation and sustained use must be based on scientific knowledge of the patterns and processes within these ecosystems, their meaning to local and regional communities and the feedback mechanisms that link them to the global climate.

To underpin the management of Congo's forests, we need substantial information on (1) their biodiversity, seen from both the ecological and systematic viewpoints, (2) the socio-economic and political context of their use, (3) the dynamics of carbon sequestration, (4) occurring vegetation types and their vulnerability, and (5) the material characteristics and technical opportunities associated with Congolese forest products.

To maximise the chances of success, research projects need to be participative and be tailored closely to the education and training of Congolese scientific and technical staff.

It is vital that the scientific knowledge relevant to the management of Congolese forests derive mainly from scientific archives and reference collections that material and information on these forests' components. The most interesting data stem from Belgian federal research institutions (herbarium, zoological collections, wood collection and so on).

To prioritise research activities, it is of the utmost importance to set up fresh mechanisms separate from conventional peer reviews that evaluate projects' relevance.

Case studies are provided from the following domains: linguistics, arachnology and wood biology.