

Introduction to Integrating Natural Capital Assets (NCA), Biodiversity, and Nature into National Accounting Frameworks: Concepts, Data, And Methods

Objective of the course

The introductory course on integrating Natural Capital Assets (NCA), biodiversity, and nature into National Accounts (like GDP-based frameworks), is a hands-on short course designed to strengthen the capacity of policymakers, statisticians, and researchers to respond to escalating global climate shocks whose economic and fiscal impacts disproportionately affect developing economies, particularly in Sub-Saharan Africa. As economic growth, livelihoods, and public finances in the region remain closely linked to land, water, forests, biodiversity, and ecosystem services, conventional macroeconomic frameworks and the System of National Accounts (SNA) often fail to adequately capture the contribution, degradation, and depletion of these assets, constraining evidence-based policymaking amid climate change, biodiversity loss, and rising nature-related fiscal risks. Aligned with global climate commitments under the United Nations Framework Convention on Climate Change (UNFCCC) and the UN System of Environmental-Economic Accounting (SEEA), the course provides practical tools for integrating natural capital, biodiversity, and nature into national accounts and macroeconomic analysis. Delivered over one intensive week, the training equips participants with applied skills to compile, update, and integrate natural capital and biodiversity into national accounts, supporting more resilient, climate-informed economic planning and fiscal policy. The course is delivered in five modules as follows.

- **Module 1: Introduction to Natural Capital Accounting, Biodiversity, and Nature**
 - Introduction to NCA, Biodiversity and Nature terminologies
 - Natural Capital Accounting and the SEEA Central Framework
 - SEEA Ecosystem Accounting and biodiversity measurement
 - Nature, ecosystems, and ecosystem services in economic analysis
 - Environmental indicators for peer comparisons
 - Market and non-market valuation methods of environmental assets
 - Economic Valuation of natural capital assets, and biodiversity
- **Module 2: Data requirements and methods for compilation for Natural Capital Accounts (NCA)**
 - Data requirements for NCA accounts like land, water, forests, energy, minerals, and more
 - Methods for NCA data compilation
 - Handling and cleaning environmental data from surveys, remote sensing, and international databases
 - Framework for consistency checks of environmental data frameworks
- **Module 3: Integration of NCA, Biodiversity and Nature in GDP framework**
 - GDP compilation framework
 - Integrating NCA, Biodiversity and Nature in GDP framework
 - Economic comparing GDP with and without biodiversity
- **Module 4: Methods for Integrating NCA into National Accounts to support economy-wide modelling**

- General methods of integrating NCA into the National Accounts (NA)
- Integration of NCA into Input–Output Tables (IOT) and Supply and Use Tables (SUT)
- Construction of extended Social Accounting Matrices (SAMs) with NCA satellite accounts, biodiversity and nature

■ **Module 5: Economic Policy analysis of Natural Capital Assets, Biodiversity and Nature**

- Methods of assessing NCA embedded in National Accounts
- Hands-on assessment of NCA, Biodiversity and Nature in GDP compilations
- Drafting of policy briefs for policy makers
- Presentation skills that influence policy

Mode of delivery

The course is delivered through an intensive, hands-on approach in which participants systematically integrate NCA, Biodiversity and Nature into the National Accounts over the duration of the training. The programme is highly sequential, requiring full attendance at all sessions, as each step builds directly on the previous one. Participants work in teams to enhance peer learning and methodological coherence, while each participant is required to have an individual laptop and mouse for practical implementation. By the end of the course, each team presents policy simulation results generated from their model. For the online delivery option, participants are required to submit all assignments within the stipulated timelines to ensure completion within the scheduled period, as extensions may incur additional facilitation costs. To apply for this course, fill in the form below or send an email to apply@macrosolve.net or macrosolveinfo@gmail.com.