

Position: Post-doctorat at the International Centre on Environment and Development (CIRED)

Context: MAIA project

MAIA (Mapping and Assessment for Integrated ecosystem Accounting) aims to mainstream natural capital accounting in EU member states. MAIA uses the System of Environmental Economic Accounting (SEEA) as the methodological basis for natural capital accounting, but a flexible approach will be followed, allowing for adjustment of the SEEA framework to the conditions of specific EU member states.

Tasks of the postdoctorat

Litterature review regarding ecosystem accounting methods and their uses. Many initiatives exist around the world regarding environmental accounting at the national or regional scale. A synthesis regarding these works is still missing. The first task of the post-doc is to collect, analyse and synthetize information regarding these methods, discussing the links between the methods and the final purpose of these indicators for decision-makers.

Marine ecosystem accounting. The post-doctorat will explore novel ways of utilising existing data sets in developing both biophysical and monetary accounts to feed this underdeveloped part of ecosystem accounting. The pilot marine accounts are developed in two countries, Finland and France. A marine condition account will be developed using habitat and species based approaches. The habitat-based analysis will be based on European EMODnet Seabed Habitats database, as well as data from the Water Framework Directive, the Marine Strategy Framework Directive and the Habitats Directive. Furthermore, the primary monitoring data from the repositories in SYKE and/or ICES can be utilized. Updated habitat maps and individual habitat models from the current phase (2017–2019) will be utilized to evaluate the extent of selected marine ecosystems. In France, marine accounting work will focus on *extent* and *condition accounting*.

Maintenance cost and unpaid ecological cost as additional indicators of value. Recognising that the valuation approach of the SEEA is limited in scope, and that policy makers may need other indicators for value when deciding upon natural resource use, the French contribution to MAIA project will focus on developing maintenance cost accounts as an experimental and innovative approach which is complementary to the valuation approaches generally proposed for the SEEA. The valuation of maintenance and unpaid ecological costs approach will draw on economic information produced in the context of the MSFD and follow existing guidelines aligned with SNA accounting principles. This project will clarify how these indicators can be used for valuing the ecosystem and explore if and how these values can be used in a complementary manner to the SEEA-EEA framework. It should help to make clearer the ecological debts in the national accounts.

Duration: January 2019-January 2021

Deadline for application: 15th of December

Background: economics, ecology, accounting

Skills: knowledge in national accounting methods, knowledge in marine ecosystems, GIS

Location: CIRED-Paris

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