

Some of the natural resource use activities should be considered as environmental activities, but a large part should not.

In the ISTAT-paper "Natural resource use and management expenditure accounts – version amended according to the outcome of the September 2009 meeting of the UN Expert Group on International Economic and Social Classifications" of 25-09-2009 it is written that "*Environmental activities and actions (and corresponding expenditures) can be defined in general as all the measures aiming at preserving and maintaining the functions of environmental assets*". Environmental assets serve three different functions, namely a resource function, a sink function and a service function. The RU part of RUMEA is supposed to aim at preserving and maintaining the resource function. The natural resource use activities included in RUMEA consist of abstraction, harvesting and extraction of natural material inputs, including exploration and development. It is quite hard to understand how the abstraction, harvesting and extraction activities could be helpful in preserving the resource function of environmental assets. Quite to the contrary, these activities lead to the depletion of environmental assets in the absence of resource management activities. The exploration and development of new sites is the only part of the RU activities which aims at preserving or maintaining the resource function, because it forms a counterweight for the extraction activities and aims at avoiding depletion by creating new sources of environmental assets.

The fact that the lion's share of RU activities are not environmental activities is further demonstrated by the fact that paragraph 30 describes the characteristic activities as the production of environmental protection and resource management services. No mention is made there of any resource use services. In view of what was mentioned above, exploration services and services linked to the development of new sites ought to be considered as characteristic (environmental) activities as well.

A different question is whether RUMEA should only contain environmental activities ? EPEA and EGSS also contain non-environmental activity data. The extraction part of the RU activities is not environmental, but when one wants to assess whether the costs of natural material input extraction is rising fast, or whether there are large cross-country differences in the balance between natural material input extraction costs on the one hand and natural material input management costs on the other, one does need data on the expenditure linked to extraction. So, including this type of expenditure in RUMEA has its advantages, but it should be clearly separated from the environmental expenditure linked with natural resource use and management.

The term "natural resource use" is, however, very misleading, for the account hasn't got anything to do with the **use** of natural resources. The resource use part of RUMEA is clearly linked to Material Flow Accounts, and deals with the **supply** of natural material inputs (which have been given the more general and therefore confusing name "natural resource inputs" in table 3.2.2 of chapter 3). A more logical name for this account would thus be: Natural Material Input Supply Expenditure Account, or NMISEA. I agree the acronym is less appealing than RUMEA, but at least it is a better description of the contents of the account. Management expenditure is purposefully left out of NMISEA, because the resource management part of RUMEA deals with a larger array of natural inputs than just the material ones. The expenditure for solar and wind energy for instance can be considered to be fossil energy saving expenditure, and is thus part of resource management, while no expenditure is assumed to exist to abstract these non-fuel energy inputs from the

environment. Alternatively, this type of expenditure is registered in EPEA when the main objective is the protection of air.

A category of activities which should not at all be considered as environmental activities is the minimization of the impact of natural hazards. Paragraph 13 gives some examples of activities aimed at avoiding or treating damage resulting from an already polluted environment. The reason why these are not to be considered environmental activities is that these activities relate to people and produced assets rather than to the environment. This is just as true for activities aiming to reduce the impact on society of natural hazards. These activities are not undertaken to protect the environment from the consequences of for example flooding, but to protect people and their produced assets from such natural disasters.