

PROGRESS REPORT - FRANCE

(Drafted by Daniel Desaulty and Jean-Louis Weber, Ifen, the French Environment Institute)

1. Launch of the "Environmental Accounts and Economics Committee"

This Committee, chaired by the Minister of the Environment, is composed of forty members representing the various sectors of the French administrative, economic and social life. Thus, it includes representatives of the main ministries (environment and land planning, economy and finances, industry, agriculture, ...) but also of representatives of companies, unions of employees, local authorities, associations, academic economists...

The Committee discuss every year a report, which presents the main evolutions of environmental protection expenditure as well as those of the eco-business and employment. Every year a dossier is presented about a specific issue. This dossier aims at being overwhelming, the answers being given in accounting terms or with any other indicators able to provide answers to the problems under study. This year two dossiers will be presented, one on inland water, the other on the effect of greenhouse gazes.

The Ministry of the Environment ensures the Secretariat General of the Committee, Ifen being the Rapporteur.

2. Continuation of the accounts of environmental protection expenditure

The following domains are now covered and give place every year to the publication of formal accounts in the report to the Committee. They are :

- waste water management
- solid waste management
- the protection of the air
- noise abatement
- the protection of biodiversity and landscapes.

The methodology of this last account was developed during this year.

3. Extension of the accounts of expenditure to other domains connected with the environment and the natural resources

Parallel to the environmental protection, Ifen develops other accounts of expenditure on domains related to the environment and the natural resources, but not raising protection expenditure.

During 1999, Ifen developed an account of the withdrawal and distribution of water. The operators in this area and those in charge of the management of the wastewater are often the same ones. The price of water includes the two aspects (provision and sewage). Another argument is that both are the competence of the Ministry of the Environment. For the time being, this account deals only with expenditure related to the withdrawal and distribution of water, i.e. the natural resource upstream of the sewage and purification of waste water system. It provides a more comprehensive description of the financial flows related to water use.

On the beginning of year 2000, an account of the expenditure related to *in situ* uses of water will complement the two accounts previously developed. *In situ* uses do not extract water from the natural environment, but modify potential functions of the natural water system and, subsequently, may generate changes in the water ecosystems. For this last account, the list of the characteristic activities distinguishes protection of the ecosystem, maintenance and regulation for the socio-cultural uses and the restoration (after degradation or damage).

In the same spirit, a first account of the expenditure of recovery and recycling has been realised this year. It supplements the first set of accounts focused on collection and elimination.

4. Other accounting developments

4.1 Physical accounts of water

The account of the quality of the rivers

Although developed since the mid-80s, tested on a river catchment in France and at the national level in Spain, the basic methodology of the quality of the rivers of the so-called Natural patrimony accounts had not yet been implemented until now. This was due to important gaps in the availability of data. To overcome this problem, a simplified method was developed by Ifen, with practical purposes :

- To produce accounts in quality in each of the 55 river catchments of the RNDE (National Monitoring Network of Water), comparable at the national

level, by using the weighting system of qualities known as *srkm*, (*see note*) so that this pilot test remains compatible with later developments calling upon the basic method. (*Note: The concept of Standard River Kilometre (srkm) is a conversion unit proposed by the CICPN (Interministerial Committee for Natural Patrimony Accounting) in France. One skrm is equivalent to a watercourse of de 1 km long with a run off of 1 m³/s, or 0,5 km with 2 m³/s*)

- To carry out these accounts starting from the only data quickly available (linear charts of quality of the rivers published by the RNDE), so as to produce them at the minimum cost, within the framework of a pilot test.
- To assess the operational value of such accounts previous taking a decision on the production of more orthodox accounts, based on a full set of monitoring and geographical data.

Simplifications were on the one hand to consider only four classes of drains to the maximum by catchment area : main drains, medium size rivers, small rivers and brooks. Then, the calculation the size of the rivers expressed in *srkm* is based on the assumption that the run off of each class is constant. The drains are then affected of a note of quality according to the chart published by the RNDE.

An improvement in two stages of the realisation of the accounts of quality is considered. The first stage consists in processing the geographical and hydrological data bases necessary to the accounts of the water resource (see § below) to establish a weighting system taking into account the real run off of each individual drain. On the other hand, the linear charts of quality will continue to be used like data of quality of water. Therefore, this methodology is called «semi-simplified».

In a last stage, the optimisation of the representativeness of the monitoring network, project also steered by Ifen, will make it possible to have results of quality of the water of the rivers on a statistical basis.

The account of the water resource

The account of the water resource (as defined in the Natural patrimony accounts) will be developed starting from a semi-simplified methodology and will be implemented at the national level. The principle of this methodology is to build a hydrological layer of information, compiled at the level of elementary drainage basins (50 to 250 km²). This layer will be common to the accounts of the water resource as well as of quality. It will become a single physical base, valuable also for improving the monitoring as well as for developing various types of statistics. This project will be finalised in 2000.

4.2 NAMEA

France took part in the pilot study steered by Eurostat on the development of the NAMEA framework. A NAMEA-air was thus developed of which a part will be presented for the first time in the dossier on «greenhouse gazes» of the next report to the "Environmental Accounts and Economics Committee."

A pilot project on a NAMEA concerning the emissions in water is in hand but only for one drainage basin.

4.3 Forest accounts

France takes part in the Eurostat Task Force for the development of economic and environmental accounts of the forests. The first phase produced physical accounts and monetary assessments of the stocks, flows and the forest activities. Several methodologies were tested. In 1999, our work focused on a regional breakdown of the accounts, related to the specificity of the French forest, both from an economic and an ecological point of view. In 2000, the study will focus on a test aimed at filling tables for the non-commercial functions of the forests.

4.4 Natural hazards

To answer at the request of the Ministry, in charge of natural hazards, Ifen was asked to develop an account of the expenditure of their prevention. To start, the work has been limited to the public expenditure. Results are expected at the end of 99.

4.5 Costs of damages

The reflection of Ifen is currently focusing on the effective expenditure of restoration following a damage. Three fields have been studied : natural hazards, air pollution and contaminated soils. For the first we could primarily establish an account (partial) starting from information obtained from the insurance companies. For the second, it was necessary to rely on studies which were not covering on the national territory or which did not relate to the totality of the topic. For the last issue, a few data exist, except when work of restoration of the soils is known (the Stadium of France for example, built on a previous industrial (contaminated) site) and/or when work received government subsidies.

5. Other business

The report to the Committee will include results based on an improved methodology for calculating environmental «employment ». Having only few direct data on employment, this method is based on environmental expenditure and production. The estimates cover

the employment in the "characteristic activities" as well as direct employment for manufacturing the facilities used by the characteristic producers and the producers of related products.