

Report on Country Visit to South Africa to discuss the UN Global Manual on Material Flow Accounts

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Purpose & Scope

UN Environment's engagement in resource use and resource efficiency issues included the publication of Assessment Reports (i.e. Decoupling Report, Trade Report, Report on Global Material Flows) which used data from Material Flow Accounts, and the publication of an online database on material flows. Most recently, the UNE distributed a draft version of a global MFA manual, which is meant to provide the conceptual and methodological foundations of Material Flow Accounting as well as a hands-on guidance on the compilation of MFA. The MFA Manual shall be usable by every country in the world, regardless of the accounting capabilities of its respective national statistical office.

By the end of 2017, the first draft of the manual was finalised, and four pilot projects have been conducted in Laos, the Philippines, South Africa, and Chile. The aim of the country visit was:

- To give an introduction to ...
 - the conceptual foundation of MFA,
 - the methods and estimation procedures undertaken in MFA,
 - data requirements of MFA
 - the material flow indicators derived from MFA;
- To introduce the Global MFA Manual and collect feedback about its implementation in the South African setting;
- To establish a preliminary material flow accounts for South Africa

Participants

12 persons from Ministries and Statistical Office covering the area of energy, agriculture, mining, environment, economic analysis, etc.

Agenda

Day 1, Tuesday, 28 November 2017

- 08.30 – 09.00 welcome and introduction (ONS)
- 09.00 – 10.30 input on sustainable resource use – concepts, indicators, policy application (NE)
- 10.30 – 10.45 coffee break
- 10.45 – 12.00 input on sustainable resource use – concepts, indicators, policy application (NE) – continued
- 12.00 – 13.00 lunch break
- 13.00 – 16.00 data compilation: introduction on data and methods (NE)
 - > DE biomass, fossil energy carriers, metals, non-metallic minerals
 - > imports, exports
 - > RME, DPO, balancing items

Day 2, Wednesday, 29 November 2017

- 09.00 – 12.30 hands-on work session on data compilation (ONS+NE)
 - > group work to establish a preliminary MFA based on (inter)national statistical datasets and the draft MFA Manual; 2 groups:
 - (1) DE biomass and fossil fuels
 - (2) DE metals and non-metallic minerals
 - > provide feedback on the practicability of the draft manual
- 12.30 – 13.30 lunch break
- 13.30 – 15.00 discussion of MFA compilation work: results, data, problems, open issues
- 15.00 – 16.00 round up
 - > Assessment of overall progress during the workshop and discussion of open issues that require further support and capacity strengthening
 - > Wrap-up and feedback round

Outcomes

None of the participants had any experience with Material Flow Accounts so far. Hence, we spend the first day with a detailed introduction on concepts and methods of Material Flow Accounts as well as indicators derived and potential applications. The introduction covered all MFA modus but

focused on domestic extraction and trade. The participants were very interested, asked back questions and reflected on their data situation.

The accounting theory was followed by a hands-on workshop on day 2. In two groups, the participants engaged in the first steps of compiling domestic extraction data along the four material categories. In the workshop we used international data sources, but the South African participants also provided national data for comparison where possible. The practical work was very lively and dynamic, the groups interacted actively and intensively discussed all kinds of issues.

The groups succeeded in the compilation of DE data and performed some of the required estimations. We summarized by comparing the results to other MFA datasets for South Africa, we discussed problems and challenges in the compilation process, and identified a list of next steps. In the last session, we discussed open issues and the further process.

The feedback from the participants was very positive:

- The group gained an understanding of MFA, its concepts and methods as well as potential applications in policy processes
- The participants undertook the first steps of data compilation, resulting in a better understanding of system boundaries, required data, estimation methods, potential challenges and different procedures to tackle data issues.
- Biggest problems were identified for the compilation of data on metallic minerals and the required calculations. Due to limited time, the participants could not go through all details of the UN Manual. For this material category, the data work only arrived at the compilation of data on metal contents extracted, without performing a calculation of the MFA relevant run off mine values.
- The participants used the UN Manual during the compilation process and by that provided feedback on its applicability. However, the participants did not read the Manual prior to the workshop. Consequently, the feedback was limited and only on an overall level.
- The participants identified necessary next steps and challenges in the implementation process.

The group concluded that at the end of day one, they had no clear picture about how to actually compile MFA data. They doubted that they could manage. After the second day and the hands-on workshop, the participants changed their mind. They succeeded in the compilation of a first set of MFA data and by that gained an understanding of how the data compilation process could be organised. They experienced challenges along the data compilation process and worked on possible solutions to overcome. In the end, they identified next steps.

Concerning the further process, the participants addresses some open questions:

South Africa was not sure about how to proceed with the implementation of MFA. A work plan for SA stats for 2018/19 is in place already and MFA is not an issues mentioned therein. Consequently, an implementation of MFA is only possible, if:

- they manage to include MFA under some other accounting routine
- they continue with MFA infrequently and stepwise on specific categories, spread over a longer time period
- required by international bodies such as the UN for example.

The organisers also raised the question about the further plan of the UN on the implementation of MFA in the long run and whether a reporting obligation (or also voluntary reporting) is planned within the next few years. Finally, the participants stated that financial support for countries implementing MFA would be very helpful, facing limited national resources.