Goal 6

Target number: 6.4

Indicator Number and Name: 6.4.1 Change in water-use efficiency over time

Agency: FAO

Has work for the development of this indicator begun? Yes

Who are the entities, including national and international experts, directly involved and consulted in developing the methodology/and or data collection tools?

The process is on-going in the context of the GEMI project "Integrated monitoring of water and sanitation related SDG targets", carried out by seven UN agencies, i.e. FAO, UNEP, UNESCO, UN-HABITAT, WHO, WMO, UNICEF, under the umbrella of UN-Water. The consultation includes a proof-of-concept (POC) phase, involving six countries (Bangladesh, Jordan, Netherlands, Senegal, Peru, Uganda). Moreover, several international experts being part of the 6.4 Target Team are consulted on an ad-hoc basis, from the following additional entities: UNSD, University of Nebraska, University of Frankfurt, IGRAC, Eurostat, World Bank.

What is the involvement of or how do you plan to involve National Statistical Systems in the development of the methodology?

The national statistical offices are systematically involved in each POC country. They collaborate with the technical institutions to produce robust and reliable indicators and to include them into the national statistical system.

Please briefly describe the process of developing the methodology for the indicator

The development of the methodology for this indicator has been carried on for more than one year, including consultations with all the entities listed above. Attention has been given also to the reaction coming from the IAEG-SDG to the earlier versions of the methodology, in order to modify it accordingly. Metadata have been proposed and discussed since August 2015.

Please indicate new international standards that will need to be proposed and approved by an intergovernmental process (such as UNSC) for this methodology.

International standards exist for most of the parameters that will be used for the computation of the indicator. Technical methodology for the assessment of the output from rainfed agriculture needs to be established.

When do you expect the methodological work on this indicator to be completed?

The methodological work will be completed by the end of 2016.

Are data and metadata already being collected from the National Statistical System for one or more components of this indicator?

Yes

If yes, please describe:

The data are being collected with the National statistical Systems of the POC countries, as described above. The work just started and will be carried on until end 2016.

How do you plan to collect the data?

Send questionnaire(s) to country, Obtain data directly from country database/website, Joint survey/compilation with national agency and international entity, Satellite images, remote sensing

If the indicator involves multiple components from different data sources, please describe how each individual component of the indicator will be collected here.

Data on water withdrawal across sectors for the compilation of the indicator are available in FAO-AQUASTAT, UNSD and Eurostat. The estimation of the volumes of water withdrawn for energy production would be possible making several assumptions. Main sources of data for the gross value added by irrigated agriculture and industry are FAOSTAT and the World Bank database. Other sources include the World Energy Outlook of the International Energy Agency and the UNIDO database. Also, it is important to take into consideration transboundary water data issues for countries sharing the same river basin.

With what frequency is data expected to be collected?

Every 1 to 2 years

Is there a process of data validation by countries in place or planned for this indicator?

Yes

If yes, please briefly describe:

Countries are expected to put in place a process of Quality Control, Quality Assurance and data verification. The process should be carried out internally for the QC part, ensuring that all the planned steps are properly carried out at each round of data collection. The QA should be carried out by independent experts, either national or international, to assess the consistence and robustness of the data produced. Finally, where possible the resulting data should be verified by comparison with similar data from other sources.

If you have any additional comments that you believe would be helpful to IAEG-SDG members in analysing the work plan and methodological development of the indicator, please provide them here:

Indicator 6.4.1 is based on an estimation of the outcome gained from the utilization of a single unit of water volume. The proposed methodology allows to disaggregate the indicator per economic sector, offering a more flexible and detailed information to the decision makers. At the same time, the aggregated result allows an easy and immediate comparison of the indicator's values over time, being also useful for comparison between countries where appropriate. Finally, the methodology implies the preparation of a number of base parameters, which would be also useful as stand-alone sub-indicators, as well as represent the basis for the preparation of eventual country specific supplementary indicators.

(as of 3 March 2017)