





Implementation Proposal for a Global Sharing Network for Strengthening Education Data: edu2030/CountrySTAT

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Summary

The proposal creates a Global Data-Sharing Network (edu2030/CountrySTAT) as a data exchange framework. Networks resources will be applications and tools made available for data aggregation, statistical analyses and dissemination to facilitate the acquisition, management, and analysis of large, diversified and distributed sets of data. It supports multiple-sourced data integration and harmonisation according to international standards and contributes to improving data quality and reliability. It will serve as a platform to submit data to the UNESCO Institute for Statistics (UIS) and to validate indicators.

The main objective is to improve the dissemination of education data with a special emphasis on Sustainable Development Goal 4 (SDG 4) data to monitor progress in education through:

- ✓ Adapting the *CountrySTAT* data exchange framework to education integrating existing system and workflows at the country level.
- ✓ In a group of pilot countries in Africa, implementing the information system and institutional framework to support data dissemination and archiving of educational data.

Each country will be responsible of their own platform. The UIS will establish partnerships with statistical offices to introduce the system and build national capacity to disseminate internationally-comparable, official statistics.

As value-added, the project builds country ownership, enables access to existing data through a single online access point, serves as a powerful instrument for strengthening decisionmaking based on facts, facilitates the exchange of data and metadata based on international standards, and enhances national capacity and strengthens institutional processes while serving to monitor national, regional and global initiatives.

The deliverables will include:

- ✓ the edu2030/CountrySTAT platform with a data exchange mechanism;
- ✓ improved data collection and validation;
- ✓ availability of key baseline data and indicators;
- ✓ improved SDG 4 data coverage; and
- ✓ partnerships set into place.

The duration of the project is about 36 months in six pilot countries, with a cost of approximately US\$6 million. Once piloted, the project could be scaled-up to all regions.



1. Background and rationale

The SDG on education (SDG 4) is putting strong emphasis on data generation and monitoring to manage the education sector more efficiently and effectively. The goal is very holistic and put forward the lifelong learning approach which calls for progress in education for all age groups and at all the levels of education. This requires clear indicators and measurement to generate evidence-based international discourses and advocacy. Moreover, SDG 4-Education 2030 is a universal and collective commitment of all countries regardless of their level of development. Looking at the data requirements to monitor Education 2030, it is clear that various data sources need to be used and a "traditional approach to data may have reached their limits" (UIS, 2016a¹).

Global challenges in improving education require fast, informed and targeted decisions. In order to develop polices based on sound evidence, decisionmakers need information to respond to critical questions based on high-quality, comparable and timely data.

However, there is still a long way to go because more often than not countries face challenges such as:

- ✓ Lack of harmonisation between data and metadata;
- ✓ Poor data dissemination systems;
- ✓ Restrictive or unclear data and data use policies;
- ✓ Gaps between data produced and its availability;
- ✓ Unclear protocol on privacy and anonymity;
- ✓ Failure of systems that equally accept both highly-formal and less-formal submissions to provide curated efforts to distinguish or warn about quality and reliability; and
- ✓ Lack of a culture of using the data.

To support improvement, the UIS has proposed the creation of a global network to share successful examples from other sectors such as <u>agriculture</u>. The platform <u>edu2030/CountrySTAT</u> aims to make high-quality statistics widely available to support monitoring and measuring of education goals and specifically SDG 4.

2. Objectives

The purpose of the project is to create a Global Data Sharing Network (in the spirit of the "Open Data" concept and approach). Network resources such as datasets, coding systems and classifications, text and ready-made products (i.e. charts, maps and reports) are made accessible through their metadata.

The platform *edu2030/CountrySTAT* is a web-based system for both national and sub-national levels that supports collection, analysis and dissemination of data, using adequate tools and international standards.

 $\underline{http://uis.unesco.org/sites/default/files/documents/laying-the-foundation-to-measure-sdg4-sustainable-development-data-digest-2016-en.pdf}$

¹ UNESCO Institute for Statistics (UIS) (2016a). *Sustainable Development Data Digest: Laying The Foundation To Measure Sustainable Development Goal 4*. Montreal: UIS.

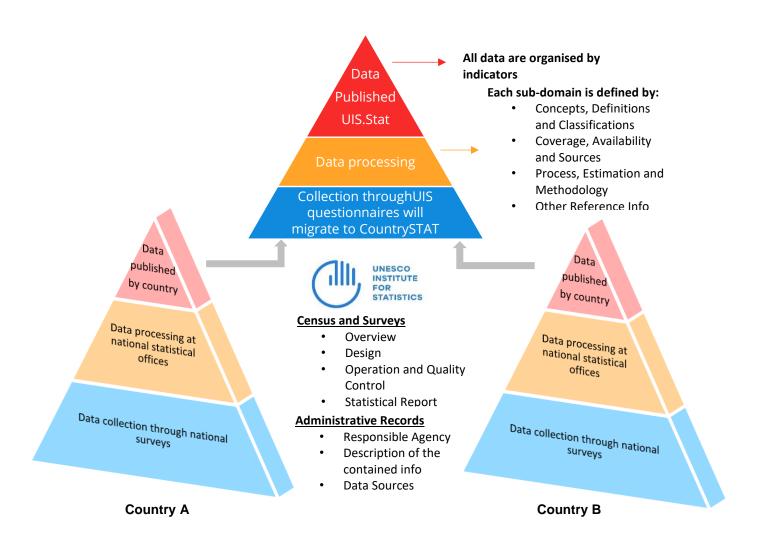


It would support multiple sourced data integration and harmonisation based on international standards and contribute to improve data quality and reliability.

The edu2030/CountrySTAT database would embed the following levels of data:

- ✓ National core data: data that have been aggregated to the national level using methodology for international comparability. The data will be presented in a standard data structure set by the UIS according to the hierarchies of its indicator system.
- ✓ Thematic modules: relevant national modules that are not included in the core but are very important at the national level tailored to the country's data needs.
- ✓ Global reporting and validation: key sets of indicators and metadata, including a reporting and validation platform.

Figure 1. Flow between sources, concepts and data





Specific objectives are to:

- ✓ Support and provide guidance in the creation of a database at the regional level which will combine statistical data from all Member States;
- ✓ Assist Member States in data harmonisation and dissemination by providing technical assistance in statistics and facilitating collaboration, sharing and exchange of data;
- ✓ Ensure the archiving and dissemination of statistical data;
- ✓ Respond to requests for complex data from different areas related to education; and
- ✓ Enable data exchange among Member States and between Member States and the UIS.

3. Activities and expected outputs

The main activities include setting institutional frameworks as well as equipment, training activities, translation, consultants and software preparations.

The main outputs to be achieved are:

Objective 1: CountrySTAT operational at the national level

- ✓ Output 1.1: Institutional Framework implemented which involves key government institutions of the 6 countries as recognised by the African union
- ✓ Output 1.2: Operational capacities implemented and strengthened in 6 African union countries
- ✓ Output 1.3: National *CountrySTAT* system implemented and rolled out in 6 African union countries
- ✓ Output 1.4.: Technical capacity of national staff is strengthened.

Objective 2: The UIS and AU increasingly provide support to Member States and technical support to countries is increasingly provided

- ✓ Output 2.1: Institutional Framework and operational capacities implemented and strengthened in the regional and global Secretariat
- ✓ Output 2.2: Data harmonisation mechanisms in place and agreed among all the stakeholders
- ✓ Output 2.3: Communication channels in place.

4. Structure and implementation strategy

The structure is flexible and allows to add/remove modules and/or to prioritise activities without losing consistency in the overall project framework. The proposed structure considers that there are following modules that contribute to build the global data-sharing network:

- i. Institutional capacity building at national and regional levels, which implies supporting existing national and regional institutional frameworks;
- ii. Strengthening of statistical methodologies and data collection/processing support;
- iii. Information technology support to countries and regions to facilitate data storage, harmonisation, processing, exchange and dissemination; increase efficiency of the I.T. platform for data analysis and sharing; and



iv. Implementation of a multi-disciplinary communication strategy to maintain the *CountrySTAT* user community, share knowledge and promote the system worldwide.

Most of the success of the project depends on the level of integration between these four modules as essential elements of the global data-sharing network. It is nearly impossible to build a sustainable data management and sharing system without strong support and commitment of the agencies involved. The network requires people contributing to the maintenance and evolution of the system by providing requirements, feedback, expertise and technical and promotional work. A sound and constructive interaction between decisionmakers, technicians, analysts and I.T. developers will create the necessary environment to make the network useful and productive.

The statistical methodological approach of *CountrySTAT* will be sustained by the UIS as part of its mandate and will be shared with countries.

The UIS will make *CountrySTAT* operational in six African countries. The UIS proposes to implement *CountrySTAT* in the countries where:

- 1. The Commission's Directorate-General for International Cooperation and Development (DG-DEVCO) provides development policy assistance;
- 2. FAO has implemented the data framework in agriculture; and also preferably where
- 3. The UIS has implemented the CapED Pilot Programme.

This ensures a consistent approach with and a complementary role to DG-DEVCO, it allows us to start with countries which have national statisticians (albeit in a different field) already familiar with web-based information systems and enhancing the data-sharing experience. In addition, the implementation of *CountrySTAT* serves the aim of the CapED programme which is to develop national capacities in participating countries to integrate SDG 4 commitments into national education policy and sector management, including monitoring of progress towards SDG 4.

For this reason, the UIS proposes to implement *CountrySTAT* in Ethiopia, Ghana, Madagascar, Mali, Mozambique and Senegal.

5. Institutional Framework

The Secretariat will be the UIS and it is foreseen to have a regional counterpart institution for the project. In Africa we expect the African Union (AU) to play this role. AU staff will work closely with the UIS team, as well as other partners involved in the project, on the overall coordination and smooth implementation of the planned activities.

In each of the six countries, there will be one key contact responsible to ensure the implementation of *CountrySTAT*, its proper coordination and support throughout the life of the project. They will benefit from the advice of UIS staff and specialised consultants to facilitate the implementation of the activities.



6. Value added

edu2030/CountrySTAT will:

- a. Reduce the burden of completing questionnaires by facilitating electronic data collection;
- b. Reinforce national statistical capacities by providing methodology, classification and coding systems to support the **collection**, **standardisation and harmonisation** of data from various local sources;
- c. Promote partnerships between the main statistical institutions providing data within countries;
- d. Assist countries in integrating and organizing national data in order to make them **comparable at the international level**; and
- e. Help countries disseminate data through **communication and information tools** at national and subnational levels.

7. Timeline and budget

Project timeline: 36 months starting as soon as funding is available.

The total project cost for the implementation and development of the platform in six pilot countries include funding for regional coordination and the UIS as coordinating agency. The key components of the budget are:

- ✓ country and UIS Headquarters activities, training and technical assistance;
- ✓ design-based thinking and rapid prototyping workshops to define user needs;
- ✓ Equipment (expendable and non-expendable);
- ✓ Translation;
- ✓ Regional and international staff/consultants; and
- ✓ Administrative support and general operating expenses and supplies.

Budget of the project (USD)

Country 1	500,000
Country 2	500,000
Country 3	500,000
Country 4	500,000
Country 5	500,000
Country 6	500,000
CountrySTAT platform	1,500,000
UIS Secretariat	1,000,000
Total	5,500,000