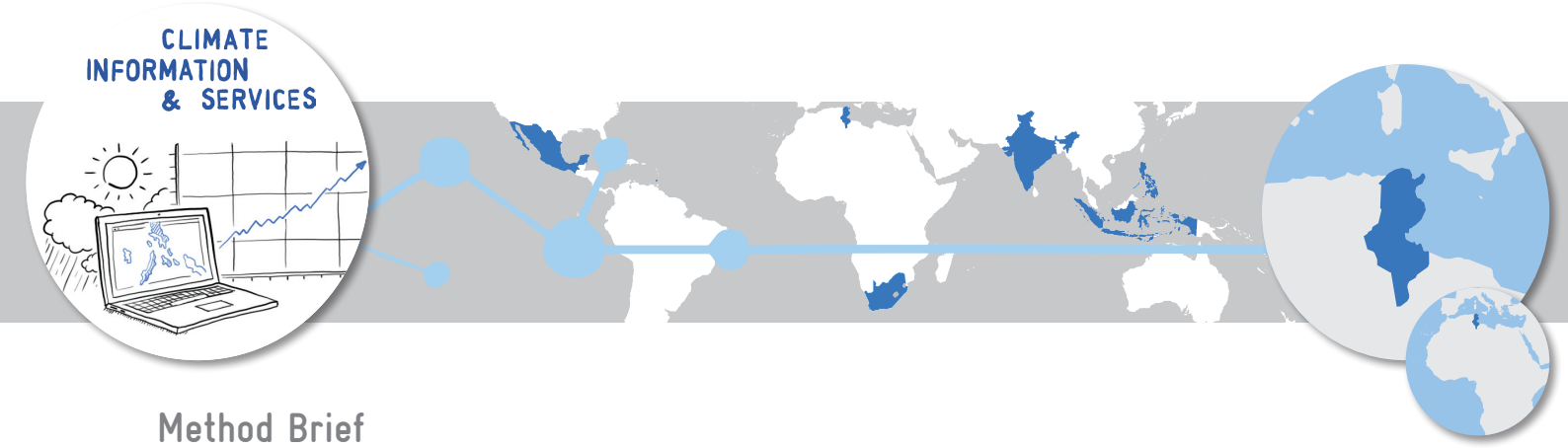


Method Brief

Metadata Cataloguing on Climate Change in Tunisia

Tool

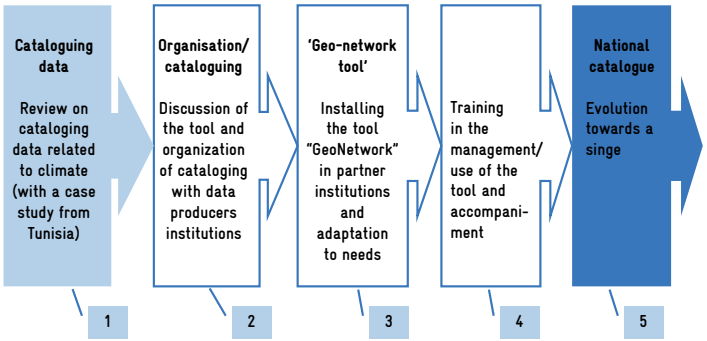
In Tunisia, as part of the cooperation framework between the Ministry of Environment (ME) and the projects 'Support for the Implementation of the United Nations' Framework Convention on Climate Change' (CCC/GIZ) and 'Inventory of Methods of Adaptation to Climate Change' (IMACC), the first steps towards setting up a cataloguing tool for the metadata required for climate change adaptation (CCA) have been taken. This tool enables the indexing, structuring and description of resources so that they can easily be found and consulted. The listing of metadata (the grouping of mainly geographical information which describes physical or digital resources) enables information sharing and interoperability, while integrating the rights and conditions of utilisation.

Scope and entry points

The starting point is the conclusion drawn at national level based on the application of a vulnerability analysis, and/or the application of other CCA methods which showed the need for a variety of data – mainly climatic – and the constraints of localisation and access to these data. The Ministry of Environment, the Ministry of Agriculture and the National Meteorology Institute have already expressed their interest in setting up a catalogue of metadata.

Operation and process (detailed description)

The vulnerability analysis carried out on the olive oil sector in the region of Médenine served as a case study to identify needs in terms of data (format, localisation, access). The process was carried out in close consultation with the data providers concerned.



Stages of implementation of the Data Catalog.

Phase 2 of the discussions with the actors was carried out at a workshop presenting the outcome of the study and allowing for exchanges on the advantages, requirements (mainly standards) and constraints involved in setting up data cataloguing tools. Bilateral contacts took place with the institutions that wished to enlist their data/information. The choice was made of a cataloguing portal 'géocatalogue-G3CTN', that operates with the open source software 'Geonetwork' (for technical details see referenced documents).

At present five institutions are at the stage of installing the tool (stage 3). Other institutions are likely to join the experience, particularly within the Ministry of Agriculture. In this transition phase, there will be one common database on the same server (of the Ministry of Environment, hosted at the Tunisian Internet agency – ATI) but each institution will have its own application and shall be responsible for the management of its geographic metadata as well as any additional descriptive documents that it wishes to share.

Each institution is given coaching in order to master the tool, make the required adaptations on the basis of information that it will put online, choose the adequate standards, and organise its catalogue management.

On behalf of

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

of the Federal Republic of Germany

Specifics of application

Stakeholders and institutional set-up

The initiative leader is the ME. The current participating institutions are the ME itself (with its management structures), three organisations under its umbrella (the Tunisian Observatory for Environment and Sustainable Development, the National Agency for the Protection of the Environment and the Agency for Coastline Protection And Planning), the Forestry Directorate General (Ministry of Agriculture) and the National Meteorological Institute. The catalogue could be used by the actors in charge of drafting development projects (public sector and NGOs) and integrating CC and research institutions. The CCC/GIZ project plays a facilitating and mobilising role.

Inputs

A Tunisian design firm has been hired to manage the installation and coaching for the adaptation and management of the cataloguing tool. The selected software meets international standards and has been widely adopted, particularly by United Nations organisations such as the FAO. In addition, it has the advantage of being 'open source'. The software is easy to manipulate (with user-friendly and intuitive interfaces) and its technical control conditions come at a reasonable cost.

Outputs

At present, the programme is limited to the installation of the cataloguing tool in five institutions. The final product expected in the medium term would be a national catalogue, which would collect data from all organisations providing relevant information on CC.

Required capacities and ease of use

The installation of the tool and its use require expertise that is available in firms specialised in computer science and information systems, as well as a brief training of its managers. The main factor in operationalising such an initiative is the adoption of an approach involving regular and progressive consultation among the actors, in addition to the sharing of data among institutions, which is often a delicate issue.

The challenge also remains institutional and organisational (i.e. human resources). The institution will have to designate a person in charge of updating and managing the catalogue and the information that should be regularly collected and documented.

Conclusions for future applications

Outcome and added value

The process is still underway but initial results demonstrate the benefit of such an approach in facilitating access to the required data for the analysis/diagnosis of vulnerability and the identification of CCA measures. In addition to the installation of the tool, in the short term, a pool of 'web managers' will be created, qualified to manage this type of catalogue. In this respect, the added value is substantial in terms of identifying existing provision in the field of information, data localisation and reduction of data dispersion.

Cost-benefit ratio

The setting up of the tool requires reasonable national expertise costs. The software is open source and around four months would be required to set up the catalogues. The efforts involved in standardising the catalogues are however more time-consuming.

Potential for replication

This potential is primarily based on the fact that the need for data identification and localisation is largely felt by those actors who are involved in the CC study and in the resulting adaptation measures.

Other institutions have also expressed an interest in being part of this cataloguing initiative (particularly within the Ministry of Agriculture).

Resorting to metadata bases and catalogues has become increasingly necessary, and is evolving at various levels. In Tunisia, the Prime Minister's Office has launched a portal for open source initiatives and would be interested in setting up such a cataloguing tool.

Nevertheless, certain constraints have to be considered:

- It is vital to clarify that metadata cataloguing be transparent regarding the nature, localisation (who holds the data and under what form) and conditions of acquisition. There can be no direct access to the data (unless approved by the institution).
- Access conditions are currently subject to the goodwill of institutions, which can sometimes be a limiting factor.

References

Documents

- Metadata geocatalogue on climate changes in Tunisia- Concept note – December 2012 – Geomatix International (Tunis)

Reference persons

- **Ghazi Gader,** Technical Advisor, CCC/GIZ project– Tunis (ghazi.gader@giz.de)
- **Moez Essafi,** Geomatix International Expert (moezessafi@geomatix-international.com)

Imprint

Edited by:
Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices
Bonn and Eschborn, Germany

Inventory of Methods for Adaptation
to Climate Change – IMACC
Dag-Hammarskjöld-Weg 1-5
65760 Eschborn, Germany
T +49 6196 79-0
F +49 6196 79-1115
E info@giz.de
I www.giz.de

Contact
Michael Hoppe, GIZ
E michael.hoppe@giz.de
T +49 6196 79-2597
I www.giz.de/climate
adaptationcommunity.net

April 2013