Study on an inventory of citizen science activities for environment policies

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CONTEXT AND AIMS

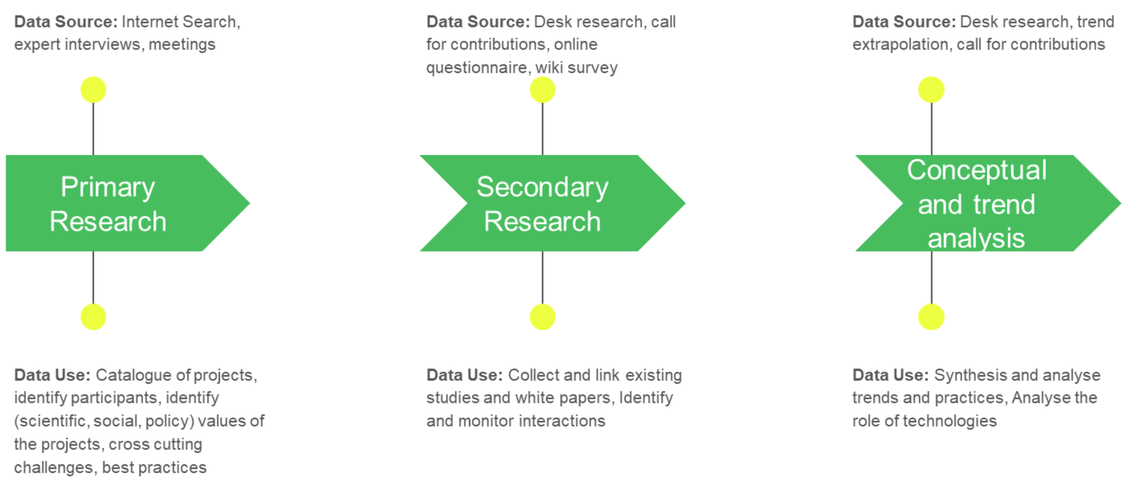
The European Commission recognises the potential of citizen science to provide useful evidence to support policy decisions. A Knowledge Innovation Project (KIP) on Citizen Science was established to consider, inter alia, how citizen science data could best be used to complement environmental monitoring and reporting process in a cost-effective manner.

The Reporting streamlining initiative foresees the stepwise promotion of citizen science data for environmental monitoring and reporting, with the development of guidelines in 2019. Further, an EU action plan on environmental compliance foresees as part of its nine strategic actions, an action to improve how Member States deal with public complaints, whereby citizen science can provide a powerful tool to engage the wider public and ensure this information is reliably recorded and assimilated by the authorities.

In this context, this project aims to provide the European Commission with an evidence base of citizen science activities that can support environmental policies in the EU. The outcomes will be a comprehensive database of projects, characterised by their main attributes. This will allow an assessment of the conditions under which citizen science can best support environmental policy, and form the basis for policy recommendations on the better integration of citizen science in environmental policy.

APPROACH AND METHODOLOGY

This project will approach the development of an inventory of citizen science projects through different levels of data collection, assimilation and analysis, viz. primary research, secondary research and conceptual analysis.



The first task was to create a representative list of citizen science activities relevant for environmental policy. The emphasis was on identifying as many initiatives as possible to ensure a good representativeness of the diversity of citizen science activities.

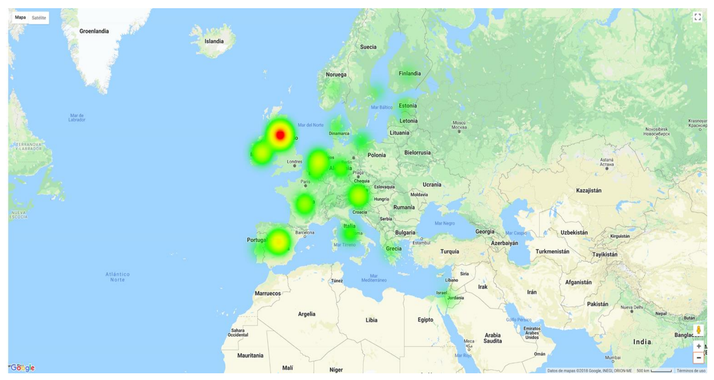
Identification of relevant initiatives has been achieved in a two-step process. An initial data collection phase (long-list of projects) is followed by a screening phase (short-list of projects) to ensure that the activities that are fit for the project's purpose are retained in the inventory. The screening is done on the main characteristics of the project that can be readily available from secondary sources.

Before collecting this information, a detailed structure for the database was developed. This included definition of the attributes for the long- and short-list of projects. An additional element was to identify whether a specific project contributes to one or more of the Sustainable Development Goal(s) (SDGs), i.e. whether no impact, direct impact or an indirect impact.

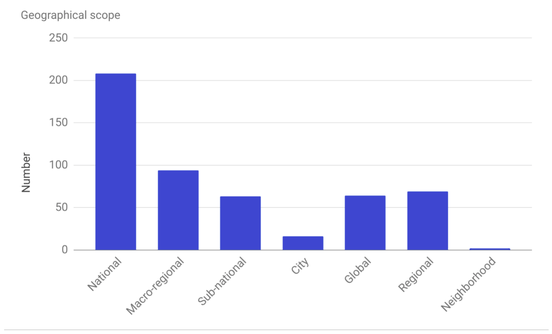
Projects from different sources were collected such as review papers (Pockoc / Chandler / Fritz / EU survey / CORDIS H2020 / FP7 / COST / EEA / LIFE, etc.) and other sources. After merging and removing duplicates there were 729 projects in the database. After filtering and adding projects from Sweden, The Netherlands, Flanders, Austria, Hungary, Germany, Latvia, and Estonia, the final long list has 523 projects. These projects were analyzed according to 36 attributes. Eleven attributes covered general information about the projects, seventeen about SDGs, and other areas such as environmental areas, policy relevance, policy uptake, social uptake, etc.

From this long-list, as short list is being created on basis of policy relevance, a diversity of environmental areas, and wider geographical coverage. The coordinators of the projects in the short-list will be contacted for obtaining detailed information.

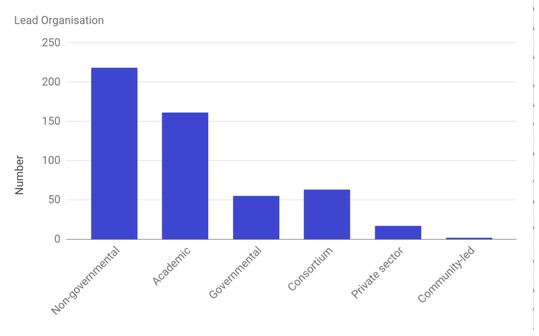
PRELIMINARY INFORMATION ON THE LONG-LIST



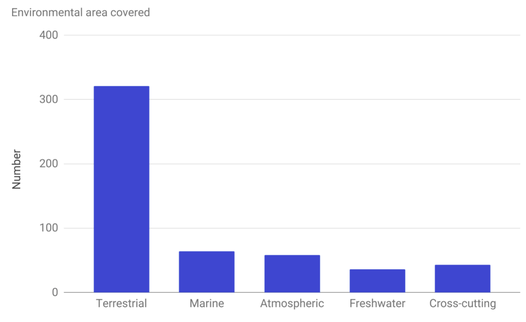
Current geographical coverage



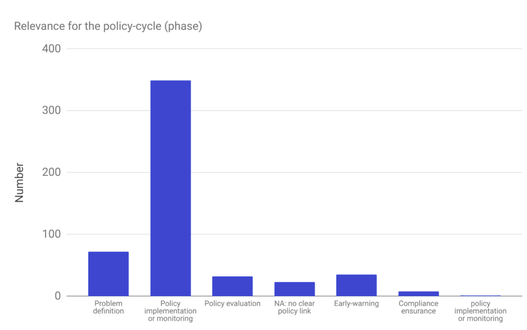
Geographical scope of projects



Organisation managing the project



Environmental area covered



Relevance for specific phase of the policy-cycle

NEXT STEPS

Currently, we are collecting detailed information from the projects relevant for this database.

We invite you to contact us if you consider your project of high relevance to environmental policy and if you would like it to be included in the database.

In the final step, this information will be analysed to cover five elements:

- Public engagement (forms and impact)
- Current impact and potential (non-exploited) benefits for science
- Current impact and potential (non-exploited) benefits for policy, notably for implementation, monitoring and compliance of environmental policies
- Data validation
- Cost-benefit analysis (use of citizens data as compared to traditional data flows)

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