



# ENPI-SEIS project Update of the country report - PALESTINE Overview of activities for 2015-2020

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# Summary

This report aims to give an overview of the changes in terms of Interstitutional cooperation, content and infrastructure occurred in the last past two years - since the publication of the first SEIS-country report in October 2011.

It also looks into the proposed pilot projects (listed below) and into the activities conducted in order to implement the shared environment information system principles in Palestine.

The pilots projects identified in the Country Report are:

- Building up the Palestinian Environmental information system
- Establishing the water information system
- Compiling the water accounts

A lot of efforts were made by EQA , PCBS and PWA in order to strengthen the cooperation among the stakeholders and work towards the establishment of a national information system.

Despite all the efforts there is a still a lot of work ahead and some difficulties to be tackled. The main difficulties encountered are the lack of human resources and financial means to purchase the IT tools and the infrastructure needed for the information system.

# Inter-institutional cooperation

The first step for the implementation of SEIS was the reactivation of the national team. Thirteen representatives from different institutions in Palestine are part of the national team (committee).

PCBS and EQA have signed memorandum of understanding with most of the institutions. The memoranda of understanding are aiming in strengthening cooperation among the different stakeholders and building up the environmental information system. The MoU are more general and do not contain details on the data to be shared, data exchange formats and frequency. The first achievement of the committee was agreeing on a list of indicators covering different environmental topics.

Furthermore, statistical units were established in different Ministries which will also help to improve cooperation and data quality as well as tackling the data gaps in the priority areas. The Ministries are trained on environmental statistics by PCBS.

The cooperation among institutions has considerably improved in the last two years but a common platform like a Report net-type of system at national level is still missing.

# Content

The signing of international treaties on environment is one of the most important steps taken in the last two years by Palestine. Palestine is now a party to the following international conventions: Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, Convention on Biological Diversity, Convention on the Law of the Non-Navigational Uses of International Watercourses, and the United Nations Convention on the Law of the Sea.

Besides the signing of the conventions, a list of indicators is being now reviewed using SMART criteria. The list covers different environmental topics which are aimed to be used for the elaboration of the first state of environment report. Those topics cover land use, energy, water, waste water, emission to air, waste, exposure to pollutants, environmental expenditures etc.

#### Industrial emissions

A point source information system was developed by a consultant from EcoConServ Company, this system is hosted by EQA and was established to be used by inspectors to record irregularities and violations of the law. The system can be accessed with a password. It is yet not sure how EQA will use this system as they have not received the source code of the system from the consultant, thus without this code they are not able to make any changes in the PSI if needed.

Within the framework of a new project entitled 'Industrial Pollution Management Information System' a similar system is under development, with the aim of having this system linked to the GeoSDI Geoportal.

Within the same project a survey covering 500 industries was conducted. The questionnaire contains questions related to emissions to air, soil and water. The data is for time being collected on paper and will be put in the system once it is finalized.

PCBS has made some estimation on greenhouse data emissions using calculation methods recommended by IPCC. The estimates of emissions to air, 2001-2011 is based on the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (2006 Guidelines). These guidelines were produced at the invitation of the United Nations Framework Convention on Climate Change (UNFCCC) to update the Revised 1996 Guidelines and associated good practice guidance, which provide internationally agreed methodologies intended for use by countries to estimate greenhouse gas inventories to report to the UNFCCC.2006.

GHG emissions are reported both in absolute units of carbon dioxide, methane and nitrogen oxide emissions, as well as in units of CO2-equivalent by applying 100-year GWPs of 1 for CO2, 21 for CH4, and 310 for nitrogen oxide.

## **Emissions from Energy Sector**

The Tier 1 method, which is used in the estimation of energy emissions, is fuel-based since emissions from all sources of combustion can be estimated on the basis of the quantities of fuel combusted (usually from national energy statistics) and average emission factors. Tier 1 emission factors are available for all relevant direct greenhouse gases.

Data on fuels are obtained from the Palestinian Energy Balance, which is prepared annually by the Palestinian Central Bureau of Statistics.

## **Emissions from Industrial Processes and Product Use (IPPU)**

By browsing the emissions sources from the Industrial Processes and Product Use (IPPU) and referring to the activity data available in Palestine, it is clear that there are difficulties in the estimation of these emissions because there are no physical units available which are required for the estimates.

Currently Palestine is in the process of preparing the first national communication report including the GHG where there is a try to solve the issue on industrial emission.

## Emissions from Agriculture, Forestry and Other Land Use (AFOLU)

Emissions from AFOLU were estimated using the IPCC Tier 1. Data of livestock in AFOLU are available and therefore emissions from enteric fermentation and manure management were estimated. Data from land have many gaps and deficiencies, plus they are not applicable to the Palestinian situation, so for these reasons, emissions from land were not estimated.

In the process of preparing the first national communication report, the issue of emissions from land is also being addressed.

## **Emissions from Waste Sector**

Emissions were estimated using the IPCC FOD method with default parameters and good quality country-specific activity data (Tier 2).

Link to the last report (Arabic version only): <u>http://www.pcbs.gov.ps/Downloads/book1984.pdf</u>

# Waste water

There is no information on waste water at the time being, the Palestinian Water Authority intends to build up an information system and they are now working on report describing the system requirements.

# Implementation of SEIS 2015-2020

## **Palestinian Environemental Information System**

The purpose of the envisaged Palestinian environmental information system is to be the platform for sharing data and information among all stakeholders. The data assembled in the system will be used to feed the list of indicators mentioned above, for the elaboration of the state of environment report, to report to the European Environment Agency under the Barcelona convention and the further SEIS implementation as well as to feed the sustainable development indicators. While steps towards building this have been made, the part lagging behind is the infrastructure. Palestine is interested in building up a national Reportnet-type of system, and the requirements for such a national system were already sent by EEA. Palestine needs financial help to purchase the needed tools and later on the necessary expertise in order to make it a functional system.

Besides the technical support and in order to build up this system in the future, expertise is needed to supervise/access the list of indicators according to a set of criteria. A support is also needed for responding to the conventions between institutions. The existing memoranda of understanding are targeting the cooperation in general. The conventions need to be more specific with defined set of data to be exchanged as well as the exchange data formats and the frequency.

The system requires as well a set of reference data to be used by all institutions such as industrial classification, land use plan, administrative boundaries.

#### Establishing a water information system

Some progress was made since 2011 and several applications of the future water information system were built up with the financial support of UNICEF. The current system contains data on water supply, water quantities and some related water quality data. In order to have information about emissions from point sources of waste water discharges (industrial plants and urban waste water treatment plants), Palestinian water authority intends to build up an emission registry.

The Water Authority needs support to further develop and adapt the Water Information System to INSPIRE requirements, as well as support for the visualisation of data on WIS (example produce reports, charts builder).

#### Water accounts

For the compilation of the water accounts support PCBS and PWA have encountered some difficulties related to data availability. Indeed due to the political situation it is not possible to access some areas, and for these parts data is missing. This data needs to be estimated. To that end expert support is needed to make estimation of the missing data and to bridge the gaps.

#### State of Environment report

The elaboration of state of environment report (SOER) is currently under discussion. Resources of the national committee will be used to draft the different chapters of the report. For this purpose and as mentioned above, the set of indicators needs to be selected. For the preparation of the report guidelines and check list were provided by the European Environment Agency.

Additional expert support is needed to supervise the whole process for the elaboration of the report, to review the content, provide comments and help with its finalisation.

## Data quality assurance and quality control

EQA is gathering the available air quality data in a data base. Expert support will be also needed to review the data and make the necessary quality checks.