

RCA Research Project: Major Project Components (2nd phase)

Overall Objectives:

To support the improvement of quality of the environment through the provision of appropriate pollutant data related to industrial activities for researchers and relevant stakeholders

Specific Objectives:

- To improve characterization through synergies in the application of NATs for better understanding of natural and anthropogenic sources of pollutants in air, soil, crops and other environmental media

To identify sources, methods of release and propagation of pollutants through the environmental media

- To assess and disseminate information on the impact of industrial activities on air quality and surrounding environments.

Outputs:

- Analytical results to assess level of impact of industrial pollution on air particulate matter and/or on soil and crops
- Development and maintenance of PM2.5 data quality and assured to regional database of selected pollutants (Black Carbon, Mass, Aluminium, Potassium, Silicon, Sulphur).
- Identification of source fingerprints and contributions (Natural and anthropogenic) from airborne pollutants and backtrajectory evidence of transport events.
- Identification of industrial sources of pollution of soil, water and crops
- Development and maintenance of database of selected critical pollutants of soil, water and crops
- Dissemination of information on the level and impact of industrial pollution in soil, water and crops to the relevant stakeholders and local authorities
- Developed analytical methodologies and appropriately skilled personnel.
- Publications and conferences including stakeholder meetings.

Outcomes:

- Use of analytical data by stakeholders and governmental agencies involved in policy and strategy design in the field of environmental pollution monitoring
- Improved understanding and new knowledge related to pollution sources for stakeholders, end users and researchers
- Use of science-based information as basis for mitigation strategies for reducing level and impact of pollution on environment.

Work plan:

- Kick-off meeting and refinements of individual work plans of RC and RA holders.
- Conducting research and publishing the results (continuous).
- Submission of annual progress reports and final reports.
- QA/QC procedures to be used in research work.
- Bilateral and multilateral co-operation.
- Attend Research Coordination Meetings.
- Report from the final RCM to summarise and evaluate the results of the research project.

Performance Indicators (for Outcomes):

- Number of countries which demonstrate confirmed intent by other organizations to take up data in support of development/strengthening Air Quality Management (target: 10 countries).
- Number of stakeholders, end users and researchers who take up the new knowledge related to pollution sources (target: total 30 across all countries).
- Number of countries which demonstrate confirmed intent by industry and governmental authorities to consider development and/or implementation of mitigation strategies for reducing level and impact of pollution on environment (target: 4 countries)

Performance Indicators (for Output):

- Number of countries producing analytical results relevant to the project (target: 10).
- Number of database entries across all GPs (target: 2,000).
- Number of countries which determine industrial pollution of soil, water and crops (target: 8 countries)
- Number of countries which disseminate information on the level and impact of industrial pollution in soil, water and crops to the relevant stakeholders and governmental authorities (target: 6 countries)
- Number of countries with time series of identified industrial pollutants (target: 10).
- Number of countries with backtrajectories identifying transport from airborne pollutants (target: 50%).
- Number of countries developed analytical methodologies and personnel trained as set out in national work plans (target: 60%).
- Number of publications and conferences, stakeholder meetings attended (target: 1 in each category in each country over 3 years).