



Features of the research programme management in the international organization

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The Global Atmosphere Watch Programme (GAW) is the research programme of the World Meteorological Organization (WMO) that provides long-term international framework for integrated observations, analysis and assessment of atmospheric chemical composition. The mission of GAW and the key implementation principles are described in the “WMO Global Atmosphere Watch (GAW) Implementation Plan: 2016 – 2023”.

The research activities of GAW are supported by the dedicated infrastructure, which includes observing systems supplemented by a set of Central Facilities supporting the quality assurance system, a data management system, advisory groups, expert teams and a steering committee. General governance of the programme is organized through focal areas. Various GAW expert groups exist under the oversight of the WMO Commission for Atmospheric Sciences (CAS) and its Environmental Pollution and Atmospheric Chemistry Scientific Steering Committee (EPAC SSC). EPAC SSC takes the responsibility for the programme strategic leadership and coordinates cross-cutting thematic activities and overarching activities in GAW. The Secretariat of the programme supports its management.

To address the needs of the countries related to diverse environmental issues, GAW currently focuses on six groups of variables (also called focal areas): Greenhouse Gases, Ozone, Aerosol, Selected Reactive Gases, Total Atmospheric Deposition and Ultraviolet (UV) Radiation. Cross-cutting activities related to development of the regional and global scale atmospheric composition forecasting are addressed by the dedicated Scientific Advisory Group (SAG) on Applications, while similar activities on the urban scale are addressed by the SAG of the GAW Urban Research Meteorology and Environment (GURME) project.

Being a research programme of the international organization (WMO is a specialized agency of the United Nations (UN) with 191 Member States and Territories) brings some peculiarities in the management of the programme: 1) Strategic decisions are taken by the countries represented by the heads of the National Hydrometeorological Services with somewhat limited input from research community. 2) The programme is implemented by the countries based on the national sources of funding, hence success depends on the priorities of the national governments. 3) There are substantial cultural, institutional, and capacity differences between the countries that have to be taken in consideration while designing GAW activities to ensure global inclusiveness.

To make the programme more sustainable and attractive to user communities in the countries, the next phase of GAW is developed following the approach “science for services”. This calls for re-thinking the way how research is organized and requires different/new partnerships to be built with organizations and institutions, providing services to society and potentially with the private sector.

At the same time there are multiple advantage of the programme being under the UN system: 1) truly global coverage (about 100 countries are involved in GAW); 2) huge potential for partnership and capacity development between countries; 3) long-term legacy of the achievements; 4) regular budget for the programme management.