

**UNITED REPUBLIC OF TANZANIA NATIONAL REPORT FOR THE 12TH
WMO/UNEP OZONE RESEARCH MANAGERS MEETING**

1. OBSERVATIONAL ACTIVITIES

Presently, Tanzania lacks the capability and resources to engage in ozone monitoring and observational endeavors. The country heavily relies on monitoring efforts carried out by other nations and international scientific institutions. However, Tanzania as a party to both the Vienna Convention and Montreal Protocol is undertaking various activities for protecting of the Ozone Layer. Among these activities include putting in place of restrictions on the consumptions of ozone depleting substances and having in place and implementing national programme for phasing out of ozone depleting substances where within this programme, research and monitoring of ozone related issues is overseen.

1.1 Column measurements of ozone and other gases / variables relevant to ozone loss
(e.g. Dobson, Brewer, DOAS, FT-IR)

Such activities have not yet been carried out in Tanzania.

1.2 Profile measurements of ozone and other gases/variables relevant to ozone loss
(e.g. ozonesondes, ozone lidar)

Due to lack of the appropriate equipment to capture and process ozone layer-related variables transmitted by the satellite, such measurements have never been carried out in the country.

1.3 UV measurements

There is no facility for direct measurement of UV, hence, there are also no UV forecasts carried out in the country.

1.4 Measurements of substances controlled under the Montreal Protocol (e.g., flask measurements, high-frequency measurements)

Such activities have not yet been carried out in Tanzania.

1.5 Calibration Activities

The Tanzania Meteorological Authority is responsible for calibrations and test-run, however due to limited financial support, not further activities have been carried out due to limited financial support.

2. DESSEMINATION OF OZONE INFORMATION

Due to Tanzania's absence of observational activities, the information disseminated primarily consists of updates on the status of the ozone layer, which are provided by assessments conducted by the Scientific Assessment Panel of the Montreal Protocol. These updates are provided to stakeholders through various channels, including emails, social media platforms, and the Ministry's official website as well as printed materials such as pamphlets and brochures disseminated during awareness campaigns.

3. PROJECT, COLLABORATION, TWINNING AND CAPACITY BUILDING

At present, the Tanzania Meteorological Agency (TMA) is the one which have potential for carrying out the research and monitoring of ozone profile. However, TMA lack facilities to carry out this activity. Currently, the TMA is concentrated on weather measurements in the country, which does not cover ozone related measurements. In addition, the department has been useful in carrying out studies on greenhouse gases and climate change. The department needs augmentation and technical assistance as backstopping to keep them with the global initiatives for research and monitoring of ozone profile. Besides TMA, other institutions like Universities, National Commission for Radiation has also potential for carrying out such studies.

4. IMPLEMENTATION OF THE RECOMMENDATIONS OF THE 11th OZONE RESEARCH MANAGERS MEETING

Drawing upon the recommendations of the 11th ORM, the NOU has encouraged the TMA and other research institutions to incorporate related ozone research components into their research and monitoring programmes. This initiative intends to foster endeavors aimed at understanding ozone monitoring, what efforts are possible in the country and what resources can be globally accessible for such projects.

5. FUTURE PLANS

As there is a good coordination and collaboration between the NOU which is based within the Division of Environmental under the Vice President's Office and Tanzania Meteorological Agency (TMA) under the of the Ministry of Transport, there is potential for initiation of the ozone monitoring and observation centre. At present, more research is needed to identify the

most feasible project that can be implemented effectively providing great benefits. Furthermore, there are aspirations to integrate air quality monitoring into these observations.

6. NEEDS AND RECOMMENDATIONS

While there is willingness to launch a project for ozone monitoring, there exists a deficiency in resources and expertise in this domain. In order to transfer this technology of research and monitoring of ozone profile, the government of Tanzania appeals to international Organizations for assistance like:

- (i) Financial assistance for acquisition of ozone and UV monitoring equipment.
- (ii) Technical support for installation of the said equipment in (i) above.
- (iii) Capacity building for technical staff for maintenance, calibration and operation of the said equipment.
- (iv) Support for scientific programmes in ozone and climate change.
- (v) Collaborations with other regional and Ozone international research centres through Information exchange, technological and technical expertise.