### REPUBLIC OF ZIMBABWE

## Dr. Jameson Kugara National Report About the Status of Ozone Monitoring Introduction

Zimbabwe ratified The Vienna Convention for the protection of Ozone layer and the Montreal Protocol on substances that deplete the ozone layer in 1992. The Country Programme has been implemented since 1995 under the Ministry of Environment and Natural Resources Management.

Zimbabwe, like most developing countries has struggled to raise the necessary financial and technical resources to establish National Action Plan for the measurement of Ozone and other stratospheric and tropospheric substances including UV.

### **Monitoring and Observational Activities of Ozone (current status)**

Zimbabwe is yet to undertake observational activities on ozone methodologies including column measurement, profile measurement of ozone and other gases necessary for monitoring the loss of ozone. Although we are very much committed to be among those countries which are on the forefront of monitoring ozone with the zeal to minimize its depletion, our biggest challenge remain the lake of equipment and funding. We do not have anything even the Narrowband filter instruments or Spectro-radiometers and other instruments for the measurement of UV through broadband.

Although we do have our Meteorological Department within the Ministry of Transport and Communication with over 30 stations scattered allover the country their activities have not been anything concerned with ozone. The reason why they have not been doing this comes back to the issue of economic hard times which then cascade to lack of proper equipment and good instruments. The only data available is that of the trend in annual minimum and maximum temperatures up to 2004. Data beyond this date including, 2010 is not available in the national Meteorological Offices suggesting the extend of the desirable need to start equipping the Ozone Project Office with financial resources and equipment for the project to be able to kickoff.

## **Projects and Collaboration**

We have never had and any collaborative activities or projects related to research/monitoring on the status of ozone over Zimbabwe as well as to determine the level of ground UV/Ozone.

### **Future Plan**

Since we have an office for the ozone project in the Ministry of Environment and Natural Resources, we plan to start research activities related to the monitoring of UV/Ozone once the committees are set. We will then have to launch a memorandum of understanding (MOU) between the University of Zimbabwe, Department of Chemistry, Various Ministries Concerned and the department of meteorological services. The Ozone office within the ministry of environment will then do coordination of activities.

# **Financial Needs**

We need the instruments like the Dobson Spectrophotometer, ozonesondes observatory to be set in Harare and other minor instruments including UV sensors or digital UV instruments to help in the measurement of UV.

# Conclusion

We intend to contribute immensely in the data provision of the status of ground UV and OZONE.