

### **BENEFITS OF CLIMSOFT IMPLEMENTATION AT ICPAC**

#### "From files to climate database management system"

Climsoft CDMS implementation and training conducted by Mr. Samuel Machua with the support from UK Met office, has improved the day to day climate data management at ICPAC. The climate data management has been transformed from flat files to interactive relational database. The provision of climate services has been highly improved in terms of quality and speed. "Climsoft has really improved how we manage climate data enabling us to have quicker and more trusted access to data we use for regional Climate analysis" said Ismael Lutta Mulama, Climate Data Management Assistant, ICPAC.

### BENEFITS

The following are some of the benefits achieved from the use of Climsoft:

### \* Data Redundancy has been minimized

The file-based data that were stored in many different locations can be easily shared, backed up without compromising data security, integrity and consistency. All the files are integrated in a single database. All data is stored only once in a central database without any chance of duplicated data.

### ✤ Data Sharing

Data can now be shared in between authorized users of the database. There is a user level access rights to the database. Therefore, the data is highly protected.

### \* Data Consistency and quality control

CLIMSOFT CDMS controls data redundancy which in turn controls data consistency. Since data is stored in a single database, we are now able to maintain consistency in data as compared to file archiving system used previously. Quality control checks on the archived data, corrections and updates data is easily achieved. The updated values are available to all the users immediately and the original record is kept for future reference.

### ✤ Backup and Recovery

CLIMSOFT provided us with a simple and fast process of data backup and recovery. Previously backup involved making copies of data files. Recovery was tedious and a lengthy process. It has solved the problem of taking backup again and again by allowing automatic backup and recovery of database.

#### \* AWS data ingestion

The additional data from Automatic Weather Stations from Somalia can now be ingested into the database without conflicting with those from the WMO meteorological stations within the same areas where the AWS stations were installed

## \* Back end database accessibility

With Climsoft implementation we are now able to apply SQL statements at the backend and query the database for different purposes. In particular for those functions that could not be easily done at the front end

## \* Provision of Climate Services

ICAPC is now able to provide a wider range of climate products than before. This includes wind roses and other graphic charts especially for the AWS data.

# Inventory of archived data

Through Climsoft CDMS inventory of the archived data is easily produced. This product has brought a lot of benefits as it makes the missing data gaps in the archive clearly visible.

# CONCLUSION

In conclusion, the implementation of Climsoft CDMS at ICPAC was a game changer in climate data management in the entire establishment.

We look forward to implementing Climsoft in all National Meteorological and Hydrological Services (NMHSs) of member countries to improve the whole cycle of data processing from data collection through climate products. In line with section 4.4 of the draft Regional Data Sharing Framework which states that, "NMHSs are encouraged to put in place WMO recommended CDMS and ICPAC shall build capacity of NMHSs and help the NMHSs to standardize the CDMS platforms". However, to achieve this vision, ICPAC requires financial support from her collaborating partners and well-wishers.

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