## MONITORING CHANGE IN THE DISTRIBUTION AND PERFORMANCE OF NATURAL PHENOMINO

MUMBA DAUTI KAMPENGELE

SOFTWARE DEVELOP ER & GIS CONSULTANT TAZAMA PIPELINE ZAMBIA



## INTRODUCTION

 One of the Cardinal principles of Zambian Government is to ensure sustainable development. hence understanding that the World is indeed but one big village. Various schools of thought have come to agree that the actions in one corner of the world would for sure be felt on the other side, it is just a matter of time.



 Equally devastating is such a journey for many of its inhabitants would suffer by either becoming extinct or by being modified in one way or the other.

- There has been talk of the possible desertification of the Amazon forest, the possible expansion of the Kalahari desert to as far as Kafue National Park to name but just a few.
- Various world organizations and their associated financers are working tirelessly year by year, ensuring consistent study and monitoring of change in the distribution and performance of national phenomenon.



- As support to such institutions is declining internationally and nationally.
- It is therefore important that adequate plans are put in place to utilize the available resources in the most equitable way. However, it is on this account that the government of Zambia established the National Remote Sensing Centre set up through Statutory Instrument No. 137 of 1999 of the Science and Technology Act No. 26 of 1997.



 It includes a segment of space science and technology dealing with acquiring data about the earth from space. Space can be defined as the area beyond the measureable atmosphere which has very few particles and any size and is flooded with electromagnetic energy (Le Roux 2008).

- Internationally, space activities have continued to have significant beneficial impacts in many areas of human life such as agriculture, climate and disasters.
- In Zambia, remote sensing and GIS technologies have been in use since the late 1980s.



## CHALLENGES

• However, development has been adhoc, not well coordinated and with little cooperation between user organizations. Currently, remote sensing data is sourced from vendors outside Zambia. Online access to imagery resources is beyond reach of many due to inadequate ICT. There is no single institution or company offering the whole range of remote sensing services.



## CONCLUSION

- The NRSC has been established against this background to spearhead the coordinated development and appropriate use of remote sensing technology and GIS in Zambia. Once fully established, the NRSC will become a center of excellence for acquiring archiving, processing and distribution of remote sensed data.
- The provision of these services to NRSC will be contributing to socio-economic development and sustainable natural resources management in Zambia.
- ITHANK YOU