

Lesotho National Geoscope Project

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Abstract: Lesotho has a continental climate, with hot summers and cold winters. The climate of Lesotho is primarily influenced by the country's location in the Karoo Basin, spanning altitudes ranging from about 1400 m to above 3480 above. Summary is the rainy season 85% of rainfall occurs from October to April, especially in the mountains snow occurs in the highlands from May to September. The hottest period is from January to February. Lesotho is a land of clear blue skies and more than 300 days of sunshine year.

Periodic droughts, earth quakes, floods, severe snow storms, snowfall, hailstorms, strong winds, localized floods and early frost are the natural hazards in the Lesotho.

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Key Words: Lesotho National Geoscope Project Local Geoscope Centres, Regional Geoscope centres, Central Geoscope Centres.

Introduction:

Keeping in view of all above geographical facts of the country, I have conducted many comprehensive studies on the Lesotho weather conditions and natural calamities combined with my researches and proposed the Lesotho Monsoon Time Scale, Lesotho Weather Time scale and Lesotho National Geoscope Project along with the other scientific results Bioforecast effect, Irlapatism-A New Hypothetical Model of Cosmology etc which can help to estimate the impending weather conditions and natural hazards of the country in advance to take mitigative measures and save the people, crops and other assets. For example.

By setting up the Lesotho National Geoscope project and maintain, the country can be predicted the impending earthquakes (or storm surges, tsunamies, volcanic hazards etc geological hazards also) in advance. Earth's underground mineral and water resources can still be found. Geoscope is also useful in emerging industries such as geothermal and geo-sequestration etc.

Lesotho National Geoscope Project:

Keeping in view of all above facts and circumstances, After studying geological conditions and disasters in the Lesotho, I have proposed the Lesotho National Geoscope Project to estimate the earthquakes and underground mineral and water resources of the country.

This is very useful to study the Lesotho underground mineral, water resources and natural calamities such as earthquakes (storm surges, tsunamies etc if the country has sea boundarie) in advance. The Lesotho National Geoscope project is a mechanical architecture established in between the underground and observatory with the help of bore-well set up at three level centers i.e., Local Geoscope

Centre, Regional Geoscope Centre and Central Geoscope Centre for maintaining the system in a coordinated manner for the entire country, proposed for conducting geological studies to know the earthquakes, ores and water currents etc. and natural calamities of the country.

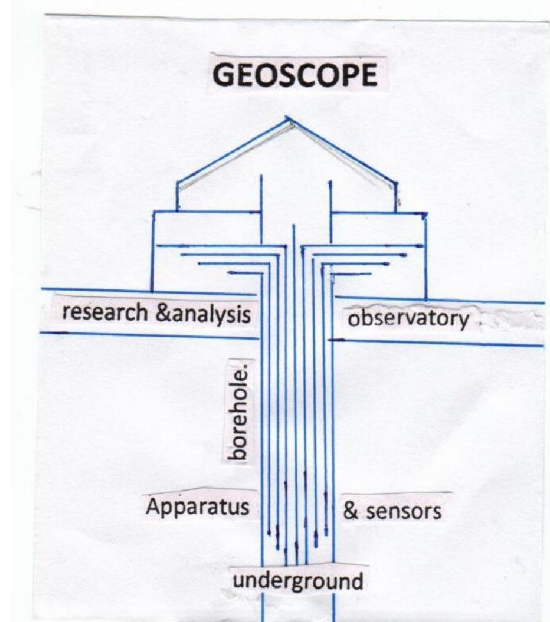
Geoscope means- a mechanical architecture established in between the underground and observatory with the help of bore-well proposed for conducting geological studies to know the earthquakes, underground mineral and water resources etc.

A borehole having suitable width and depth has to be dug. An observatory having research & analysis facilities has to be constructed on the borehole Apparatus & sensors to recognize the geo- physical and geo-chemical changes generated in the underground such as foreshocks, chemical changes, electrogeopulses, micro-vibrations, pressure, geomagnetic forces etc should be inserted into the underground and linked with the concerned analysis sections of the observatory that is above the ground to study the changes taking place in the underground.

That means-relative results of geological & geographical researches & developments of past, present and future should be interposed, coordinated and constantly developed. The apparatus related to the geology and geography such as Richter scale etc also should be set in the observatories of the Geoscope. we can make many more modern ideas & modifications thus bringing many more improvements & developments in the Geoscope.

And we can build many more types of Geoscopes thus connecting many more levels for national wide network, more and required geoscope centers should be established in the earthquake zones of the Lesotho

where earthquakes occur frequently and there should be established a central office to co-ordinate and codify the data of warnings about the onset of earthquake. The central office should analysis the data and estimate the time, epicenter, area etc details of the impending earthquake and send to the authorities and people to take precautions.



Uses:

Geoscope can help to forewarn the earthquakes 6 to 18 hours in advance and also used to detect the minerals and, water resources of underground of the country. Storm surges, tsunamies, volcanic hazards etc geological hazard can still be predicted if the country has sea boundaries. Earth's underground resources like metallic resources such as iron, gold, silver, tin, copper, nickel, aluminium, chromium etc mine sites and non-metallic resources like sand gravel, gypsum, halite, uranium, dimension stones, etc. can be found. And Geoscope is also useful In emerging industries such as geothermal and geo-sequestration etc.

Many kinds of super high remote sensing technology in the area of sensor physics, signal processing used specially image processing, electromagnetic detection technology etc should be used in the Geoscope.

Geophysical deep underground detectors and mineral exploration equipments, natural gas sensors etc should be used in the Geoscope.

Electromagnetic sensors may also be used in the Geoscope project.

Lesotho National Geoscope Project:

Many extensive researches were conducted on the national geosopic forewarning system to detect the geological changes in advance. In this system,

there should be established three level centers i.e., Local Geoscope Centre, Regional Geoscope Centre and Central Geoscope Centre for maintaining the system in a coordinated manner for the entire country of the Lesotho.

Local Geoscope Centre:

One or more required number of Geoscopes should be established in the every expected earthquake zones of the Lesotho. The observation personnel in the respective local Geoscopes should watch the onset of earthquakes day and night.

Regional Geoscope Centre:

There should be established some Regional Geosopic Centre at important earthquake regions of the Lesotho to co-ordinate and codify the information supplied by the local geosopic centers of the earthquake zones of the Lesotho.

Central Geoscope Centre:

There should be established a Central Geosopic Centre to co-ordinate and codify the information supplied by the Regional Geosopic Centers from all over of the country of the Lesotho in a coordinated manner.

Performance:

Whenever a Local Geosopic Centre sends warning about the onset of earthquakes, the observation personal should immediately send the information to its Regional Geosopic Centre. The Regional Geosopic Centre should analysis the information and send it to the Central Geosopic Centre. The Central Geoscope Centre analyze the information supplied by the Local Geosopic Centers, Regional Geosopic Centers and estimates the epicenter, time, area to be affected urban places etc., details of the impending earthquake and send to the authorities, and media and warnings in advance to take precautions.

Types Of Geoscope Models

4simple Geoscope:

This is a simple construction involving no expenditure. A deep well having suitable width and depth has to be dug. Construct a room over the well. Wash the inner walls of the room with white Lime. Fix an ordinary electric bulb in the room.

Home Made Geoscope:

This construction involves no expenditure. Even students, children's and science enthusiasts can make the Home-Made Geoscope and detect the earth-quakes 24 to 28 hrs in advance. By making certain changes and alterations, the house having a well can be converted into a Geoscope i.e., wash the inner walls of the house with white Lime. Fix ordinary electric bulbs in the room.

Performance:

Observe the colour of the room lighting daily. When the bulb glows, the light in room generally

appears white in color, but before occurrence of an earth-quake, the room lighting turns blue in colour. The onset of earth-quake can be guessed by this "Seismic luminescence Emission".

Principle:

Due to stress of continental plates and some other reasons on a place where there are favorable chances for earth-quake to occur, the pressure is induced in the underground. As a result, there is a steady rise in the pressure around the focus centre. Because of the large disparity in the magnitude of energies involved, gas anomalies such as (a) Helium emission (b) chemico-seismic anomalies of sulphur, calcium, nitrogen etc., chemical compounds (c) seismic atomic radiations of radioactive mineral compounds show up much earlier even at large distance from the epicentre which enter the well through the underground springs. These gas anomalies occupy the room in this manner; emit radiation which gives blue colour (sometimes red) to the room. 12.

Micro Geoscope:

Micro-Geoscope is an elaborate construction. For this model a deep bore-well having suitable width and depth has to be dug. An observatory having the most modern high-technological research facilities has to be constructed on that well. Most modern mechanical systems like electronic, physical and chemical sensors and apparatus to recognize the rise and fall of the underground water levels, micro-vibrations and waves generated in the underground, differences in pressure, temperature and other seismic activities should be inserted into the underground and linked with the concerned research analyzing departments of the observatory that is above the well to observe the seismic changes taking place in the underground. The results of researches on the quakes like Richter scale etc., also should be setup in the Geoscope. That means relative results of past, present and future pertaining to the earthquakes or seismic researches should be interposed, co-ordinate, and constantly developed. We can make many more changes thus bringing many more developments in the geoscope.

Observe the geophysical & geochemical changes such as foreshocks, chemical changes, ground water levels, strain in rocks, thermal anomalies, fractroluminescence's gas anomalies, electrogeopulses, micro-vibrations, pressure, geomagnetic forces, etc taking place in the underground. The onset of earthquakes can be guessed by observing the aforesaid changes in the concerned analyzing departments of the observatory.

Studies:

I have proposed many type of studies to study the earth's underground through the Geoscope. At present we discuss about two types of studies of many of them.

Seismic Luminescence Study:

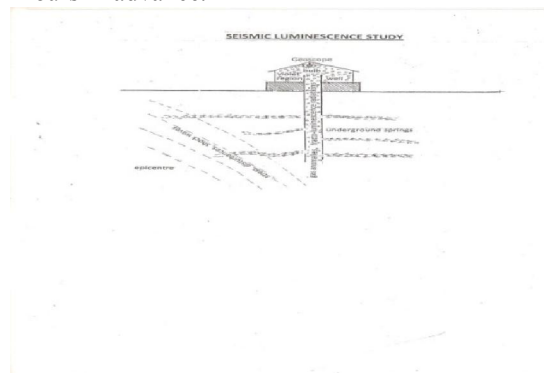
This is a very easy and simple study in the Geoscope Project. Construct a room over a well having suitable width and depth. Wash the inner walls of the room with white lime. Fix an ordinary electric bulb in the room. (Otherwise by making certain changes and alternations any home or office having a well can be converted into the Geoscope. Wash the inner walls of the house with white lime. Fix an ordinary electric bulb but don't fix fluorescent lamp in the house. This method involves no expenditure).

Observe the colour of the lightning in the Geoscope room daily 24 hours 365 days. When the bulb glows, the lightning in the room generally appears as white (reddish). But before occurrence of an earth-quake, the room lightning turns violet in colour.

Because, before occurring of an earthquake-gas anomalies such as radon, helium, hydrogen and chemico-mineral evaporations such as sulphur, calcium, nitrogen and other fracto-luminescence radiations show up earlier even at large distances from the epicenter due to stress, disturbances, shock waves and fluctuations in the underground forces. These gas anomalies & fracto luminescence radiations and other chemical evaporations enter into the well through the underground springs. When these anomalies occupy the room above the well, the room lighting turns violet in colour. The light in the room scattered in the presence of these gas anomalies, fracto-luminescence radiations and other chemico-mineral evaporations the ultra violet radiation is emitted more and the room lighting turns in violet colour. Our eye catches these variations in the radiation of the lighting in the room easily since_

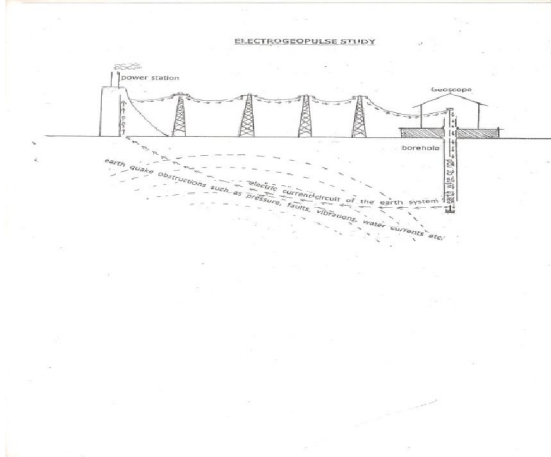
- a) The violet rays having smaller wave length.
- b) The violet radiation having property of extending greatly.
- c) The light becoming weak in the violet region.
- d) The eyes having greater sensitivity to violet radiation.

Due to all reasons the room may appear violet in colour then we can predict the impending earth quakes 12 hours in advance.



Electro Geopulses Study:

This is also easy study to recognize the impending earth quake. A borehole having suitable width and depth has to be dug. An earth wire or rod should be inserted into the underground by the borehole and linked with the concerned analysis section having apparatus to detect, compare measure of the electric currents of the electric circuit of the earth systems. Otherwise by observing the home electric fans. etc. We can also study the electrogeopulses studies to predict the impending earth quake.



Observe the changes in the electric currents of the earth system 24 hours, 365 days. From a power station, the electricity is distributed to the far-off places. Normally the circuit of the power supply being completed through the earth system. Whenever if the

disturbances occurs in the layers of the earth's underground, the fluctuation rate will be more due to the earth quake obstructions such as pressure, faults, vibrations, water currents etc., of the earth's underground. So we can forecast the impending earth quake by observing the obstruction of electric currents of circuit of the earth system in the observatory of the Geoscope and also by the obstruction sounds in the electric fans etc.

Conclusion:

We can make many more modifications thus bringing many more developments in the Geoscope.

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