STRATEGIC PLAN ON BASIC DATA GENERATION FOR INVESTMENT

What is the sector thinking?

- In the past seven years, the Ethiopian economy has grown up at an average of 11%
- The Mining Sector is making a significant contribution to the national economic and social growth and development. During the planned Period
- In accordance to GTP plan, basic geo-science data collection, organization and dissemination activities have been going on in the mining sector
- The volume of investment in mineral and petroleum sector has shown remarkable increments and big numbers of companies have been registered in the sector exploration and development
- The next five years plan (2010- 2015) should be realized so as to ensure the sustainability of economic and social development

Mines Sector Five Years Development Plan

- The Mining Sector plays a vital role for the continuous economic and social development being recorded by earning foreign currency, supplying raw material for industries (import substitution), generating revenues and creating job opportunities
- Government main attention is to create conducive environment for private investors and to participate in exploring and developing the mineral resources and capacitate the capacity of gathering, compiling and interpreting basic geo-science information to deliver to the customers
- Policies, laws and new regulations are issued that creates conductive environment for the development of the sector's economy

- Many practical examples of the utilization of geoscience data to support or help to solve society's problems in different fields include: Protection of the environment; Geo-hazards for Sustainable management of natural resources; Land use planning. Nevertheless the general awareness about the importance of geological data is still low
- To address this issue some automation reporting systems that combine several different geoscience datasets plus the specialist's interpretation have been developing in order to provide geoscience information easily to understand and use

Program objectives

According to strategic plans:

- Exploration and reserve estimation of coal and industrial minerals (phosphate, potash, limestone etc) to increase import substitution and agricultural production through improving soil productivity
- Exploration and determination of ground water quality and quantity for domestic consumption and irrigation
- Exploration and exploitation of gold, platinum, tantalum, uranium, gemstone etc) to increase foreign currency earning
- Dissemination of geo-science data to customers and providing drilling, geotechnical and sample analyses services
- Enhancing the contribution of geoscience data towards the mining sector

Bibliographic Metadata Bases, Digital Data and Promotion Dcuments

- METADATABASE: ENRAMED is Ethiopian Natural Resource and Environmental Metadata base, as a partner GSE contributes more than 2500 GSE records on Ethiopian, reports, Resource and Environmental sciences. <u>WWW.geoinfo.uneca.org</u>
- SIGAfrique Network (GIS Africa) Network Project Ethiopia: (GSE) through its participation in the GIS Africa (SIGAFRIQUE) project has entered more than 2600 records in the PANGIS database. WWW.sigafrique.net
- Geological Survey of Ethiopia Mineral Occurrence Database Mineral occurrence Database developed by the British Geological Survey in collaboration with the Geological Survey of Ethiopia (GSE) as part of Geological survey and Investment Promotion Study 2005-2006.
- GeoRef CD-ROM Database: It is the CD-ROM version of the American Geological Survey's Geosciences Database, containing over 1.9 million records covering North America and other countries including Ethiopia (1933 to 1996).
- The Geological Survey Ethiopia (GSE) is the member of African European Geo-Obseravation System (AEGOS) Project that completed the first stage (planning Phase I) on Spatial Data Infrastructure (SDI) which has been expected to continue to Phase II Implementation phase)
- 14 Promotion Documents on bentonite, clay, coal, diatomite, dimension stone, gypsum, gemstone, limestone, marble, phosphate, potash, iron, gold and tantalum are available, and others are under preparation. The cooperation with the Geological Survey of Finland (GUES) has contributed in the production of promotion documents

FOREIGN COOPERATIONS IN MINING SECTOR

Since its establishment, the GSE undertook several projects/programs to fulfill its objectives. The main ones among others:

- UNDP-Mineral Survey in two selected areas (1967-1971)
- Metal Mining Agency of Japan (1973-1974)
- Omo River Project Ethio-Canada (1976-1978)
- Ethio-Czech Mineral Exploration Project (1984-1988)
- Ethio-Korean Iron Exploration Project (1984-1987)
- Bulbul-Ageremariam–Moyale Mineral Exploration Project (Ethio-Soviet, 1989-1993)
- Adola Gold Exploration Project- AGEP (Ethio-Soviet, 1979-1981)

- UNDP- Training for Mineral Exploration Project (1984-1994)
- Ethio-Nor Mineral Exploration Project (Ethio-Norway, 1997-2000)
- Ghimbi-Nejo Regional Geochemical Survey (Ethio-China, 2006-2010)
- Ethio-Finland Capacity Building Project (2010 to present) on RS/GIS and Data Management

SPECIFIC JAPANESE COOPERATION OUTCOMES

Metal Mining Agency of Japan (1973-1974)

- The project classified the western Ethiopia mineral potential region into A-C Metallogenic Belts for gold and base metal mineralization.
- After successive exploration for years by GSE and different companies investment, some targets are closer to mine development such as Tulu Kapi and Abetselo, Dul, etc.

Ethio - Japan Corporation in Geothermal

Existing and Past Cooperation

- 1. Feasibility Study for Aluto Langano Geothermal Power Expansion (2009 to 2010):
- Has been conducted under finance from the Ministry of Economy, trade and industry of Japan. The Study indicated geothermal power expansion at Aluto is feasible at a cost of 600,000USD
- 2. Aluto Langano Geothermal Power Expansion Phase I (2011 to 2013)

A project being carried, to drill four deep wells and conduct feasibility study and design of power plant ,up to additional 70MW. The Project is financed by Japan's grant (11-12 MUSD), World Bank Ioan (10MUSD) and Ethiopian Government contribution (10MUSD)



One of the existing geothermal well -LA 8



One of the Drilling site for the proposed Project at Aluto Langano, near existing well LA 7



Aluto Langano Geothermal Power Plant



Anticipated Future Cooperation

1. Aluto Langano Geothermal Power Expansion Phase II

Japan is expected to Co-finance the power plant construction (initial talks are underway)

2. Tendaho Geothermal Development

Japan is expected to involve in the Project together with other development partners