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የኢትዮጵያ ጂኦሎጂካል ሰርቬይ

The Federal Democratic Republic of Ethiopia
Ministry of Mines Petroleum & Natural Gas
Geological Survey of Ethiopia

ቀን 21/03/2016
Date

ቁጥር GT/ADg/1/6
Ref. No.

Embassy of Czech Republic to Ethiopia
Addis Ababa

Subject: Application of Proposal

The Geological Survey of Ethiopia has so far benefited greatly from a number of development assistance by the Czech Government for capacity building in bilateral Co-operations.

Seeing a number of issues we can further co-operate especially with regards to geosciences, we are here by submitting a new proposal namely "**Training to enhance capacity of junior geoscience professionals working in public sector of Ethiopia**" which are helpfull for capacity building. For the proposed project the Geohazards investigation Directorate of the Geological Survey of Ethiopia will be responcible for carrying out work if the proposal is accepted. We are attaching five pages (5 pages) of the proposal with this covering letter.

We again appreciate the kind assistance offered to us and would like to take this opportunity to inform you our intentions to further strengthen our ties.

Kind Regards,

The Federal Democratic Republic of Ethiopia * Ministry of Mines Geological Survey of Ethiopia

Hundie Melka
Chief Geologist

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CZECH REPUBLIC DEVELOPMENT COOPERATION *Expert Request Form*	Request number: (Allocated by the Czech Development Agency)
Title: **Training to enhance capacity of junior geoscience professionals working in public sectors of Ethiopia.**	
Expected field of expertise: Geosciences	
Partner country: Ethiopia	**Region/town/locality:** Ethiopia/Addis Ababa
Expected Start and End Dates: From 2017 Until 2020	**Total amount of days in the field:** 80
Expected Czech ODA financial contribution (EUR): 40,000 Euro per year 160,000 Euro in total.	**Estimated co-financing from the partner institution (financial contribution in EUR/ in kind in detail)** 10,000 Euro per year 40,000 Euro in total.
Applicant / Partner Institution: *Mr. Hundie Melka (Off tel. +251-116-46-3321)* *Deputy Director General (Chief Geologist)* *Geological Survey of Ethiopia* *P.O. Box 2302, Addis Ababa,* *Ethiopia.*	
Context and rationale: The Geological Survey of Ethiopia (GSE) has seen progress of geoscience information generation and distribution since its establishment in 1969. Over the course since the establishment various capacity building efforts have been implemented including assistance in the early phase by UNDP to launch a local professional staff of geoscience from almost none in existence at the time. This has given rise to establishment of several trained professionals where the training from the University of was very much limited. The demand for geoscience data after long quiescence for decades during past regimes is once again on fast race truck due to increased demand from public and private investment. This resulted in high turnover of experience d and trained professionals in the geoscience field giving rise to huge gap to meet the ever complex and increased demand of the public at wide and also the private sector investing in the country's development projects needing administrative and consultative service from the government regional and federal offices. Seeing the threat the government has attempted to curve the	

problem by increasing salary which was far from competitiveness in the private market. Although this is regarded as positive indication that there is growing industry and demand for trained professionals in the market the government ability to deliver increasing service is undermined. Recently, the most hopeful solution forwarded has been to speed up capacitating and training of young professionals from Universities to catch up with turnover of senior professionals through short intensive training and overcoming the gap created elsewhere. This effort has been the most promising in curbing the problem but has itself suffered a major setback due to lack of access to experienced professionals that are preoccupied widely in the private sector unable to engage in the envisaged knowledge transfer process. Also the need to have up to date skill and scientific touch to the subject has demanded input from experience of developed nations in this regard. Hence the GSE being the focal organization on geoscience matters is taking the step to contribute its share to alleviate the problem of shortage in practically enhanced geoscience professionals for both regional and federal institutes to be able to meet the nation's goal.

Context:

Current situation dictates that the government has faced difficulties in retaining senior professionals in the geoscience field due to blooming of private sector and investment in Ethiopia. This unfortunately has reciprocated the problem of not being able to meet the capacity to render extensive service to the very industry required to develop in the country. Hence instead of entering to impractical completion with the private sector, the alternative is to upgrade and enhance capacity of young and junior professionals with intensive short term in-country training. The role of the assistance in this case is to deliver an up to date and state of the art knowledge and experience transfer in a well-structured and sustainable manner with repeated programs for cycles of up to three or four depending on the grant awarded.

Expected outputs and outcomes:

The training is envisaged to be held in the months October to November as from experience these are the months known to have not much field activities and hence when all professionals can be available for the training. In the training both theoretical as well as practical aspects are intended to be addressed with most emphasis on the practical aspect. To this effect a short precise in house lectures with strict focus on new technological discoveries and developments in the respective fields of the geo-science discipline, methodologies that will be followed in the upcoming field training etc. will be given to trainees by each trainer at the beginning of the annual training sessions. These are followed by elaborate group based field works of data generation and collection using various means by the Czech experts. This may include but not be limited to geophysical exploration, sampling, describing outcrops and rocks and soil or any deposit, sections, cross section, sketches, photographing, nomenclature of rocks, hydrogeological characterization, engineering geological characterization, geo-hazard assessment etc. Upon completion of the elaborate field work sufficient time is envisaged for processing of collected and generated data. Also compilation of the works are supervised by Czech experts as the trainees put together the training into effect by producing maps and explanatory notes using various tools. In the last year of the program all the maps are compiled for the selected area for each geo-scientific discipline with explanatory note and used manuals in the training process and made available to all involved parties through GSE.

- Practical skills of public sector geo-science professionals with junior level of experience is enhanced and capacitated.
- Basic geo-science data generation, interpretation, archiving and administration methodology is established.
- Sets of geo-scientific aspects of selected (prioritized) areas by GSE (Geological Survey of Ethiopia) will be investigated for geo-hazard risk, groundwater potential, economic mineralization and geological set-up in the training process. The area can also be those in pipe line for private exploration companies of mineral ore where agreement can be reached between

GSE and the company for undertaking joint exploration of the area if such opportunities arise.

Role of the applicant/partner organisation and roles of other key partners:

Geological Survey of Ethiopia

Local permits and licenses, selection of trainees, invitation of trainees, coordination of trainees, provision of logistics for field training particularly cars, field logistics including fuel (camping facility if available and necessary),stationary expenses, sufficient space for in-house training, existing sample analysis and preparation facility, office space for Czech experts, existing geological and topographic maps as well as any relevant satellite data at disposal of GSE for the selected areas. It is also presumed that GSE will cover the basic expenses of its trainees during the program GSE will also avail senior expertise to support in training during lecture and field work..

Regional Bureaus and Federal Organizations

Availing relevant professionals covering basic expense for their participating delegate duration of the study for both the field work and in house lectures.

Arba Minch University/Addis Ababa Science and Technology University/ Ministry of mines, petroleum and natural Gas.

Oversee evaluation of the trainees and issuing certificates accordingly.

Partner Institution in the Czech Republic

Team of well qualified and experienced geo-science professionals/scientist, the travel and accommodation expenses of Czech Experts, accommodation for trainees during field and refreshment during lecture, carrying out of laboratory analysis, training with full capacity by all means possible in lectures, field practices, Satellite data that is not available at GSE, data processing and interpretation, laboratory analysis, supervising compilation of the results by each trainee, and compilation of the overall map and explanatory notes along with the training manuals at the end of the 4 year program. Also required will be provision of basic field and scientific equipments to facilitate the training process as well as deliver a "quick win" support to the applicant institute, the Geological Survey of Ethiopia, to further strengthen its activity.

Complementarity:

So far endeavours have been in the form of collaboration on studies for the purpose of carrying out normal study procedure with the intent of having to transfer the necessary skill sets and knowledge in the process. But due to requirement to know the study areas during the project implementation which are usually short to extensively undertake the skill transfer aspect the level of skill transfer has not been well addressed. Also continued turnover of the few well affiliated project participants from partner organizations soon left the institutes creating similar gaps in capacity of the institutes to fully deliver their goal. Hence, the emphasis in this case is more on training and capacitating rather than the working of physical outputs which is regarded to be more effective with the proposed intensive and cyclical approach of training. Some of the previously implanted activities in the above context are listed below. Also the interventions in the previous cases were focused only on environmental protection and groundwater resources while basic geological understanding and economic mineral resources evaluation and administration at regional levels and at the geological survey have not been considered where the sector is suffering huge gap as well.

Japan International Cooperation Agency (JICA)

- *Landslide Investigation for development of Counter measure in the Blue Nile River section of the*

Main Trunk road from Addis Ababa to Bahir Dar towns (2010-2012).

Czech Republic Development Cooperation

- *Capacity development in environmental geology - mapping of geo-hazards including hydrogeological conditions in the regions of Dila and Hosaina, Ethiopia", which was implemented in the years 2012 - 2014 by Czech Geological Survey in cooperation with Aquatest Company a.s and the GSE.*
- *Analysis of natural risks affecting agricultural production in selected areas of Southern Nations Nationalities and People's Region (SNNPR), Ethiopia, by Czech Geological Survey (2015 – 2017).*
- *Establishment of Seismic Monitoring Station in Shashemene in cooperation with Aquatest Company a. s. (2015)*
- *Capacity Building in the Field of Engineering Geology and Hydrogeology (2010 – 2012)*
- *Capacity Building in Management of Environmental Data (2013)*

Date and Signature:

Place, date, name of authorised person within applicant institution and his/her signature, stamp.

Addis Abeba, Ethiopia
March 18, 2016

Hurdie Melka
Chief Geologist

The Federal Democratic Republic of Ethiopia
Ministry of Mines
Geological Survey of Ethiopia

Annex

1, List of Anticipated Participants

Total of 45 participants every year. This includes those from every region, the Geological Survey of Ethiopia, Ministry of Mines, Ministry of Environment and Forestry, Ministry of Water and Irrigation, Ethiopian Roads Authority and Ministry of Agriculture as given below.

No	Trainee source	Anticipated participants every year	Anticipated participants at the end of 4 year
	Federal Institutes (Ministries)	**20**	**80**
1	Geological Survey of Ethiopia		
2	Ministry of Mines Ministry of mines, petroleum and natural gas		
3	Ministry of Environment Forest and climate change		
4	Ethiopian Roads Authority		
5	Ministry of Agriculture and natural resource		
6	Ministry of Water Irrigation and electricity		
	Regional relevant zone offices	**20**	**80**
7	SNNP		
8	Oromiya		
9	Somali		
10	Beneshangul-Gumuz		
11	Gambela		
12	Amhara		
13	Harari		
14	Afar		
15	Tigray		
16	Addis Ababa		
17	Dire Dawa		
	Total	**40**	**160**

2, Support in equipment relevant for the training

Projector, Laptops, GPS, Camera, Schmidt hammer, Compass, Satellite data (images), Stationary, few basic laboratory equipment.