

SPEECH AT THE CLOSING CEREMONY OF THE 38TH ANNUAL SESSION OF THE UNU GEOTHERMAL TRAINING PROGRAMME.

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Permanent Secretary for the Ministry for Foreign Affairs Stefán Haukur Jóhannesson, distinguished guests and UNU Fellows.

The four United Nations University programmes in Iceland are a key part in Iceland's assistance and contribution to developing countries. We in the Geothermal Training Programme are the oldest in the family, established at the end of 1978, having now actually the longest history of any UNU programme.

The capacity building tasks of the UNU programmes in Iceland are important for UNU, but our rector, David Malone, has also given us the task to increase our service in policy-making and think-tank role to support the operations of the United Nations. And more emphasis is also to be given to research in the specific capacities of the different programmes of UNU. I state that the activities of the four UNU programmes in Iceland are now at a higher level than seen before. It is therefore a special pleasure for us to experience the visit to Iceland of Ban Ki-Moon, General Secretary of the United Nations, our superior officer. Tomorrow, the UNU programmes have the honour to present their activities for him. The task that he is specially focussed on during his last year in office is ensuring that everybody pulls its weight in realising the UN Sustainable Development Goals that were accepted at the UN Paris meeting in December last year. At our meeting tomorrow with the general secretary we hope to convince him that we can play an important role in this.

It is not difficult for the Geothermal Training Programme to seek inspiration in the new SDGs of UN. Access to energy is given more emphasis than before, with goal 7 stating:

Ensure access to affordable, reliable, sustainable and modern energy for all.

and goal 13 is as important for us:

Take urgent action to combat climate change and its impacts.

This is clearly recorded and demonstrated in the Strategic Plan of 2016-2019 for the UNU-GTP, which was accepted at its Board meeting in February this year.

The four UNU programmes are also optimistic that their value will be proven through the evaluation process which is expected to be carried out in the coming months by a foreign expert company in such tasks, not yet selected, but with the application procedure ongoing. I have said before that at UNU-GTP we are proud of our record and past achievements, and we are confident that this opinion will be shared and accepted through this evaluation process, which should be completed in early 2017.

During the 38 years of the UNU-GTP, we have had good support from the Icelandic Government which has ensured the strength of the programme despite difficult economic climate in recent years. We have though suffered considerable cuts in our budget since 2014, as all the UNU Programmes. We believe we are now due to see improvements from this temporary set-back, with the enormous need there is for this kind of capacity building in the developing part of the world. The budget from the government is the basis of our activities. For the Geothermal Training Programme this increased need has though had a positive side through requests for international geothermal capacity building associated with available external funds to finance it. This has helped us to keep our flag flying higher than ever. For 2016, I expect the external funding may cover about 45% of the budget of our operations. Still, I want to emphasize that the contribution from the Government's budget is our basis and we need to have a solid basis, to plan ahead.

The year 2016 has probably been our busiest ever. In all four main pillars of our operations, *the 6-Month Training, the Academic Studies, the annual Short Course Series and the Customer-Designed Courses and Training*, we have experienced strength, and even growth, and new activities have been introduced. This year 34 UNU Fellows were invited to Iceland, and are graduating here today. This is the highest number to graduate in Iceland in one year, equalling the record from 2013. All eight study lines were operated, with up to 7 participants attending the different lines. The UNU Fellows in Iceland came

from 15 countries on 5 continents. For the first time we had UNU Fellows from Hungary. The highest number from a single country was from Kenya eight as in recent years, where geothermal development is now in a such a fast-tracking mode, that Kenya is now just about passing Iceland in electricity production from geothermal. The majority of the Kenyan UNU Fellowships have been financed by Kenya or by institutions supporting Kenya. Unusual for this year was the attendance of 6 Hungarians and 4 Romanians whose UNU Fellowships are mainly financed by the EEA-funds.

Summarizing, during 1979-2016, 647 scientists and engineers from 60 developing countries have completed the 6-month training at UNU-GTP, with the highest number coming from Kenya, 117. I think it is safe to say that Iceland has found a large number of good ambassadors in this group.

Gender equality is important to the Geothermal Training Programme but here we have had to face the reality, that in many developing countries energy business and research is not an appealing working place for women, or they are just not given fair opportunities. I am therefore happy to announce that in the year 2016, we saw a higher number of women in the group than ever before, 14, or 41% of the group. We will certainly continue trying to improve this trend.

During 2016, 17 former UNU Fellows have been doing MSc studies in Iceland, 12 of them under our longstanding cooperation agreement with the University of Iceland, and five under our recent agreement with the University of Reykjavik. Our first graduate through Reykjavik University, from Malawi, completed his studies in January this year, while five graduated from the University of Iceland in May-July. Three of these were from Kenya, one from Ethiopia, and one from Tanzania. In August/October this year, 5 have started their studies. In all, 51 UNU Fellows have now graduated with an MSc degree from UI or RU.

Under the same agreement with UI, in September we also had the pleasure of witnessing our 2nd PhD Fellow, Ms. Thecla Mutia from Kenya, complete her studies and defend her PhD thesis. Three additional Fellows are carrying out their PhD studies, with one expected to finish in early 2017.

The Short Course Series in Kenya for East Africa and in El Salvador for Latin America, usually referred to as the UN Millennium Development Goals Series, have now been reorganized in order to support better the ideas set forward with the UN SDGs. These new series are expected to be offered on an annual basis, with the first SDGs Short Course given in El Salvador last month, with more participants than ever, 68. In November the first SDGs Short Course in Kenya will be realised.

The importance of customer-designed courses and training is as high as ever in our operations. This year, we have continued our close cooperation with ICEIDA – or the ICEIDA department of MfA, through the East-African *Geothermal Exploration Project*, where World Bank and Nordic Development Fund are also prime partners. Three events are given through this cooperation, a short course on Drilling Technology was given in May in Djibouti, a short course on Borehole Geophysics in June in Ethiopia, and in the beginning of November a Short Course on Project Management will be given in Ethiopia in association with the ARGeo-C5 conference. Two short course were given in the Azores of Portugal, on Drilling Technology in January, and on Geophysical Exploration in April, which ended a series of six Short Courses. Three events were given in Romania in April and May, a Workshop for Decision Makers and Short Courses on Geothermal Utilization and Geothermal Exploration. Next week will see a Short Course for a Hungarian group held here in Reykjavik on Exploration and Development of Geothermal. The European events are mostly financed through the EEA-funds initiative.

Our annual UNU Visiting Lecturer for 2015 was Mr. James Koenig from USA, the retired founder of the well-known geothermal company, GeothermEx. He gave a series of lectures on *Geothermal Development* which were very well presented and received.

We have also seen important new activities in 2016. In January we signed a Memo with LaGeo of El Salvador of increased cooperation – taken further with a formal cooperation agreement signed in April - on the development and running of the Diploma Course given at the University of El Salvador intended for Spanish speaking geothermal experts. Our new SDG short course series will be an integral part of the Diploma Course and Icelandic lecturers will participate in the teaching. The Nordic Development Fund has agreed to support the course for the next 2 years, through the ICEIDA department of the MfA and UNU-GTP, which will be responsible for the implementation together with LaGeo.

New on our agenda was also the cooperation with the Germany-based UNU-EHS in hosting four Kenyan and Ugandan MSc students from the PanAfrican University in Algeria. The students participated in some lectures here, but the emphasis was on their MSc theses, where Dr. Páll Valdimarsson supervised them during their three month stay in Iceland in the spring, and to the end of their studies in September this year, when they graduated. The financial part of this was mainly born by UNU-EHS, but UNU-GTP

also contributed significantly to this.

I think we can all agree on that this has been a very good year for UNU-GTP. I would like to thank the many teachers, trainers and supervisors that we have been able to call upon during the year. You are the key to the success of the programme. Here, the experts of ÍSOR – Iceland GeoSurvey have as before carried the biggest load with about 55% share, while about 20% have come from the Universities, and 25% are specialists from other institutions, energy utilities and consulting engineering offices. In all, about 100 teachers have contributed to the teaching, training and supervision this year. Without you the UNU Geothermal Training Programme could not operate. Despite the few permanent employees, these numbers show that the Geothermal Training Programme is really a large working place.

And let me then bring the attention to the permanent staff of UNU-GTP. Here I would like to give my deepest thanks to your good work, Ingimar G. Haraldsson, Markús A.G. Wilde, Málfríður Ómarsdóttir and Þórhildur Ísberg (who is unfortunately sick at home today), your drive and will in work is the key to the success of the programme, in academic terms and even more so in human terms.

After this long review of our activities, it is time to turn the attention to the current UNU Fellows. We had a good class in the six-month programme in 2016. Not only did we see you do well in your training, but also in everyday live here in Iceland. It was for example a proud moment to see three of you run the full Reykjavik Marathon in August, there you outdid all former classes. I am sure that through your training you are clear on the importance of geothermal development for your home country. You were selected to come to Iceland because you had impressed us - through your education, in interviews or with your background, making us believe that you can play an important role in geothermal development of your home country. Now it is your task to prove this.

Dear UNU Fellows, you will now be returning to your home. You have been a long time away and made sacrifices in not being close to your families and friends. During the period you learned about and experienced some of the benefits of geothermal energy, but you also experienced many other things. And in many ways the summer of 2016 was a special one in Iceland. It may not have been very warm according to your standards when you arrived in Iceland, before April 19, unusually early for UNU Fellows, and then our geothermal heating proved its worth. But still you certainly had the fortune to experience Iceland from its best side, with the summer measuring as the fifth best on record. And rains or wind you hardly saw for long periods, though you have clearly seen this other side of our climate during this week. And this was also the Icelandic Football Summer, when our footballers and fans captured the attention of the world. And that is another thing which made this a very special year in Iceland. The participation of the Icelandic team at Euro2016 in France, as the smallest nation ever to participate in finals of a major tournament, and its exceptional deeds there, is something that most Icelanders will treasure for a long time and I know that many of you really enjoyed this with us as well, not forgetting all the greetings I received on this from old UNU Fellows around the world. There are many memories to treasure from the weeks I spent in France, besides the games and the Viking clap, and I want to share two of them with you. I will always remember jumping around hugging our Minister of Industries and Innovation after one of our famous victories, I was hoping she would be with us here today to remind her of this, but more pressing government duties intervened at the last minute, but she sends us her best greetings. Nor will I forget giving a high-five to a guy sitting behind me, after Iceland scored in another famous victory, he was very much alone there, and had actually lost his prime minister's status a few months earlier. Football can certainly bring people together, but so can geothermal also. And let us not forget the Northern Lights or Aurora Borealis which have been exceptionally kind to you during the last 2-3 weeks. I do not remember earlier classes experiencing such heavenly light shows as you have seen.

Now your thoughts are probably already half way back home. When you return home, please remember to keep in touch with us and your fellow students. In the age of information none of us has the excuse of not being able to connect. And you must also remember your new families, which will a part of your future live. The UNU Geothermal Family keeps on growing every year, and the same applies also to the Big Geothermal Family, where development of geothermal resources all over the world is its burning ambition. As with other family ties, this means both duties and pleasures. We will be following you from distance and support you in your work as possible.

I wish all of you a very good and safe journey home, and look forward to see you soon again, wherever that may be.

THANK YOU