Geophysical Research Abstracts
Vol. 14, EGU2012-14131, 2012
EGU General Assembly 2012

An Earthscience Research Policy is indispensable for a sound protection of geoheritage values. A case study of the province of Drenthe, the Netherlands

E Bregman (1) and I Kant (2)
(1) Province of Drenthe, Westerbrink 1, 9405 BJ Assen, NL, , (2) Baltic Federal University, Kaliningrad, Russia

To distinguish and protect geoheritage values a digital database on the earth history is an important tool for environmental decision making. Be it for spatial planning or nature- and landscape management purposes. Apart from the database, sufficient earth scientific knowledge is needed to interpret the data, for example how to use the data in a proper scale and context, or how to combine the data with information from reports, maps and other databases and to indicate the extra fieldwork needed.

The actual data available on geology, geomorphology and soil for Dutch government officials date from inventory programmes in the 1970s and 1980s. They need an update because soils and lands since then have changed considerably, and modern scientific insights and techniques developed.

At the national level a digital soil database was started in the BIS-programme, the Bodem / Soil Information System (2010 -2014). The province of Drenthe in 2005 already began a programme to update the soil information at a provincial scale, e.g. the scale of the geomorphological map 1:10.000 – 1:20.000. In this programme the province combines forces with regional organisations, but also with Dutch universities: the University of Utrecht and Wageningen University, as well as with universities abroad. The province cooperates with the Free University of Berlin, the universities of Latvia, Arhus in Denmark and Tartu in Estonia to update its knowledge on respectively groundwater modelling, clay minerals, buried glacial valleys and ice streams. These studies are part of two European projects: (i) Potentials of deep groundwater in Glacial Channel Systems in the IML with respect to natural functions and human impact on strategic freshwater supplies (GCS project) and (ii) the Shifting Shoreline and human settling project (SSS-project). The last project aims to give an overview of postglacial coastal development and stone age occupation.

Apart from this, the province spent over 800.000 EURO on knowledge improvement: external orders for research, students fellowships, Ph.D studies and international networking.

Cooperation of the province with the Dutch universities and the universities abroad contributes to a better understanding of the historical development of the Drenthe landscapes, better information and more reliable maps and a better insight in the unique geoheritage values of Drenthe on a European level.

The poster presents a map of the province with research locations and involvement of the Dutch and foreign universities explained.