STRENGTHENING YOUR APPLICATION TO THE NETHERLANDS FELLOWSHIP PROGRAMME

If you intend to apply for an NFP fellowship, it is necessary to supply a motivation statement. Currently, the Netherlands Government focusses its development efforts on the following four themes:

- Security and legal order
- Water
- Food security
- Sexual and reproductive health and rights.

It is likely to enhance your chances of gaining a Netherlands Fellowship if your motivation statement shows a clear link to one of the focus areas.

A few suggestions on how the ITC Geoinformatics course may contribute to these four themes are given below.

1. **Security and legal order**
   - Most property disputes are caused by insufficient or unreliable boundary demarcation data.
   - The accurate establishment of property boundaries and its assets rely on precise surveying methods and data capture.
   - Data capture and storage techniques need to be fast and efficient to cope with rapidly changing infrastructure development.
   - The availability of accurate property boundary data is only helpful when it can be stored, disseminated, and displayed to all stakeholders in formats that can be easily shared and understood (or interpreted). Geographic Information Systems facilitate this.
   - Cadastral organisations are responsible for documenting real estate property rights. However, the quality of stored data, the ability to deal with large data volumes is increasingly important.
   - The Geoinformatics course covers all topics above.

2. **Water**
   - Availability and access to scarce water resources, and drought, are serious concerns worldwide. Serious disputes arise over the utilization of river water and damming of rivers that flow across international boundaries. Proper information about the location of resources and terrain are essential data requirements for settling disputes, or better, preventing them.
   - Flood modelling can be performed with Geographic Information Systems but requires a good description of land height and topography – such data can be derived from remotely sensed data.
   - Environmental Impact Assessments to assess infrastructure changes requires much geospatial data and analysis.
   - Accurate digital elevation models are required by decisions makers when planning efficient flood defences. Laser scanning techniques can provide the necessary data for this.
   - Geoinformatics addresses in-depth the technological developments for accurate and fast acquisition of required base data.
3. **Food security**
   - Remote sensing image classification is routinely used as an input to assess the healthiness and potential yield of crops.
   - Data integration techniques using data from multiple sources provide valuable tools for agricultural monitoring.
   - Remote sensing and GIS techniques contribute to predictive models used for agricultural production, and help assess their accuracy and uncertainty.
   - Geographic data is essential for land-use planning.
   - Data obtained from Unmanned Aerial Vehicles (UAVs) can be used in precision agriculture.
   - Geoinformatics introduces new technology and methodologies to support increasing food security.

4. **Sexual reproduction health and rights**
   - Geo-information tools contribute to the siting of hospitals and clinics and mobile healthcare information for specific target groups.
   - Geoinformatics contributes to more effective and personal dissemination of healthcare information to specific target groups through wireless networks and mobile phones.
   - Statistical data on demographics of special target groups can be modelled in geographic information systems to optimize the supply of health services.
   - Pollution data affecting fertility can be modelled and the information can be used in land use planning, thus mitigating these effects.
   - Geoinformatics strongly focuses on proper spatial modelling, increasing the reliability (or: reducing the uncertainties) of the outcomes of data analysis and integration.