

# **The Nation Land Capacity Building Model for Informatization – an ICT based model to strengthen human resource capacity for the sustainability of land administration modernization projects**

**Beckhee Cho (Republic of Korea)**

**Key words:** Capacity building; Education; e-Governance; Land management; Land governance; Land Information System; Land Administration

## **SUMMARY**

No matter the size of a country, land is always a scarce resource. It is, therefore, of utter importance that land is managed effectively and efficiently, and that good land governance takes place so that land tenure or ownership can be secured and protected for all people, land resources are optimized according to national plans, and there is a sound and fair taxation system. All these will lead to the economic advancement that all countries deserve. One of the ways that this can be achieved, which has been and is being discussed continuously, is the materialization of a modern land administration system that has a full grasp of all national land information and data and that this information is shared and fully utilized by all the stakeholders for land administration. In the case of Korea, a modern Land Information System (KLIS) provided the solution to this end. The KLIS, one of the pillars of Korea's globally recognized e-government system, integrates into one system all information on land for all sectors of the government including local and federal on real time basis including all transactions and changes, policies, plans, etc. This information is used for policy making, land and urban planning, secure sound taxation, and better public service.

For this efficient system to be fully operational, the government worked centrally, coordinating all the pertinent sectors including at the local level. More important, however, was the nationwide capacity building that took place for this massive project to be successfully carried out. Capacity building took place both at the public and private sectors and to review existing institutions. New organizations were created or merged for the purpose of managing the creation and maintenance of the LIS. But most important was the strengthening of the human resource capacity. The first step was public awareness campaigns to change the mindset of the people but more importantly the public officers. Thus, short, mid and long term education and trainings were carried out not only for the public sector but also for the private sector. This new generation of experts in the field of ICT, land administration, from land surveying with the latest technologies to digitalization, as well as

---

The Nation Land Capacity Building Model for Informatization – an ICT based model to strengthen human resource capacity for the sustainability of land administration modernization projects (9677)  
Beckhee Cho (Republic of Korea)

FIG Congress 2018

Embracing our smart world where the continents connect: enhancing the geospatial maturity of societies  
Istanbul, Turkey, May 6–11, 2018

GIS is the generation that is leading the modernization of land administration in Korea today.

Interaction with other countries has shown that until now when embarking on land administration projects internationally, whether with multinational development banks or as bilateral cooperation projects, the strengthening of human capacity usually happens once the project has already been started. This may have worked when projects were installed in a country with advanced systems. The only role of the recipient country is to maintain the system which is renewed on a regular basis by the administrators of the advanced systems. However, today, a country is more proactive with growing expertise in advanced technologies and a population that has full access to ICT technologies. Therefore, a country wants and needs to take on the leadership role of the project so that this can be sustainable in nature. Only such a sustainability will be able to integrate the project into the overall administrative system.

It is for this reason that the strengthening of capacity must take place prior or as an

integrative part of a project. Enemark and Williamson says that “it is critical that capacity building is a mainstream component, not as an add-on, which is often the case. In fact such projects should be dealt with as capacity building projects in themselves.”\*

Based on this understanding in addition to the growing experience of working with different countries recently, LX, the Korea Land and Geospatial Informatix Corporation developed a capacity building model that aims to tailor-make a capacity building scheme that is most suitable for the country that is seeking to embark on projects for the modernization of land administration.

The capacity building model for human resource strengthening was developed by LX to meet this demand for capacity building in the modernization of land sector and land administration. The model called the National Land Capacity Building Model for Informatization (hereafter referred as NLCBM-i) is a model that focuses on the analysis, construction, development, maintenance of land service or system that is digitally based by looking at the different sectors of land administration from policy, planning, land data, data acquisition, expertise, etc. The model is systematically designed into three areas – diagnosis of the capacity in the mentioned field, assessment, and development of a roadmap to that may work for the country.

In this paper, the NLCBM-i model will be presented by first defining the model based on the background and also its components. Furthermore, it will discuss some countries where this capacity building is being applied.

By presenting the NLCBM-i through this paper, the author hopes that this model or parts of the model can be used as a preliminary exercise before projects related to the modernization of land administration are executed.

---

The National Land Capacity Building Model for Informatization – an ICT based model to strengthen human resource capacity for the sustainability of land administration modernization projects (9677)  
Beckhee Cho (Republic of Korea)

FIG Congress 2018

Embracing our smart world where the continents connect: enhancing the geospatial maturity of societies  
Istanbul, Turkey, May 6–11, 2018