Developing an Automated Cadastral Information System in Egypt

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Key words: cadastre, GIS, land registration, certificate of title, security of tenure

SUMMARY

The Egyptian Cadastral Information Management Project (ECIM), working since March 2002, is funded by the Ministry for Foreign Affairs of Finland, to support the computerisation of the cadastral system in Egypt. The project owner is the Egyptian Survey Authority (ESA), but the Real Estate Publicity Department (REPD), in the Ministry of Justice, is also concerned, because they are responsible for the juridical land registry.

The project's pilot area was Damanhour district in Beheira province, a rural area approximately 160 km north of Cairo and 60 km south of Alexandria. The initial system was only concerned with rural lands, which are included in the Title Registration System. The approach adopted was to build a unified cadastral database and to convert and migrate there all existing analogue and digital data, both map data and the corresponding attributes. The GIS chosen (Oracle, ArcSDE, ArcCadastre, and MapObjects) was customised to include automated procedures to continuously update these data. Computerising the day-to-day cadastral work of ESA was seen the most secure way of keeping the database up to date. Simultaneously the selected approach will streamline the previously varying work procedures, as the system will guide ESA staff thorough the workflows. This has been seen important, as good governance is a significant sub-goal of the project.

Considerable time was spent in analysing the current manual updating system, which was made more difficult because of the lack of an agreed practice manual. Egypt also still runs two land registration systems in parallel, namely the old Deeds Registration System in urban areas, and still about 20% of rural areas, and the new Title Registration System, that has been built by systematic adjudication since 1976, and currently covers approximately 80% of rural areas. The fact that two fundamentally different systems are run in parallel in same offices and by same staff has made it confusing for the involved persons to distinguish between the procedures.

It was also found out that the results of the systematic land adjudication, run since 1976, were not nearly as expected, i.e. the adjudication didn't succeed in establishing the reality into the legal registers. Informal ownership thus dominates.

Despite of the challenges ECIM has made significant progress in developing a computerised cadastral information management system in the Egyptian Survey Authority.