

Ex ante evaluation of aligning education with land administration (technology) in Vietnam

**Thanh BUI QUANG, Tuan TRAN VAN, Tuan TRAN ANH, Vietnam
Walter T.de.VRIES, Netherlands**

Key words: Land Administration, Education, Alignment, Vietnam

SUMMARY

The current rapid urbanization and land use changes in Vietnam require a new approach and an enhanced capacity for land administration at all levels. Evaluating the effects of capacity building interventions is however difficult. Often the results may only be effective after a significant number of graduates and a significant number of years. Moreover, very few projects evaluate their impacts in retrospect. That's why this article conducts an ex ante evaluation of for a three year project (2009-2012) aimed at building capacity in land administration in Vietnam.

The ex-ante evaluation relied on our own educational alignment model, constructed in analogy to the business-IT alignment model of (Henderson and Venkatraman, 1993). We assumed from the onset that any capacity building project input would need to consider the Vietnamese institutional and historical context of both the land administration domain and the educational domain. The extent of alignment formed the basis for the evaluation.

The educational alignment model focuses on the alignment of educational requirements with the land administration domain requirements. For the educational requirements we made a distinction between educational infrastructure and educational processes (content and mode / technology of delivery). For the land administration domain requirements we made a distinction between land administration infrastructure and land administration processes (content and mode of execution / work flows). The evaluation would entail whether there are mutually beneficial relations between the educational domain components, the land administration domain components, the infrastructure components, and the processes components.

Ex ante evaluation of aligning education with land administration (technology) in Vietnam

Thanh BUI QUANG, Tuan TRAN VAN, Tuan TRAN ANH, Vietnam
Walter T.de.VRIES, Netherlands

1. INTRODUCTION

Vietnam is a country in transition. The rate of urbanization in Vietnam is relatively high. In the Southeast, due to the presence of Ho Chi Minh City, the urban proportion of the population increased from 30.1% to 57.1%. In the Red River Delta, with the presence of Hanoi and Hai Phong, the urban proportion of the population increased from 19.9% to 29.2% (General Statistics Office Vietnam, 2011) is fairly large. Vietnam's e-readiness ranking in 2009 was 64th. The number of internet users in 2011 is approximately 30% of the entire population, while the number of mobile phone users is in the order of 120 %. On the other hand the societal and public administrative system is not yet geared towards relying fully on Information and communication technology (ICT) products and services. The Vietnamese ICT market is estimated to grow at 16% over the 2011-2015 period, and the domestic market for ICT products and services is projected to reach US\$4.1bn by 2015.¹

These simultaneous developments have introduced a set of new problems, such as how to manage the increasing and diverging demand and supply of public and private land. A joint development meeting of bilateral and multilateral agencies (Worldbank, 2011) revealed that the urban land market is rapidly expanding, yet slowly maturing. *Efforts to extend the formal market for land have met with limited success, and the absolute majority of land transactions remain outside the formal sector. The urban land market is more focused on investment in land and property for commercial purposes being supported by evolving government policy and legislation.* (Worldbank, 2011). Urbanization also transforms society to a more urban culture with citizens expecting rapid access to facilities and resources, and, most of all, to information. As a result of both developments, there is an increasing demand for up-to-date and accurate system of land information. *In the long term, improvement of governance and service delivery capacity of the land administration is vital for its sustainability, as the acceptance of its clients remains low. The incidence of registered transactions is estimated at one-fourth of the total number of land transactions at most* (Worldbank, 2011). As a result, capacity building in land information systems and infrastructure is crucial. This includes an a set of skills and knowledge in how to set up and maintain a local and global land information infrastructure as well as a set of skills and knowledge in how to develop sustainable land policies.

Evaluating the effects of capacity building interventions is however difficult. Often the results may only be effective after a significant number of graduates and a significant number of years. Moreover, very few projects evaluate their impacts in retrospect. That's why this article

¹ <http://www.agentschapnl.nl/onderwerp/vietnam-ict-kwartaal-iii-2011>

conducts an ex ante evaluation of for a three year project (2009-2012) aimed at building capacity in land administration in Vietnam.

2. CAPACITY BUILDING PROJECT INTERVENTION

The project ‘Capacity building partnership in land administration for sustainable economic development in Vietnam’ had 4 interrelated activities:

- The development and accreditation of a joint international course in land administration,
- The on-the-job upgrading of academic staff in both land administration and educational tools, and
- The on-the-job training of land administration officials.
- Development of research in land administration in Vietnam.

In relation to the first activity, in 2010 the project team conducted a training needs analysis which evaluated the existing courseware in land administration in Vietnam. Furthermore, a joint educational development project took place to create an e-learning module on land information infrastructure. Hanoi University of Science – Vietnam National University (HUS/VNU) staff was upgraded in the land administration modules at the Faculty of Geo-Information Science and Earth Observation – University of Twente (ITC/UT) , and both educational partners deliberated on the adaptation of the course contents, teaching and learning material (‘courseware’), and mutual responsibilities when providing a joint course, quality control procedures, candidate’s selection process and course flyer for marketing purposes. Partners agreed that the first MSc course would start in September 2011. In September 2011 the first 10 students entered the joint MSc course in land administration in Vietnam.

For the second set of activities VNU staff – having been upgraded earlier in the course content and modes of delivery – has started to organise and execute the modules in Vietnam. In all modules there has been extensive mutual communication between VNU and ITC/UT staff to ensure an equal quality of each other’s courses. The modules were supported by courseware in an internet-based learning environment (Blackboard) enabling such equal quality and communication. This also allowed for e-learning, self-study, flexible learning and distance learning facilities. The course is entirely provided in English.

The third set of activities consisted of consecutive workshops in 2011, in which 97 staff members of the General Department of Land administration (GDLA) in Vietnam and VNU participated. The workshops dealt with:

- Workshop 1 “*e-Government; sharing information in order to create a transparent land administration system*”
- Workshop 2 “*Land registration and the development of the real estate market*”; this included unit leaders and District Land Administration (LA) leaders with on-the-job training.
- Workshop 3 “*Application of Remote Sensing and GIS on land use changes*”.

Finally, the staff members of VNU and ITC have started to produce several academic publications in international research forums. The course is gradually attracting more attention nationally (at local government offices), regionally (in Lao, Cambodia and Japan

notably) and internationally (through presentations and publications at conferences and land administration related journals and other publication outlets). The execution of the course has been a boost for VNU staff to connect to international academic networks, and first discussions are underway to expand the course further. Through the initial relations in this project VNU and ITC were able to host a UN-Habitat workshop on Transparency in land administration in Hanoi. Although the impact of the staff upgrade and students / graduates intake may not be directly visible, the first signs of impacts - in the form of new joint research projects, an increase in requests for land administration expertise and in students applications, an increase in land related private companies relying on GIS and RS technology - are promising.

3. EDUCATIONAL ALIGNMENT MODEL

For Vietnam the historical analysis of (Nguyen Duc Kha and Tran Van Tuan, 2011) shows how the educational infrastructure has aligned gradually with the changes in institutional structures in Vietnam. Reviewing the project efforts of in terms of this development reveals that accreditation and internationalization are indeed significant elements in the infrastructure alignment. A crucial condition remains however the alignment of educational financing and educational accreditation. In terms of process alignment the on-the-job training of academic staff is a significant incentive. Crucial considerations include however the alignment of national versus international recognition of educational content. In addition there still needs to be an alignment of traditional modes of delivery which are still very common in Vietnam with e-learning and distance learning modes of delivery. Finally, the project input of on-the job training of government official is indeed an alignment effort of land administration infrastructure with land administration processes. However, in this respect a crucial condition remains that it aligns with both the land administration policy and the programs of public sector reform.

In order to review the project efforts in designing and implementing a new land administration course in Vietnam, we constructed our own educational alignment model, in analogy to the business-IT alignment model of (Henderson and Venkatraman, 1993). Instead of focusing on the alignment of business and IT within an organization, we focused on the alignment of educational requirements with the Vietnamese land administration domain requirements.

Within the section of educational requirements we made a distinction between educational infrastructure and educational strategy (content and mode / technology of delivery). In the section of Vietnamese land administration domain requirements we made a distinction between land administration infrastructure and land administration strategy (content/policy and mode of execution / work flows). The infrastructural requirements in both concern both the institutional and historical context in which either education or land administration have developed and are being accredited (for education) or regularized (for land administration). The alignment seeks a mutually beneficial relation (a 'fit' or 'linkage') between the educational domain components, the land administration domain components, the infrastructure components, and the strategic components.

Figure 1 shows presents the educational alignment model schematically. The ellipses with text refer to the model components, the boxes contain the strategies and infrastructure for both the

educational and land administration domain, and the arrows describe the ‘fits’ and ‘linkages’.

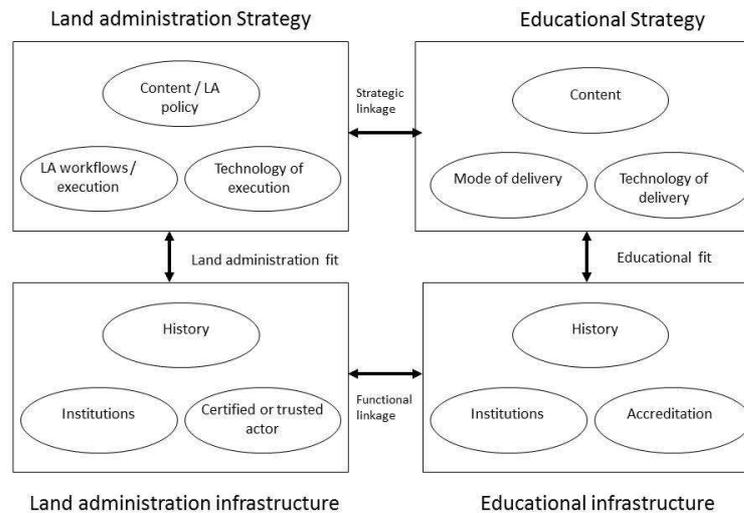


Figure 1. Educational alignment model

The alignment is the combination of seeking the ‘fit’ in each domain and the ‘linkages’ between the domains. This starts by examining each of the individual components of model.

4. EXAMINING THE COMPONENTS OF THE EDUCATIONAL ALIGNMENT MODEL IN VIETNAM

4.1 Educational infrastructure in Vietnam

History

Education in land administration in Vietnam has a long history. For Vietnam the historical analysis of (Nguyen Duc Kha and Tran Van Tuan, 2011) describes how the land administration education has been regularly adapted to cope with the changes in technology and institutional requirements in Vietnam.

The strategy of the project intervention was to link to the history of land administration education. In line with the historical developments this required a gradual approach of implementation.

Institutions

The strategy of the project intervention was to establish a sustainable academic relation between a network of universities in Europe with both VNU / HUS and University of Mining and Geology (UMG). The latter two had both a history of education in land administration, albeit with a different focus and a different set of objectives.

Accreditation

There are two different kinds of accreditation in Vietnam: one by the Ministry of Higher Education, and one by the umbrella organization of Vietnam National University. Internationally the accreditation is handled by UNESCO, which recognizes certain degrees.

The academic network in land administration builds on a set of inter-organisational MoUs to accredit and / or recognize each other's courses as equivalent. LA department is tied to VNU accreditation procedures and the project intervention targets to get international accreditation

The project strategy was to achieve both national and international accreditation. The latter was possible through the joint education programme of ITC/UT on the condition that the Vietnam programme would be highly similar to the one at ITC/UT. This included establishing entry requirements (a minimal level of English, being a BSc graduate in a relevant subject), subject to regular audits, establishing certain fees, aligning with Bologna declaration requirements, etc. The Vietnamese entry requirements were however different (a minimal score in an entry test; no specific level of English required).

4.2 Educational strategy

Content

History favors a gradual approach of adaptation and the project intervention is evaluated on short term gains. The Msc programme takes the adapted modules from ITC/UT. The Modules include Core technologies (Remote sensing, Geographic Information System), Land information systems, Land policy, business administration/ organizational development and Land information infrastructure. Extra modules focus on reading, writing skills, advanced research topics and thesis writing skills. The programme modules are equivalent to such LA running course in VNU

Mode/ Technology of delivery

Historically Vietnamese conventional modes of class-room teaching are inherent but the global developments press for increase of alternative modes and ICT-based learning. The project introduces more variety of work forms and courseware and e-learning environment. The programme is scheduled for 15 months in Viet Nam for completing all modules and 3 months in the Netherlands for Master thesis proposal. Lectures were recorded in/ by ITC/UT lecturers and students enjoy the videos and interact with the Vietnamese corresponding lecturers. E-learning environment and videoconference were created to connect learners from different locations.

4.3 Land administration infrastructure

History

The alignment of ICT in the land administration systems is therefore a major challenge. At first glance Vietnam has a relatively complex institutional system of land administration, in which different levels of government and multiple institutional stakeholders need to interact. There exists a historical legacy of different type land administration systems, which in addition gradually adapted to new societal challenges such as rapid industrialization, informatization and urbanization. (Nguyen Duc Kha and Tran Van Tuan, 2011). Partly as a result of this situation land information products and services are the responsibility of various public agencies and government authorities in an interrelated system at national, provincial, district and commune level. Moreover, in some instances these institutional actors are part of the environmental administration, at other instances part of the physical infrastructure and construction administration. This implies, for example, that land use rights for individual

citizens are processed at a different level and by different administrative columns than land use rights for companies for example. Information requirements reflect these differences as well.

Institutional set-up

Legally, the current land law of 2003 provides the formal details on how to operationalize the land administration in Vietnam (Lemmens, 2008). However, despite the universality of this land law for all of Vietnam, the implementation problems vary per district. In more rural areas the rapid migration to more urban areas has fragmented the notion of ‘rural communities’. This makes allocating land use rights to (often unregistered – hence unidentifiable) ‘communities still a complex public administrative task.

Certified or trusted actors

While the government and agency columns have authority, trust is at stake given cases of mismanagement, corruption and discussions on transparency. A report of (Worldbank 2011) shows that “*corruption is most likely to occur when an official or office has a monopoly, when the official or office has a great deal of discretion over how the decision is taken, and when there is little accountability for that decision or transparency, which might make it harder for the corruption to proceed unabated*”. A recent case reported in Vietnam disclosed the alarming situation in mishandling of land acquisition and it revealed the fact that state officials would only do the right thing if people fight back physically². In addition there are powerful land actors (developers, brokers, etc.) (Sun Sheng Han, Kim Trang Vu 2008) that build up tensions among them and lead to violent conflicts.

4.4 Land administration strategy

Content / LA policy

A report of (Dang Hung Vo, Goesta Palmkvist 2009) showed the aims of current land administration and land reform policy that are: complete the land legislation and land policy system based on political stability; social justice and economic development; effectively strengthen to the land inspection system; well settle land disputes. According to the decision of the Government, initial cadastral documents and digital forms of maps are accomplished and land use certificates are delivered to all right owners for effective short and long-term land use planning and efficient real estate market. The management skills of land administration, therefore, should be modernized towards technology-based approach with the establishment of the National Land Information System (NLIS) as a final output.

The LA policy and reform focus on more effective performant and execution of land by applying modern techniques and a more comprehensive approach. LA reform is to keep up with practice demands and to fill the gaps in current land law

Mode of execution /work flows

Land decision responsibility is given to local certified actors and a sharing mechanism is introduced through the establishment of NLIS. The land law and executing guides also contain detailed descriptions for required workflows in case of property transactions. The

² <http://www.thanhniennews.com/2010/pages/20120210-hai-phong-authorities-finally-act-in-land-revocation-dispute.aspx>

project intervention focused on on-the-job training through a workshop and tailor-made courses with GDLA and for its staffs.

5. CONCLUSION

From the alignment analysis we assessed that the project can enhance both the land administration capacity and the educational capacity in land administration in Vietnam. We warn however that such capacity change is only a gradual process of change, and may not be directly visible. Evaluation of capacity change must acknowledge that capacity is part of mutually influencing infrastructures and historically grown processes of implementation. Evaluating project inputs in terms of alignment is therefore worthwhile.

We believe that the alignment model is a useful tool to structure the evaluation of the project and its impact. The model has made it more evident that cooperative interventions, including the specific capacity building project can align the land administration strategy with the educational strategy in Vietnam. The application of the model has furthermore made clear that both the land administration and educational infrastructures only adapt through a very gradual process, and that project interventions may this not always be directly visible. Recognizing that capacity change is part of mutually influencing infrastructures and historically grown processes of implementation is however crucial. The continuation of evaluating project impacts in terms of the alignment model remains therefore worthwhile.

ACKNOWLEDGEMENT

The first author's attendance at the Conference is supported by the National Foundation for Science and Technology Development (NAFOSTED), Vietnam

REFERENCES

- Dang Hung Vo, Goesta Palmkvist. (2009) *Sweden - Vietnam Cooperation on land Administration reform in Vietnam*. FIG regional conference, Hanoi, Vietnam
- General Statistics Office Vietnam. (2011) *Migration and urbanization in Vietnam: Patterns, trends and differentials*, Ministry of Planning and Investment.
- Henderson J.C., Venkatraman N. (1993) *Strategic alignment: Leveraging information technology for transforming organizations*. IBM Systems Journal 32:472-484.
- Lemmens M. (2008) *Land administration in Vietnam*. GIM International 22:4.
- Sun Sheng Han, Kim Trang Vu. (2008) *Land Acquisition in Transitional Hanoi, Vietnam*. Urban Studies, 45(5&6) 1097–1117, May 2008
- Nguyen Duc Kha, Tran Van Tuan. (2011) *Land administration science and education in the period of industrialization and modernization in Vietnam*. Vietnam National University Journal of Science, Natural sciences and technology 27:90-98.
- Worldbank. (2011) *Vietnam Development Report 2011*. Natural Resources Management. Joint development partner report to the Vietnam Consultative group meeting, Hanoi, December 7-8, 2010. Le Bros Ltd.
- WorldBank. (2011) *Recognizing and reducing corruption risks in land management in Vietnam*. National Political Publishing House, Hanoi, Viet Nam

CONTACTS

Thanh BUI QUANG

Lecturer

Faculty of Geography, VNU Hanoi University of Science, Vietnam National University
334 Nguyen Trai Road, Thanh Xuan District, Hanoi
VIETNAM

Tel. + 84 943672345

Email: qthanh.bui@gmail.com

Web site: www.hus.edu.vn

Walter T.de.VRIES

Course Coordinator 'Land administration' , course coordinator 'governance and spatial
information management'

Faculty of Geo-information science and Earth observation, University of Twente
Box 217, 7500 AE Enschede

THE NETHERLANDS

Tel. +31 (0)53 4874 475

Email: devries@itc.nl, w.t.devries@utwente.nl

Website: http://www.itc.nl/about_itc/resumes/devries.aspx