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Key words: Land administration, poverty alleviation, Small & Medium Enterprise, Land Law.

SUMMARY

Land Administration has been making a significant contribution to the socio-economic development in Vietnam in recent decades. However, there are still many challenges for the reform process in this area. This paper presents two studies on the impact of Vietnam land policy to: 1) poverty alleviation – PEN II with case study at 6 provinces, 6 districts, 6 communes and 12 villages; and 2) Private sector development – this study provides an analysis on the feedback from the private sector after a year of implementation of the new land law. The feedback was collected from the Internet, newspapers, and questionnaire from business enterprises.

The results of those studies: Improved Land use planning could have more impact on poverty alleviation at remote and upland areas. Land allocation is a good policy but it is still unclear regarding the impact on poor people in upland areas. For private sector development, land administration could continue the reform in administrative procedures for land allocation, land compensation, and site clearing. Real estate market development and a proper land use planning, which incorporates the demand of private sector development, are also needed for Vietnam land administration in coming years.

SUMMARY

Địa chính đã đóng góp những kết quả đáng ghi nhận cho công cuộc phát triển kinh tế xã hội của Việt Nam. Tuy nhiên còn nhiều thử thách trước mặt trong công cuộc đổi mới hết thô nhung địa chính này. Bài báo giới thiệu kết quả hai nghiên cứu chính sách đất đai tác động đến 1) vấn đề xoá đói nghèo, đây là kết quả nghiên cứu PEN II thực hiện điều tra tại 6 tỉnh, 6 huyện, 6 xã và 12 bản làng, và 2) vấn đề hỗ trợ phát triển lĩnh vực tư nhân, được thực hiện bằng cách tổng hợp các ý kiến doanh nghiệp vừa và nhỏ qua các báo chí, các hội nghị gặp gỡ doanh nghiệp về nội dung luật đất đai 2003.

Để tiếp tục xoá đói nghèo, qui hoạch & kế hoạch sử dụng đất da có tác dụng nhiều hơn và cần xây dựng phù hợp cho các khu vực, vùng miền. Đối với vấn đề phát triển lĩnh vực tư nhân, địa chính cần tiếp tục đổi mới thủ tục hành chính trong giao đất, thu hồi, đến bao, phát triển thị trường bất động sản và đặc biệt xây dựng qui hoạch sử dụng đất da hợp lý có tính đến nhu cầu phát triển của lĩnh vực tư nhân.
Vo DANG HUNG and Trung TRAN NHU, Vietnam

1. Introduction

Land is an important resource for both Poverty Alleviation and Small and Medium Enterprise (SME) development. Because poverty alleviation and sustainable development are very closely related and both directly influenced by the way land resources are used and exploited. The Comprehensive Poverty Reduction and Growth Strategy (CPRGS) for Vietnam up to year 2002, page 22, has stated the cause for poverty is “especially agricultural and rural development, combined with agricultural and rural reform policies, especially with regard to the transfer of land use rights to the people, has created a new dynamism and resources that allow broad-based hunger eradication and poverty reduction to take place”, (CPRGS, 2002). This document, page 32, also recognises “poverty reduction serves as a fundamental factor for ensuring social equality and sustainable growth”. Consequently, on page 36, one of the solutions for CPRGS is to create conditions for land use, support business production, and develop SME, farms and various types of enterprises in the private sector.”

Meanwhile, Land Administration (LA) is understood as ‘the process of determining, recording and disseminating information about ownership, value and use of land, when implementing land management policies”, (UN/ECE, 1996). Good LA can therefore promote a better relationship between the use, value and ownership of land. In the other words, LA will play a key role in poverty alleviation, as well as growth in SME development.

Vietnam LA is a term sometimes confused by either translation between Vietnamese to English (considered as land managment) or by the name of an agency – General Department of Land Administration (before 2002 and now merged as a part of Ministry of Natural Resources & Environment - MONRE). Vietnam LA is organized at four administrative levels, from National (policy level), and Provincial, District to Commune (operational level), (Trung, 2004). In this paper, LA will be looked at from three main activities: Land Allocation (LALL), Land Registration (LR), and Land Use Planning (LUP).

Vietnam has achieved a significant result in LA. There are a number of milestones: strategy to re-allocate land to individual use in 1988; legalized by Land Law 1993 with five land use rights; and most recently, Vietnam approved Land Law 2003 (LL2003) in November 2003 which was put into implementation in July 2004. LL2003 is a considerable change from a command economic system to a more open market system; the use of land is decided more by local people, and the land price is more decided by the open market.

In response to the call for papers for the workshop “Expert Group Meeting on Secure Tenure”, the authors of this paper would like contribute two research studies of Vietnamese LA on: LA & poverty alleviation, and LA for SME development.
The main objectives of this research paper, is to answer to the question “what are issues for Vietnam LA in the future” from two angles; poverty alleviation, and SME development. Section 2 of this paper firstly introduces the study of PEN II; Section 3 provides analysis of the opinions on the impact of LL2003 implementation on SME; then Section 4 focuses on discussion and recommendations.

2. Land Administration and Poverty alleviation

2.1 Background for Poverty alleviation & LA in Vietnam

There are a number of studies that have tried to identify the impact of Vietnam LA on poverty alleviation. Generally, these impacts are positive but the results are still unclear for some areas. Here are a number of examples.

Vietnam’s achievements in term of poverty reduction are one of the greatest success stories in economic development. As recently as 1993, 58 percent of the population lived in poverty, compared to 37 percent in 1998 and 29 percent in 2002. These gains have been associated with distribution of agricultural land to rural households in a context where economic reform provided the right incentives for increased farm production, (WB, 2003).

Vietnam land allocation does favor the “land-poor”. There is no obstacle from local government. The speed of adjustment to inefficiencies in the administrative allocation also tended to be higher for those who started with less land. There are signs that land allocation responded to the inefficiencies of the initial administrative assignment at de-collectivization. Households who started with an inefficiently low (high) amount of crop land under the administrative assignment tended to increase (decrease) their holdings over time, through the process of re-allocation allowed under the new Land Law, [Ravallion & Walle, 2003].

However, the result of forestland allocation for poverty reduction in upland area is unclear. – A study in northern upland of Vietnam initially recognises the impact of forestland allocation to household. This study found that the new policy in forestland does not clearly affect non-hungery household, but strongly impacts the hungery household, because, the hungery household relies deeply on slash and burn activities, which are not allowed or significantly limited in forestland allocation policy, [William & Ba 2003; Castella & Quang 2002].

In some cases it was recognized that land registration could play a constructive role in poverty reduction and environmental protection. Toan & Lakshmi, 2003 proves the positive effectiveness of land registration, as additional land rights led to significant increases in the share of total area devoted to multi-year crops, as well as some increase in irrigation investment. These effects are stronger in areas, which are impacted by the earlier land reform. An analysis on Vietnam’s Living Standard Survey 1992/3 and 1998 is made and show that both rental and sales markets in Vietnam has increased rapidly [Klaus & Songqing, 2003]. It is enhanced by possession of long-term use rights and off-farm employment, and contributed to greater equity and efficiency of land use. Barriers preventing access to land markets are low. A relatively egalitarian land ownership distribution and rapid growth of off-farm opportunities are likely to partly under this result. Furthermore, provision of clear,
enforceable, and secure long-term land rights, even if they may fall far short of full ownership rights, is an essential pre-condition for the operation of land rental and sales markets. However, the progress of forestland and upland registration with LTC are limited in both geographical extent and number of certificate issuance. Up to year 2004, there are about 97.4% agricultural land granted with LTC. Whereas, only 35% of allocated forestland area received LTC, [An, T. 2004].

To conclude, the contribution of Vietnam LA to poverty alleviation is obvious. However, because of the diversity of regions and local conditions, the impact and the contribution of LA to poverty alleviation might be different from area to area, especially for upland areas.

2.2 PEN-II (land part) Study introduction

PEN II study is a research project funded by the WB and started in July 2004. This study consists of several parts, including a part dealing with LA. This part, also known by the name Land nexus poverty in Vietnam, is carried out by TECOS Consultancy Company, in which one the authors of this paper is the leader of the Vietnamese research team. Four senior researchers from WB: Nygards Jostein, Claude Saint Pierre, Bjorn Lasson, and Rob Swinkles supervise this research. The preliminary findings were presented on 28-29 June 2005 in Hanoi and the final findings are still being assessed [WB, 2005].

Objectives of this study are (1) analyzing the linkages between poverty and environment in association with land management and land use change in Vietnam that are the main topics mentioned in the LL2003; (2) assessing the need for environment and poverty impact monitoring on the Land Law, and to foster the commencement of monitoring work; and (3) providing support to the government in integrating study results in the implementation of LL2003 and the preparation of the future land code.

The study employs both quantitative and qualitative methods. In which, quantitative method is used to analysis and identify the correlation between land administration activities and poverty and environment for the whole country from the detail at district level. Qualitative method is used especially for a case study, which concentrates on only 2 research questions, which may have potential and direct link between land resources, poverty, and environment. Furthermore, this method also helped in a deeper understanding of the process of new land law implemented at local level.

Due to limited time & resources, this study focuses on upland area in 3 selected provinces, 6 districts, 6 communes, 12 villages, and 261 households where an in-depth study was made. In this paper, only the main findings from the case study are presented in the next section.

2.3 Main findings from the field survey part

2.3.1 There is various results of forest land allocation for poverty alleviation

Different to the agricultural LALL, which is a very successful policy for poverty alleviation in Vietnam, forest LALL is limited and varied in both ways of implementation and outcomes from area to area in this case study. In the two districts of Tuyen Quang province, forestland
was allocated to local people with forest book (green book) issued by the forest management unit since 1994. There is no plan for converting these green books to red books. Forest management unit officials and State Forest Enterprise (SFE) still play an important role in forestland management. In Nghe An, all forestland was also allocated to local people with green book since 1992 and completed in 2004. The district department continues to convert all these green books to red books, and land officials here play a key role in forestland management but not forest management unit. Binh Dinh, in contrast, was not fully allocated to local people. Though, the responsibility of SFEs, land administration officials and forest management officials to forestland are well defined.

Figure 1: Poverty and proportion of HH have LTC for forestland

Consequently, the impact of forest LALL on poverty alleviation is, of course, different among surveyed districts: (1) Forestland was allocated for Dzao people in Na Hang because they have so little paddy land for cultivation. However, Dzao group continues slash and burn on allocated forestland causing degradation of forest coverage and environmental impacts; (2) Forest LALL creates positive impact on poverty alleviation but creates negative impact on environment in Nam Luong/ Phu Luu/ Ham Yen district; (3) In Con Cuong and Tuong Duong district, forest LALL and efforts to restrict slash and burn activities become a good tool to manage the conversion from forest to non-forestland and result in good protection of environment. However, the life of poor people face more challenges since they very much rely on slash and burn techniques. Tuong Duong officials support the poor by facilitating the rotational cultivation on allocated forestland. However, the lack of allocated forestland and limited time for rotation then reduces its environmental value. These unclear impacts of forest LALL on poverty reduction can be seen from the quantitative analysis in figure 1.

2.3.2 Land registration does not yet fully play a key role in poverty alleviation at upland area

There are a number of important roles of LR that could be relevant to poverty alleviation: 1) Encourages and makes people more confident to invest labour and capital in their land, 2) Land titling certificate (LTC) as a collateral in mortgages and renting for more capital
(2) as a commodity in land market, which could guide and encourage the best use and investment in land.

Agricultural land has mostly been registered with LTC at 6 surveyed districts while for forestland in several districts like Con Cuong and Tuong Duong, forestland is slowly being registered with LTC. The delay in LR, especially forestland registration results from, and accounts for differences in the rights of forestland use among case study areas. In Tuyen Quang, households and land officials consider that people only have rights to plant trees without permission to harvest these trees! The inappropriate policy and weak land management system leads to illegal conversion of forestland to commercial crops. By contrast, in Nghe An, regulations on people rights on planting are made but the harvest must be under the supervision of local land management officials; while households do not have a good understanding of their rights. There is unclear awareness about forestland use rights in Binh Dinh. This also leads to destruction of forest and convert to commercial crops such as cassava, and cashew nuts.

LTC issuance encourages people in reclaiming land. In fact, many people who reclaimed land hope to register and receive LTC for their land. However, reclaimed land, as customary rule, even after being developed by anyone, must belong to the whole village and is not able to be registered. That is why land reclamation is hardly carried out in many districts. It is expected that having LTC, households are more confident for their labour investment on reclaiming land.

Compared to the past, local people have a better awareness of land use rights (except forestland use rights). However, the people’s knowledge about the benefit of LTC is just a means for obtaining loan mortgages from the bank. When local people received LTC they may use it as collateral for household development. However and for many reasons, these investment are not economical and efficient enough then they (local people) lose these investment. The LTC has lost it role as in the first time of use. When people cannot refund the first loan then the role of LTC is terminated. The limited role of LTC leads no opportunity to land market and land rental market development in these remote areas and vice versa. In quantitative analysis also has shown the same result at household level in 12 case-study villages, figure 1.

In conclusion, LR has played some role in encouraging people to invest labour on land (land reclamation). The collateral role of LTC is very limited. Because, the ability to return the debt is a key factor to make LTC to be continued as a collateral, depends on the efficient degree of using land with the borrowing money from the bank. LR is not significant for using the LTC as a commodity in a real market because the market is very limited in upland area.

2.3.3   Land use planning is still win-win situation for poverty alleviation

In principle following LL2003, LUP is prepared, verified, monitored and implemented with local people participation (dân biết dân bàn dân làm và dân kiểm tra); and consequently the socio-economic matters such as poverty alleviation are incorporated in any LUP.
However, the current LUP is limited in both quality and quantity in all case study areas. LUP according to LL2003 has not yet been established in the 6 surveyed districts due to late promulgation of decree 181. In the case of Na Hang & An Lao district, LUP following the previous Land Law has not been established, needless to mention the new LUP specified in the LL2003. Only four of the surveyed districts have LUP, they are Ham Yen, Tuong Duong, Con Cuong, and Tay Son. Since the local authority considers LUP as a basis for other LA activities rather than a process of using land in the best way, the delay in LUP leads to delay and effectiveness of LALL and LR. Because of the lack of LUP the boundary of forest categories is not defined which leads to incomplete forest LALL, LR and mismanagement of forestland conversion to commercial crops as well as other changes. By contrast, in the case of Con Cuong and Tuong Duong district where LUP was already approved, forest LALL has been implemented smoothly and the conversion from “green book” to “red book” is also occurring.

Furthermore, the participation of local people is hardly observed in the case study area. LUP following LL2003 is still a new concept and the ability of implementation LL2003 at local level is still a question. In addition, local people still have a view that LUP is a government job, and local people just do what they can. Therefore, if local people can use land in the way that brings good results then this LUP plays a key role in poverty alleviation, such as for the case of Phu Luu commune with “economic orange plantation”, if not it is no use for poverty alleviation, such as for the case of An Quang commune in “economic cassava plantation”. This absolutely means that LUP is win-win situation for poverty alleviation.

3. Land administration and Small & Medium Business Enterprises

3.1 Background for Small & Medium Business Enterprises

SME plays a key role in the process of Vietnam economic development. Up to May 2005, there are more than 130,000 registered SME which covers about 97% of total number of business enterprises. Annually, SME has contributed about 26% of GDP and creates jobs for about 25% of total labour in the country, [Tran Viet, 2005].

Land-related issues for business development, particularly SME, are getting more attention from policy makers and investors. In research work, there is not a clear conclusion for which matter of that business expected more on land-related issues. Recently, MPDF, 2005 has conducted a research study of the business registration and formation process in Vietnam. This research has interviewed about 47 firms and found out that “access to land has clearly become a major issue facing private businesses in Vietnam. Land-related problems often arise during the start-up phase, and in many cases continue throughout the full life span of the company”.

3.2 Study introduction

This study was carried out by the author of this paper and his colleague Dang Thuy Linh, Dang Thi Tuoi and Hoang Hong Hue from August to November 2005 [Trung et all, 2005]. Research objectives are to answer two questions 1) What areas and to what extent does SME have questions and 2) What are main reason and to what extent can those question be solved
in the future? A business enterprise is considered as a SME if its size following decree 90/2001 [Decree 90].

Questions and response from SME to LL2003 implementaiton were collected in two ways. In the first way, research was undertaken in ten famous online newspapers in Vietnam since the LL2003 was approved (26 nov 2003) up to 26 Nov 2005. The second way is that MONRE (who was in charge of LL2003 preparation and implementation) and VCCI (Vietnam Chamber of Commerce and Industry) have organized two workshops for all business enterprises in the North and South for question and answer to the LL2003 implementation. The researcher of this study has refined, revised and finally gathered opinions from 154 SME (80 SME have participated in the workshop) with 203 questions on matters of LL2003 implementation.

These questions are divided into 5 main groups: 1) Question on administrative procedures for LA such as procedures in LR, land transaction, etc, 2) Question on land price & land market, 3) Demand on land for business development or land accessibility, 4) Land policy for LUP and 5) Others. The result of percentages of each field that SME are interestd in LL2003 implementation are shown on figure 2.

In order to better understand the main reason of administrative procedures, researchers have rearranged this group into 5 sub-groups of administrative procedures: 1) LTC issuing, 2) Land allocation, land rental, land transaction, 3) Land recovery, Site recovery, Land compensation, 4) Land use changes and 5) Other. Figure 3 shows the percentage of each sub-group.

<table>
<thead>
<tr>
<th>Field</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land demand</td>
<td>10.3%</td>
</tr>
<tr>
<td>Adm. procedures</td>
<td>13.3%</td>
</tr>
<tr>
<td>Land price</td>
<td>12.3%</td>
</tr>
<tr>
<td>Policy</td>
<td>14.3%</td>
</tr>
<tr>
<td>Others</td>
<td>49.8%</td>
</tr>
</tbody>
</table>

3.3 Main findings

3.3.1 What are fields and to which extent that SME are most interested in LL2003 implementation?
Figure 2 presents clearly that administrative procedures are the field that SME most interested in (with about 50% of questions). The second field interested by SME is land price and land market, is about 14% of questions. The third about 12.3% of questions is land policy in dealing with LUP. The fourth one is only 10% of questions for accessibility on land for business development.

SME interest mostly on administrative matters is not a new finding. Like any other government services, the questions of administrative reform still remain. However, the question for land accessibility stays at lowest extent of attention compared to LUP and land market is quite a surprising result. Because most recent donors and researchers when supplying the technical assistant to Vietnam LA always emphasise the question of land accessibility for private sector development [FIAS, 2005].

More detail on administrative procedures, figure 3 shows that question on LTC issuing and Land Use changes got less attention compared to 2 other main sub-groups (less than 10% of the questions in compared to sub-group of land recovery (26%) and land allocation, land rental (47%). This means that administrative procedures in dealing with LTC issuing and Land use changes has improved a lot. It is different again that donors and many other researchers still complain LTC issuing is most difficult point in LA administrative reform. It could be explained that technical procedures and guideline for LTC issuing are clearer and accepted by local people in recent time.

3.3.2 What are main reasons and to which extent that the question could be solved in future?

Regarding the administrative questions:
As said earlier, administrative procedures are a common theme for Vietnam administrative reform. Therefore, question for administrative procedures are true in this framework. From our analysis details of the question, for the delay in administrative procedures are the results of two main reasons: 1) There is still some cumbersome processes in the legal framework, and in the technical guidelines for LL2003 implementation and 2) The ability of local agencies for implementation of LL2003 at local level.

Concerning the first reason (cumbersome legal framework), this difficulty will be solved as soon as MONRE has upgraded its decree 181 (as guideline for LL2003) this year. This updating is based on 13 study visits to local areas and directly received responses from SME as obtained in the two mentioned above workshops. These questions will be solved by revised and modified technical guidelines in coming versions. However, the question of the ability of local agency in LL2003 implementation is quite unknown answer. Vietnam has a diversity of culture, topographic and socio-economic conditions (there are 64 provinces with 64 Department of Natural resources & Environment). The differences in understanding of LL2003 and human resources for local level are the main difficulties to quickly resolve these questions.

Regarding land price:
The main reasons found out in analysis, are that land prices increased when implementing LL2003. The fact that LL2003 has put a lot of effort forcing land price toward the market.
price rather than following the price framework decided by the administrative command system. It is estimated that in Hanoi, SME has to pay for land lease four times higher than before LL2003 implemented; from 11M VND to 47MVND/m² of renting.

This question only happens at the beginning of changing an old system to a new system – from command system to an open market. Theoretically, if the above rental land price is high and fully decided by land market, then we have to follow it. If not, then land market will pull down the price to the extent of market acceptance. However, the problem here is how far Vietnam will follow and accept the adjustment to an open market. Shortly, the question is how firm Vietnam LA follows an open market. The question of establishment of such real estate market is a hot topic recently in Vietnam. However, this establishment is something far more complicated than the administrative works, at which MONRE could have strong influence in.

**Regarding Land Demand:**
Land accessibility or demand for land for business development seems a difficult question to answer compared to the above two issues. Actually, up to now there is only 10% of questions for land accessibility and demand for business development, figure 2. The explanation for this phenomenon might be the case that SME is just growing up and the land for business development is still available in some places. However, the more mature the SME, then the less land is available. That means, that while the percentages of questions on administrative procedures and land price will be reduced in the future, the percentages of question on land demand will correspondingly increase.

To answer this question, as mentioned in many SME opinions, LUP must incorporate this demand (land for SME) for the short-term and the future. At the moment, LUP is not yet well incorporated, especially in big cities such as Hanoi and Ho Chi Minh City.

**4. Discussions & recommendation for further research**

This paper has analyzed Vietnam LA from two view 1) poverty alleviation and 2) SME development. Generally, the research in these two areas have some limitation for it is the first year of LL2003 implementation; the size of case study is small for the poverty study; and it is not a comprehensive data collection for the case of SME study. Consequently, it is very difficult to make a clear conclusion for both views to Vietnam LA. These two topics, therefore, are worth continuing further research. Meanwhile, some draft conclusion and thoughts for further development for Vietnam LA could be as follows.

Vietnam LA has achieved significant results in reform process, poverty alleviation in upland and remote area, and supported SME development. These results however are like the low-hanging fruit, often harvested first. More challenges are waiting for continuous reform in Vietnam LA to meet the demand of society for growth and development. In which some matters will be solved quickly in the short-term. For example, LR will be quickly solved in near future with further revised technical guideline (as mentioned it has improved a lot for SME). However, the LR itself as a registration work cannot help to achieve the setting up the relationship between the use, value, and ownership of land.
The quality and quantity of LUP are obviously needed for poverty alleviation and SME development. LUP plays a key role in cultivation and helping poor people to escape from the poor in remote and upland area, where people rely on cultivation and land as long time ago. How to help these people with better LUP, which on the one hand alleviates poverty but still keeps environmental protection – it is still an ongoing challenge for Vietnam LA.

LUP is strongly needed, not only for poverty alleviation but also for SME development. As analyze above, in the short-term, such kind of administrative questions will be reduced by administrative procedure reform and by the way MONRE administers Vietnam LA. However, the demand on land for SME development will be increase in the near future. LUP for such crowded cities likely Hanoi and Ho Chi Minh need to prepare a proper LUP in which demand of land for SME development must be incorporated.

Land price and land market are other challenges for Vietnam LA. To cope with this issue, administrative tools are not enough. To deal with this actually we might have to deal with many other aspects of society such as legal framework, financial issue of land, institutional arrangement, and human resources for implementation level. These questions cannot be solved just by a single administrative system as MONRE (or whether others involved). It also presents truly the statement by someone that “LA is not just a single administrative system is a result of society”.

In conclusion, Vietnam should continue their work in LA development. Such kind of innovative as LL2003 toward an open market direction, to the needs of local people, are encouraged to be continued.

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BIOGRAPHICAL NOTES

Prof. DrSc. Dang Hung Vo hold Mathematic University degree in 1969 at Hanoi University, Survey & Mapping University degree in 1975 at Mining & Geology Technical University of Hanoi, PhD. on Survey & Mapping in 1984 at Warsaw Technical University (Poland), DrSc. on Survey & Mapping in 1988 at Krakov Mining & Metallurgy Academy (Poland). Now, he plays two roles: 1) Chairman of Land Administration Faculty, Hanoi Natural Sciences University and 2) Vice Minister, Ministry of Natural Resources and Environment, where he is in charged of Land Administration and Survey & Mapping. He has had a lot of contributions for technology development in Survey & Mapping area and land policy reform in Land Administration area. Vietnamese people call him as the chief of architect of the new system of land legislation. In 2005, one of his scientific works on establishment of National Geodetic Reference System has got the highest Award for science & technology in Vietnam (Hochiminh Award) given by President of Vietnam.

Tran Nhu Trung hold Survey & Mapping university degrees in 1993 in Hanoi and M.Sc. with distinction in Geo-Informatics for Cadastral applications in 2000 in ITC/The Netherlands. Tran started to work for government (GDLA) in 1993. Then he moved to private sector since year 2002. Now, he is working for two consultancy companies dealing with land and environment: TECOS and VNAGEO. He has followed a number of consultancy projects in fields of land administration, survey & mapping, NSDI, remote sensing, integrated coastal zone management, and environment protection in Vietnam and Lao PDR. Trung considers himself as an independent researcher in field of land administration. He publishes regularly a number of research papers in both Vietnamese and English in topic of land administration.

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