

Sustainable Land Tenure and Land Registration in Developing Countries

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Abstract

The aim of this dissertation was to define a framework of key issues behind sustainable land tenure and land registration in developing countries. The research targeted a selection of poor countries and a rich country with a poor past, and the conclusions were drawn in the developing country context.

The basic framework of land tenure and land registration was compiled from a literature study, and the three developing country cases were targets of literature studies, field researches, analyses and piloting. The case of Finland, which was used for historical comparison between the developing countries' present and industrialised countries' past, was the target of a literature review and analysis. The case studies were integrated, and analysed within the compiled framework. The result is an interpretation of the framework of developing country land tenure and land registration with key issues and their relative impacts on a) the feasibility of land administration and b) sustainable development.

This dissertation shows the complexity and multi-dimensional nature of land administration, land tenure and land registration development in this context. The main conclusions are firstly that workable land administration is built upon good governance, appropriate resources, cultural sensitivity, equity, quality and commitment, and secondly that sustainable development is best promoted by secure, flexible, all-inclusive land tenure structures.

Keywords: Developing Countries, Sustainable Development, Land Tenure, Land Registration, Land Administration, Cadastre, Land Policy, Land Reform, Customary Land Tenure

Kestävä maanhallinta ja kiinteistörekisteröinti kehitysmaissa

Mika-Petteri Törhönen, tekniikan lisensiaatti

Tiivistelmä

Tämän väitöskirjan tavoitteena oli määrittää kestävän maanhallinnan ja kiinteistörekisteröinnin päätekijöitä kehitysmaissa. Tutkimuksessa keskityttiin valittuihin köyhiin maihin sekä rikkaaseen maahan, jolla on köyhä menneisyys. Johtopäätökset on tehty kehitysmaayhteydessä.

Alustava maanhallinnan ja kiinteistörekisteröinnin viitekehys koottiin kirjallisuustutkimuksella ja kolme kehitysmaaosatutkimusta suoritettiin kirjallisuustutkimuksen, kenttätutkimusten ja –töiden sekä analyysin avulla. Suomen osatutkimus, jota käytettiin esimerkkinä verrattaessa kehitysmaiden nykypäivää teollistuneiden maiden menneisyyteen, oli historiallinen kirjallisuustutkimus ja analyysi. Osatutkimusten tulokset yhdistettiin määriteltyyn viitekehukseen. Tulos on tulkinta kehitysmaan maanhallinnan ja kiinteistörekisteröinnin viitekehuksesta, tekijöistä ja niiden suhteellisesta merkityksestä a) kiinteistöjärjestelmän toimivuudelle sekä b) kestävälle kehitykselle.

Tämä väitöskirja näyttää, kuinka monimutkaista ja monitahoista kiinteistöjärjestelmän, maanhallinnan ja kiinteistörekisteröinnin kehittäminen kehitysmaayhteydessä on. Pääjohtopäätökset ovat, että toimiva kiinteistöjärjestelmä luodaan hyvällä hallinnolla, riittävin resurssein, kulttuuritietoisesti, tasa-arvoisesti, laadulla ja sitoutumisella ja, että kestävä kehitys edistävät parhaiten turvatut, joustavat sekä kattavat maanhallintamuodot.

Avainsanat: Kehitysmaat, kestävä kehitys, maanhallinta, kiinteistörekisteröinti, kiinteistöjärjestelmä, katasteri, maapolitiikka, maareformi, tapaoikeudet

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1 Publications

- 1 *A Thousand and One Nights of Land Tenure; The past, present and future of land tenure in Zanzibar.* Royal Institute of Chartered Surveyors, Our Common Estate -Series. ISBN: 0-85406-917-8. London 1998, 99 pages.
- 2 *Would a registry map hang comfortably in a round, mud hut? A Register of Title for Zimbabwe's Communal Areas: Philosophical and Technical Considerations.* With David P. Goodwin. *The Australian Surveyor* Vol. 43, No.2, 1998, pp. 96-108.
- 3 *Developing Land Administration in Cambodia.* *The Computers, Environment and Urban Systems* 25 (2001) 407-428; Special Edition 'Cadastral Systems', PII: S0198-9715(00)00049-1. Elsevier Science Ltd.
- 4 *Sustainable Land Tenure and Land Registration in Developing Countries, Including a Historical Comparison with an Industrialised Country.* Approved for Publication in the *Computers, Environment and Urban Systems* XX (2003) XX pages; Third Special Edition 'Cadastral Systems'. Elsevier Science Ltd.

1.1 Author's Contribution

I have written and am responsible for the monograph 1 and the articles 3 and 4 in their entirety. In addition, I wrote and am responsible for the land tenure parts of article 2. Mr. David P. Goodwin wrote and is responsible for the technical considerations part of the article 2.

2 Introduction

2.1 Definitions

I have adopted the following definitions for this dissertation, which are presented in a shortened, simplified form, recognising that comprehensive definitions, applicable in all conditions, are unattainable. The highest term in the land hierarchy is land policy, which refers to a governmental instrument that states the strategy and objectives for the social, economic and environmental use of the land and natural resources of a country. Government implements land policy with various instruments, of which land administration and land management are the most significant. The relationship between the two is as follows, that land management implements land policy by means of land administration. Land management is a positive and creative activity that aims at sustainable land use, while land administration is an implementer that follows the law and enhances it. Land administration consists of varying components, but a relative consensus prevails on its core function, namely that of land registration, done for both fiscal and legal purposes, and of the basic unit of the cadastral parcel. Theoretically there are two main legal land registration types: deeds registration, where documents in the register are the evidence of title, and title registration, where mostly the register itself serves as the primary evidence. A fiscal register records data in cadastres established for taxation purposes. In addition, cadastre is used as a general term denoting official land records, which may be classified further into at least legal and fiscal cadastres. First-registration is a process that enables the first entry of an object in a land register/cadastre. The key code for land administration is provided by land tenure, which defines the relationship (rights, restrictions) between people and land. Statutory land tenure is written, codified and exercised by the state, while customary land tenure is based on custom and exercised by a community. Land reform is a man-made change to land tenure, usually aimed at changing land distribution. A land tenure system or a land register is sustainable if it manages to administer land effectively and to reflect the actual relationships between people and land. However, in terms of sustainable development this is not enough. Land tenure and land registration have to promote development. (Article 4).

2.2 Topic

Imagine a country where nobody can identify who owns what, addresses cannot be easily verified, people cannot be made to pay their debts, resources cannot conveniently be turned into money,

ownership cannot be divided into shares, descriptions of assets are not standardised and cannot be easily compared, and the rules that govern property vary from neighbourhood to neighbourhood or even from street to street. This is how Hernando de Soto (2000, p. 12) brilliantly captured the developing country reality from the point of view of a property system, or rather the lack of it. My dissertation is a land tenure and land registration research study in conditions similar to those described above. I have defined and analysed key issues and their relative impacts on a) the feasibility of land administration and b) sustainable development.

2.3 Aim

The aim of this dissertation was to define a framework of key issues underlying sustainable land tenure (including land reforms) and land registration (stressing first-registration), and to analyse their relative impact on land administration and sustainable development in developing countries. I attempted to highlight the issues hindering land administration from promoting sustainable development, and to point out key issues that could reverse such a situation. It is my hope that the dissertation findings will contribute to the design and implementation of land administration development projects.

2.4 Scope

This dissertation looks at land administration and more specifically land tenure and land registration concepts. I targeted poor countries and also rich countries with a poor past, where land administration is facing severe challenges and where a land registration development project is either planned or being implemented. The two African countries (Monograph 1, Article 2) and the South East Asian (Article 3) case differ markedly and cover a wide range of developing country land administration issues. All have as an objective a land registration programme intended to solve a number of micro-scale issues and which also have broad, macro-scale aims. The fourth case study (Article 4) focused on the evolution of land tenure and land administration in Finland, which is a story of land reforms. Finland was the object of a historical research study that justifiably falls within the scope of this research due to its poor-country past. It provided a link for comparison between industrialised countries' past and developing countries' present. Note that the conclusions were drawn only for a developing country context. Their applicability to industrialised countries has not been considered, and it also has to be understood that they will not be valid for every

developing country. Still, the key issues display similar features and consequences. Therefore, the findings can be taken to have general applicability in developing countries.

2.5 Structure and Methods

The research steps were the following:

- Cases
- Basic framework
- Analysis and conclusions. (Table 1)

As mentioned, four case studies were carried out for the dissertation. All three developing country cases (Monograph 1, articles 2 and 3) involved field research studies¹ on the current status of land tenure and land administration, with supporting literature research on the land tenure and land administration history and its lessons. The fourth case study (Article 4), the Finnish case, was the target of a historical literature research study.

Then, a basic framework of land tenure and land registration was combined with articles from internationally published land administration research and statements that shared this dissertation's scope or a certain element of it. This literature research's focus limited to the most relevant concepts of land administration in the dissertation context: land tenure (including land reforms) and land registration (stressing the first registration). (Article 4)

Finally, I integrated the case studies within the basic framework of land tenure and land registration. The result is an interpretation of the framework for sustainable land tenure and land registration with key issues and their relative impact on a) the feasibility of land administration and b) on sustainable development. The compilation of framework was an iterative process, which helped to structure the research and which provided platform to systematically analyse the findings. Final conclusions were summarised from the framework. (Article 4)

¹ Field researches: Zanzibar several between 1991-1995, Zimbabwe 1996 and Cambodia 1999.

CASES

Monograph 1, Zanzibar

Literature study and field research on:

Land tenure evolution
Land tenure types
Land tenure layers
Land reform
Land policy
First registration, pilot
Development project

Article 2, Zimbabwe

Field research on:

Communal land tenure
Transition
Land administration
Titling options
First-registration

Article 3, Cambodia

Field research on:

Post-crisis situation
Land administration
Land registration
First-registration, pilot
Development project

In Article 4, Finland

Literature study on:

Land tenure evolution
Land reform
Refugee settlement
Indigenous refugee settlement
First registration
Land registration

BASIC FRAMEWORK

In Article 4, Framework

Literature study on the key theories and concepts of:

- Land administration
- Land tenure
- Land registration
- Land administration as a development project

ANALYSIS AND CONCLUSIONS

In Article 4, Analysis

Integration:

- Case study findings
- Basic framework

Analysis:

The framework of developing country land tenure and land registration with key concepts and their relative impacts on

- The feasibility of land administration
- Sustainable development

Conclusions

Table 1. Dissertation structure, targets and methods.

3 Summary of Publications

In this chapter, I present the articles and the monograph that make up this dissertation in chronological order. The three developing country case studies were published separately. The Finnish case study was integrated with the last published article, in which all case research results were compiled and the research findings concluded.

3.1 A Thousand and One Nights of Land Tenure; The past, present and future of land tenure in Zanzibar

This monograph introduced a comprehensive record of the history, the present and the future of land tenure in Zanzibar. It was the result of a broad three-fold research study consisting of a literature study on Zanzibar land tenure evolution, field research on current land tenure structures and a research memorandum describing a systematic first-registration pilot initiative. The monograph tested the following hypothesis: Constant and radical changes in the land tenure of Zanzibar have caused such confusion in land relations that a new land management system will face difficulties when aiming to unify the tenure.

Firstly, the monograph described research findings on the Zanzibar land tenure evolution, which showed how an African customary tenure system was originally capable of accommodating and benefiting a wide range of land users with vertically overlapping land rights. But the resulting equilibrium, based as it was on mutual benefits, proved fragile in a dramatically changing environment; for example land reforms and commercialisation both had impacts. The resultant imbalance was shown to be harmful both to primary and secondary land rights. In this situation, secondary rights, which had provided a source of livelihood and settlement for the majority of people, proved very weak when judged against the interests of primary right holders. This had severe consequences on social stability in Zanzibar.

The research on a historical land reform showed how restrictive land use when coupled with transfer regulations caused insecurity of tenure, boosted the informal land market and resulted in unproductive land use. The tenure structures subject to more flexible regulation proved to offer better incentives for development.

The monograph showed how a proper land policy was of no use in itself if there were no means for implementation, and how weak land administration tended to be replaced by informal administrations. A land management structure without appropriate land administration will be implemented, if at all, without control. Presenting the outcome of systematic first-registration piloting, logistical and technical problems were highlighted. On the legal front, the monograph showed the difficulty of statutory codification of multi-layer land tenure.

The monograph ended with research conclusions including the notion that access to land provided by communities was more widespread than state-recognised access. The Western type of statutory tenure potentially diminished the security and balance of tenure provided by the community. The rule that recognised only registered interests in land had *de facto* created a situation where the majority of land holdings were illegal. Overall, the Zanzibari land tenure situation was confusing. The monograph ended by proving the hypothesis correct, but suggested that while land tenure unification is going to be difficult it might be possible, with the proviso that it will not be only down to land professionals to attain.

3.2 Would a Registry Map Hang Comfortably in a Round, Mud Hut? A Register of Title for Zimbabwe's Communal Areas: Philosophical and Technical Considerations

This article introduced a research project on the communal areas of Zimbabwe. It consisted of field research and an analysis of customary land tenure, of land administration and of the tentative introduction of a title registration system.

The article explored African customary tenure that was facing pressures for transition where overpopulation and excessive livestock levels had stressed the communal tenure system. Public trust was undermined by the escalating poverty, the communal lands' inability to accommodate new families and by accusations concerning the fairness of certain rulings by traditional leaders. The research revealed a pattern in which commercialisation slowly took over from the weakening customary, communal, tenure. But equally, the findings highlighted the ability of customary tenure, even in the toughest conditions, to provide access to shelter and a basic livelihood both for present and absent community members. The gender findings included a notion that the ailing customary tenure form recognised only married women's rights to land, leaving female divorcees unprovided for.

The article demonstrated how the ambiguous land administration resulted in low security of tenure. It was shown that official and tribal land administrators existed side-by-side, which created an uncontrolled situation in which grass-root level leaders wielded power, a situation open to violation and corruption. An important finding was that the overriding legislation that vested land in the government had enabled the authorities to implement land management without reference to customary land rights. The only positive aspect apparent in such land administration is that it costs nothing to run.

The article also described the technical research undertaken, which tested surveying methodologies and approaches for offering title in the selected customary tenure areas. The findings, in which I participated, included principles of one-visit-per-parcel and simplified-boundaries to enable feasible first-registration.

Finally, the article explored the possibility of replacing the weakened customary tenure, which was shown to provide an unsatisfactory livelihood, with titled tenure. While benefits were evident for the state and for the wealthy, the question of whether the poor would gain anything from such a land reform proved difficult to answer. A title system, in conditions where some are more integrated with the cash economy than others, would serve many but would endanger the majority. The feature of customary tenure that guarantees shelter and a livelihood for everyone would be lost. The communal title alternative was shown to offer a compromise, but its positive potential was not evident.

In the conclusions, the solution for development was sought from improved recognition of women's rights to land, micro-level economic support and credit programs rather than from land reform. No all-embracing land tenure solution was found for the malfunctioning customary system, but the idea was proposed of introducing a variety of tenure systems upgradeable area-wise towards individual tenure according to gradual land tenure evolution.

3.3 Developing Land Administration in Cambodia

The first part of this article presented a research project on rural land registration, and the second part detailed a new approach, a methodology and pilot results for systematic registration. The general focus of the article lay in land registration in a post-conflict situation.

The research included nine, rural Cambodian provinces, and aimed to clarify the level of security of tenure, the functionality of land management and the status of land disputes and litigation. Findings revealed a troubled land registration picture based on a sporadically updated legal cadastre. Taking into account recent Cambodian history and the fact that the infrastructure was completely destroyed, the harshness of the situation still exceeded expectations. The findings showed how huge an effort it takes to build a land administration structure starting with no tradition, and with neither human nor monetary resources. The article explored how a stipulation that vested land in the State and, even when a relatively freehold tenure type had been specified, enabled local government to have practically unlimited power on land matters, resulted in insecurity for landholders. The lack of a binding and rigorously implemented land policy was shown to enable only unguided, uncontrolled, local-level land management and administration. Land management actions without proper land administration proved to create overlapping, formally recognised land rights, and to ignore the majority of holdings. In the post-conflict situation, a registration system that recognised only registered interests in land was shown to cause a majority (90 % in Cambodia) of landholdings to become illegal. Informal registration fees had pushed registration out of the reach of the majority of poor farmers. In addition, the lack of guided and controlled land administration left landholders with no avenue to act against unjust plans and decisions. In fulfilment of the research aim, the research findings showed that security of tenure was low, especially the perceived sense of security, that land management was not at all functional and that the potential for land disputes was high. The article concluded that the sporadic, weakly established and maintained legal cadastre in low-resource conditions could not serve the people, but it did not provide anything for the state either.

The second part of the article explored a new system for systematic registration as a partial solution to the current problems. A general remark was offered that the feasibility of first-registration has improved significantly over the past decades due to the advances in technical means of surveying and mapping. The importance of transparent and participatory processes was evident in conditions with low enforcement of laws and a lack of documentation on land rights. Where trust towards authorities is generally low, a successful first-registration requires communities (i.e. the people themselves) to guarantee the process. It was concluded that first-registration in a case with no documents on land had to include a field visit or visits. The article showed how adoption of the one-visit-per-parcel principle, which was reached by combining the adjudication, demarcation and surveying steps, kept costs to the minimum. The review on piloting demonstrated that orthophotos, photo-interpretation and simple additional surveying provided an adequate means for the technical work to take place simultaneously with adjudication, and that the local community leaders managed

to organise people's participation smoothly alongside of the work progress. Finally, the public-appeal period proved to be an effective means of incorporating community control, and the pilot results consequently contained very few disputes.

Overall, the article showed that it is possible to develop a viable systematic first-registration process even with the barest minimum of resources. It requires commitment by the authorities and a high level of desire by the people. Prerequisites for success were shown to be a sound base, administration unified for the cause, legal recognition of both the tenure form and the process, together with political will. A post-conflict situation seemed to enable quick reforms for the sake of change towards increased stability. It was noted that the previously existing title system had evidently paved the way, because the people both understood the process and took for granted its necessity.

Finally, the article presented the conclusion that low security of tenure in a post-conflict situation is a hindrance to development. A national registration system that was feasible in scope was suggested as having the potential for improving security of tenure. Lastly, it was recognised that while first-registration was only a beginning, when viewed together with other ongoing reforms it provided a real possibility for change.

In addition, the article looked at the suitability of a land registration development project for European development cooperation. Land registration project objectives were shown to be consistent with the strategic goals of Finnish development cooperation, which in turn were considered similar to the agendas of other development cooperation agencies.

3.4 Sustainable Land Tenure and Land Registration in Developing Countries, Including a Historical Comparison with an Industrialised Country

This article constituted my fourth and final publication of this dissertation research. It started by explaining the research topic and its scope, aims and methods. The basic framework of key concepts of land administration, namely land tenure and land registration, were compiled by literature research. Then the findings of three previously published case researches and the case of Finland, which was investigated in this article, were compared with the framework. The article followed the basic framework structure and the key case study findings were integrated into the appropriate contexts. In the end, the article presented an interpretation of the framework for

sustainable land tenure and land registration with key issues and their relative impact on a) the feasibility of land administration and b) to sustainable development. Finally, general conclusions were summed up, which also constituted the findings of the dissertation. It was noted that the conclusions were drawn from a selection of poor country (and a country with a poor past) case studies and only for a developing country context. Their general applicability to industrialised countries has not been considered and it must also be understood that the findings will not necessarily be valid for every developing country. Still, the key issues repeatedly displayed similar features and consequences. The following is a presentation of my findings, namely the key issues behind sustainable land tenure and land registration in developing countries, and of the dissertation conclusions as presented in the article.

Starting from the basic framework, land policy was defined as a crucial guideline, as well as being a tool and the recommended starting point for land administration. The lack of it was shown to result in scattered land administration without a common goal, but importantly, its presence without the means for implementation was found to be no better. Land management was defined as a creative activity that aims at sustainable land use, and land administration was defined as an implementer that follows and enhances the law. The findings showed that land management efforts are likely to be wasted without functional land administration, in which case planning will be unconnected with reality, and reforms or development initiatives are likely to have little impact. Consequently it was suggested that land administration requires a clear hierarchy and procedure, otherwise formal and informal authorities will compete to fill the power gaps, and the result will be administrative anarchy. The findings showed how even nominal rule that vests lands in the state will make the position of landholders worse by providing *de facto* unlimited powers to the authorities.

Various land tenure types were found to co-exist in developing countries, both customary and statutory. The article suggested that if a land administration system fails, an informal system will replace it. The fact is that all habitable landed property is administered (and subject to interests) formally or informally. Evidence is given which indicates that the recognition only of statutory tenures tends to marginalize a large sector of society. It was noticed that in developing countries a large number of secondary rights commonly exist, which are not recognised by statute. If only registered rights are legal, then the reality is that most rights will be illegal due to the existence of unregistered primary rights and unrecognised secondary rights. In the light of this, an absolute guarantee of title is seldom seen to fit the circumstances of developing countries. It is likely to boost informal tenure and the informal land market, contrary to its aim, i.e. it will lessen security of

tenure. Ignorance of existing secondary land rights, often both customary and temporary, was shown to endanger food security and social stability. The article demonstrated how the situation is made worse if no feasible means of registration is available. The land tenure evolutions that were researched showed that for ages customary tenures have tended to provide wide access to land in a flexible manner, thereby ensuring the survival of generations through, for example, (semi)-subsistence farming, hunting and fishing. Given the right circumstances, customary land tenure structures may be mutually beneficial both to primary and secondary right-holders, but it was shown that they seemed to lose the ability if the economic situation changed drastically. Following such a change, secondary right holders become vulnerable, which may result in insecurity of tenure that can have severe impacts on social stability. The article described how customary tenures were often weakened by modern pressures and by co-existence with statutory tenures. Poorly executed land reforms may exacerbate the situation resulting in a multi-layer tenure without clear rules. Consequently, the article imposed a question, namely; “Is it practicable for a modern land administration system to recognise customary tenure or multi-layer tenure?” And the answer was that it is problematic, especially because secondary rights are generally too dynamic to classify or record, and possibly these rights may be more secure if left untouched. The article favoured general legal recognition of customary tenure forms, and it was noted that compromises such as communal title can be criticised for their inability to adapt to changing conditions and on their lack of potential to contribute anything more than customary tenure. A Nordic common-rights model, in which secondary rights are both broad and publicly accessible, was presented as an example of a general legal recognition of secondary land rights, with a notion that this sort of model could be researched further in this context. Nevertheless, it was suggested that the crucial point was not the tenure type but the level of security, which affects a vast number of issues.

It was shown that land tenure, whether forced or unforced, is an evolutionary process. The findings indicated that for sustainable results it should either be supported or else left undisturbed. One critical juncture is when a group exercising communal land tenure at an early stage of evolution, needs to deal with another group many steps forward on the evolutionary scale. In general, customary landholders facing commercial interests are vulnerable, and may need support. The preservation, through use and transfer restrictions, of a tenure type for an idealistic reason (such as the protection of an indigenous culture or of a communal tenure pattern) were shown to be doomed to failure. Permanent restrictions potentially boost the informal market, and may even speed up the fall of the tenure type and culture that they were built to preserve. The article called for groups, cultures and livelihoods to be free to develop, and no group should be consigned to a “land tenure

terrarium” for others to admire. Still, the article supported the protection of customary tenure groups, and even included transfer restrictions as a means, but it pointed out that such controls should not be permanent. Successful land reforms were found to be possible as long as they are fair and systematic, create vibrant tenure systems and allow mutation. Vibrant tenure seems to require a gradual freeing-up of land use, inheritance and transfer. The article showed how weak authorities in land redistribution reforms are vulnerable to externalities as happened in the surplus-acquisition in Finland. The land reforms researched, with certain exceptions, had unexpected consequences, both positive and negative. The article suggested this to support the theory that created tenure systems have to be flexible in order to adapt to changing conditions and should not be restricted to their original aims. The best setting for a land distribution reform seems to have been provided by a post-conflict situation where a mood of solidarity may overcome personal interests.

The article explored the idea that land registration systems are unique and must reflect their host societies. A functioning deeds system was seen as sometimes being the best that a developing country can afford, but it potentially serves neither the best interests of the state nor of the poor majority. An improved deeds system may be a desirable option so long as it is based on affordable fees, is fair and is free of informal payments. Still, the article demonstrated that it would most likely serve only the interests of the wealthy. Such a situation was not seen as ideal, but it could still be better than failed title registration, which may cause previously existing systems to collapse. The conclusion was that a title system should only be introduced if there is a certainty of implementation, something that requires a strong land administration structure and a high level of motivation of the people. Registration systems that require professional services for transactions are likely to remain out of reach of the poor. Consequently, the article called for registration systems to be technically so sound that no repeated adjudication or surveys are required for transactions.

The article demonstrated that the connection between land registration and taxation may make it unattractive to people, even if it may benefit them as much as it does government. A modern cadastre was interpreted to be legal or fiscal and to serve both public and private interests; the challenge is to establish practical, equitable, public systems. It was noted that land registration or cadastre development is a slow process, and took centuries in Europe. Cadastres evolve and their purpose and the tasks they perform vary over time. This was illustrated by reference to the first property taxation records in Finland, which date back to the 13th century while a comprehensive cadastre was only achieved last century. While it was suggested that in principle a separate title register and cadastre are a wasteful duplication of resources, Finland’s example showed a) how

technical unification may provide a way for improvement if a formal unification is unattainable and b) that public liability can be at a high level without a formal state guarantee of the records. The article called for a modern land administration system to be interlinked to different authorities and to provide wide public access to information, serving the private and public sectors equally.

It was shown that while sporadic first-registration may be the only affordable way for a country it cannot cover the majority of property rights. Informal payments make for a sporadic system that serves only the wealthy. Systematic registration was found to have a potential to suffer from logistical problems if not carefully designed for local conditions. But the article demonstrated that in order to be feasible, all legal and technical work must be executed during one visit per parcel. Such a thing is possible at least in a rural setting with structured local government. Landholders could be used as survey assistants, witnesses and more. Pilot results indicated that a public procedure that embodies a fair appeal period thereby ensures social control and should result in an equal treatment of claimants. Importance was attached to the desire for title, which is likely to be high if the titling process reinstates something that has existed previously, but introduction from scratch may face strong resistance and may close the door to participatory approaches. All cases showed that the time span for first-registration on a national scale is likely to be lengthy. The article presented the idea of possibly creating a largely self-financing first-registration system based on the efforts of private surveyors and on the landholders' own input. It was concluded that such a thing requires investment in an umbrella system by the state and also a high desire for title among the public. The Finnish land reforms explored were conducted in this manner during eras of very low resources.

The article showed that there is wide consensus on the benefits of a functioning land administration system for a developing country. Critics may be found, and the international forum is generally quick to adopt the language of the critics, but, at least at present, customary tenure gets the recognition that it deserves. It has also been understood that land administration development cannot be isolated from overall development. Tight preconditions are seen as appropriate before investing in a land administration system. It is wished that new land administration projects will be better than old ones and not only that the language has changed.

Towards the end of the final research article, is an interpretation of the framework of developing country land tenure and land registration with key issues and their relative impacts on a) the feasibility of land administration and b) sustainable development. The relative impact evaluations

were presented in a five-level rating noting that the rating may have been too exact, but seemed to serve the purpose well. It was also noted that the use of qualitative research methods had left some level of subjectivity to the results. Finally, conclusions were summed up from the framework. The main ones were that: 1) the establishment and maintenance of viable, national level land administration ideally requires good governance, adequate resources, a culturally sensitive approach, equity, quality and commitment; 2) Land administration based on ambiguity in governance, inadequate resources, low legality, insensitive approaches, excessive control and lack of commitment, will rarely succeed; 3) a secure flexible all-inclusive tenure form, whether customary or statutory, provides the best basis for development and; 4), an ambiguous, ineffective land administration that fails to serve a large part of the population and promotes insecurity of tenure is a harmful institution.

4 Conclusions

This dissertation has revealed just how complex and multi-dimensional land administration, land tenure and land registration development is in developing countries. The establishment and maintenance of viable, national level land administration ideally requires good governance, adequate resources, a culturally sensitive approach, equity, quality and commitment. If all or most of these apply, with resources as a precondition, land administration development on a national scale has the potential to meet its objectives. Land administration becomes unworkable where there is ambiguity in governance, inadequate resources, low legality, insensitive approaches, excessive control and lack of commitment. If, disturbingly, most of these apply, then the best solution might be to aim for less ambitious goals and merely to prepare a land policy, create a simple unified land administration organisation, recognise and support customary tenure structures, aim to establish a fair and gradually improved register of deeds with simple sporadic methods, and only to consider self-financing, systematic registration when legal enforcement and resources improve.

Workable land administration is in itself one of the factors behind sustainable development. But many of its key issues also have tangible significance. Very positive factors are associated with land tenure, including balance, security and flexibility. In a nutshell, a secure flexible all-inclusive tenure form, whether customary or statutory, provides the best basis for development. Less tangible positive impacts can be expected from good governance, an appropriate approach, land distribution and commitment. If ambiguity, low legality, insecurity, insensitive approaches, low resources and a lack of commitment prevail, then land administration will significantly disrupt sustainable development. In other words, an ambiguous, ineffective land administration that fails to serve a large part of the population and promotes insecurity of tenure is a harmful institution.

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Mika