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SECURE TENURE FOR ALL STARTS TO EMERGE: NEW EXPERIENCES OF COUNTRIES IMPLEMENTING A FIT-FOR-PURPOSE APPROACH TO LAND ADMINISTRATION

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ABSTRACT

There are two major drivers that are increasingly encouraging and compelling countries, especially

developing countries, to adopt a Fit-For-Purpose (FFP) approach to land administration. The first relates

to the Global Agenda as set by the Sustainable Development Goals (SDGs) and other frameworks, such

as the New Urban Agenda, where it is now accepted that security of tenure is a prerequisite for

successful transformational change. The second is about taking advantage of the opportunities provided

by new and emerging game-changing technology developments that change the focus from costly, high-

tech solutions to providing fast, low cost, participatory approaches for achieving secure tenure for all.

This paper initially provides background to the 2030 Global Agenda and the realization that many of

these goals will not be achieved without quickly solving the current insecurity of tenure crisis through

the FFP approach to land administration. New technology and emerging trends for land administration,

identified within the World Bank's Guide (2017), will then be reviewed within the context of

implementing FFP land administration solutions.

The paper will review the recent experiences from implementing FFP land administration solutions in

three developing countries, Indonesia, Nepal and Uganda. This will include how their country strategies

were evolved, how the FFP land administration guidelines were interpreted and adapted, how politicians

and decision makers signed onto the approach, and how the mind-set of key stakeholders, including

surveyors, were changed to embrace FFP land administration.

Finally, the paper presents some concluding discussions and lessons learnt.

KEY WORDS:

Fit-For-Purpose, Land Administration, secure Tenure

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1 INTRODUCTION

Most developing countries are struggling to find remedies for their many land problems that are often causing land conflicts, reducing investments and economic development, continuing poverty, hunger and malnutrition, and preventing countries reaching their true potential. Existing investments in land administration have been built on legacy approaches, have been fragmented, and have not delivered the required pervasive changes and improvements at scale. While a wealth of literature emphasizes the need for security of tenure and elaborates on its benefits, including the opportunities of significantly contributing to poverty reduction and sustainable development, the conventional approaches to land administration do not make this a reality. The standard solutions have not helped the most needy - the poor and disadvantaged - that have no security of tenure. In fact, the beneficiaries have often been the elite and organizations involved in land grabbing. It is time to rethink these traditional approaches. New solutions are required that can deliver security of tenure for all, are affordable and can be quickly developed and incrementally improved over time. The FFP approach to land administration has fortunately emerged to meet these simple, but challenging requirements.

2 2030 GLOBAL AGENDA

There is a broad agreement that, while the Millennium Development Goals (MDGs) provided a focal point for governments, they were too narrowly focused. The MDGs are now replaced by the Sustainable Development Goals (SDGs) with a new, universal set of 17 goals and 169 targets that UN member states are committed to use to frame their agenda and policies over the next 15 years (2016-2030), see Figure 1. The goals are action oriented, global in nature and universally applicable. Targets are defined as aspirational global targets, with each government setting its own national targets guided by the global level of ambition, but taking into account national circumstances. The goals and targets integrate economic, social and environmental aspects and recognize their interlinkages in achieving sustainable development in all its dimensions.



Figure 1. The Sustainable Development Goals (UN, 2015).

The SDGs provide a framework around which governments, especially in developing countries, can develop policies and encourage overseas aid programs designed to alleviate poverty and improve the

lives of the poor. In particular, the SDGs Target 1.4 (secure tenure rights to land) will not be achieved with conventional land governance. Similarly, the land component is referred to in target 3 of Goal 2 on ending hunger, and, more generally in Goal 5 on gender equity, Goal 11 on sustainable cities, Goal 15 on life on land, and Goal 16 on peace, justice and strong institutions. These goals and targets will never be achieved without having good land governance and well-functioning countrywide land administration systems in place. The SDGs represent a rallying point for NGOs to hold governments to account. In other words, the SDGs are a key driver for countries throughout the world – and especially developing countries – to develop adequate and accountable land policies and regulatory frameworks for meeting the goals.

2.1 The Wider Global Agenda

It should be recognized that, next to the SDGs, the wider global agenda includes a range of global issues, such as responsible governance of tenure, human rights and equity, climate change and natural disasters, rapid urbanization, and the New Urban Agenda – see Figure 2.

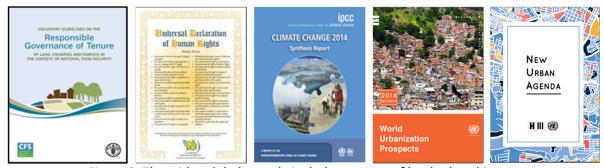


Figure 2. The wider global agenda includes a range of land related issues.

Solutions to the overall global land issues relate to alleviation of poverty, social inclusion and stability, investments and economic development, and environmental protection and natural resource management. These land matters are now embedded in the SDGs and the land professionals are the custodians of the systems dealing with these land issues and responsible for delivering appropriate land administration policies and services.

There is a strong requisite for effective monitoring and assessment of progress in achieving the SDGs as provided through the annual progress reports (UN 2017). There is a need for reliable and robust data for devising appropriate policies and interventions for the achievement of the SDGs and for holding governments and the international community accountable. Such a monitoring framework is crucial for encouraging progress and enabling achievements at national, regional and global level. This calls for a "data revolution" for sustainable development to empower people with information on the progress towards meeting the SDG targets (UN, 2014, p.7).

2.2 The FFP Response

The FFP approach is flexible, includes the adaptability to meet the needs of society today and the outcome can be incrementally improved over time, when required. The FFP approach takes advantage of advances in technology development that now allows for aerial / satellite imagery to be provided quickly and at low / affordable costs. These imageries can be used for identifying and recording the visible boundaries of the individual land parcels rather than using conventional field surveys and complying with high accuracy standards. The identification and recording of visual boundaries are undertaken in a participatory process involving the local community. The participatory process may also include "walking the boundaries" using handheld GPS to capture boundary corners on a tablet imagery. This simple identification and recording can be upgraded over time, e.g. triggered in response to social and legal needs of economic development, investments and financial opportunities that may emerge over the longer term. The FFP approach thereby enables land rights to be secured for all in a timely and affordable way. Similarly, the FFP approach looks at recording all rights – legal as well as legitimate – and enables for updating and upgrading over time in accordance with the continuum of land rights (UN-HABITAT/GLTN, 2008). The FFP approach also advocates for the use of a flexible ITC approach and an integrated institutional framework without bureaucratic barriers.

3 NEW AND EMERGING TECHNOLOGIES IN LAND ADMINISTRATION



The World Bank, with sponsorship from the Nordic Trust, has recently published the "New Technology and Emerging Trends: The State of Play for Land Administration" Guide (World Bank, 2017). The Guide provides decision support to designers of Land Administration programs requiring guidance on what new and emerging technologies could be effectively adopted and integrated within their programs

The Guide is positioned within the context of implementing FFP land administration solutions where technical solutions supporting the implementation of the spatial framework need to be complemented by appropriate legal and institutional frameworks. The target audience of the Guide is World Bank staff, NGOs/CSOs and Donor organizations providing guidance and aid to developing countries designing their land administration programs, as well as public and private sector decision-makers involved in formulating and implementing land sector policies.

3.1 FFP Land Administration Context of the WB Guide

The FFP Land Administration approach (Enemark, et al., 2016) provides an innovative and pragmatic solution to land administration. The solution is focused on developing countries, where current land administration solutions are not delivering, with often up to 90 per cent of the land and population in

developing countries left outside the prevailing formal version. The approach is directly aligned with country specific needs, affordable, flexible to accommodate different types of land tenure, and also upgradable when economic opportunities or social requirements arise. It is highly participatory, can be implemented quickly and aimed at providing security of tenure for all. Most importantly, the FFP approach can start very quickly using a low risk entry point that requires minimal preparatory work. It can be applied to all traditions of land tenure across the globe.

To significantly accelerate the process of recording land rights, the FFP Land Administration approach advocates the use of a range of scales of imagery as the spatial framework, wherever feasible, on which to identify and record visible tenure boundaries. This fast, affordable and highly participatory approach is appropriate for the majority of land rights boundaries. Using imagery also allows the spatial framework to be used by many other land administration and management activities and generate wider benefits.

Security of tenure does not in itself require precise surveys of the boundaries. The most important aspect of security of tenure for the majority of unregistered land parcels is identification of the land object and its relation to neighboring objects, in relation to the connected legal or social right. The absolute precision of the survey is less important, except perhaps in high value land and properties, and non-visible or contested boundaries when higher precision, but more costly conventional ground survey methods and monumentation, may be necessary.

Rather than mandating a single surveying specification for capturing land rights across an entire country, the FFP approach supports flexibility in adopting a variety of techniques to capture the land rights depending on local circumstances, a flexibility that will ensure lower costs and higher speeds in the capture of land rights. However, this does require that those designing the FFP projects are familiar with and able to select the most suitable options from the myriad of emerging technologies and solutions that show significant promise in accelerating the process even more. This raises questions such as: Which imagery (satellite, aerial or drone) and what resolution are appropriate? Should we use paper orthophotomaps or adopt mobile technologies to support mapping and adjudication participation? How does urban density influence our choice of survey technique? Do community mapping and rights adjudication tools support formal land administration activities? Is automatic extraction of linear and settlement features suitable for land administration? Are modern SMS or other mass media approaches appropriate to raise public awareness of land registration programs? What are the key technological gaps and emerging trends?

The purpose of the Guide is to provide designers of country-specific FFP Land Administration strategies with guidance on the current status of technology and emerging trends. This should allow the most appropriate technical solutions to be adopted in designing and implementing the Spatial Framework for the FFP Land Administration approach. This guidance aims to ensure that the capture, management and dissemination of land rights information will be achieved using the most cost-effective solutions, meets

the precision and accuracy requirements, matches the technical resources within the country, is compatible with social cultures and can be implemented quickly over large areas.

Therefore, the Guide should be used in conjunction with the GLTN sponsored "Fit For Purpose Land Administration: Guiding Principles for Country Implementation." (Enemark, et al., 2016). The FFP concept includes three core components: the spatial, the legal, and the institutional frameworks – see Figure 3. Each of these components includes the relevant flexibility to meet the actual needs of today, yet can be improved incrementally over time in response to societal needs and available financial resources. The three framework components are inter-related and form a conceptual nexus underpinned by the necessary means of capacity development. Each of the frameworks must be sufficiently flexible to accommodate and serve the current needs of the country within different geographical, judicial, and administrative contexts.

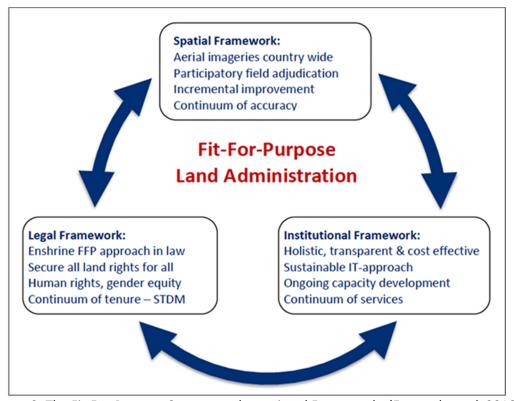


Figure 3: The Fit-For-Purpose Concept and associated Frameworks (Enemark, et.al. 2016).

Hence, although the Guide covers technology solutions, it is imperative that the decision-making process on technology is made with the full understanding of the impact on the legal and institutional frameworks. Importantly, prior to building the spatial framework and issuing any certificates of land rights, it must be ensured that the regulations and institutions for maintaining and updating the FFP land administration system are in place. Without the institutional capacity and also incentives for the parties to update the system in relation to the transfer of land rights and land transfers, it will quickly be outdated and unreliable and lead to waste of investments for building the system in the first place.

3.2 Scope of Technology Solutions and Approaches in the Guide

The Guide reviews and assesses new technology solutions that are currently operating successfully in land administration systems, but also emerging disruptive technologies that could significantly accelerate the land administration processes. This will allow the risk of when, and if, to adopt this emerging technology, to be judged. Although there have been advances in supporting technologies such as enterprise content and document management, optical character recognition and biometric recording of individuals, these are not considered within the Guide. This emerging technology includes, for example:

- Use of social media to engage with land stakeholders;
- Use of appropriate imagery sources (satellite, airplane or drone) to map parcel boundaries, with AI or crowd-sourced solutions to extract features from imagery, and/or extraction of land parcel boundaries from point clouds if LiDAR is collected simultaneously;
- Use of effective emerging methods for capturing rights in the field using smartphones or tablets, and/or auto geo-referencing of interpreted, participatory map-sketching; and
- Use of cloud and/or blockchain technology for immutable recording and management of rights.

These are particularly powerful when combined with less recent technologies such as: Freely-available satellite imagery and OpenStreetMap (OSM) data; portable digital devices and crowdsourcing techniques to record inhabitants and attitudes (hopes and fears) about land rights; and the use of modern data model standards (LADM and STDM) for defining, recording and managing RRRs in land.

The Guide clarifies which of the identified techniques are fully operational, what is still in the early piloting phase and what is still pure research. It is emphasized that the technologies and approaches reviewed by the Guide do not represent an exhaustive nor exclusive list, but provides an indication of good practice and emerging trends that should be reviewed alongside additional consultations. The technologies and approaches included in the Guide are shown in the Table 1 below.

Technologies and approaches included in the WB Guide (2017) on "New Technology and Emerging Trends: The State of Play for Land Administration"

- Global Property Rights Index (PRIndex)
- Social Media (for Land Administration)
- Use of Unmanned Aerial Vehicles (UAVs)
- Feature Extraction from Imagery
- Paper Orthophotomaps
- Field Papers
- Smart Sketchmaps
- Mobile Applications to Secure Tenure (MAST)
- Cadasta Platform
- Meridia (formerly Landmapp)
- Solutions for Open Land Administration (SOLA) – Open Tenure
- STDM Software
- · Mapping For Rights.
- Blockchain Based Land Administration.
- Advara.
- what3words.

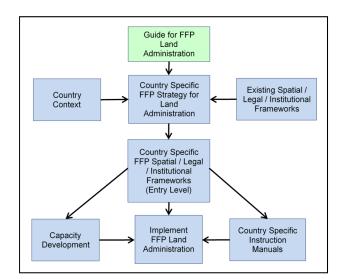
Table 1: Technologies Reviewed in Guide

The World Bank expects that the Guide will be instrumental in paving the way forward towards implementing sustainable and affordable land administration systems in developing countries, enabling security of tenure for all and effective management of land use and natural resources. This, in turn, will facilitate economic growth, social equity, and environmental sustainability.

4 THE FFP IMPLEMENTATION PROCESS

This FFP Guidelines (Enemark, et.al, 2016) is not a manual. Instead, it provides guiding principles for building Fit-For-Purpose land administration systems. These principles should not be interpreted as prescriptive, but should provide direction and guidance on building the spatial, legal and institutional frameworks in support of designing the country specific strategies for implementing FFP land administration. This process is illustrated in Figure 4.

Furthermore, the issue of capacity development is essential. This is reflected in the phrase: "Don't start what you can't sustain". This phrase is particularly relevant for implementing land administration systems at country level. Once established, the systems must be maintained and updated from day one; otherwise the efforts and investments in building the systems are easily wasted. The necessary capacity to manage and maintain the systems, therefore, must be developed up front in order to ensure efficient implementation and effective on-going maintenance and management. This process is illustrated in Figure 5 and explained in more details in (Enemark et al., 2018).



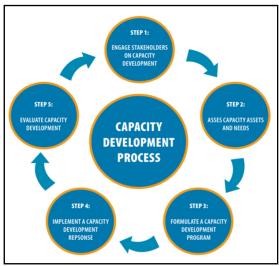


Fig. 4. Developing Country Specific FFP Strategies for implementation (Enemark, et al., 2016)

Fig. 5 Capacity development for FFP Country Implementation (Source: UNDP, 209))

The country specific FFP strategy for land administration will be based on a country context analysis and the baselines of the existing spatial, legal and institutional frameworks. The country context analysis will involve identifying the culture, conditions and policies prevalent within a country that constrain and shape the way that FFP land administration can be implemented within the country. An analysis of the existing spatial / legal / institutional frameworks will define the current approaches and identify any

constraints for change. These analyses may follow the frameworks as outlined in the World Bank Land Governance Assessment Framework (LGAF) (World Bank, 2011). The FFP Guiding Principles will then be used to create the country specific strategy for building the spatial, legal and institutional framework for implementing FFP Land Administration that will also require provision of capacity development measures as well as country specific manuals. The process is explained in details in (Enemark and McLaren, 2017).

5. EXPERIENCES IN IMPLEMENTING FFP LAND ADMINISTRATION AT THE COUNTRY LEVEL

A well know example of implementing the FFP approach at country level is the project in Rwanda of demarcating and recording 10 million land parcels over five years for a cost of 6 USD parcel. This project was completed even before the FFP principles were launched by FIG and the World Bank (FIG/WB 2014). Currently the FFP approach is being implemented in countries such as Ethiopia, Colombia and Mozambique. It should also be mentioned, that many countries in the European and central Asia (ECA) region used such flexible and low-cost approaches in the 1990s when undergoing a transition from centrally planned to market based economies. More recently, national scale projects developed in countries such as Indonesia, Nepal and Uganda. Experiences from these countries are presented below.

5.1 Indonesia

Indonesia is the world's fourth most populated country with a land area close to 2 million km2 and a population of around 260 million people. It is estimated that Indonesia has about 120 million land parcels of which about one third are registered and only about half of these are spatially identified. About 3 million new parcels appear each year.

Land administration in Indonesia is divided between forestlands, administered by the Ministry of Environment and Forestry (MoEF), and non-forest lands, administered by the Ministry for Agrarian and Spatial Planning (BPN). This results in duplication of policy, legal and institutional frameworks, and precipitates unclear tenure arrangements and legal recognition. The dualism also contributes to the slow recognition of customary ("adat") communities' rights on land and hinders the government's ability to optimize land use and protect resources (World Bank, 2016).

The lack of a unified spatial framework has created multiple conflicts between communities and other land users (ibid). In response, the Government of Indonesia introduced the One Map Policy (OMP) as an effort to establish a unified, agreed-upon, reference set of geospatial data that inform decision-making at the national and sub-national levels. The current OMP methodology aims to produce 1:50,000 scale maps based on over 80 thematic datasets and with limited or no ground verification. However, in order to identify reliably the land use and occupancy at the district and village levels, the OMP also supports village boundaries mapping by district governments at a scale of 1:10,000 or larger upon need.

Furthermore, the President has set a target for registering 5 million land parcels in 2017, 7 million in 2018 and 9 million in 2019. This target can only be achieved using a FFP approach, even though some resistance is voiced, especially from the National Land Agency (BPN). Some preliminary piloting has already taken place, e.g. in Gresik District, East Java, see Figure 6.



Figure 6. Example of demarcation of land parcels using high resolution imagery.

Wotan Village, Gresik District, East Java Province, Indonesia (Source: Gresik District Land Office)

Experience from this kind of FFP piloting looks very promising, even though the legal & regulatory frameworks will have to be adjusted in order to allow for mandatory registration as part of the participatory process of boundary identification. Overall, the benefits of implementing the FFP approach can be summarized as shown in Table 2.

Current key issues:

- Sporadic registration with measurement and boundary marking of individual parcels.
- Demands for accuracy of measurement and area.
- Fragmented sectors for land tenure, land value and land use.
- Lack of capacity and land professionals.

FFP solutions:

- Systematic registration with aerial mapping and participatory land adjudication.
- Visual boundaries and areas calculated on the map
- Integrated land management based on a one map policy.
- Use of locally trained land officers acting as trusted intermediaries.

Table 2. FFP transition process in Indonesia.

5.2 Nepal

The (then) Ministry of Land Reform and Management has been working for a few years on developing a draft National Land Policy. This policy aims to address the various land administration and land reform issues that have remained unresolved and under discussion for quite a long time in Nepal.

In Nepal, almost 28% of the total land area is arable and only around 75 % of this is formally registered. The land administration system does not deal with non-statutory or informal land tenure. It is estimated that around 25% of the total arable land and settlements are outside the formal cadastre. This accounts for approximately 10 million parcels on the ground, including occupied land parcels that legally belong to either government, public or person/institution. This means that a significant amount of the Nepalese population is living in informality, without any spatial recognition and without security of tenure.

The recent events, such as the mega earthquake of 2015 and post disaster reconstruction and rehabilitation, the promulgation of a new Constitution, and post conflict peace and social rebuilding have ignited the need for developing a strategy for implementation of the National Land Policy in the changed context, see: https://gltn.net/country-work/#nepal. The current Nepalese land administration system (LAS) only deals with the formal or statutory land tenure system, while there are three types of non-statutory land tenure in the society: non-formal, in-formal and encroachments, see Figure 7.

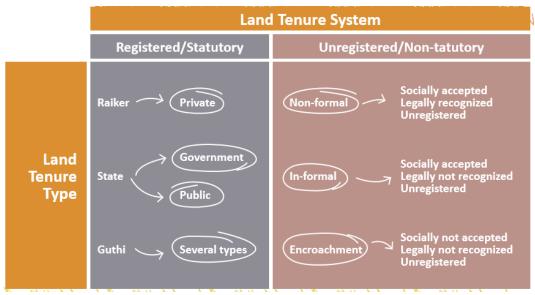


Figure 7. Tenure systems in Nepal (Source: Government of Nepal)

It is recognized that because of unsecured tenure, the settlers hesitate to invest on the land to improve its productivity, and without investment, production cannot be increased. All these consequences show that the land under informal tenure is causing huge loss to the economy and the valuable land asset is dumped as "dead capital", see Figure 8.



Figure 8. "Land administration is about people". This family in rural areas, about 20 km outside Kathmandu, has occupied a small farm for four generations without any security of tenure to enable investments and improvement of their livelihood (Photo: Enemark, 2018).

Therefore, it was decided, in cooperation with UN-Habitat/GLTN and Nepal civil society organizations, to develop an appropriate strategy for implementing the latest provisions made in the draft National Land Policy and the Constitution of Nepal. This should ensure social justice on the one hand, and on the other hand, lead to increased land productivity to support economic growth. The strategy document integrates the resulting FFP approach to land administration as a key solution to these problems.

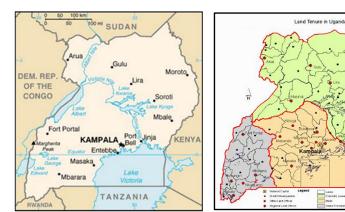
The strategy is strongly supported by government, including Ministry of Agriculture, Land Management and the Survey Department. Also, civil society organizations such as Community Self Reliance Centre (CSRC) and the National Land Rights Forum (NLRF) are very supportive, while some reluctance is voiced by the professional land surveyors.

The draft strategy is currently (July 2018) under consideration and adoption at the Parliament in Nepal, including a timescale for implementation. The draft strategy document and an executive summary is available at: https://gltn.net/home/download/full-report-fit-for-purpose-land-administration-a-country-level-implementation-strategy-for-nepal/.

5.3 Uganda

In Uganda, as in many Sub-Sahara African countries, colonial governments introduced land administration systems to deal with tenure insecurity. However, the tenure systems and procedures for legal recognition of tenure rights were not oriented to the context and realities of the African communities. The result is that even after independence, many countries have only managed to register less than 20% of their land.

The Constitution of the Republic of Uganda of 1995 (Chapter 15) vests land in the citizens of Uganda hence giving powers to citizens to own land privately as individuals, families or communities. The 1995 constitution maintained the Freehold and Leasehold tenure systems that were recognized under the colonial laws. Furthermore, the 1995 constitution re-introduced the Mailo Tenure system that is comparable to freehold, the difference being the recognition of rights of occupants categorized under the Land Act as bona fide or lawful. The constitution also recognized customary tenure for the first time making it possible for holders of customary rights in land to acquire legal documents. Customary tenure accounts for approximately 80% of land in Uganda see Figure 9.



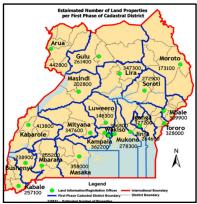


Figure 9. Left: Uganda, with a population of 28.3 million and an area of 200.000 sq.km (excl. Lake Victoria waters), received independence 1961 after 70 years of British colonization. Middle: Land tenure in Uganda is divided between Native freehold 22% (grey), Mailo 28% (yellow) and Customary 50% (green). Right: Cadastral Information Branch Centres providing local access to reliable land information. Source. Government of Uganda.

Even though the Uganda Land Laws allow for registration of Mailo (bona fide) titles and customary ownership (Certificate of Customary Occupancy) these opportunities are not enforced in practice. However, a number of recent pilot projects, carried out by donors and civil society organizations, have introduced the FFP concept as a vehicle for efficient and effective systematic registration of land rights for the remaining about 20 million parcels currently outside the formal system. As the challenges are enormous and the capacity of land stakeholders limited, the Global Land Tool Network engages in Uganda to scale up pro-poor land interventions in order to contribute to the achievement of tenure security for all, see: https://gltn.net/home/country-work/#uganda.





Figure 10. Left: Community people discussing the outcome of a pilot project for registering land rights in the Mailo district of Central Uganda. Right: A satellite imagery showing the mapped parcel boundaries as demarcated though a participatory process (Photo: Enemark, 2018).

The experiences of the pilot project are very promising and well-received by government as well as at the community level. Teams have been created, consisting a volunteer acting as locally trained land officer and two representatives from local government, to complete the parcel demarcation based on visual boundaries as shown on large-scale satellite imagery or captured in the field with hand held GPS. The Government of Uganda has now engaged with UN-Habitat/GLTN to develop a National Strategy for implementing a FFP approach to land administration. The aim is to register 20 million parcels within the next 10 years for a cost of around 10 USD per parcel. This base cost does not include further costs relate to institutional development, awareness raising and capacity development.

The draft strategy presents the FFP concept and an assessment of the current land administration system in terms of shortcomings and constraints of delivering secure tenure for all. The requirements for building the spatial, legal and institutional framework is then presented along with the crosscutting issues, such as capacity development and budgetary costs over a period of 10 years. The draft strategy was recently (August 2018) presented and discussed at a workshop with attendance of all the key stakeholders and the final version is expected by the end of September 2018 for further discussion and approval at Parliament level.

The strategy is well supported at the Prime Minister level, parts of the ministry of Lands, Housing and Urban Development, and various civil society organizations. Some other stakeholder, such as private licensed surveyors still voice some reservations even though there is a growing understanding of relevance of replacing costly field surveys with simple positioning at a lower accuracy, supported by boundary corner plants. This also relates to understanding the benefits deriving from a new role as land professionals being the custodians of a countrywide land administration system. Overall, the case of Uganda is very interesting for testing the implementation of the FFP approach at a national scale.

6. DISCUSSION AND LESSONS LEARNT

The phrase "Fit for Purpose" is generally and widely used as a quality label for government policies or interventions. The phrase is commonly used for any intervention or activity that is appropriate, and of a necessary standard, for its intended use. So, the label was chosen to indicate that this (FFP) approach is appropriate and of a necessary standard for the purpose ... namely to provide security of tenure for all.

The FFP approach is therefore an endeavor to address the issue of building and sustaining land administration systems, especially in developing countries, that are basically fit-for-purpose of providing security of tenure for all, rather than blindly complying with top-end technological solutions and rigid regulations for accuracy (FIG/WB, 2014).

The FFP approach is affordable by using innovative technological solutions and locally trained land officers for identifying and recording the land parcels and associated land rights. Furthermore, the mapping and recording activities can be carried out simultaneously in local/regional jurisdictions throughout the country at the same time. Countrywide projects can therefore be completed within a relative short timeframe of say 5-10 years, depending on the size and population of the country.

The FFP approach is designed to be a total, flexible solution at national scale by providing a spatial identification of the land parcels in a participatory process, providing (eventually) legal security of the various kinds of land rights related to each parcel, and providing an institutional framework for administration, maintenance and incremental upgrading over time. The approach can, of course, also be applied in a regional or local context, but then often without providing the full legal impact and security until the captured land parcels and rights are included in the national land registry at a later stage.

Discussions so far have focused mainly on the methodology for providing the spatial framework, using a participatory approach and modern technology solutions rather than conventional field surveys. However, the more fundamental issues around providing the legal and institutional frameworks have largely been overlooked, even though these issues are the most critical from a political and societal point of view.

The FFP approach is often seen as disruptive, in the sense that it introduces new, simple and innovative ways of providing secure tenure for all. This implies that a range of current land administration functions normally undertaken by land professionals become obsolete. Similarly, related activities of the land agencies will change and new procedures will be applied. The FFP approach also implies a more fundamental and fairer change in society towards greater social equity and leaving no one behind. This will gradually reduce the divide between those who have and those who have not. Therefore, even though the FFP concept is quite straight forward, cost effective, fast to implement and fully in line with the globally accepted policies, such as the SDGs and VGGTs, it can easily be seen as disruptive and

potentially threatening to many vested interests. These attitudes are normally caused by the professional associations not creating awareness of the opportunities created by the FFP approach.

6.1 Pilot projects vs national scale

The FFP approach is flexible in terms of the methodologies that can be used for the identification of land parcels. Conventional and expensive field surveys are replaced by modern technology solutions such as satellite imagery, drones, and handheld GPS, where appropriate. The demands for accuracy varies according to topographic conditions, land use density, and land values. So, for example, conventional field surveys will still be used for dense, high value urban areas. Furthermore, the methodology is highly participatory by involving the local community and the process is conducted by locally trained land officers rather than land professionals.

This methodology for recording land parcels has been extensively tested in a range of highly important pilot projects and has been proved to work well for the function of the initial identification of the land parcels and the connected land rights. However, when adopting the methodology for a national scale project a whole range of potentially conflicting interests comes into play. These interests relate to the current roles of the land professionals as well the land agencies.

6.2 The interests of key stakeholders

The main barriers for adopting a FFP approach to land administration may easily be seen as political economy constraints, colonial legacy, lack of basic financial resources, and even lack of political will. However, this may not be entirely true. Politicians will often react positively to a concept like FFP that aims to significantly improve the living conditions of the citizens within a relatively short timeframe. However, politicians will often rely on professional bodies and government agencies to advise on specific professional issues; unfortunately, this advice is often lacking.

These groups of land professionals, such as lawyers, surveyors, planners, etc., are highly educated and act as custodians of existing land administration systems that were mainly developed by colonial powers and mainly serve the elite. It is therefore no surprise that their professional codes support these existing systems, and there are many examples of resistance towards change that will challenge their monopolistic position. On the other hand, by including all land in the formal land administration systems the land professionals will contribute to much wider social development and, at the same time, also enlarge their functions and client base.

Similarly, the national land agencies will often defend the existing system and try to keep business as usual, thereby guarding their role and position as experts and the importance of existing regulations and administration.

To overcome these barriers, requires a focus on the benefits to society to be achieved by implementing a FFP approach, e.g. effective engagement through seminars and open discussions with all relevant stakeholders, including civil society.

Furthermore, the suppliers of complete end advanced IT systems may argue that they already have the right solution (for sale). Some donors may be skeptical since this concept looks to be too simple, fast and cheap and not fully tested. Moreover, some agencies providing loans to countries to implement land administration are judged by the amount of the loans rather than then effectiveness of the supported approach. Finally, some social scientists often argue that the local population in developing countries should not have their people to land relationship disturbed at all.

6.3 The interests of society

Next to the people, land is probably the most important asset of any country. This also means that the people to land relationship is crucial to society development. This is also why the SDGs Target 1.4 states that "By 2030, ensure that all men and women, have equal rights to ownership and control over land and other forms of property". A good example of the importance of the people to land relationship is found in China. In 1978, China dismantled their collective farms and used long-term leases to allocate land rights to farming households. This policy enforced an era of agricultural growth that transformed rural China and led to the largest reduction of poverty in history. The percentage of people living in extreme poverty declined from about 80% of the population in 1981 (the highest in the world at that time) to only 13% in 2008. (Byamugisha, 2013a).

Similarly, in the European and Central Asia (ECA) region, the focus over recent decades has been on land reform following the dramatic change in 1989 from a state-controlled regime to a market-based economy. The Adlington and Stanley (2009) paper gives an excellent overview of the 37 World Bank projects supporting the region that produced a greater level of land and property redistribution than has been experienced anywhere else in history. The executive summary of this publication states: "The overriding and predominate policy behind the projects and the reforms was to rebuild the systems of secure real estate tenure by developing, within a framework of laws, good systems of real estate registration and cadastre.". The Systems in the ECA region were built quickly using methodologies that in many cases were comparable to the FFP concept and they have subsequently been upgraded several times to meet the requirements of societal and economic development in the individual countries.

In most countries in a developing region such as Sub-Sahara Africa, 90 per cent of the land and people are outside the formal systems of land registration and administration. Even if Sub-Saharan Africa has seen a considerable growth rate of above 5% per year for more than a decade, the region still remains poor for the most part and has been unable to translate its recent robust growth into rapid poverty reduction. These facts indicate that poor land governance, including the manner in which land rights are defined and administered, may be the root cause of the problem (Byamugisha, 2013b).

The benefits to society of adopting the FFP approach are certainly many. The key benefit would be that by taking this approach it will be possible to include all land in the formal land administration system within a reasonable short time and for a relatively low cost. A FFP approach also means that the solution can be shaped to fit the size of the economy – the budgetary capacity – that the system is intended to serve. Furthermore, such a framework will be more flexible and suitable for meeting the current demands in the land sector – and the framework can easily be incrementally improved over time. This will enable a developing country to leap frog many of the steps and lessons that developed countries have been through when the time is right, resources are available, and the need for improvement present itself (Enemark, 2013). Recent experience indicates that the benefits will easily outweigh the disadvantages (if any).

6.4 Lessons learnt

Some key lessons learnt can be drawn from the recent period of implementation:

- Pilot projects in various countries have shown that the FFP approach is easy to implement on the ground and well accepted and understood by the local communities.
- The FFP approach makes it possible to cover even major countries (such as Indonesia) within a few years (say 5-10 years) and at an affordable cost of say 5-20 USD per parcel depending on the country context. This is due to the use of locally trained land officers and low-cost technology for mapping the land parcels and using a participatory approach to record the connected land rights.
- The FFP approach is attractive to politicians because of the benefits to society and citizens by providing secure tenure for all and enabling control of the use of all land. The FFP approach is also attractive because of lower costs and a short timeframe for completing the project, thereby showing results within the timeframe of political mandates.
- The FFP approach is a national, top-down approach and requires strong political will and the support of key senior civil servants.
- FFP projects at a national scale need to involve all stakeholders in the process of developing a strategy for implementation and thereby address the potential fears, misunderstandings, and various perceived threats to vested interests. This will enable the creation of shared ownership to the future solution for the benefit of societal development.

7. CONCLUDING REMARKS

There is a clear consensus that governing the people to land relationship is at the heart of the 2030 global agenda. There is therefore an urgent need to build effective, simple and basic systems using a flexible and affordable approach to quickly identify the way land is occupied and used, whether these land rights are legal or locally legitimate. The systems need to be simple and flexible in terms of spatial identification, legal regulations and institutional arrangements to meet the actual needs in society today

with the capability to be incrementally improved over time, when required. Building such spatial, legal, and institutional frameworks will establish the link and trust between people and land. This is now possible due to emerging, game changing technology developments that enable mapping and registration procedures to be undertaking at much simpler, cost efficient and participatory ways. In turn, this will enable the management and monitoring of improvements in meeting aims and objectives of adopted land policies as well as effectively meeting the global agenda. The results of the current country implementations of FFP land administration happening and expanding worldwide will make this approach compelling and widely adopted. At last there will be a scalable land administration solution implemented across the globe to eliminate the scourge of insecurity of tenure. All land professionals need to embrace and fully support this approach.

REFERENCES

Byamugisha, F. (2013a) Improving Land Governance for Development: Opportunities and Challenges for the Survey Profession. Article of the Month, September 2013. International Federation of Surveyors (FIG), Copenhagen.

http://www.fig.net/pub/monthly articles/september 2013/byamugisha.html

Byamugisha F (2013b): Securing Africa's Land for Shared Prosperity: A Program to Scale Up Reforms and Investments. World Bank.

 $\underline{http://documents.worldbank.org/curated/en/732661468191967924/pdf/780850PUB0EPI00LIC00pubdate05024013.pdf}$

Enemark, S. (2013): Fit For Purpose: Building Spatial Frameworks for Sustainable and Transparent Land Governance. Annual World Bank Conference on Land and Poverty, April 8-11, 2013.

Enemark, S., McLaren, R. and Lemmen, C. (2016): Fit-For-Purpose Land Administration – Guiding Principles for Country Implementation. UN-Habitat / GLTN, Nairobi, 120 p.

https://unhabitat.org/books/fit-for-purpose-land-administration-guiding-principles-for-country-implementation/

Enemark, S. and McLaren, R. (2017): Fit-For-Purpose land Administration: Developing Country Specific Strategies for Implementation. Annual World Bank Conference on Land and Poverty, March 20-24, 2017.

 $\frac{https://www.conftool.com/landandpoverty2017/index.php?page=browseSessions\&form_session=673\&presentations=show}{}$

Enemark, S., McLaren, R. and Antonio, D. (2018): Fit-For-Purpose Land Administration: Capacity development for Country Implementation. Annual World Bank Conference on Land and Poverty, March 19-23, 2018.

 $\frac{https://www.conftool.com/landandpoverty2018/index.php?page=browseSessions\&presentations=show\&search=Enemark}{w\&search=Enemark}$

FIG/WB (2014): Fit-for-Purpose Land Administration. FIG Publication No. 60. http://www.fig.net/resources/publications/figpub/pub60/Figpub60.pdf

UN (2014): The Millennium Development Goals Report 2014.

http://www.un.org/en/development/desa/publications/mdg-report-2014.html

UN (2015): 2015 is the Time for Global Action. http://www.un.org/sustainabledevelopment/

UN (2017): The Sustainable Development Goals report 2017.

https://unstats.un.org/sdgs/report/2017/

UNDP (2009): Capacity development: A UNDP Primer.

http://www.undp.org/content/dam/aplaws/publication/en/publications/capacity-development/capacity-development-a-undp-primer/CDG PrimerReport final web.pdf

UN-HABITAT/GLTN (2008): Secure Land Rights for All. https://unhabitat.org/books/secure-land-rights-for-all/

World Bank (2016): Terms of Reference for Technical Assistance and Capacity Development for the Program Preparation to Operationalize and Accelerate the One Map Policy.

World Bank (2017): 'New Technology and Emerging Trends: The State of Play for Land Administration'. Washington DC, USA. https://www.conftool.com/landandpoverty2018/index.php/14-07-McLaren-186 ppt.pdf?page=downloadPaper&filename=14-07-McLaren-186 ppt.pdf&form id=186&form index=2&form version=final

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