

**Public – Private – Partnerships
as a Catalyst for Tenure Governance in Developing Countries**

- *Inspired by “The Danish System”*

Soren Brandt PEDERSEN, Denmark

Keywords: Land Administration Systems, Public-Private-Partnership (PPP), Capacity development, Sustainable Development Goals (SDG’s)

SUMMARY

The paper describes the opportunity to utilise the potential of collaboration between the public and the private sector’s in connection with the establishment of land administration systems. The description in the paper is inspired by the Danish system, where there is an extensive degree of "cooperation" between the public and private sectors in the ongoing operation and development of the administrative land and property-related systems.

Establishing Public-Private-Partnerships, can create the basis for establishing a governance system that can utilise the opportunities that come with the flexibility of the private companies in relation to the public sector’s more bureaucratic structure.

Taking advantages of the private companies' flexible business approach offers the public sector great opportunities for establishing and operating land administration systems in a Public-Private-Partnership constellation.

Public – Private – Partnerships as a Catalyst for Tenure Governance in Developing Countries

- *Inspired by “The Danish System”*

Soren Brandt PEDERSEN, Denmark

1. INTRODUCTION

In order to ensure the fulfilment of the SDG’s, the establishment of land administration systems is central. In connection with the establishment of land administration systems in developing countries, both locally and centrally there can be different challenges.

Public-Private-Partnership

The paper describes the opportunity to utilise the potential of collaboration between the public and the private sectors in connection with the establishment of land administration systems.

The description in the paper is inspired by the Danish system, where there is an extensive degree of "cooperation" between the public and private sectors in the ongoing operation and development of the administrative land and property related systems.

The paper describes the opportunity, through the establishment of Public-Private-Partnerships, to build a governance system. The public authorities can maintain the control and the development of the establishment and operation of a land administration system, while at the same time utilising that in the private sector there is a focus on developing and delivering services and products.

Utilising private companies’ flexible business approach, innovation in task performance and focus on new business areas offers the public sector great opportunities for establishing and operating land administration system in a Public-Private-Partnership constellation.

2. LAND IS FUNDAMENTAL FOR THE SUSTAINABLE DEVELOPMENT GOALS



Figure 1. The 17 Sustainable Development Goals. © United Nations

The UN's Sustainable Development Goals for 2030 (SDGs) place sustainable development at the top of the agenda for governments, companies and populations

Research undertaken by a range of key actors, including the World Bank, the Food and Agriculture Organization of the UN, OECD, civil society organizations, and academic institutions, shows that security of land tenure rights is closely connected with the realization of development objectives related to poverty alleviation, food security, environmental sustainability and enhancing women's empowerment.

The abovementioned connection between land and sustainable development is recognised in the 17 Sustainable Development Goals and the 169 targets that include a thorough focus on land. At least eight goals are directly land-related or include land implications.

Especially *goal 1: No poverty* and *goal 2: Zero hunger* specifically address the lack of protection of land tenure rights and use rights that subject large portions of the world's population to poverty and hunger. (Ravn-Christensen and Norre, 2018)



SDG no. 1: End poverty in all its forms everywhere

This core goal addresses the cohesion between poverty alleviation and access to the necessary means to strengthen the security of land tenure rights.



SDG no. 2: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture

The Zero Hunger-goal emphasizes the importance of small-scale agricultural producers in order to ensure a sufficient amount of food to the world's poor and vulnerable.

3. LAND ADMINISTRATION SYSTEMS IN DEVELOPING COUNTRIES

In order to ensure the fulfilment of the SDGs, the establishment of land administration systems to secure ownership and property rights is an essential factor in combating poverty and hunger.

In connection with the establishment of land administration systems in developing countries, both locally and centrally there can be different challenges, both in connection with the establishment and in the subsequent operation and maintenance of the systems.

Institutional framework

Establishing and adapting the necessary institutional conditions are crucial parameters for the basic conditions to be in place when establishing a land administration system. Initially in the establishment phase, but also for the subsequent operation and updating the land administration system.

In establishing land administration systems, it is important that the objective(s) the system initially is to achieve is understood and prioritised, so that the institutional framework and establishment of property-related registers can be configured and adjusted accordingly.

In addition, the institutional organization should be considered already at an early point in the process of the establishment of the land administration system, with a view to preparing these systems for possible extension of the system that is initially established.

A lack of cooperation and coordination between the existing organizations/agencies in state administration can be a barrier to the establishment of land administration systems, as well as a lack of flexibility in organizational structures can make it difficult to implement the necessary changes.

Legal framework

Directly linked to the institutional considerations are the legal measures to ensure that the establishment and management of the land administration system and associated registers are legislatively adapted to the desired setup.

Existing property legislation needs to be identified and revised and the necessary repeal of outdated legislation and the drafting of new legislation must be initiated.

The new institutional structures and the interaction between the property registers must be grounded in the applicable legislation, and legislation must be implemented to ensure the ownership of land and tenure rights and the establishment of provisions for property and land transactions.

In establishing the land administration system, the legal framework for the registration of properties may be outdated, or there may be existing legislation that deliberately obstruct the introduction of new property systems.

In the legal system, legislation may also be established based on principles from developed countries that place unrealistically stringent requirements on precision, standards etc.

Spatial framework

Establishing the spatial mapping of boundaries is the basic starting point for identifying and establishing ownership.

The spatial mapping of municipalities and regions, and ultimately entire countries, can immediately seem overwhelming and an insurmountable task in a government administration that has not previously organized and handled these tasks.

The mapping can advantageously be carried out - based on a Fit-For-Purpose approach - by determining property boundaries based on satellite or drone aerial imageries and, if necessary, supplementing with land-based surveying, e.g. GPS or mobile phone.

Establishing property boundaries, both using aerial imageries and land-based surveying, the involvement of the local landowners can clarify any uncertainties, and participation in determining the boundary lines can clarify and prevent future disagreements between landowners.

Capacity development

When establishing the spatial mapping and determining the boundary lines, regardless of the registration method chosen, there is a need to acquire and train the necessary local labour to identify and determine boundary lines in a large-scale format.

Providing and training the necessary local labour can be a challenge and a bottleneck for the establishment of land administration systems. Also at the ongoing operation and maintenance

of the land administration system, the necessary capacity development can be a challenge and a limiting factor.

After the establishment of the land administration system, maintenance of both the spatial maps and property databases is a crucial factor for using the systems optimally, as well as an important factor for ensuring that the systems do not become out of data and the investment is wasted. Maintenance is a regular ongoing task for both surveyors and administrative personnel.

The following section describes the opportunity, through the establishment of Public-Private-Partnerships, to contribute to building a land administration system and subsequent handling and develop the system, focusing on solving the institutional, legal and physical challenges and the need for capacity development.

4. PUBLIC – PRIVATE – PARTNERSHIP (PPP)

The institutional and legal "obligation" of the public sector to carry out the construction of a national land administration system can be seen as an insurmountable task if the physical registration is to be done within the framework of a ministry or board. In a country like Nepal, which at present time is conducting studies on the methods of establishing land administration systems and physical mapping, it is estimated that several thousands of surveyors are needed to make the necessary survey. (Ministry of Land Management, Nepal)

A possible shortage of labour resources and trained employees in the public administration in connection with the desire for the establishment of land administration systems should not be a limiting factor.

This section describes the opportunity to utilise the potential in a collaboration between the public and private sectors in connection with establishment, and subsequent operation and maintenance, and possible development of land administration systems.

The description in the paper is inspired by the Danish system, where there is an extensive degree of "cooperation" between the public and private sectors in the ongoing operation and development of the administrative land and property related systems.

The Danish System

The land administration system in Denmark is developed over more than 200 years and has been continually adapted and improved to meet changing societal requirements over time.

The first land register was established for the purpose of property valuation and taxation to create an income for society. This registration also gave property owners and owners of mortgages and tenure rights protection and security for their ownership and rights.

Later, use of the register was extended to include functions such as planning and regulating the land use of urban and rural spaces and the country's natural resources. Finally, registers were established for purposes including detailed regulation of land use and the handling of building permits.

In the Danish system the registration of property in the cadastre, the land registry and municipal registers also provide the basis for a number of administrative systems:

- Planning of construction projects.
- The possibility for valuation and subsequent taxation of the registered properties.
- Planning and determination of land use.
- Land governance of the open land, natural resources, mining and quarrying, etc.

These administrative systems are providing a good basis for the administration of the country's properties, natural resources etc.

In addition to property rights related data in the cadastre and the land registry, the Danish land administration system furthermore includes a series of administrative property data in national and municipal systems. The systems have become fully digital over the past decades.

- Plandata.dk – Planning Register
- ESR – The Municipal Property Database
- BBR - Central Register of Buildings and Dwellings
- SVUR - National Sales and Valuation Register
- OIS - The Public Information Server

The Danish land administration system is based on transparency, which makes it easy to see information regarding ownership and restrictions associated with a property. This transparency is important for ensuring the tenure rights of citizens and companies.

For this purpose the OIS – The Public Information Server is established. The OIS is a database compiling information from numerous registries, including the above mentioned. The OIS was established to provide landowners free access to data regarding their own properties.

The compilation of information from many registers also provides easy access to property data for companies, such as surveyors, real estate agents, financial and mortgage companies and other land professionals.

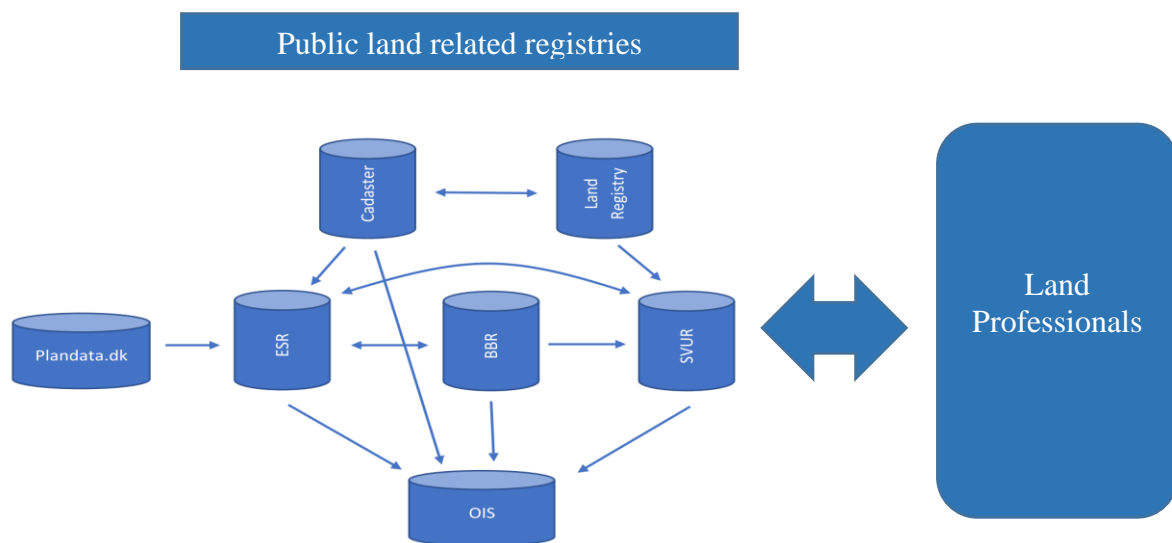


Figure 2. In the Danish system, there is an extensive degree of "cooperation" between the public and the private sector.

The cadastral interaction between the public and private sectors in Denmark

The Danish cadastral system is built up in the public sector and the public administration is responsible for the final registration in the cadastral register, but it is the private sector - private chartered land surveyors - who make all the property changes, including surveying, obtaining the necessary permits, handling mortgages, and agreements with landowners.

On the basis of the request by private chartered land surveyors for registration of property changes, the public sector updates the land register and the changed property information is passed on to the land registry and municipal registers.

As described, regarding registration and handling cadastral changes and the continuous updating of the land related registries, there is close cooperation between the public and the private sector, but also regarding the establishment and expansion of the IT systems used in registration and updating the cadastral changes, the use of private sector services has played a major role.

Around the turn of the millennium, the Danish Geodata Agency began digitizing the cadastral registration system, so the cadastral changes from the private chartered surveying companies submitted for registration at the Danish Geodata Agency in the long term could be fully digitised. The system was to streamline the administration of cadastral changes between state, municipalities, chartered surveyors and other land stakeholders towards a future fully digitised public administration.

The development of a new cadastral information and updating system, known as MIA, was offered in limited tendering and various teams of chartered land surveyors and IT companies presented different solutions for developing and establishing a new digital system for the preparation of cadastral cases and digital exchange of data.

After selecting the new cadastral system, a long process began between the Danish Geodata Agency and the winning private team of chartered land surveyor and IT companies, in which development and implementation of the new system took place in close cooperation seeking the best solution of the new system.

A few years later, around 2005, a modernization of the system was to be developed and implemented so that the system could support new technology and at the same time, a number of control functions was implemented to support quality assurance of the submitted cadastral cases. The new system was named MiniMAKS.

Again, after a tender, a team of private companies was selected as the supplier of the new system, and the private developers of the original system, MIA, were selected to ensure the quality of the interaction between the existing and the new system.

Within the last few years, an expansion of the Danish cadastre including condominiums and buildings on foreign land, as well as a further digitization of the municipality control and approval of the cadastral cases, has necessitated an upgrade of the system, called ERPO.

Completely similar to the last upgrade back in 2005, the system upgrade was done by a team of private companies and developed in close collaboration with the Danish Geodata Agency, and again with the use of the private companies that established the original system, to assure the quality interaction between the systems.

PPP's in establishing land administration systems in developing countries

The good experience of "The Danish System" with widespread use of Public-Private-Partnerships, can hopefully inspire to building a land governance system that can utilise the opportunities that come with the flexibility of the private companies in relation to the public sector's more bureaucratic structure.

The challenge for the public sector will be to determine the institutional and legal basis, and to determine the framework within the national or local land administration system should function and then explore the possibilities of obtaining the necessary services in the private sector.

The description of "The Danish System" should only be seen as a source of inspiration regarding considerations on how a given land administration system can be established and developed in the long term.

Establishing a land administration system in a developing country can advantageously be established from a Fit-For-Purpose approach, so initially the basic registration of property and ownership can be based on a simple mapping method, e.g. using aerial imageries. (Enemark and McLaren, 2017).

Collaboration with e.g. private companies producing aerial imageries can be a solution for establishing the necessary spatial mapping. The cooperation agreement can be concluded in different ways according to local conditions, either as a bilateral agreement with a single company or the task can be offered between several companies, and the selection criteria may, in addition to price and execution time, be the companies description of a task solution and their experiences from similar tasks.

The necessary framework and conditions for the deliveries to be received from private actors must be established, and a control function organized, which at an appropriate level, checks whether the deliveries meet the stated standards. This should be evaluated and continuously adjusted based on experience.

In "The Danish System", as previously described, the control is partly trust-based with appropriate control functions, which has been continuously evaluated and adapted to circumstances, especially in connection with the extensive digitisation of the systems, which has allowed automatic quality controls in the IT systems.

Developing the land administration system, e.g. if registries are to be established to support valuation of property and subsequent taxation, as described above, this can be done in close

cooperation with private companies, both as individual companies or in a constellation of more companies supplementing each other.

While the public administration utilizes from the knowledge of private companies' in their specialized areas through PPP's, these public tenders and subsequent tasks help the private companies to expand their workforce and building up and refining their skills within their specific working areas.

Thus, the land related registers and systems can create a large number of jobs in the private land and real estate sector, which in addition to performing the basic cadastral and land registry functions, also undertake a wide range of other georelated and legal services such as surveying, GIS, real estate consulting etc.

In a Public-Private-Partnership constellation, politicians and government officials can determine the policies and frameworks for establishing a land administration system. The public authorities can maintain the control and the development of the establishment and operation of a land administration system. While at the same time utilising that in the private sector there is a focus on the development of business models that meet the public (and private) demands for services and products, e.g. spatial data, IT solutions, GIS, etc.

Utilising private companies' better opportunity for faster changeover, capacity building, innovation in task performance, focus on new business areas and scaling up and down offers the public sector great opportunities for establishing and operating land administration systems in a Public-Private-Partnership constellation.

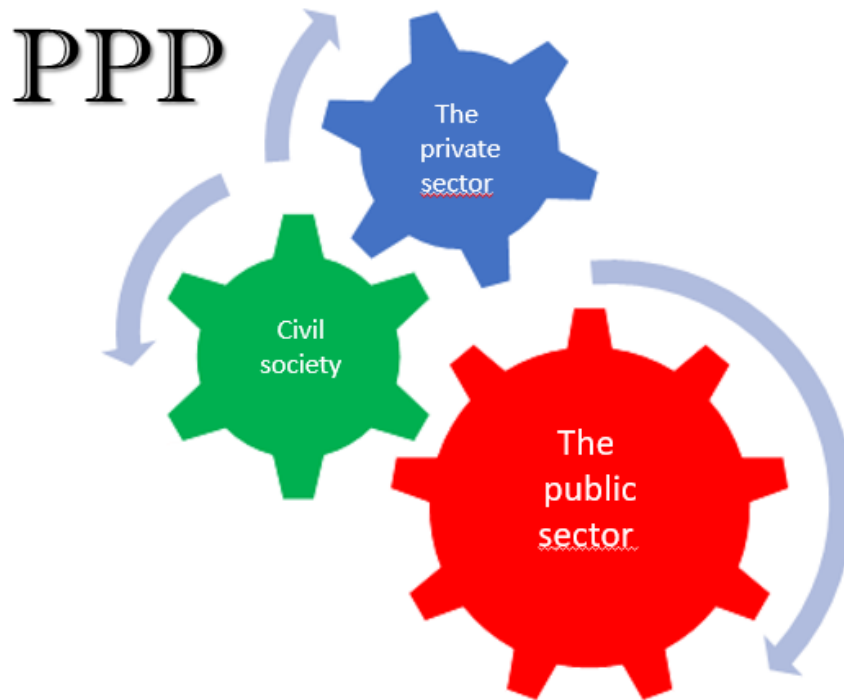


Figure 3. Establishing Public-Private-Partnerships have a positive effect on civil society and the private sector.
(Inspired by DenOffentlige.dk)

5. DERIVATIVE EFFECTS OF LAND ADMINISTRATION SYSTEMS - THE SDG´s

In direct connection with education and job creation in the local community in terms of the establishment of land administration systems follows contributions to the fulfilment of the UN SDG´s no. 4, Quality Education and no. 8, Decent work and economic growth.

The need for training and the use of local labour can be a challenge for the establishment of a land administration system. By using Public-Private-Partnerships, this should instead be seen as a "driver" for politicians and other decision makers in connection with the implementation of land administration systems, as both education and job creation are important parameters for positive social development.

These derived effects of the establishment of land administration systems, together with the positive impact of land administration systems on the elimination of poverty and hunger (SDG´s no. 1 and 2), can be significant factors for the achievement of the SDG´s for developing countries.

6. CONCLUDING REMARKS

In order to ensure the fulfilment of the SDG's by 2030, the establishment of land administration systems to secure ownership and property rights is essential.

By utilising from Public-Private-Partnerships and taking advantages of the private companies' flexible business approach offers the public sector great opportunities for establishing and operating land administration systems.

Furthermore, while the public administration utilizes from Public-Private-Partnerships, these public tasks contributes to capacity development and economic growth in developing countries.

REFERENCES

DenOffentlige.dk

<https://www.denoffentlige.dk/hvad-er-offentlig-privat-samarbejde%3F>

Enemark, S. and McLaren, R. (2017): Fit-for-Purpose Land Administration: Developing Country Specific Strategies for Implementation

http://vbn.aau.dk/files/256138117/Washington_2017_Enemark_Paper_ID_192.pdf

Ministry of Land Management, Nepal

Ravn-Christensen, C. and Norre, K (2018): The Role of the Private Land Sector in Supporting the 2030 Global Agenda. - *The link between achieving the SDGs and Creating Sustainable Businesses.*

https://www.fig.net/resources/proceedings/fig_proceedings/fig2018/papers/ts03a/TS03A_ravn-christensen_norre_9309.pdf

The Danish Geodata Agency

<https://eng.gst.dk/danish-cadastre-office/>

CONTACTS

Public – Private – Partnerships as a Catalyst for Tenure Governance in Developing Countries (10359)
Soren Brandt Pedersen (Denmark)

FIG Working Week 2020
Smart surveyors for land and water management
Amsterdam, the Netherlands, 10–14 May 2020



Soren Brandt Pedersen

Senior Advisor, Land Management, LE34
Hestehaven 21J, 5260 Odense S
Odense
DENMARK
Tel. +45 5131 4216
Email: sbp@le34.dk
Web site: le34.eu

Public – Private – Partnerships as a Catalyst for Tenure Governance in Developing Countries (10359)
Soren Brandt Pedersen (Denmark)

FIG Working Week 2020
Smart surveyors for land and water management
Amsterdam, the Netherlands, 10–14 May 2020