Land Tenure And Land Administration For Social And Economic Development In (Western) Europe

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ABSTRACT

Land Tenure and Land Administration in Western Europe contribute to sustainable social and economic development. However improvements are needed in legislation (completeness), strategic aims, financial regime, accessibility and speeding up procedures. In the next century the land administration institutions should anticipate more government intervention in private property, more public private co-operation, advanced application of ICT and encouraging and providing the core of a GI-infrastructure. The system will cover its costs and allow long term financial planning. Within EU a first step in harmonisation will be taken.

Keywords and phrases: future developments in land tenure and land administration in Western Europe.

INTRODUCTION

After an introduction to the history of land tenure, changes in concept and implementation of deed- and title registration are analysed, and related to sustainable development and to good governance. Then some developments in the next years to come are analysed which the land administration institution should anticipate.

1. HISTORY OF LAND ADMINISTRATION IN (WESTERN) EUROPE AS A CONTEXT FOR THE PRESENT SITUATION

People settled in northern Europe after the last ice period around 10 000 years ago. They were first hunters and fishermen and then later developed the use of agriculture and more stable settlements, first based on families and smaller groups, which later developed into villages. New villages were developed from the first established settlements and some kind of ownership was developed for building sites, agriculture fields and for hunting and wood products for areas between villages.

The first boundaries were established between villages. Within the village ownership was generally connected to a share of the resources belonging to the village. The share was located to a building site and certain strips of land in the various cultivated fields. Forest and fishing rights where generally not divided between shareholders but used in common by the inhabitants in the village, both those owning shares and also by people not owning land rights.

In (western) Europe the change from feudal hierarchy towards individual possession of land indicates the emancipation of the people. By owning land (e.g. 'fee simple') an owner declares his freedom. It took many years before feudalism declined, though history shows that feudalism occurred in many forms, declined and flourished, was relieved or strengthened. The development of ownership of land (recognised as 'res corporeales') under Roman law, the dominium, was after the death of the last westroman king (476), influenced by the Frankish kings. The centres of dominium, great proprietors, who also acted as government including the application of justice, owned the 'villa's'. The Roman, German, and Celtic law were the roots of feudalism and subinfeudation, and their manifestation was various, with the people extorted with personal servitude's. However in the 14th century feudalism was declining bit by bit in the west, and tightening in the east, caused by a different development of central power versus nobility, supply of land, nature of agriculture, and the towns. Later on the decline of feudalism corresponded very much with the industrialisation (economic development), first starting in England (17th century), then in western Europe (France 1790 at the revolution, Germany early 19th century, Austria late 19th century), and then in eastern and southern parts (late 19th and 20th century). In northern Europe the feudal system never became dominant and a strong class of independent peasants existed through history.

Distinctions in tenure between nobility and peasants came to an end, and the people could have title to land without any further obligation to the lords (Powelson 1988). It is said that Scotland has the last feudal land tenure system remaining in western Europe; the new elected Scottish parliament (1999) gives land reform a high priority (McLaren et al, 1999).

In old Germanic traditions, the right of land use has usually not been absolute as in the roman law. The land use rights belonged to a group and was used in more or less intensive ways. Resources that were abundant, such as wood, berries, wildlife etc. were usually not under the absolute control of a landowner. These traditions still prevails in parts of Germany and in Scandinavia, where the landowner cannot prevent anyone from trespassing or camping on his land. Wild berries and mushrooms are also common property from which anyone can benefit. These traditions are in Sweden today known as the right of public access to land and can be enjoyed by anyone irrespective of the landowner.

Land transfer and land registration

The right of land use was inherited within families. Transfer of land to someone outside of the family could not take place without the consent of all family members with a potential right in the land. A land transfer therefore had to take place before the court or the thing, where the intention to transfer a piece of land to anyone outside of the family was announced and finally approved and a "title" to the land could be issued The process and the title were registered in the court proceedings, first by oral traditions and later in writing. The court proceedings were organised in chronological order and were the base for a deed registration system.

With the development of a market economy, the family pre-emption rights and other restrictions on land transfers of feudal origin were gradually abolished and land could be more freely transferred on a market. This necessitated the development of improved land registration and title registration systems were introduced, mainly during the second half of the 19th century. The title registration system needed a precise description of the property to be transferred and a correct identification of the persons who carried out the transaction. The description of the land was generally established through the use of land descriptions established by the governments for land taxation purposes, from the cadastre.

Land taxation

The establishment of kingdoms, feudal landlords and their administration needed income. The main source was the production derived from land use and land taxation systems of different kinds have a history as long as governments. The land taxation needed some kind of real property registration and these registers are known as cadastre in continental Europe, for instance the Doomsday book in England, the Maria Teresia cadastre in central Europe, the Napoleon cadastre etc. In Sweden the present written cadastre was established 1530 and complemented with cadastral maps during the 17th century. The cadastral books generally was organised according the real principle, -in order of real properties- as opposite to the personal principle, -in the name of the owners- sometimes used to register ownership and land titles. The filing system in the cadastre came to be a base for unique identification of the real property, which could be used for identification of a certain piece of land on a map and then to connect to other types of information, such as land titles.

2. DEVELOPMENT OF LAND REGISTRATION SYSTEMS AND CATALYSTS FOR CHANGE

2.1 Characteristics of deed registration

In a deed-registration system it is the deed itself which is registered. It differs from the so-called title registration where the legal consequence is recorded. Between deed and title registration various intermediate forms occur, related to a countries history, tradition, and common attitude. So are deed registrations combined with some register of title not unusual (the 'improved' deed registration). The deed and title registration represents quite different legal and political foundations. The legal meaning of land tenure reflects the opinion on the nature of the relation man-land, as a matter of private law of public law. Countries with a tradition of Roman law (e.g. later: napoleonic law) tend to consider land ownership as a matter between private parties only. Countries with a tradition of common law (e.g. Anglo-Saxon law families) tend to consider ownership as a free- or leasehold of land owned by the State or a King/Queen. As a careful consequence one may say that land registration in the first mentioned countries is a matter of private persons only (e.g. the registration of deeds, no judgement of the State on the legal impact), and that land registration in the last mentioned countries is a matter of private persons and the State together (e.g. title registration, with a judgement of the State or King/Queen on the legal impact). The earlier mentioned political foundation is the common opinion to which extent the State should play a role in the transfer and registration process: this role is in a deed registration environment less than in a title registration environment.

2.2 Legal framework of deed registration

The legal context of deed registration systems is quite complex. Because the legal consequences of a conveyance as described in a certain deed are not checked by the State, the parties involved in the land market form an opinion of the legal status themselves by studying the contents of the deed. As imperfections in a earlier conveyance concerning the same subject of transfer (as described in an earlier deed) may affect the legal validity of the last conveyance (as described in the last deed) a detailed study of the legal history of the subject is necessary. This is called the 'causal legal system'. It will be obvious that in such countries the public is not left to its fate. The notary public as a free professional person is available for handling all these difficult and risky professional aspects of conveyancing. Many countries know the so called 'notariat latin', where involvement of the notary in procedures of conveyance is compulsory. At the same time, we recognise a role for licensed land surveyors, however to a different extent in various countries.

If the deed registers are in principle a matter of private persons (i.c. private law), the land registrar as keeper of the registers is not to judge the legal consequences of recording a deed, but the formal requirements only. It these are met, the deed will be recorded. This principle is called 'the negative system', which says that somebody not mentioned in the register as an rightful claimant never can be an owner, but if this person is mentioned indeed, one may not be sure he is; further investigation is needed. So the key-words in the legal framework of deed registration systems are:

- legal causal system of conveyance
- negative system of land registration
- publicity of deed and specification of persons and subjects involved
- passive competence's of the land registrar
- importance of notary public and licensed surveyor

Access to deed registers, in which deeds are filed in order they come in (necessary ranking of rights in rem), is done by special registers made up by the land registrar as an extraction from the deeds. They occur in various forms, but basically these are a

register of names with cross-references, a register of parcels with cross-references, and the cadastral map. The interest of the State herein is that these registers provide the base for government activities like land taxation, land use planning etc. It is curious that the State de facto creates a 'administrative' ownership: for the sake of good governance the State fictively considers the rightful claimant mentioned in the register as the real owner. Fact is that in many countries these auxiliary registers are of such a good quality that they are considered as giving sufficient proof of ownership (a 'pseudo-title')

2.3 Characteristics of title registration

The economic development influenced by liberal ideas necessitated improvements of the land registration to facilitate land transactions. The increased demand on land for mainly urban development increased the demand on land use planning in order to make better use of the land resources. Social demands on land for housing, production and recreation increased demands on state control of land markets and access to land to affordable prices. To satisfy these demands an improved land registration became necessary, which could provide better information for the market and for governmental control of land resources for social development.

The title registration system was developed as an answer to these demands. The title registration should provide easy accessible and reliable information about land rights and facilitate the use of land as collateral for credit. The State should guarantee the content of the title registration so that a person that relied on information from the registry in principle should be protected from damages caused by faults in the registry. The registration process should therefore in general include a legal check by the registrar that a person acquiring land from another person did it from the legal owner and that the legal conditions for the transfer was fulfilled. In order to make the information more accessible, the registration of a property, which could be find on a map instead of the personal principle. In this way the chain between title holders were immediately established in the registry book, which simplified the legal check by the registrar. A basic principle of the title registration system is that the information for any purpose and thus the register must be open for public inspection.

Most title registration systems in Europe based the identification of the real property on the cadastre, which already was organised according to the real principle and had some kind of connected map that could be used. As England lacked a cadastre, the title registration in England instead has to be based on new large-scale topographic maps. In several countries, it became necessary to extract a new register from the original fiscal cadastre, including a description of the real properties with its boundaries and areas, location, unique identification designation and a map. These registers are known as real property registers or as legal cadastre and are usually the responsibility of a cadastral or real property registration organisation.

The maps for each different real property where compiled from different sources, for instance maps of real properties established for fiscal purposes, for land ownership description purposes, for land consolidation purposes or through new topographic mapping. With the exception of topographic maps, they usually was not produced using co-ordinate systems or they were produced in local co-ordinate systems and

thus not easy to compile to country-covering cadastral index maps. In Sweden for instance a special land use map, based on aerial photography has been compiled, where real property boundaries have been identified through aerial interpretation as a cadastral index map for the whole country and with a national co-ordinate system. In other countries efforts have mainly been on integrating existing cadastral maps in national co-ordinate systems.

The title registration books have been established based on the real property register or the legal cadastre, where each real property has been filed under its property designation from the legal cadastre. Under this heading in the title registry, one section will include titled owners of the property in chronological order and other sections are used for encumbrances from private rights, such as easements or mortgages, or from public law, such as land use restrictions, zoning, etc. The title or land registration has usually remained the responsibility of local courts or some other legal body.

The notary system developed in continental Europe during the deed registration period and the notary is in some system (for instance France) the only person with a legal responsibility of the content of a deed in terms of identifying the legal conditions and the persons who are undertaking a transaction. This system has prevailed, although in principle obsolete, in central Europe as a further legal component in the land registration process also in title registration systems. In northern Europe there are no demands on the participation of a notary in the land registration process, which simplifies the registration process.

The title registration system generally fulfils its demands. It has greatly facilitated land transactions and made such transactions safe and simple. The legal checks in connection with registration uphold the legal integrity of the system. The system can provide information both for public and private use, including for instance market information like prices and existing credits. The system can be used by authorities to impose land use restrictions and these restrictions are registered and available for existing and potential land users. The system has also been used to impose restriction on the land market for instance regarding acquisition of different kind of properties. Through the combination of cadastral and land information, it was possible to establish the system within affordable resources. The maintenance of the system is secured through its construction and legal definitions. The cost for registration is generally low. Governments usually take out a land transfer tax in connection with land transactions and including this tax, the cost for land registration in Europe is in between 2-10% of the value of the transferred property. Of this the registration costs is less than 1%. Systems where notaries are obligatory are more expensive than system without the interference of notaries.

Title registration systems have been computerised or are in the process of computerisation. The computerisation will greatly decrease registration costs and make the information content much more accessible for users. The information content can be updated within hours, giving a very high actuality of the information. More advanced computerisation projects have developed systems including both the legal cadastre and the title register, sometimes without changing the responsibility for the different parts of the registration. The systems have developed direct links for instance to banks to include mortgages and letter of credits and thus abolished much paper work and need of archive and streamlined the credit processes.

2.3 User demands

The demands of users will not essentially differ from country to country: digital land information (registrative, cartographic), up to date, conspicuously reliable, complete, rapidly accessible, susceptible to customisation, integration of descriptive and cartographic data, well-harmonised with other types of records, good value for money, and it must fit in well with the customer's working procedures. One could add that the products and services must be available nation-wide, they should be uniform, and preferably delivered to the user's desk. Concerning the attitude of land administration organisations, the customers would like to meet a service directed attitude.

2.4 Infrastructural aspects

In countries with a developing geo-information infrastructure, an important benefit is the easy accessibility of a set of baseline data, which have a dedicated responsible holder who takes care of keeping the dataset up to standard. In this respect, one speaks of so called authentic datasets, which act as sources. The land registers and the cadastre will always be one of the main authentic data: the parcel number index (specifying the subject of rights in rem) and legal status of land (private law and public law). Other baseline data sets are the population census, the registers of chambers of commerce concerning legal bodies, and (e.g.) the municipal register of buildings and accommodations. To establish an infrastructure, standards are essential, otherwise no linkage will be possible. Consequently land administration institutions should play a role in standardisation activities (Groot, 1997).

2.5 Meeting the demands

Defining new business objectives, in connection with the emerging possibilities of information technology, cause a need for IT re-engineering and business process redesign. As the working processes sometimes are integrated with the working processes of others (like notaries, solicitors, real estate agents), almost all of these are formalised in legal regulations. In the future this innovation must -from the users' perspective - lead to the development of a logically integrated information supply (descriptive and cartographic). As for keeping the information up-to-date, this will be ensured by the electronic delivery of deeds and other documents (Burdon 1998). OCR technology is being used to analyse the documents that are submitted. On the output side it seems likely that a substantial webserver should be available which will make it possible to use internet technology to access the data. Discussions are being held on whetherand, if so, to what extent - land registry data can be made available to the general public via the public internet. This is not a technical problem but a policy matter. Concerning the up-to-dateness of the land registry maps, the time taken to carry out the necessary measurements and to process the data has been shortened by establishing 'field offices'.

2.6 Catalysts for change

The catalysts for change (in the post WW II period) may be distinguished in six categories.

- demography: the proportional increase of the ageing population, families with less children, children who leave home earlier, make the land and building market more active,

- economy: the concentration of employment in certain economic areas (mostly in the cities and the urban fringe) causes more moves from rural to urban areas than before; economic growth and the scarcity of real estate make the value rise, which makes the land and building market fast moving.

- legal framework private law: development of the system of rights in rem like apartment rights (in the Netherlands since 1951), condominium, strata title, time sharing, participation rights in co-operative ownership, clean soil declarations, preliminary agreements (in France, Belgium, Germany, in the Netherlands probably in 2001), buy-in-rent (rental agreement with ownership only of the inside of the house) make the land administration more complex.

- legal framework public law: increasing number of public encumbrances and restrictions, developments in the field of expropriation, land reform, and in the context of land administration (privacy laws, protection of databases, accessibility)

- institutional development: more attention to the management of the public sector focusing on privatisation, decentralisation, cost recovery, customer orientation, sideline products, and price policy.

- technology: technology push in dataacquisition (GPS), electronic conveyancing (Van der Molen, 1999) processing (databases), and distribution (datacommunication), as well as construction technology (sub soil construction), infrastructure (telecom networks) and agriculture (pushes land reform).

3. SUSTAINABLE DEVELOPMENT STRATEGY AND THE CONTRIBUTION OF LAND ADMINISTRATION

3.1 Sustainable Development Policy

The effect of sustainable development policy depends strongly on the institutional context. There are at least five major elements:

- the effectiveness of the law making process
- the existence of mechanisms for mobilise public support
- the effectiveness of the management of the public sector
- the effectiveness of enforcement of the law
- the existence of appeal procedures

The governmental system in Western Europe are parliamentary democracies, with

societal consulting procedures in the preparatory stage of policy making. A system of civil-, criminal- and administrative jurisdiction provides procedures for enforcement of the law and for appeal.

3.2 Agricultural reform

Agriculture land reforms in western Europe have mainly been directed towards the rationalisation of the agriculture through increased size of farms, better shape of fields and improved infrastructure in forms of roads, drainage, irrigation and village development in general. There have in principle been three major measures to implement these policies:

- Support of open market transactions of land, sometimes supported by legislation concerning acquisition control, aiming at favouring established successful land users on the land market. Also short-term leases have to large extent been used by farmers to access additional land.
- Public land acquisition in order to acquire land from willing sellers and sell the land to willing farmers in a manner that support the rationalisation, sometimes combined with legislation regarding expropriation, pre-emption and land valuation.
- Comprehensive systematic land consolidation projects including redistribution of the land in order to create better facilities for agriculture combined with infrastructural investments in new roads, better drainage and irrigation and village development in general.

Another field of governmental polices have been to strengthen the position of leaseholders of agriculture land towards the land lord, for instance regarding lease control and pre-emption rights for leaseholders in connection with land transfer.

The importance of the land administration for implementation of these land policies is mainly connected to the provision of the information of market activities and the possibilities through the registration process to control the market. Especially land consolidations are sometimes undertaken by organisations connected to the cadastral system. Control of real property formation, such as subdivisions or mutation is another important part of the governmental control of the market.

3.2.1 Agriculture reform in the Netherlands

The aim of the Netherlands agricultural policy is the encouragement of a liveable countryside, with enough economic competitiveness, social cohesion, ecological sustainability, and cultural identity. The policy as such is highly embedded in the agricultural policy of the European Union: the so called Agenda 2000 policy, which aims in the first place for a further reduction of the guaranteed prices for dairy products, beef and grain in favour of direct financial income support to individual farmers and in the second place to stipulate conditions for farming related to the consumer concerns: environment, public health, and animal welfare.

At the same time one should recognise that agriculture -though of high importance for food supply and export- is getting less important in terms of labour employment, area of land use, and contribution to the GDP. Considering the period 1958 -1994 the figures for Europe (in 1958 12 member states, in 1994 15 member states) are for agriculture from 19% to 6%. The agricultural land use area dropped from 2 billion hectare in 1991 to 1,9 billion hectare in 1997. The number of farms in the Netherlands went down from 125.000 in 1991 to 104.000 in 1997 with a growing number of farms with more than 30 hectare. Employment in the agricultural sector went down from 290.000 in 1991 to 286.000 in 1997, while the total employment in the same period rose from 6.592.000 to 7.037.000. In the rural land market the area of land is not the only determining factor. Land without milk yield quota has a much less market value than with a quota. The same counts for manure quota.

In this context the government policy aims for setting a framework in which farmers can earn their income in the market as much as possible and where the agricultural production should take place in a way which is ecologically sustainable. Therefore measures are taken in the field of:

- financial support for farms meeting the demands of market orientation and sustainability

financial support for the introduction of ecological cultivation and breeding
support small environment-friendly land consolidations with a profitable costbenefit ratio.

- agreements between government and farmers for ecological cultivation

3.3 Social policy and housing

The importance of land administration for social development is mainly connected to the question of providing land for housing, recreation and other activities to the whole population in a country to affordable prices. The urbanisation process in connection with the land reforms, see above, has put heavy pressure on governments in Europe in this respect. The main contribution of the land administration in this process have been to provide a land registration system, which supplies appropriate information for governments to formulate land market policies and give efficient mechanisms to implement the polices. The land registration process, including the control of the real property formation has provided the governments with efficient tools to control the land markets and for enforcement of legal instruments, aiming at the provision of land for all groups of population.

Some examples of political measures undertaken in this respect are:

- Site leasehold on for instance municipally or state owned land in order to make the acquisition of land more affordable for low income groups
- Active land market policies, meaning that for instance the municipality establish itself as the main buyer of land for urban development. The idea is that the municipality should buy the land before expectation on increased land values occurs due to potential for urban development. After the land has been planned, in principle by the municipality, the municipality can transfer the land to developers with conditions that safeguard that he lower land price will be reflected in the final costs for the constructions on the land. This policy can be supported by legal tools, such as expropriation or pre-emption rights for urban development and special valuation rules in connection with expropriation
- Acquisition control, for instance that buyers of real properties including apartments for rental have a record of good and socially acceptable management of such properties

- Municipal planning monopoly, meaning that the municipality and not the land owner has the exclusive right to determine if and how land use can be changed, for instance from agriculture to urban development, through demands on physical planning to be determined by political bodies and in which the general public can be given a high degree of participation.

Linkage to the allocation of housing and apartments through public owned building societies, public allocation, rental control etc., so called social housing

3.3.1 Housing in the Netherlands

The Netherlands government aims for good housing, safe public spaces, stable social environment, and affordable prices, in a context of as less as possible damaging the ecological aspects of space, bio diversity, and energy. A recent development is the awareness that especially in the big cities an integrated approach is necessary. This integrated approach is implemented by an integrated governmental investment budget for urban regeneration, while formerly various separate ministry departments had their own budgets, conditions and rules.

An other objective is the so-called affordable housing, both owner occupied property as rented houses. Access to affordable housing by the financially weak sections of the population is a major concern. Various subsidy measures try to address this problem. Rented houses for this category are often owned and managed by housing corporations. An interesting development is a subsidy measure to sell the property of housing corporations to the sitting renter in order to encourage self owned housing (in 1992 2500 houses, in 1997 16500).

Interest on mortgages is tax-deductible, which encourages the buying of property very much. High real estate prices and a low interest rate makes mortgaging very popular. New recorded mortgages on real estate came to 57 billion Dfl in 1993, in 1997 even up to 119 billion Dfl.

Government measures in the field of housing are a/o. :

- financial support to gain self owned property (income dependent)
- rent subsidy (income dependent)
- substantial financial support to municipalities for urban regeneration
- subsidy for sustainable construction

3.4 Environmental protection

Sustainable development of land resources and environmental control are mainly uphold through two types of policies concerning land use:

- General conditions on any land use to take measures to upheld sustainable development and environmental conditions, for instance regarding agriculture, forestry, urban development and other types of investments. These kinds of conditions are valid for all land users and they are obliged to uphold them without any specific compensation from the government. One example of this kind of concern is the demand on environmental impact analysis for any kind of activity that can influence the environment. Environmental impact analysis is obligatory within the European Union.

 Protection of areas of specific interest for natural, cultural or historic reason for instance natural areas for protection of specific environment or for recreation, cultural or historic monuments, valuable built environment etc. The landowner will usually be compensated for restrictions in land use of this kind. The compensation claims on the government can be decreased by special valuation legislation, active land market policies, land consolidation etc.

The contribution of land administration in this respect is similar as has been pointed out for housing and agriculture. Some cadastral organisation are actively involved in land consolidations and land valuation in connection with environment protection and in providing information for environment impact analysis.

3.4.1 Environmental protection in the Netherlands

The aim of the Netherlands government on environmental policy is that sustainable development not only requires a clean environment, without pollution and nuisance, but also access to natural resources for everyone, now and in the future. Key elements are equal access to space, bio diversity, and energy. Nevertheless the economic grow and the rise of consumptive spending (1990: 258 billion Dfl, 1995: 322 billion Dfl), increase pressure on the environment. Production (1997: + 4.0 %), consumption of energy (1985: 2400 pJ, 1997 2700 pJ), and transport (1985: 148 billion km, 1997: 192 billion km) are steadily growing. CO2 emission rises (1997: +2%), NH3 emission doesn't drop, dehydration increases, however the policy of cleaning of polluted soils, the push back of noise hindrance, and waste management is quite successful.

A sample of effective subsidy measures:

- financial support for cleaning soils
- support for integrated approach to environmental quality for municipalities

3.4.2 Integrated Decision Making and some concluding remarks

In the Netherlands understanding grows that integrated decision making is necessary to attain sustainable development. While formerly policy making took place quite differentiated (corresponding to the various departments and ministries), the development and implementation of plans is growing towards a more integrated approach. Nevertheless one may observe that there is an ongoing debate on the effect of these good intentions. The government is being criticised that in the final decisions the environmental interests taste defeat. Decisions on the construction of the high speed train, the railway from the seaports Rotterdam to Germany, the expansion of the Schiphol airport, the growing urbanisation, the submitted drillings for gas in the Waddenzee (main world nature conservation area), the pressure on new road construction to prevent traffic jams, are just as much points of heavily social debate and the society is divided against itself. In short: reality is stubborn.

3.5 Good Governance and Land Administration

The land administration system in Western Europe provides in general favourable conditions for the land market. Land transactions can take place with security from frauds, and with in general low transaction costs and with considerable speed. There are however differences between northern and southern Europe. The processes are

generally more complicated, more time consuming and more costly in southern Europe than in northern Europe. In countries with obligatory demands on the involvement of notaries, the process will be more complicated and costly than in countries, where the notaries are not involved. The land registration information is in general available for the general public and especially computerised systems provide easy access.

The land market is a cornerstone for economic development. The real property provides collateral for most long-term credits for investments. Investments in building and construction can take place with less risk. Land can be made available for most investment purposes at the same time as the political decision-makers and the general public has a considerable control and possibilities for participation in the decision-making process. When land use plans have been prepared, the cadastral system offers possibilities for fast and speedy implementation of the plans, sometimes independent of the participation of individual landowners if the public or private interest is of high importance.

The real property represents a considerable income source for local or central governments through land or property taxation. Although the importance of land taxes compared with other types of taxes in general has decreased, they represent still an important income source for many governments. Since property taxes are usually based on values of the real property and the paying capacity of the land user not always are in line with property values, the tax cannot be increased without social problems. The tax rate in Europe usually is between 1-10% of the property value, estimated from market values or from more administrative land valuation methods.

3.5.1 Good governance and land administration in the Netherlands

Land markets

The current procedures of conveyance in the Netherlands are as follows. The transfer of real rights on land (and buildings) is ruled by the Civil Code jurisdiction, which defines a closed system of rights in rem. So only the real rights as defined in the Civil Code may be exercised on immovable goods, as third parties may not be unpleasantly surprised by a kind of real right they don't know. The lawfully defined rights in rem are e.g. ownership, condominium, long lease, usufruct, right of possession, mortgage, attachment, encumbrance. The rights in rem may only be transferred by a deed, which compulsory will be drawn up by the notary public, who is a 'free professional' though appointed by the Queen. There are in de Civil Code four requirements to become a legal owner of land and buildings: an agreement of obligation, a notarial deed, power of disposal by the alienator, and the recording of the deed in the public registers. The parties involved (seller and the purchaser), through the notary public, are responsible for the contents of the deed. The land registrar only checks the statutory requirements (formal demands): if these are met, the land registrar will record the deed. However the interpretation of the contents of the deed, and the extraction of the essential data into the registers and maps (the 'cadastre'), is a responsibility of the State (in this case the Cadastre and Public Registers Agency). Conveyancing is under the rule of private law, and the updating of the registers and maps (the 'cadastre') is under the rule of public law. As a consequence, legal security is provided by the deeds in the public registers, the 'cadastre' only acts as a key to these. However, because of the good quality of the deeds at one hand (the professionalism of the notary public), and the secure procedures and quality assurance on the other hand (the performance of the Agency), the registers and maps (the 'cadastre') act as a title-registration (not formally, but practically).

As a comparison, it can be mentioned that a real property transfer in Sweden only requires a written and signed agreement between the parties.

Taxation

Taxes related to land and buildings provide a substantial part of the government budget, especially at the local level. Of the government budget at state level about 200 billion Dfl. is generated by taxes; the contribution of income tax as far as related to property of land and buildings is 1,5 billion Dfl (1%) and of the transfer tax (6% of the value of conveyance) 2,8 billion Dfl (2%). When we look at the budget of the local government, we see that the municipalities have a budget of 8 billion Dfl, which is financed by the land and building tax for 4 billion Dfl (50%). The Waterboards (regional bodies for water management) have a budget of 3,5 billion Dfl, which is covered for 0,7 billion Dfl (28%) by the local Waterboard tax on land and buildings. The total yield in the Netherlands differs anyway not much from the average revenue in many other countries, which is between 1 and 3% of the GDP (Youngman et al, 1994).

The contribution of land administration to a sound land and building taxation is in the Netherlands undisputed. The legal status of land and buildings must be knowable. The delineation of taxable objects can not be done without information on the cadastral parcels, their surface area and their features. Reliable assessment of values cannot be done without the information on purchase prices as known from the deeds of transfer. All changes in the land registers and cadastre may cause changes in taxable objects, taxpayers, and assessed value. To secure the quality of the tax administration of the municipalities, once a month they get all necessary changeswithin their jurisdiction- from the Agency.

In Sweden the tax register is integrated in the land data bank system, giving easy access to all relevant data for different purposes.

Land use planning

In managing land resources and land use (urban and rural) it should be recognised that a certain legal provision is needed by governments to affect private property and private land use. As a base for such legal provisions one should be aware of three important stages: planning, development/implementation of the planned land use, and maintenance to keep the given land use in proper order. Especially in the stage of implementing a given land use at the local level the availability of land information from land administration is necessary in order to clarify to the individual land owner and land user which land use is attributed to their land, and to give the government an opportunity to make legal decisions on the application of regulations. In many zoning plans three possibilities enforce: we see to - building permits for building and alteration of real estate (often issued together with an approval of building regulations according to the building laws) - construction permits for other activities (often issued together with an approval of environmental regulations according the environmental to laws) - land use regulations (which could be of a different nature, such as imposing the planned land use, or only prohibiting undesired land use unless there is a permit). An appropriate local zoning plan should indicate very clear and at an individual level which are the requirements to be met in order to obtain permits. If governments want to realise a certain given land use, and owners or users are not willing to cooperate there is often only one way to proceed: expropriation. Also then a good land administration is indispensable because the impact of the expropriation at one hand and the involved individual land parcels should be very explicit.

Land consolidation

Land consolidation is a integrated approach to land reform. The legal instruments ('tools') comprise both sectored as integrated measures which have to serve the realisation of objectives concerning agriculture, nature, forestry, tourism, environment, and landscape. Land consolidation projects may vary from simple to complex projects, related to the aims and the area. Also the adjustment of an area to a new infrastructure may be an aim. Because the projects take too long time, and the support of the parliament for deep inroads on the landscape, the budget for land consolidation is going down (1997: 371 million Dfl, 2002: 229 million Dfl). Nevertheless the involvement of land administration is high, being involved in the inventory of the legal status of land and buildings, the re-allotment process, and the design of the new legal status.

Protection of the environment

Concerning the protection of the soil, the relationship to individual cadastral parcels is strong. The Soil Protection Act orders that government decisions on the necessity of a soil-cleaning activity, are assigned in the land registers. If a soil is cleaned, this fact should also be assigned. If a draft Act on the Registration of Encumbrances and Restrictions according to Public Law will come into power, more environmental measures will be registered, like noise hindrance, nuisance, etc.

Access to credit

Mortgaging of real estate is essential for access to ownership of land and buildings. In 1997 an amount of 199 billion Dfl was recorded. The total value of real estate is about 1,199 billion Dfl.. The demand for houses is high, which also positively effects the building construction activity (under construction in 1995: 26 billion Dfl, in 1997: 29 billion Dfl). The contribution of the construction industry to the GDP is 6%. It is known that in countries in transition this may come up to 40% (like former DDR)! Economic growth also is depending on the way of financing economic activities. The balance sheet of the industry in the Netherlands show an average of 29-43% long term liabilities. It may be expected that in the sector of small and middle scale businesses almost all long term liabilities will be mortgages. The banking sector has a lot of benefit of lending money for mortgages, providing a basic income out of interest payments. Important is of course that there exists a well functioning banking system, with transparent procedures. Without such a banking system, a well functioning land registry and cadastre will not be sufficient. Providing legal security to owners and mortgage companies is important. No bank will provide a mortgage without a proof of ownership. No bank will provide a mortgage if it will not be registered. Land administration consequently is an indispensable activity.

3.6 Imperfections of the (western) European land administration systems

Though in (western) European societies the activity of land administration is generally acknowledged, imperfections may be recognised in the following fields of attention.

The first category of imperfections is incompleteness and is related to the national legislation on real rights and personal rights to a real thing, which is decisive to the contents of land registers and cadastre, as the nature of rights in rem is to have legal power against third parties, which makes them differ from personal rights, which only are binding to the parties involved. Therefore only real rights are published in public registers of deeds or title, and are the rightful claimants as well as real objects to a certain extent specified. As a consequence the information in the land registers and the cadastre will not a priori provide a complete legal status. E.g. the Netherlands definition of 'short lease' as a personal right prevents public registration, though the short lease lasts six years and will be compulsory renewed if the lessee asks for it.

Another cause of incompleteness is the legal definition of which legal transactions are to be recorded. There are several ways to acquire real rights on land: delivery, prescription (adverse possession), inheritance, division of the joint property, land reallotment and land expropriation, judgement, transfer of shares of a legal body etc. , and it is important to realise which of these legal acquisitions are to be submitted for recording. Delivery as a result of a conveyance and the establishment of a mortgage are cases of which normally the registration is covered by the law. Inheritance, division of common property, judgements etc. however may suffer the lack of registration in some countries, while in others the registration of all types of transfers take place.

A third cause of incompleteness is of the lack of knowledge of encumbrances and restriction according to public law. By governmental measures the right to dispose by the rightful claimant may be limited to a certain, sometimes substantial extent. These restrictions may occur in a range from very light (like a duty to accept a lamppost or a small financial burden) to very heavy (like an imposed land use, and most extremely: expropriation). As many of these public restrictions have legal power against third parties (e.g. buyers) knowledge is of importance. Land administration systems therefore should not provide land information of the legal status according to private law only, but also according to public law. In all (western) European countries, some of these public restrictions are registered (Koert, 1988). In England the 'charges register' is a part of the land registration system, providing information on some national and local charges, in France the Certificat d' Urbanisme provides information on the public legal status, in Belgium there is something similar, in Germany public encumbrances are to a certain extent flagged in the Grundbuch or the Liegenschaftskataster. In Sweden most regulations of importance for a third part is publicised in the land registry.

A fourth cause of incompleteness, is the moment of registration itself. If rights in rem are transferred by the signature of a deed only, and registration takes place weeks or months afterwards (to obtain power against third parties, or for fiscal obligations) a vacuum exists in the knowledge. This kind of imperfection occurs mostly in countries with a fiscal purpose land registry and cadastre.

A fifth cause of incompleteness is that the land administration system are not country covering. E.g. in England the title registration is implemented step by step: when land is transferred, a title will be issued. In Scotland the existing deed registration (the 'register of sasines') is replaced by a title registration step by step. In e.g. Greece, Switzerland and Portugal the cadastral map isn't covering the country yet.

The imperfections of the second category are related to the purpose of land administration. In many (western) European countries (e.g. Belgium, France, Italy, Spain) the purpose is mainly of a fiscal nature. This single purpose approach hampers the evolution towards a multi-purpose cadastre, as incentives from the user demands are quite unilateral.

The imperfections of the third category are related to the financial regime of land administration. As recording of legal documents and the issuing of titles to land are almost everywhere compulsory, and the services of the government with this respect are to be paid, the land registry institutions will have a quite sound financial position. The cadastral institutions however, which face huge investments in mapping, digitising and cadastral reform, will suffer from lack of funds. If a government fails to consider land registry and cadastre as financially interrelated, the 'big spender' (cadastre) will always be a long way behind the 'money-maker' (the land registry). A related problem is the co-ordination of large-scale cadastral maps and large-scale topographic maps. The development of interrelated cadastral and topographic datasets (seamless and scale-less databases) will come into being with difficulty. These imperfections will work out badly for the up to dateness and coordination of registers and maps, as well for the role of the cadastre in a national geo-information infrastructure.

Imperfections of the fourth category concern the accessibility of land information. If the land registers and the cadastre are not digitally available, it will be impossible to have access by datacommunication networks. Easy access by a network is one of the main user demands. Only a few (western) European countries have completed the digitising of their land registers and cadastre. However, progress is being made, and within a few years all data is digitally available.

Imperfections of the fifth category are related to the procedures of conveyancing, especially when subdivisions of parcels are necessary. If a land survey is required in advance of the conveyance, it may take some days or even weeks, before a deed of transfer may be submitted to the land administration. The advantage of such a procedure is that the object to be transferred is quite clear for the parties involved (seller and buyer), the disadvantage is that it takes time. E.g. in the Netherlands and Norway the land survey is carried out afterwards, because the verbal description of the object in the notarial deed defines the conveyance and not the geometric description of the subdivided cadastral parcel. The advantage of such a procedure is the speed of the conveyance; the disadvantage is that afterwards disputes may arise on the exact course of a new boundary and that the subdivision in itself cannot play a role in order to promote suitable land use control.

4. LAND TENURE AND LAND ADMINISTRATION IN THE 21ST CENTURY

The tendency in general regarding land market policies during the end of the 20^{th} century is to abolish different regulations aiming at control of the land market from

social point of view. In this sense the development is very similar to the end of the 19th century when the same tendency was very obvious. This liberal period was then followed by a period of more and more regulations up to about 1970. The development during the 21st century will probably very much depend on the development of the society in general and the conflicts that can occur regarding land use. Another important factor will be the possibilities for the market to provide access to land and housing at affordable costs for an increasing urban population. The urbanisation shows tendencies to continue with concentration to larger and larger conglomerates and the immigration to Europe from other parts of the world seems also to continue for foreseeable future.

The land use will become more and more complicated with more different and usually contradictory interests to accommodate in planning processes, driven in principle by the interest for sustainable land use at the same time as the competition for well-located land will increase. This will probably make land use planning more complicated, more time-consuming and also decrease the possibilities for exploitation of land in favour of a more conservative view on change of land use. Preservation and modernisation of already established built-up structures would become more and more important.

There will probably also be demands on more varied tenure forms to meet the future development, for instance more ownership not only on land but on horizontal division of the space in the air above the land and in the ground below the surface of the land for many varied purposes. Also new forms of jointly owned facilities to provide different kind of common services to the individual properties will probably develop, as the municipality or existing forms of companies and associations are not able to provide required services to appropriate costs and participation of the users.

4.1 Land Tenure: more government interference in private land ownership

In the former Civil Code of the Netherlands (1838) the real right of 'ownership; was defined as 'an absolute right to dispose...'. It is meaningful that in the new Civil Code (1992) 'ownership' defines as 'the most complete right one can have...'. In the 19th century it was almost impossible for governments to interfere in the owner's right to dispose, nowadays it is common and growing. Of course ideology may determine to which extent (political opinion on the role of the State and the power of public administration), but even in the Netherlands policy to decrease the governmental influence and to allow market forces become more effective, the number of governmental options to interfere in one's right to dispose is steadily increasing. Counting only the public encumbrances and restrictions who have power against third parties ('droit de suite'), one comes up to 60 measures (RAVI 1991). To name a few: expropriation, rights of preference, housing regulations, historical monuments, nature conservation orders, noise nuisance orders, air pollution orders, soil pollution orders, land use planning regulations, liabilities on maintenance of roads, ditches, canals, dikes etc, orders on unoccupied houses, prohibitions to felling trees, etc. These public encumbrances are to be seen apart from all kinds of personal rights like chain-conditions in deeds, conditions of long lease agreements and general conditions contracts in of sale. As the appeal to nations to perform good governance will lead to the execution of government power to interfere in private law rights to dispose, a forecast is that land administration systems are definitely to cope with this developments.

4.2 Land administration institutions: Public Private Partnership and privatisation

In the literature one may find that at least three topics determine the way of public administration, namely the opinion on how to govern a society, secondly the way of management and organization of the administration, and thirdly the civil service culture.

The first topic is very much external oriented, since it aims for the making and creation of society, or to say it more sophisticated, it aims for guidance, control and evaluation of society. Administrative reform is very much based on the opinion that the administration is too ineffective, money wasting, not able to govern. So the governmental reform aims for restoring the primate of politics, reducing the tasks of the ministries to their core business, improving the output of the public institutions by steering them at distance. Improvements were searched for in decentralisation, deconcentration, delocation and deregulation.

The second topic addresses the problem how an administration can perform best. In an attempt to improve the capability of the public sector, it was decided to reform the ministries, make them smaller, and to concentrate their tasks on the real political core business. The measures, which were taken, were privatisation and more involvement of the private sector. E.g. in many (western) European countries the land administration institutions were privatised, or at least given more independence (UK, Netherlands, Germany, Sweden).

The third topic is the organisational culture of the civil service. It is recognised that the civil service has customers indeed, and that the demands of the customers should be met. Institutional conditions are established to be capable in doing so. As a consequence, a forecast is that the gaining of more independence by land administration institutions, and a changing culture and attitude towards markets and customers will take place, and that the private sector increasingly will be involved.

4.3 Land administration technology: GIS- and database technology, datacommunication

The performance of land administration institutions in (western) European countries trusts very much on the application of appropriate information technology. The fastness of editing and updating procedures for (e.g. geometric) databases is improved by modern object handling. Integrated query of registers and maps in a 'geoshop' concept requires advanced GIS-technology. Fast access to data relies on database technology e.g. methods of spatial indexing. Adequate distribution of land information is not possible without datacommunication. Fast procedures for field survey are only possible by using pencomputers and datacommunication between the field party and the geometric data bases.

Especially in a fast moving property market, customers ask for speedy steps in the land administration procedure -data acquisition, processing and analyses, presentation and distribution- which definitely requires investments in ICT. Because this will affect the analogue working procedures, less staff expenses will also improve return on investments.

A forecast is that investments in ICT will rise.

4.4 GI-infrastructure: accessibility and integration

The fast development of IT will continue and make more information accessible for use in a variety of applications at lower and lower costs. The importance of data maintenance, standardisation and harmonisation and of copyright questions will increase at the same speed. On question, which will become more and more complex is the question of private integrity in the growing information society.

The processes for data collection will become speedier and more efficient, more reliable and less complicated. Legislation need to be streamlined between different sectors of society in order to open for more streamlined solutions. The importance of the state as guarantee for the basic data provision, co-ordination between different sectors and the protection of the private integrity will increase. This will on the other side open for different private actors to participate in data collection and in the use of the data for many applications. Established organisations will to large extent be reformed or be merged with other organisation as the technical development makes more and more of them unnecessary. The state provision of information and control of information will be financed on developed cost-recovery methods, which will provide total cost recovery for the state without over-compensation. On the other hand information on real property will become a more and more important income source for governments through various forms of taxation. The state will also use the improved information to more involvement and control of the land market in order to secure sustainable development and social objectives.

4.5 Financing: cost recovery and long term financial planning according to cost/benefit system

In many (western) European countries there is a trend to discuss the funding of land administration. This trend arises from a more general debate on the role of the State in the government of a nation. Should the State care for everything, or -to a certain extent- only for the basic needs. Should the State pay for land administration or should it be paid -somehow- by the customers. 'Customer-paid services', 'agencies', 'privatisation' are the key words in this debate. There seems to be two important topics which should be taken into consideration when deciding on the financial structure of land administration.

The first is that in almost all countries where the land registry and the cadastre are part of different organisational structures, difficulties arise in financing the cadastre. The reason is simple: the land registry is a money maker, the cadastre is a big spender. It will be highly advisable to make an attempt to link the land registry budget and the cadastre budget within the State's financial system or even join these in one organisation e.g. (Netherlands, Hungary).

The second topic is that cost recovery can hardly become a manageable controlparameter in a traditional government budgeting system (the traditional civil service accountability system), in which budgets are set by the parliament year after year. Fees based on covering yearly expenditure will by definition be of a discontinuous nature, while customers will definitely be in favour of some continuity in the level of the fees. The latter is possible only in a cost-benefit approach, with a financial management comprising profit and loss account and a balance sheet, providing methods for long term planning and long term planning of the level of fees. Thus aiming for cost recovery simultaneously means aiming for a organisational status as an agency, on an arms length of the responsible ministry.

The forecast is a growing demand for cost recovery, which will lead, to a more business like financial management.

4.6 Harmonisation of land administration systems within the Member States of the European Union

The Land Administration Systems Inventory (MOLA 1998) shows that land administration systems in Europe are different form country to country. One may observe that from a historical point of view some families of systems exist, like the Napoleonic -, the Maria Teresia-, the Nordic- and the UK systems, but within these families the countries show their own developments. The countries in Central and Eastern Europe develop their own land administration systems, partly based on own historic values and experiences, partly based on the lessons learnt in the western European countries.

The citizens in the European Union face different kind of land markets in the member-states, though European measures more and more encourage the free movement of people, goods and capital. One may reasonably wonder whether this will effect the regulations ruling the real estate markets of the EU member states. After all, persons and companies moving from one member state to another will certainly face different concepts of property and use, mechanisms for transferring property and use rights, land registry and cadastre, mortgaging regulations, service industry, and legal security.

One hindrance to harmonising the real estate markets (more precisely: the land administration component) is presented by the European Treaty which states in article 222 that the Treaty will not affect the issue of property in the various member states: such matters fall under national jurisdiction and the systems pertaining to property rights diverge too much. Nevertheless, the EU nibbles more and more at this principle: see the EU directive on time sharing property (directive number 94/47/EU) and the judgement of the European Court on intellectual property (13th July 1995 European Jurisprudence C-350/92). The aim here is, however, the protection of the consumer. But isn't consumer protection applying to the land markets as well?

A forecast is that minimal requirements will be formulated as a first step towards harmonisation of the (western) European land administration systems

5. CONCLUSIONS

5.1 Are the existing land administration systems a burden or a benefit for sustainable development ?

The cadastral and land registration systems in Western Europe have played a very important role for the economic and social development. Studies in development history shows in fact that the establishment of these institutions was one major factor for the fast economic and social development to occur and be successful. The systems were possible to establish at affordable costs and with enough accuracy and coverage thanks to the combination of different interest and purposes, namely the real property rights and credit interests with the public interest for taxation and control of the land use development. The development in Europe in this sense is an example of a successful institution and can be used an example for development of similar institutions elsewhere in the world to promote both social and economic development and sustainable development of the land resources on the globe.

The above was a general statement summarising the development of land administration in Western Europe. However, looking more in detail, the development have been different in different parts of Europe and there are many differences in detail between different solutions chosen by different countries in Europe. The same will apply for the rest of the world, which implies that the solutions will be different in different parts of the world. Some solutions will be more efficient to achieve chosen objectives than others. The competition between different solutions will continue to develop more and more efficient solutions and examples for other countries should be chosen from most successful solutions at different points in time. Studies of the history of economic development shows that it is possible and desirable to try to develop institutions in a country to be more efficient and that the global competition sooner or later will force countries to adopt to more efficient institutions to avoid to be left behind in the development. Institutional change is one of the most powerful measures to promote sustainable economic and social development.

5.2 Necessary improvements of the land administration systems in (western) Europe.

Improvements are necessary in the field of legislation (completeness), purpose, financial regime, accessibility, and the speed of procedures.

5.3 Land information as the core of a Geo Information Infrastructure (GII).

Cadastral information is in almost all countries the core dataset for a geo information infrastructure (Masser, 1998). Land Administration Institutions should take a leading role.

Country	Registration fee	Transfer tax	Taxation of development value	Taxation on capital gain	Real property tax
Austria	1%	3,5%	1%	Yes	1%
Denmark	DKK 700	1,2%	No	Yes	0,6-2,4%
England	Yes	1-2%	No	Yes	No
Finland	FIM 310	4%	No	Yes	0,2-0,8%
France	1%	9-15%	No	Yes	5-10%
Germany	Yes	3,5%	No	Yes	0,5-1,4%
Greece	Yes	9-11%	Yes	Yes	0.025-0,8%
Italy	3%	11%	No	Yes	0,4-0,7%

Transaction costs and taxation on the land market in some European countries

Country	Registration fee	Transfer tax	Taxation of development value	Taxation on capital gain	Real property tax
Netherlands		6%			
Norway	Yes	2,5%	No	Yes	0,2-0,7%
Sweden	SEK 700	1,5%	No	Yes	0,5-1,7%
Switzerland	0,1-0,3%	0,1-4%	0,05-0,2%	Yes	Yes

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