

Attempt on Systematization of Land Consolidation Approaches in Europe*

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Summary

The actual land consolidation practices in Western and Eastern Europe are demonstrated. Thereby, fundamental differences in the methodological procedure and the legal basis are shown. In terminology of land consolidation a »Babylonian language confusion« is to state. That leads to the insight that the land consolidation practice in Europe needs a systematic treatment and categorization. A first methodological proposal has been done.

Zusammenfassung

Die derzeitigen Flurbereinigungspraktiken in West- und Osteuropa werden dargestellt. Dabei sind grundlegende Unterschiede in dem methodischen Vorgehen und den gesetzlichen Grundlagen festzustellen. In der Begrifflichkeit ist eine geradezu babylonische Sprachverwirrung zu konstatieren. Alles das führt zu der Einsicht, dass die Flurbereinigungspraxis in Europa einer systematischen Durchdringung und Kategorisierung bedarf. Erste Vorschläge dazu werden gemacht.

1 Introduction

Land management related issues in general and land consolidation related issues in particular are of actual importance – not only in the development processes in rural areas in Central and East-European Countries (CEECs) but also in the West-European Countries (WECs) again.

Whereas in WECs a partly long tradition and much practical experience in land consolidation are to state, CEECs are still in a short tradition and sometimes just standing at the beginning; that concerns all aspects like legislation, technical approaches, establishment of authorities, implementation and, not least of all, education of their staffs. Regularly the awareness of the need for efficient land consolidation instruments is also quite different with the acting experts, politicians and the shareholders, farmers and the population.

All that finds its immediate expression in the current land consolidation practice concerned. At the moment, even for experts it is particularly in CEECs very difficult to look through whether an implementing procedure is indeed »land consolidation« or not. Therefore an analysis and a systematization of all these approaches are obviously necessary.

2 Current state concerning land consolidation in Europe

2.1 Western Europe

In Western European understanding a land consolidation procedure is a means with a view to improve the production and working conditions in agriculture and forestry as well as promoting the general use of land and the development of rural areas by re-arrangement of agricultural land; in a land consolidation procedure settlements/villages are not needed to be excluded (Thomas 2004). In Germany, the land consolidation procedure is partly restricted on the village area in order to implement comprehensive village renewal measures. At the moment, Cyprus Government is for example elaborating a land consolidation law in order to make it applicably to settlement problems (Christofidou 2002).

Land consolidation is mostly established as a sovereign compulsory tool for rural areas (see also Sonnenberg 1996), and based on a special law.

Land consolidation laws are well established in all continental WECs, partly since more than hundred years. And in all cases the impetus was to improve the production and working conditions in agriculture. The height of the »classic land consolidation« was during the sixties and seventies of the 20th century in context with the European Unification; the most important aim was to increase the competitiveness of the national agricultures, mostly under a programmatic national umbrella.

Since the German unification in 1990 for the East German Länder (in the area of the former socialistic German Democratic Republic) a »Law on Adjustment of Agriculture« (Landwirtschaftsanpassungsgesetz – LwAnpG) is available – additionally to the Federal Land Consolidation Act –; it is a special law concerning re-arrangement and adjustment of farms and rural real estate. That law is the basis for the regulation of restitution requests of former owners as well as the transformation of the former legislation into the current legal system of Germany concerning land ownership and building ownership. It makes possible the implementation by land consolidation (Thomas 2004).

Twenty years ago, land consolidation in some WECs changed from an agricultural farm-focussed instrument to an instrument that is likely to cover public demand in land and to solve land use conflicts (Thomas 2004) and from a landscape-destroying means to an environmentally friendly and sustainable land management instrument (Thomas 1998, 2005). A third impetus came from

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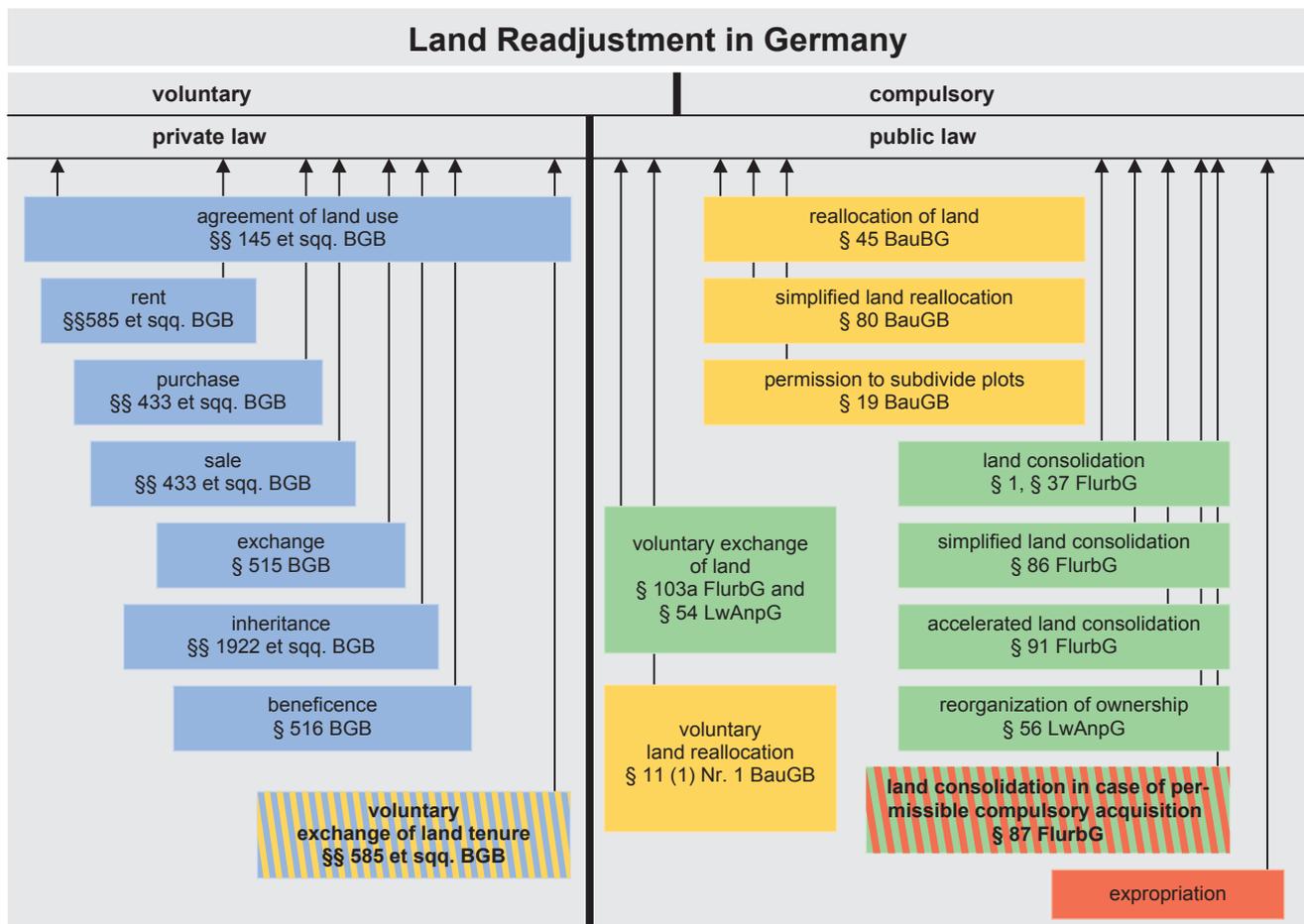


Fig. 1: Land consolidation as part of land readjustment instruments in Germany (Thomas 1995; Magel 2003)

the European Union regarding cohesion policy where land consolidation was investigated as an indispensable measure for an integrated rural development. And as is generally known, in the implementation of the Common Agricultural Policy of the EU the infrastructural improvement of rural areas has priority over the immediate monetary transfer to farmers (»single farm payment«).

The intensity in the application of these new approaches and implementation of these new aims even differ from country to country in Western Europe. It seems to depend on the actual agricultural structure and the real land use pressure by high population density. In Spain, Portugal, Finland and Sweden land consolidation has traditional approaches whereas for instance the Netherlands, Belgium, France and Germany are additionally going on in solving public interests (see FIG 2004).

Land consolidation is sometimes the sole agrarian instrument, sometimes embedded in a sophisticated toolbox (see Fig. 1) with other voluntary and/or sovereign land readjustment instruments (Thomas 1995) and partly differentiated depending on the objectives concerned. In some countries only a couple of procedures are in work going, in a few countries thousands of procedures are in work (Thomas 2004).

Finally, »land consolidation« is applied in some countries (for example in Belgium, France, Germany and the Netherlands) to solve expropriation problems in the con-

text of public infrastructure intentions (construction of highways, railroads, flood protection, airport enlargement etc.): If it is permissible to acquire land by compulsory purchase and if such a measure would affect agricultural land on large scale, the authority responsible for the compulsory acquisition may apply for the initiation of a land consolidation procedure, if the loss of land to be incurred by the parties concerned is to be apportioned among a large number of owners or if disadvantages that the project brings about for the general use of land are to be avoided. In that case land consolidation is not focussed on an improvement of agricultural structures but on the defence of disadvantages for the (existing) agricultural situation by the public measure.

The most comprehensive application of the »land consolidation philosophy« is a kind of »Integrated land development«, for instance in Germany, the Netherlands and Belgium.

»Integrated land development« is a planning and implementation process at regional and local level, which aims to create a suitable physical environment, meeting the current and future needs of society. Change, exchange and merging of private and public land are a central element in this approach. Land development evolved over time from a purely sector approach to a broad regional development instrument. Gradually, it is getting more and more embedded in regional policies that go beyond

the »green« functions of rural regions. Land development and land banking are used nowadays to facilitate and complement policies to establish new residential areas, to fit in infrastructure, to improve the livelihood by village renewal and to solve typical problems in peri-urban landscapes. Links between land development and other regional policy instruments are also strengthened by the fact that land development nowadays is a clear regional competence in most countries. In a number of countries it developed from a sector orientated instrumental approach to an open flexible goal orientated approach. Widening the approach towards multiple objectives requires more flexibility and a bigger range of tools to tailor approaches to specific problems in regions. Although the general trend of more integration, decentralization and flexibility is a common phenomenon, this development is in different stages and it takes different forms across the regions of Europe.

2.2 Central and Eastern Europe

The driving forces behind land consolidation in CEECs are the legacy of the socialistic period and actually of the land reform disasters of the nineties when the countries in transition privatized agricultural land. They abolished mostly the traditional agricultural production structures; the agricultural production decreased rapidly, partly down to 50% and less (Thomas 2006). And land consolidation is seen as a »secret weapon« for solving all these problems that the transition process caused in rural areas.

That is the actual political challenge that has been causing many activities by the international community and national governments for the last ten years circa. With a view to the future, in mind of FAO (Food and Agriculture Organization) additional driving forces behind land consolidation should be »the Common Agricultural Policy of the EU, rural development, efficient multiple use of rural space, including improved agricultural efficiency, natural resource management, infrastructure, environment«. That demand is well defined and written, but doesn't find any response or reaction in legislative activities concerned. In CEECs many activities exist, mostly carried out by local or regional actors being under pressure that something has to happen. But real results and decisive success are missing. Instead of designing and enforcing national programmes, adopting relevant laws and establishing efficient administrative structures, most of these countries mark yet time. They try to get experiences in pilot projects. In such a situation the constitutional and legal framework gets regularly out of view.

Various approaches to land consolidation are actually pursued:

- »land consolidation by market transactions« (Albania),
- voluntary exchange of land parcels (Armenia, Georgia, Bulgaria etc.)

- comprehensive compulsory land consolidation (Czech Republic, Slovenia).

Common features of all approaches are

- a broad participation of all involved persons and institutions,
- community-driven decision making and
- transparency (FAO workshop Prague 2005).

Since countries like for example the Czech Republic and Slovenia have a solid legal base and an adequate administrative power to make land consolidation efficient, most of the CEECs are just in an experimental phase and are just dealing with land consolidation pilot projects, executed by external private companies – mostly on a voluntary base for the land owners.

The international community tries to give targeted fundamental support. The Food and Agriculture Organization (FAO), particularly focussed on the agricultural and rural sphere, implements meetings and workshops to special topics in the context of land consolidation, like the workshop in March 2004 in Tonder/Denmark, dealing with Land Banking and Land Funds, and the workshop on Land Consolidation in March 2005 in Prague/Czech Republic.

Two important FAO-publications were edited last time:

- The design of land consolidation pilot projects in Central and Eastern Europe. Rome 2003, ISBN 92-5-105001-5.
- Operations manual for land consolidation pilot projects in Central and Eastern Europe. Rome 2004.

All these activities are based on the experiences regarding land consolidation in Western Europe and try to adjust that instrument empirically to the situation concerned in Central and East-European Countries.

3 Need for Research

In Europe we have to state a very diffuse situation concerning land consolidation and sometimes a real Babylonian language confusion in terms of »land consolidation«. For all these types of agricultural improvement and land re-arrangement, »experts« use the term »land consolidation«. This finding is not only of academic interest; it had and has wide reaching consequences. A crucial question has to be answered: Which kind of land consolidation is likely to solve rural structural problems concerned in an appropriate and most suitable manner, which means in an economic and acceptable costs/benefits ratio? Or do we take a sledgehammer to crack a nut? Which type of land consolidation is likely to achieve the best results and impacts in terms of costs/benefits ratio? Is a voluntary land

exchange the adequate approach or is a comprehensive and compulsory approach needed?

Until now, decisions in Western and Eastern Europe about land consolidation procedures were mostly depending on the chance of funding, public and/or private. The right approach has to be »impact orientated«, which means that the outcome (value added) has to be higher than the financial input. In some West-European countries typical indicators and standards concerning an impact-orientated assessment of land consolidation procedures exist. If these indicators are transferable in the recent agricultural economics in Central and Eastern Europe is an open question.

The missing or delaying positive economic results in all these projects and training activities in Central and Eastern Europe concerning land consolidation suggest a new approach, namely to substitute the current empirical approach by an analytical.

This is what an intended transnational research project on »Rearrangement of Property Rights for Rural and Urban Areas in Europe« (Dixon Gough; Thomas 2006) is trying to do. In that research project a systematic survey of the relevant land consolidation and land readjustment tools in Europe should occur with a comparative analysis and evaluation. Even now it is to state that the comparative analysis will show different dimensions of land consolidation.

4 A first attempt of systematization

A first attempt of a probable analysis approach leads to important distinctive marks: What is the general character of land consolidation; which kind of type of public measure is land consolidation?

Land Consolidation is – as demonstrated before – a means to improve the production and working conditions in agriculture and forestry. In this sense it is »Special (agrarian) Physical Planning«, targeted to improve the agricultural and forest structures in rural areas concerned. Because such thoroughgoing transformations and measures are not possible without consideration for the land ownership and land tenure structures and rights, most of the land consolidation laws in Europe have combined the special planning rules with land readjustment tools. Thus, in terms of legislation on land consolidation, it is to state that

Land Consolidation means Special (agrarian) Physical Planning plus Land Readjustment.

By *Special Physical Planning* the administrative basis for all intended agricultural measures is done and, if needed, legally regulated and enforced. Typical measures are the construction of rural roads and water bodies, landscape measures, village renewal measures, measures for soil conservation etc.

The *Land Readjustment* component is the core issue of each land consolidation approach: The accompanying post-processing land readjustment makes possible a realization of the physical planning without any respect to the actual land use and ownership of the needed and affected land; in the land consolidation procedure the adjustment of the land tenure to the planned state occurs in the land readjustment segment.

By land readjustment current land use, land ownership issues and other land tenure rights (individual subjective property rights) are in accordance with private and public requests on the land use (manifested in planning goals or legally binding plans) and/or to eliminate disturbing effects according to plan (Seele 1992).

Nevertheless, the analysis has to get in details; the indicators of the »land consolidation practice« concerned have to be analyzed. This analysis might be done with view to the legal base; it might occur with a view to the programming objectives; the analysis can be focussed on the organizational implementation or its technical standard:

4.1 Legislation

The need for legislation has to be investigated. Which is the link to the constitutional framework? Are circumstances given that allow a compulsory sovereign influence on the private real property?

Why are merging of parcels, voluntary land exchange and a comprehensive land development procedure named by the same term »land consolidation«? Why do some countries have different land readjustment laws and others only have a single law and why does the rest not need anything? Is it a question of tradition, of culture, a question of the constitutional framework, or is it only the result of active lawyers and ministerial officers? Is there an indispensable legal base for compulsory land consolidation? And what's on regarding the voluntary land consolidation and negotiation planning and good governance?

Analysing the legislative base of land consolidation:

Is land consolidation established

- on a voluntary base or
- as a compulsory sovereign measure on the basis of
 - a general Civil (or Land) Code or
 - a special (Land Consolidation) Act
 - or even without any legislative rules?

Additionally: does land consolidation concern only rural or also forest land, and what's on regarding homesteads, settlements and villages?

It should be obvious that for the compulsory land readjustment element of land consolidation, a legal base is indispensable; concerning the special-planning element, different possibilities for the establishment are given: legal base, governmental regulation, adopted governmental program or an administrative directive.

4.2 Objectives

A second dimension is dealing with objectives of land consolidation approaches and measures in land consolidation procedures:

The principle objectives of land consolidation can be derived either – if given – from the national or regional Rural Development Program or, if not existing, from the land consolidation practice or in case of existing legal rules from the legislation concerned. The main objectives in Western Europe are

- improvement of production and working conditions in agriculture and forestry,
- improvement of the general use of land in rural areas,
- maintenance of existing and creating of new employment in rural areas,
- improvement of the livelihoods of the rural population,
- conservation and protection of the natural and cultural legacy.

Typical measures in the implementation of land consolidation procedures are merging of fragmented parcels, ownership, farms (land tenure), creation of an appropriate design of the plots, construction of rural roads, landscape development, soil conservation, creation of irrigation and/or drainage infrastructure, measures of village renewal, creation or rehabilitation of water supply, sewage systems and other rural infrastructure, flood protection, measures for recreation and leisure etc.

Extent and intensity of land consolidation measures in pursuance of the objectives differ from country to country and don't only depend on the programs and objectives concerned but often also on public funding.

The existing different approaches are the result of historical, traditional, environmental, social and economic circumstances, depending on the corresponding policy (Thomas 2004, 2005). That is also true regarding legislation (chapter 4.1). Nevertheless it has to be proved, if legislation, programmatic objectives and practice are just in accordance.

4.3 Organizational implementation

What are the actors in land consolidation and what does remain in state responsibility? Which role should private companies play? And is there a conclusive mix of public private partnership?

The organizational structures for land consolidation in Europe are varied and even for experts hardly to look through. Systematization could occur by the distinction, if the implementation of land consolidation procedures is done by

- state agencies (in the general interior administration or by special agencies),

- private companies
 - on behalf of the state/municipality/stakeholders,
 - by contracting with the state/municipality/stakeholders
 with or without any legal base.

4.4 Technical design

The technical design depends regularly on the starting point in legislation and on the status and quality of land registry and real property cadastre.

The technical design of a land consolidation procedure determines mainly the total costs of the procedure itself and therefore the costs/benefits ratio decisively.

In the past the land surveying costs were a permanent challenge in all land consolidation procedures and they have been until now. For a conclusive comparison and benchmarking the cadastre and registry status and the framework of technical regulations are crucial. Main costs are caused by the method of valuation and the question, if boundaries have to be marked. But the decision on the valuation and surveying method has to be done impact-orientated, that means with a view to the total following social use of the results and the gross domestic gain; low costs by the land consolidation project can cause expensive consequences for the whole national economy.

A systematic survey of the applied technical methods could be very helpful for the development of impact-orientated and cost reducing technical rules and regulations.

4.5 Further aspects

The existing different approaches in Europe concerning land consolidation can be also assessed regarding environmental aspects or even »sustainability«. Are legislation, organization and implementation of the national approach concerned able to achieve sustainability in the sense of Rio? The answer for this question needs a very deep analysis of concrete land consolidation projects. Single assessments already exist, but it has to be generalized.

A strong indicator for »good governance« is the »bottom up« approach in general and in land consolidation particularly. What's on regarding participation of farmers and stakeholders in preparation and during the running procedure? And how to prevent corruption and what's on regarding appeals; what's on regarding transparency of the state administration?

For insiders it is obvious: these different assessment levels are not isolated or independent from each other; there are mutual influences and impacts, strongly correlated between the different dimensions.

5 Final remark

In the different countries in Europe we find quite different designs of »land consolidation«, caused by totally different national and regional circumstances. Besides formal reasons like legislative and administrative tradition the design depends on the relevant economic and social national challenges, circumstances and prerequisites (Thomas 2004, 2005). Therefore, an existing »land consolidation design« is not simply transferable to other countries; it has to be defined: which objectives shall be reached by land consolidation? The objectives concerned define the legal and technical design. That concerns mainly the special-planning approach (agricultural and rural structure improvement).

To my mind, in the 21st century each society and state needs a modern compulsory land readjustment tool in order to be able to provide for sustainable land use and public infrastructural equipment. A land readjustment tool for a redesign of real property structures should take precedence over a compulsory expropriation. The land readjustment tool is quite non-seasonable; it depends mainly on the constitutional rules concerning (real estate) property. Therefore, the land readjustment tool is the core tool of each land consolidation procedure; it fulfils the (constitutional) guarantee task (Gewährleistungsaufgabe). The second role of the land readjustment tool is to fulfil the disposition task (Ordnungsaufgabe), that is, to adjust the land use and parcel structure concerned to the intended planning (Thomas 2005).

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