

What's on Regarding Land Consolidation in Europe?

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Key words: land consolidation, land readjustment, terminology, design of land consolidation

SUMMARY

The different approaches on “land consolidation” in Europe are shown, practical relevance included. Thereby the broad variety of what is land consolidation and terminological problems become obviously. A first attempt of systematization of relevant components having influence in the design of land consolidation occurs. A method is suggested which is likely to describe the “design of land consolidation” in context of legal and administrative background concerned. The tool is able to demonstrate different approaches on land consolidation.

ZUSAMMENFASSUNG

Die unterschiedlichen Ansätze zur Flurbereinigung in Europa werden einschließlich ihrer praktischen Relevanz dargestellt. Dabei wird offensichtlich, dass schon in der Begrifflichkeit eine große Vielfalt vorherrscht, welche einer Systematisierung bedarf. Es erfolgt ein erster Versuch der Systematisierung der Komponenten, welche das Wesen der Flurbereinigung ausmachen. Dies mündet ein in ein grafisches Werkzeug, mit dem das „Design von Flurbereinigung“ und die Wechselwirkungen ihrer relevanten Komponenten beschrieben werden kann; mit dem Werkzeug können unterschiedliche Ansätze zur Flurbereinigung veranschaulicht werden.

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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. Since in WECs a partly long tradition and much practical experience in land consolidation are to state, CEECs are yet 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 at least, education of their staffs. Regularly the awareness on the need for efficient land consolidation instruments is also quite different by the acting experts, politicians and the shareholders, farmers and in the population.

2. CURRENT STATE CONCERNING LAND CONSOLIDATION IN EUROPE

2.1 West Europe

In West European understanding a **land consolidation procedure** is a mean with view to improving 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. Last time, Cyprus Government was for example elaborating a land consolidation law in order to make it applicably to settlement problems.

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

Land consolidation laws are well established in all continental WECs, partly established since more than 100 years. And in all cases, the impetus was to improve the production and working conditions in agriculture. The high period of the “classic land consolidation” was during the sixties and seventies of the 20th century in context with the European Unification; the most important target 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 through land consolidation (THOMAS 2004).

Since about 20 years **land consolidation** in some **WECs** changed

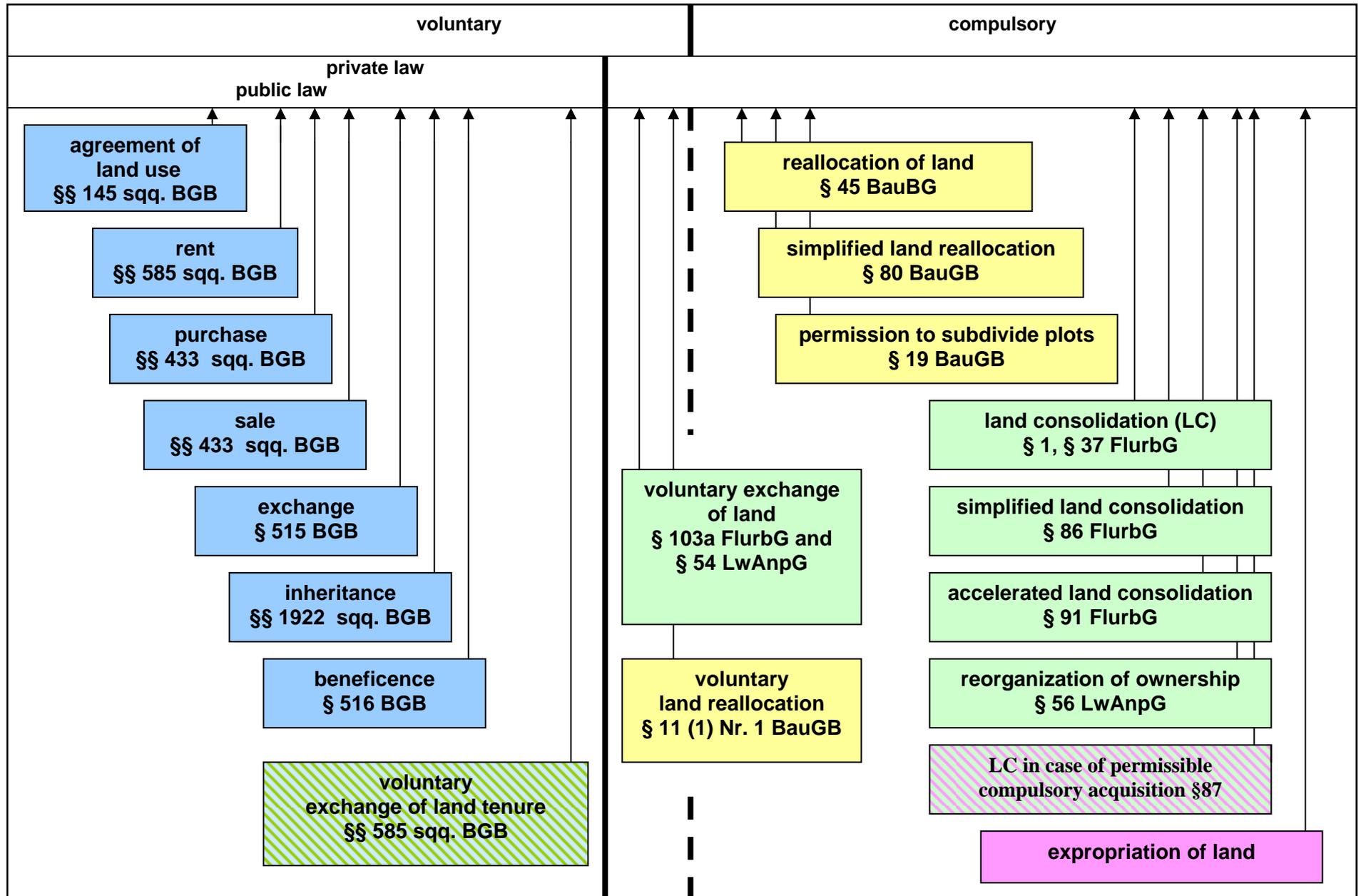
- from a specific, agricultural farm-focussed instrument to an instrument which is likely to cover public demand in land and to solve land use conflicts (THOMAS 2004),
- from a landscape destroying mean to an environmental-friendly and sustainable land management instrument (THOMAS 1998, 2005b).
- A third impetus came from the European Union regarding cohesion policy where land consolidation was investigated as an indispensable mean for an integrated rural development. And as you know, in the implementation of the Common Agricultural Policy of the EU the infrastructural improvement of rural areas has priority before the immediate monetary transfer to farmers (“single farm payment”).

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

Land consolidation is sometimes a sole agrarian instrument, sometimes embedded in a sophisticated tool box 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 going, in a few are thousands of procedures in work (THOMAS 2004).

Finally “land consolidation” is applied in some countries (for example in Belgium, France, Germany, Netherlands) to solve expropriation problems in context with 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. structures; the agricultural production decreased rapidly, partly down to 50 % and less (THOMAS 2005). And land consolidation is seen as a “secret weapon” for solving all these problems in rural areas that the transition process caused.

Land Readjustment Instruments in Germany



That is the actual political challenge and causes many activities by the international community and national governments since about 10 years. With view in the future, in mind of FAO 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 real response or reaction in legislative activities concerned. In CEECs many activities exist, mostly driven by local or regional actors having the pressure that something happens. But economic 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,
- transparency (FAO workshop Prague 2005).

Since countries like for example Czech Republic and Slovenia have a solid legal base and an adequate administrative power to make land consolidation efficiently, most of the CEECs are just in an experimental phase and are yet 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, thus for example the workshop in March 2004 in Tonder/Denmark, dealing with Land Banking and Land Funds or 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 set up on the experiences regarding land consolidation in West 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" take the item "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, that means in an economic and acceptable costs/benefits ratio; which "design" of land consolidation has the best outcome? Or do we fire with cannons at birds? Which types 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, in West and East Europe decisions about a land consolidation procedures were mostly depending of the chance of funding, public and/or privately. The right approach has to be "impact oriented", that means: the outcome (value added) has to be higher than the financial input. In some West European countries typical indicators and standards concerning an impact-oriented assessment of land consolidation procedures exist (BMS 2005). If these indicators are transferable in the recent agricultural economics in Central and East Europe, is an open question.

The missing or delaying positive economic results in all these projects and training activities in Central and East Europe concerning land consolidation suggest an new approach, namely to substitute the current empirical approach by an analytical. Already now it is to state that the comparative analysis will show different dimensions of land consolidation.

4. 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 typus of public measure is land consolidation?

Land Consolidation =

Land Readjustment plus Special (agrarian) Physical Planning

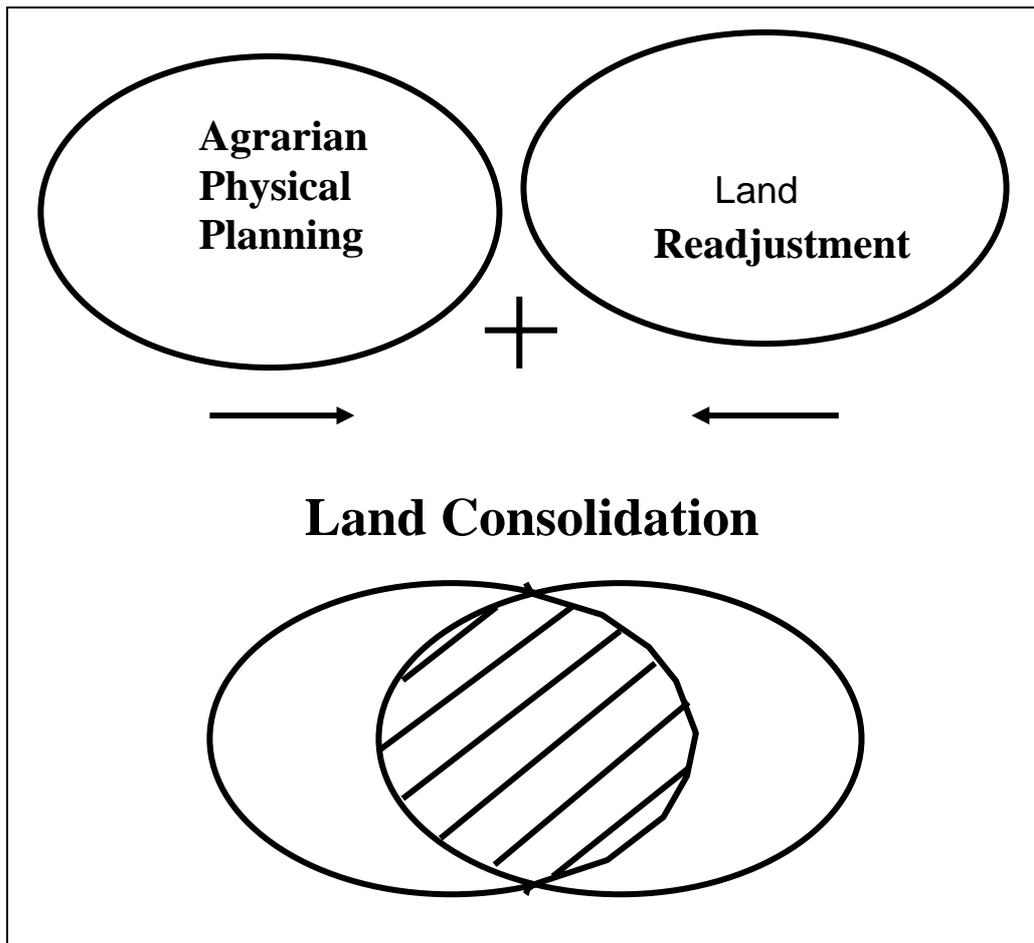


Figure 2: Character of Land Consolidation

Through **Special Physical Planning** the administrative basis for all intended agricultural measures is done and, if needed, legally regulated and enforced. Typical measures are rural roads, 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 possibly a realization of the physical planning without any respect on the actual land use and ownership of the needed and affected land; in land consolidation the adjustment of the land tenure occurs in the land readjustment segment.

Through land readjustment current land use, land ownership issues and other land tenure (individual subjective property rights) is to bring 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 (THOMAS 2004); by the way, fragmented land tenure can be merged. The coverage area of both elements in figure 2 "determines the intensity of land consolidation" in the traditional sense.

Never the less the analysis has to get in details; the indicators of the "land consolidation practice" concerned have to be analysed. This analysis might be regarded to the legal base; it might occur with 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 item "land consolidation"? Why do have the one countries different land readjustment laws and the others only a single and why does not need the rest 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 a indispensable legal base for compulsory land consolidation? And what's on regarding the voluntary land consolidation and negotiation planning and good governance?

Is land consolidation implemented	without any law?	on the basis of	
		the general Civil Code?	a special law?
on a voluntary base?			
as a compulsory sovereign measure?			

Figure 3: Legislative base of land consolidation

Additionally it is to investigate if land consolidation concerns only rural or also forest land, and what's on regarding homesteads, settlements and villages?

It should be obviously, 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:

Objectives		Measures		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 of the natural and cultural legacy
		Improvement of production and working conditions in agriculture					
with or without any public funding	Merging of fragmented parcels	x					
	Merging of fragmented ownership	x	x				
	Merging of fragmented farms	x	x	x			
	Appropriate design of parcels	x	x				
	Construction of rural roads	x	x	x	x		
	Landscape development					x	x
	Soil conservation	x	x				
	Irrigation	x	x				
	Drainage	x	x				
	Nature protection		x				x
	Village renewal	x		x	x	x	x
	Rural infrastructure	x		x	x		
	Water supply					x	
	Sewage system					x	
	Water management	x	x				x
Flood protection	x	x			x	x	

	Recreation and leisure			x	x	x
	etc.					

Figure 4: Objectives in land consolidation approaches

The existing different approaches are the result of historical, traditional, environmental, social and economic circumstances, depending on the corresponding policy (THOMAS 2004) (THOMAS 2005b). That is also true regarding legislation (chapter 4.1). Never the less it is to proof, if legislation, programmatic objectives and practice is just in accordance.

4.3 Institutional Framework

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

Implementation of land consolidation procedures by		with legal base	without legal base	payment	
				any	by the state
state agencies	general				
	special				
private companies	on behalf of the state				
	by contracting				

Figure 5: Institutional framework

4.4 Technical Performance

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

Implementation work Cadastral status		without	with		with		without	
		valuation			complete new land survey			
			by market value	by natural productivity	with	without	with	without
				marking of boundaries		marking of boundaries		
unified real property cadastre Yes/No	analogy							
	digital							
updated land registry Yes/No	analogy							
	digital							
updated real property cadastre Yes/No	analogy							
	digital							

Figure 6: Technical performance of the land consolidation procedure

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

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 on 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 shareholders 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?

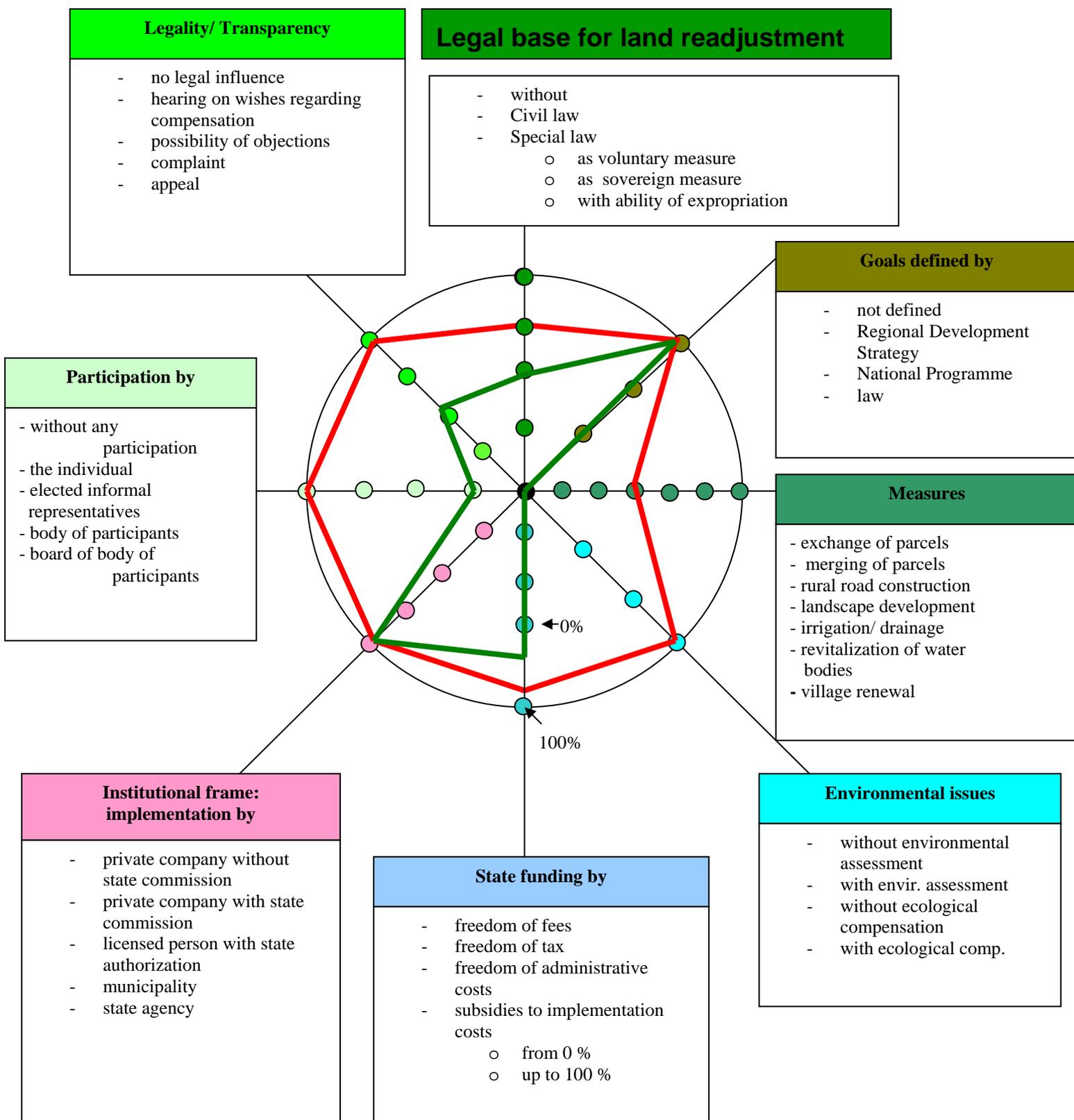
For insiders it is obviously: these different assessment levels are not isolated or independently; there are mutual influences and impacts, strongly correlated between the different dimensions.

Figure 7 is likely to model the “design of given land consolidation approaches, demonstrating the interrelationship between the relevant components and allowing a comparison between different approaches.

Figure 7: The “Design of Land Consolidation” (see next page)

The figure describes

- (in red) a concrete German Comprehensive Land Consolidation project that is targeted on a merging of fragmented parcels, rural road construction and landscape development;
- (in green) a Voluntary Land Exchange project with an exchange of parcels between two farmers.



Notice: the indicators in the design components rise from centre to the periphery, for example component “goals” from “not defined” up to “law”

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 is temporarily, that means depending on the relevant economic and social national challenges, circumstances and prerequisites (THOMAS 2004) (THOMAS 2005b). 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).

In 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 have preference before 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** (German "Gewährleistungsaufgabe"). The second role of the land readjustments tool is to fulfil the **disposition task** (German "Ordnungsaufgabe"), that is, to adjust the land use and parcel structure concerned to the intended planning (THOMAS 2005b).

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