

# Pitfalls in institutional transplantation: lessons from Central Europe

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## Abstract

*The enlargement of the European Union has triggered the exchange of spatial planning practices between East and West. Especially on the level of policy instruments – the implementation side of the planning spectrum – Western European experts on spatial planning have been actively exporting their knowledge to the new and candidate Member States. This exchange seems logical in the light of the many similarities between the new and the old Member States, however, there are several pitfalls that may cause the exchange of planning experience to lead to disappointing or even negative results. Three pitfalls are discussed in this paper and illustrated by referring to the export of land consolidation during the 1990s. The Central European rural crisis created a pressing need for instant solutions causing the process of institutional transplantation to tumble into the pitfalls.*

**Keywords:** institutional transplantation, Central Europe, rural areas, enlargement, land consolidation

## 1 Introduction

In an internationalising scientific and political community, experience from other countries, in terms of planning concepts and planning instruments, is exchanged and sometimes mimicked. Transplanting complex phenomena meets specific difficulties, as Masser and Williams already pointed out in their book ‘Learning from other countries’ (1986). Planning instruments are very complex because they are anchored in the legislative, cultural and administrative context of society.

This paper derives a number of practical lessons from a region where particularly intensive exchange of practices of governance is taking place: between Western Europe and the former Eastern Block – now referred to as Central Europe. In the preparations for European accession, intensive co-operation between governmental bodies was stimulated. Rural land management is one of the topics that received attention, for Central European land reforms in the 1990s have caused dramatic fragmentation of agricultural land. This land fragmentation has harmful effects for, among others, biodiversity and the quality of the soil (Gatzweiler *et al.*, 2002), the social status of the rural population (Frenkel and Rosner, 1999), value of agriculture for economy as a whole (Goetz *et al.*, 2001; p.11) and the EU expenditures on agricultural support (Courchene *et al.*, 1993; Grabbe and Hughes, 1998; Brenton and Gross, 1993).

As Western Europe has a long-standing tradition of reducing land fragmentation, applying that knowledge to Central Europe was logical but, as we will see, treacherous. Among the instruments used in Western Europe, land consolidation is well-known and by some, the suitability of land consolidation for reducing Central European land fragmentation was too easily taken as a fact. Like the FAO, that held a survey on this specific topic around the turn of the millennium and co-organised a special seminar on Central European fragmentation and the prospects for land consolidation in Munich, early 2002, the outcome of which was the ‘Munich Statement’, expressing guidelines for land consolidation activities in Central Europe. But was it the right track?

## 2 The cause of the challenge

The early 1990s brought Central Europe a transition from a centrally planned to a market economy, which involved privatising the agricultural land that in the decades before was pooled into large production units (Pryor, 1992; Meurs, 1999). Privatisation means reversing the socialists’ policy by shifting ownership of land from state and collectives to private persons. The eventual aim was competition in agricultural production, leading increased efficiency and production. Privatisation can be conducted in various different ways.

- *Restitution*: means returning the land to the original owners or their heirs. In most cases, the original land distribution is defined as the situation in 1945, just before the introduction of socialism.
- *Distribution*: involves giving the original owners a piece of land that is not the same as they owned before, but is comparable in size and quality.
- *Compensation*: is a system that returns agricultural assets in money or vouchers (Hungary) that can be traded and with which pension, apartments or land can be bought.
- *Sale*: means transferring state owned land to individuals in return for money. In Poland this is the major means of privatisation. The drawback here is, that marketing large amounts of land, the price per hectare declines dramatically, ruining the land market.

Most Central European countries chose to restitute collective farm land to former owners. Moreover, former owners who kept legal rights to their land were restituted property rights on their land without exception. State farm land is typically leased, pending sale.

From the papers collected in Tillack and Schulze (2000) and Swinnen et al (1997) it becomes clear that the land use structure that resulted from the land reforms typically is bimodal. This means that there is a large group of very small land users and a small group of very large land users. The class of middle-sized family farms, that are so characteristic to Western European family farming, is typically small but slowly growing.

In Slovakia and the Czech Republic, some three-quarters of all agricultural land used in large units (Voltr, 2000; Kabat and Hagedorn, 1997). Romania and Bulgaria (from which only secondary and older data are available) on the other hand are very fragmented. More than half of all agricultural land is used in private holdings smaller than 2 hectares on average, corresponding with 4 and 1.8 million farmers respectively (Davidova et al, 1997; Benedek, 2000). Poland and Hungary's characteristics are intermediate (Borek, 1993; Harcsa et al, 1998).

### 3 Unclear terminology

As said, Central European land fragmentation is a problem to landowners in that region and Western European experts were prepared to assist in finding solutions. In the literature that was generated as a result, people are writing about the situation partly in English – as non-native speakers. They all refer to 'land fragmentation', but from the figures that are used to illustrate the severity of the problem it becomes clear that they don't all use the same definition for 'land fragmentation'. To make matters worse, the definition of the assumed solution (land consolidation), too, is used in an ambiguous way. The Western Europeans use that term for systems that may differ widely.

#### 3.1 What exactly do we mean with 'land fragmentation'?

The one term 'land fragmentation' is used for very different problems – people think to be talking about the same problem, but have very different perceptions. Van Dijk (2003a) identifies four definitions of land fragmentation, three of which are schematically represented in Figure 1. The first is ownership fragmentation. It was a popular way of painting a picture of Central European agriculture in the early 1990s. At that time, the privatisation agencies provided such statistics, and generally these figures were the only statistical information available on agriculture.

But ownership alone does not give a complete image of fragmentation, because that does not always correspond with the functional parcelling of the landscape. The actual use of agricultural land may be quite consolidated through tenancy. Privates or enterprises may have succeeded in acquiring tenancy on large amounts of leased land, typically hundreds of hectares. In other cases, like in Romania, private landowners join forces and form family associations.

So, besides fragmentation of ownership, the number of users (or the size of use-units) is a second type of fragmentation. The use situation, as said, is visible in the landscape, although you cannot tell if a fragmented parcelling points to small farms or fragmented farms (the Germans call the latter '*Zerstreuung*', opposed to '*Zersplitterung*' that refers to a high density of land users and the consequent small farm size). The overlap between these land users and landowners represents owners that at the same time are users, i.e. the share of owners that are using their land themselves.

A third type of fragmentation is the number of parcels exploited by each user. This is the fragmentation within a farm. Internal fragmentation has traditionally been the main subject of Western land consolidation experts who tried to demonstrate the importance of land consolidation. Internal fragmentation not only considers (i) parcel size, but (ii) parcel shape and (iii) parcel distance as well. Models have been made that proved that decreasing the distance of parcels to the farm saves time, a better parcel shape raises yields and increased parcel size both saves time and raises yields. For recent empirical data, see Coletta (2000).

The literature on problems in Central European agriculture tends to ignore the internal fragmentation, although the internal fragmentation is locally severe in Central Europe. Statistics on the situation are few and unreliable, though. Apparently, the problem is not felt to be the most urgent. That is logical to some extent. Reallocating the 10 parcels of a two-hectare farm still does not enable the farmer to make a good living. And the surveying and

transaction costs will be relatively high (Surprisingly, this imaginary reallocation improves efficiency very strongly in proportionate terms, far more than joining 10 parcels of a two-hundred-hectare farm.)

If the overlap of use and ownership is small, a fourth potentially problematic situation occurs. A small overlap means that tenancy is playing an important role in agricultural land use. A certain percentage under tenancy is desirable to allow farms to change size in a cheap and flexible way, so we cannot entirely do without tenancy. However, analyses on Central European land markets, for example in Schulze (2000) and Swinnen (1999) as well as economic theory (Currie, 1981), suggest that land use that largely depends on tenancy suffers important drawbacks.

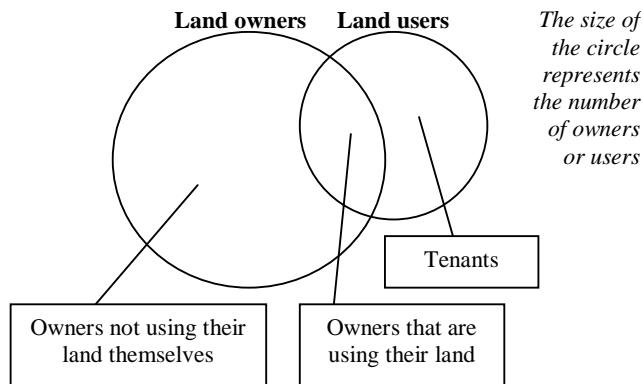


Figure 1: Schematic representation of three types of fragmentation. In addition, this article discerns internal fragmentation as well.

We thus have four types of fragmentation: (1) number of owners, (2) the number of users, (3) the number of parcels per farm, and (4) the discrepancy between ownership and use (see Figure 3). This implies that reduction of fragmentation occurs by definition when the number of owners and/or users declines, the number of parcels per farm falls and when the share of owners that use the land themselves raises.

### 3.2 How do we communicate about instruments?

In addition to properly defining what exactly is the problem we are talking about, it is equally important not to be ambiguous in labelling possible solutions. For given the lack of a solid intervention-theoretical framework, we rely on names of instruments to express what solutions we see. But identically labelled instruments may differ widely across countries.

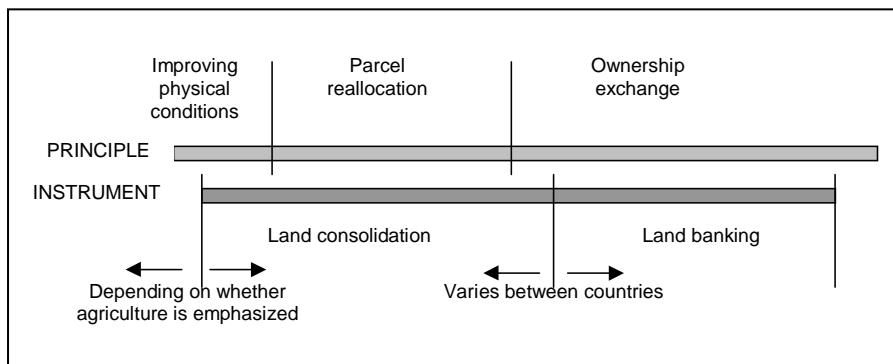


Figure 2: Schematic representation of the variation that exists between the two land management instruments and the actual principles that they apply.

Essential, therefore, to clear terminology in planning instruments is that we make a distinction between the *principle* and the *instrument*. The principle refers to the actual changes we make to the legal situation of land ownership and land use. For instance, we improve the outlay of individual farms, we promote conversion of land use or we stimulate transfer of land ownership from one owner to another. The principle is the essence of the operation. The instrument, on the other hand, is the procedure with which the principle is pursued. Land consolidation is an example of an instrument with a legal basis, project-wise execution and special agencies and funding, that may embrace a varying set of principles (Figure 2, Table I).

At present, it can be hard to discover whether a person discussed the principle or the instrument, because many people are not aware of the difference, but foremost because some terms can be – and are – used for both. For

instance land consolidation is both an instrument and a principle. It would therefore be helpful to define terms in such a way that they only apply to an instrument or only to a principle. This way, the distinction is always clear.

Principle:	
Improvement of physical conditions	<i>Improvement of drainage, soil stratification, relief and road access to parcels; all physical impediments to agricultural productivity.</i> <i>Prime instrument: land consolidation</i>
Parcel reallocation	<i>Rearranging the parcels of participants in terms of their location (mainly distance to farm buildings, saving time and energy) as well as their number and shape (in order to allow or optimise possibilities for mechanisation).</i> Prime instrument: land consolidation
Ownership exchange	<i>Transfer of ownership from less desirable persons to more desirable persons. The desirability is a subjective, political, locally varying choice. It may be transfer from elderly farmers to more vigorous farms (farm enlargement), from farmers to bodies for nature (re)development, or from farmers to a Ministry of Transport that wants to construct a new highway (conversion of land use).</i> Prime instrument: land banking
Instruments:	
Land consolidation	<i>Law-based project with the objective to improve agricultural production conditions, the need for which may be result from autonomous processes (inheritance, land market, economy) or non-agricultural developments (road construction).</i> Prime principle: parcel reallocation
Land banking	<i>Stimulating the transfer of ownership from less desirable persons to more desirable persons, if necessary by using an intermediate pool of land (land fund) in which strategic reserves are 'stored' and managed.</i> Prime principle: ownership exchange

Table I: Attempt for better defining the instruments and principles that are – currently quite ambiguously – referred to in the article.

This structuring of terminology allows us to point out what the international variation is about: there is variation in the set of principles that instruments contain. The boundaries of the instruments are not fixed. As it turns out, the Danish instrument of land consolidation, for example, gives the principle of ownership exchange (objective: farm enlargement) more emphasis than the Dutch instrument. So, we must acknowledge that there is no one-on-one connection between instrument and principle and that the boundaries vary both internationally and between projects within one country.

The traditional practice emphasised improvements for agricultural production, therefore primarily applying parcel reallocation, together with improvement of physical conditions and some transfer of ownership. Nowadays we see projects where building highways or establishing nature areas is the prime focus, thus applying ownership exchange (objective: conversion of land use), together with some parcel reallocation as compensation for damaging the agricultural production structure.

### **Lesson 1: Make sure that terminology is properly defined**

It seems that in the quest for solutions relieving Central European land fragmentation, there was an unfavourable combination of the confusing term ‘land fragmentation’, various nationalities communicating in English and the pressure to find instant solutions. This mix lead to the impression that there was a general and accurate understanding of the problem, and together with the urge to find solutions – caused by the initial conviction that transition was a straightforward process taking only a few years – a proper problem analysis entailing definition of terms was never made. What exactly do we mean when talking about land fragmentation, and what precisely is happening in a land consolidation project? Such ambiguity in terminology can undermine successful cross-national exchange of planning knowledge.

## **4 Preconceived solutions prevailed**

Clear terminology is particularly important for the ‘strategic analysis’, in which the intervention principle must be found that is appropriate to the problem at hand. In the case of Central European land fragmentation, it appears that the strategic analysis was completely left behind (thus explaining the pitfall of unclear terminology) and land consolidation was put forward at the obvious way to solve the problem. Below, it is argued that the core of the problem demands a different intervention principle.

## 4.1 Revealing the core of the problem

The fourfold definition of land fragmentation raises the question which one is most important in Central European agriculture. The answer to that question lies in the bimodality of farm size that in turn is a result from land privatisation. On the one hand there is small-scale farming by the landowners that mainly produce for own consumption. On the other hand there are very large units that to an important extent rely on tenancy – that in Central Europe is generally hardly regulated and relatively expensive. The middle-sized farms are not an important category yet.

The bimodality implies that two definitions of land fragmentation apply: (1) size of use-units and (2) small overlap of use and tenancy. Internal fragmentation technically speaking is of little interest for small farms, because they are not commercial and internal optimisation of a small farm would not pay off. Therefore, the real problem seems to be that ownership of land resides at the wrong parties, namely at elderly small holders. These owners are not the most desirable category, from an economical point of view.

The most important challenge therefore is redistributing solid rights on land (ownership or to be developed tenancy structures with a proper long-term continuity) to farmers of a viable size. Adjustments to the land use units (i.e. farming structure) are on the long run ineffective as long as ownership and use remain this widely separated. In a situation where commercial land users do not have solid rights to their land, basic requirements for economically healthy farming are impeded: investments (through rural financing), competitiveness and autonomous changes in farm-size (see Swinnen, 1997, p.360 for a similar view). Ironically, ownership fragmentation has only few direct disadvantages.

Central European fragmentation thus differs profoundly from the Western European situation at the start of large-scale fragmentation reduction, despite the treacherous similarity when we look at statistics on farm-size distribution. Statistics on farm size do not reveal the problem of ownership-distribution that is hidden underneath.

## 4.2 Matching the problem's core with the instrument's target

The strategic analysis raises two questions. To what types of fragmentation do the Western instruments apply and do they correspond with the key Central European problems? And: what are the prerequisites for the effectively implementing an instrument? In other words, we want to check the similarity in problems as well as the 'transplantability' of Western experience.

With regard to the first question, it appears that Western Europe has addressed two types of fragmentation, out of the total four types mentioned before. Only the farm-size problem and internal fragmentation have been subject to the Western European fragmentation-reducing instruments. Instruments for the remaining two types (i.e. dealing with ownership fragmentation or with a large gap between ownership and use) have not developed in Western Europe. They probably did not need to be developed because these specific problems did not occur. They can be regarded as particularities of Central Europe that stem from the privatisation process.

	Land banking	Land consolidation
Main agricultural target	<i>Farm size</i>	<i>Parcelling (number, distance, average size)</i>
Non-agricultural targets	<i>Providing space for infrastructure, water management, etc.</i>	<i>Comprehensively improving regional quality</i>
Time dimension	<i>Ongoing</i>	<i>Long projects (&gt; 10 years)</i>
Affects	<i>National farmers population</i>	<i>Between 50 and 300 farmers</i>
Prerequisites for success	<i>One or more agencies that acquire and redistribute parcels</i> <i>Owners/occupiers that pursue farm enlargement</i>	<i>Owners/occupiers with internal fragmentation</i> <i>Who are willing and able to invest time and money</i> <i>Governmental financing for non-agricultural improvements</i>
Cross-relations	<i>Involving land-banking parcels can improve effectiveness in voluntary exchanges</i>	<i>Redistribution of land-banking parcels can be integrated in land consolidation projects</i>

Table II: Tabular overview of characteristics of two Western European fragmentation-reducing instruments.

One of the two types that Western Europe does have experience with is the same type that we discovered to be a main fragmentation problem of Central Europe, namely farm size. Land banking is the instrument that concentrates on this specific type of fragmentation. Therefore, land banking makes the best match with the Central European fragmentation-problem on the short term, when we take into account the match between problem and experience.

But matching goals and problems is just one criterion, because the prerequisites for effectively applying an instrument also have to be considered. Prerequisites are the conditions that allow an instrument to be operational, adopted and achieve its goals. Success in one country does not guarantee success in another. The prerequisites for each of the instruments are derived from Western European practice, and listed in Table II.

Again, land consolidation appears to make a poor match with the Central European situation. Especially complicating for the application of land consolidation is the absentee-ownership, so typical for rural Central Europe that collides with the required willingness of the land users to invest in better parcelling. Absentee-owners will face costs and might be wary of losing their parcel or be subject to other disadvantages. These negative sides are not compensated by advantages, because the absentee-owners by definition do not enjoy these positive sides. The implementation of land banking, however, does not seem to face fundamental problems as far as prerequisites are concerned.

Land banking can also help reducing the gap between use and ownership. By acquiring small, leased out parcels and selling them to the present user, a gradual accumulation of user-ownership will occur, with land banking as the driving force that generates transfers of ownership to the most efficient user. This double effect – land banking can address both farm size and segregation of use and ownership – further stresses the importance and suitability of land banking.

The conclusion therefore is that land banking, generally speaking, makes a better match with the Central European land fragmentation than land consolidation does.

## **Lesson 2: Don't forget the strategic analysis**

In this particular case, it was de focus on operationalising a preconceived solution that appears to have been the main fault. As it turned out, the preconceived solution was no so suitable after all. A more detailed problem analysis could have prevented making effort in the wrong direction.

Land consolidation, the instrument that is most prominent in the debate on solving Central European land fragmentation, spatially optimises land use of each participant but by definition hardly changes the amount of land of each participant. However, because farm size is the main agricultural drawback in Central Europe, another instrument, namely land banking makes the best match with the Central European fragmentation-problem on the short term, when we take into account whether similarity in problem and experience exists.

Also with regard to prerequisites, land consolidation appears to make a poor match with the Central European situation. Especially complicating for the application of land consolidation is the absentee-ownership, so typical for rural Central Europe, that collides with the required willingness of the land users to invest in better parcelling.

This paper thus emphasises the importance of the strategic choice; it is crucial to explicitly investigate what concept to apply before filling in the operational details. The scope of operation-affecting factors appears to be very wide and international experience – whether recent or somewhat dated – provides relevant leads and even criteria for making procedures that allow effective application of a given planning concept.

## **5 Tailoring the procedure**

The third issue on institutional transplantation that is raised here becomes relevant when, after thoroughly defining and matching problem and solution, a strategic choice has been made. At that stage, one specific intervention principle must be adapted in order to fit into the Central European context.

Although land banking, as we saw, makes the best match, this section will use land consolidation as an example. Indeed, land banking activities will stimulate the emergence of regions with middle-sized farms that have many parcels. So, land consolidation will have a role in Central European agriculture, but on the short term not the leading role.

### **5.1 What is transplantable and what is not**

One intervention principle may have various guises throughout countries that are actively applying that principle. Therefore, comparing existing instruments is vital for designing new ones; if several options are known, the more likely it is that a well-suited option can be chosen. For discovering a range of options, a cross-national comparison is useful, enabling a range of systems to be described and compared. Only then, the eye caps of reasoning out of a one strategy paradigm can be removed.

After such a comparison, we must try to explore the relationships between the already being applied instruments and their context. An instrument applied in a context that is strongly similar to the receiving country will obviously have the best chance for successful transplantation. But what elements of the context are relevant? And: for which components in the procedure? So, comparative research is necessary to assess in what way instrument and context are related in order to allow a founded choice from the variety of optional instruments and their components (Figure 3). More detailed reflections on comparative research (Van Dijk, 2002) assume that there are four levels of comparative cross-national study.

1. collecting information about planning systems in other countries ('exhibiting')

2. valuing each planning system with a relative value ('valuing'). From larger sets of countries, the same pattern of values may be observed in several instances. Through a tentative way of cluster analysis, 'families' of planning may be distinguished, as is done by De Jong (1999) and Newman and Thornley (1996).
3. revealing the variables that determine the outline of the policy instrument ('explaining'). Terhorst and Van der Ven (1997) demonstrate this in their excellent study on differences in urbanisation patterns. Regression analysis can be an interesting tool in linking planning systems to their context. Studies of agricultural economic researchers Mathijs and Swinnen (1996) show that even complex issues are suited for regression analyses. Pickvance (1986) has published on the specific topic of explanatory comparative research, and warns that 'a correlation which holds good in a statistical sense must also make theoretical sense.'
4. advising countries that do not yet apply this instrument ('advising')

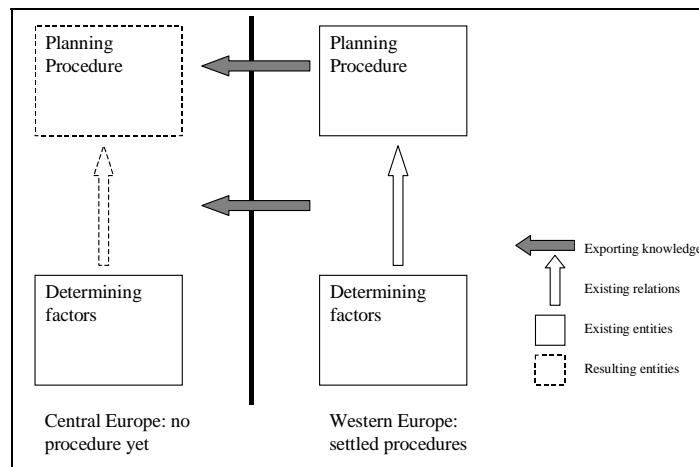


Figure 3: When exporting planning knowledge, we should export knowledge about the relationship with underlying factors (lower grey arrow) and link them to certain possible characteristics (upper grey arrow).

Each successive level aims at more complex goals, but inevitably embraces the lower levels as sub-goals. For example, before you can give a value, you need to collect a number of cases to be able to compare. And before seeking variables, a relative valuation is necessary in order to reveal a discriminating factor. Because each level needs the former, it is necessary to go through the whole process. The division into the first three levels coincides with the three schools of cross-national comparison Lowe and Kemeny (1998) describe. The first and third level as noted above, correspond with their school of divergence and convergence respectively.

Bottom line is that only the *relationship* (between components of the instrument and their relevant contextual aspects) is suitable for exporting. If a strategic analysis would point out that implementation of one specific instrument is desirable, the fourth level of cross-national comparison would be needed, although the method uses generalisations to which the receiving country can be an exception.

## 5.2 Distinguishing and selecting components

For the Dutch and German land consolidation laws, a comparative analyses has been conducted (see Van Dijk, 2003b). Most paragraphs from the Laws have a counterpart in the other country. The exact content of such parallel paragraphs differs quite strongly in most cases. In addition, there are paragraphs that are unique for one of the countries. For four differences, a plausible explanation was found. For instance, the status of tenants in a project depends on the level of tenancy-protection. In the Dutch case, tenants had a very firm claim on the land they used, which caused land consolidation to reallocate land *use* in an efficient way, and not only land *ownership*. But since for instance most Central European tenants are relatively weak, in a legal-technical sense, it does not seem sensible to consider their interests in reassigning parcels. If bureaucracy and transaction-taxing is not too restricting, tenancy can rearrange itself after ownership has been rearranged, like in German projects. Another example is the origin of the German Body of Participants-concept; all participants choose a board from their midst that has full control over the project. This concept can be traced down a public need for civilians' participation. The Dutch procedure it still led by experts from outside the project area. In the light of the Central Europeans' scepticism toward government interference, it seems very sensible to apply the German type of democratic project-management. It furthermore makes top-down initiation of projects less intrusive, which may allows the government to set priorities on which regions optimisation of agricultural production can take place and which regions are to be preserved because of their scenic or environmental qualities.

### **Lesson 3: Don't underestimate the broadness of context-dependency**

When turning to the operational side of transplanting an instrument to another country, we want to know on what kinds of contextual factors an instrument's effectiveness depends. Comparative research, that detects and explains international variation, can provide vital information on why components in procedures are applied. As it turns out, explanatory research reveals a broader range of relevant factors than was initially expected.

## **6 Conclusions**

The Central European land fragmentation issue provides a well-documented real-life example of institutional transplantation and shows what pitfalls it can hold. The situation at hand consisted of agricultural difficulties in the East and seemingly suitable long-standing experience in the West. It is a complex issue, the urgency of which depends on the political level it is considered on, whether an economic or a social perspective is used, and how the newly acquired European status mixes in.

This paper argues that the connection between problem and appropriate instrument – being the pivotal challenge of institutional transplantation – failed in this case. Western researchers did not sufficiently 'try to lay aside their Western spectacles and outlook' (Heywood, 2000). Three main lessons can be drawn that may be applicable to all cases where planning experience is exchanged between countries with the aim to fill a void of experience on one of them. The conclusions suggest that there is a danger of inaccurately projecting a seemingly suitable instrument in the centre of the discussion, as happened with land consolidation in Central European structural policy. This pitfall is caused by (or may cause as a consequence) a failure of accurately defining and analysing the situation and optional solutions. Thirdly, the aspects of the context that determine what the instrument should look like, may be underestimated. The paper provides a way to reveal those aspects.

In the strategic analysis, this article opposes to the popular line of thinking. Similar views appear since the turn of the millennium. Graefen (2002), for instance, concentrating on Bulgarian agriculture, suggests that land banking deserves to have a higher priority than land consolidation. And Bromley (2000) stresses the importance of 'marketisation' of land assets in order to cope with problems of agricultural structure. Early 2004, a workshop was held an international workshop was organised on land banking as an instruments for land management in Central and Eastern European countries (FAO, 2004), leading to the Tonder Statement in which it is stated that 'land banking should be considered by CEE and CIS countries as an essential instrument, particularly in conjunction with land consolidation, for better rural land use and land management,...'.

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