

# **From Land Reform to Land Consolidation in Central and Eastern Europe**

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**Keywords:** Land reform, Land fragmentation, Land Consolidation, Land banking, Central and Eastern Europe

## **SUMMARY**

The countries in Central and Eastern Europe (CEE) began a remarkable transition from centrally planned economies towards market economies in 1989 when the Berlin Wall fell. Land reforms were high on the political agenda in most of the countries. In some countries, land reforms resulted in a complete break-up of the large scale collective and state farms, while in other countries the farm structures fundamentally remain the same as before beginning of transition. In many countries in the region, land reforms have resulted in farm structures dominated by small and fragmented farms, which are not competitive in the globalized economy. Drawing on the classical theory on land fragmentation, a recent PhD study has explored the coherence between the land reform approaches applied in 25 study countries and the outcome in form of farm structures and the fragmentation of both land ownership and land use. The results of this study are explained and discussed in the paper.

During the quarter of a Century, which has passed since the beginning of transition, most of the Central and Eastern European countries have introduced land consolidation instruments to address the structural problems with land fragmentation and small farm sizes. The PhD study has analyzed the experiences from introduction of land consolidation and land banking instruments in 25 countries in the region and provides the first full overview of the experiences achieved. The findings are summarized in the paper. Seven of the CEE countries already have ongoing national land consolidation programs while land consolidation instruments have been introduced in further 13 countries, which not yet have an operational programme. Based on the analysis, it can be expected that additional four to five countries in the region may have ongoing programmes within the next four to five years.

While land consolidation instruments are well on the way and still developing in the region, land banking instruments have largely failed, at least as tools for supporting land consolidation programmes. Based on the limited theory available, the analysis have revealed how limited land mobility is often hampering the outcome of land consolidation projects and also documented the need for land banking instruments in support of land consolidation programmes. Finally, the research has documented the need for a land consolidation model more suitable for the Central and Eastern European context than the classical models usually applied. Such a model, *integrated voluntary land consolidation*, is been presented in the paper.

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## 1. INTRODUCTION

The fall of the Berlin Wall in 1989 started the beginning of transition from centrally planned economy to a market economy in the countries in Central and Eastern Europe (CEE). Land reforms were high on the political agenda in most countries and together with restructuring of the large-scale socialist farms a key part of the overall agrarian reforms.<sup>1</sup> Different land reform approaches were applied in the different countries in the region with the main methods being the *restitution* of ownership to former owners and the *distribution* of agricultural land to the rural population in either physical parcels or land shares. Also the outcome of land reform vary between the countries. In some CEE countries, land reforms after 1989 have completely changed the farm structures that existed during the socialist era while in other countries the farm structures remain basically the same. As a result of the recent land reforms the ownership of agricultural land has become fragmented to a medium or high extent in almost all the countries. Also the land use has become fragmented in most CEE countries.

Most governments in the region have during the 1990s and 2000s recognized the need to address the structural problems in agriculture with land fragmentation and small farm sizes and land management instruments such as land consolidation have been introduced to address the problems. Some of the countries already have ongoing national land consolidation programmes, while others are in the process of preparation for operational programmes.

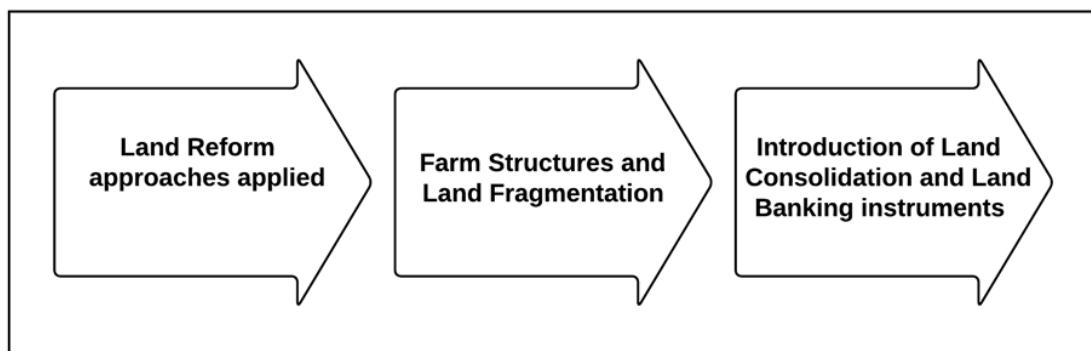


Figure 1: Logical sequence of PhD research on land reform and land consolidation in CEE.

This paper summarizes the results of a recent PhD study conducted by the author at Aalborg University in Denmark.<sup>2</sup> The main aim of the PhD work has been to conduct the first comprehensive and comparative study of land reform and land consolidation in 25 countries

<sup>1</sup> Lerman, Z. et al. (2004): *Agriculture in Transition – Land Policies and Evolving Farm Structures in Post-Soviet Countries*. Lexington Books, p. 3.

<sup>2</sup> Hartvigsen, M. (2015b): *Land Reform and Land Consolidation in Central and Eastern Europe after 1989 – Experiences and Perspectives*. Ph.D. Thesis. Aalborg University.

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in CEE in the following logical sequence: i) the coherence between applied land reform approaches in Central and Eastern Europe after 1989, ii) the outcome of land reforms in form of farm structures and land fragmentation and iii) the introduction of land consolidation and land banking instruments to address the structural problems in agriculture. This is illustrated in figure 1. The PhD thesis includes five peer-reviewed journal papers and two working papers published by FAO.<sup>3</sup> The study countries are displayed in figure 2.



Figure 2: The 25 study countries in Central and Eastern Europe.

<sup>3</sup> Hartvigsen, M., Gorgan, M. and Palmer, D. (2013): *Experiences with Land Reform and Land Consolidation in Moldova*. FAO Land Tenure Journal nr. 2/2012, 6-37.

Hartvigsen, M., (2013a): *Land Reform in Central and Eastern Europe after 1989 and its outcome in form of farm structures and land fragmentation*. FAO Land Tenure Working Paper 24.

Hartvigsen, M. (2013b): *Land Reform and land fragmentation in Central and Eastern Europe*. Land Use Policy 36 (2014), 330-341.

Hartvigsen, M. (2014a): *Land Mobility in a Central and Eastern European Land Consolidation Context*. Nordic Journal of Surveying and Real Estate Research. Volume 10, Number 1, 2014.

Hartvigsen, M. (2014b): *Land consolidation and land banking in Denmark – tradition, multi-purpose and perspectives*. Danish Journal of Geoinformatics and Land Management, Year 122, Vol. 47, 1-7 (2014).

Hartvigsen, M. (2015a): *Experiences with land consolidation and land banking in Central and Eastern Europe after 1989*. FAO Land Tenure Working Paper 26.

Hartvigsen, M. (2015c): *Integrated Voluntary Land Consolidation – A Third Model for Land Consolidation and Land Banking in Central and Eastern Europe*. Accepted for publication in Land Tenure Journal (forthcoming issue spring 2015).

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## 2. LAND REFORMS APPROACHES APPLIED SINCE 1989

As mentioned in the introduction, two fundamentally different overall approaches to land reform have been applied in the CEE countries after 1989; *restitution* of land rights to former owners and *distribution* of agricultural land to the rural population.<sup>4</sup> In all the countries, considerations on equity and historical justice have been important with a potential conflict between the objectives of “equity” and “historical justice”.<sup>5</sup> Restitution can establish historical justice but has often not led to equity while it is the opposite with distribution. As a general rule, the countries have either restituted land to former owners or distributed the state agricultural land to the rural population. The countries have usually not applied both restitution and distribution as a main land reform approach. The study of land reform has identified six land reform approaches applied in the region after the beginning of transition. Four of these six approaches are related to restitution; i) restitution to former owners, ii) withdrawal of formally private land from collective farms iii) compensation in state vouchers, bonds or money, iv) privatization through sale of state land, while two are related to distribution; v) distribution in physical parcels and vi) distribution in land shares.

In total, 16 of the 25 study countries have applied one or more of the restitution approaches as a main land reform approach, while seven countries have distributed land to the rural population as a main approach. Hungary had a unique land reform process and is the only country where approaches related to both restitution and distribution were applied as main approaches.<sup>6</sup> The main land reform approaches applied in the CEE countries are displayed in figure 3.

In 13 of the 25 countries, *restitution of land rights to former owners* has been among the main land reform approaches. The three Baltic countries, the Central European countries (except Poland and Hungary), Romania and Bulgaria and five of the seven countries in former Yugoslavia all have chosen to restitute land rights to the former owners. In these 13 countries, land was restituted in the former boundaries when possible. In many situations, however, the physical situations had changed since the land rights were lost (e.g. through urban development, infrastructure works etc.). When physical restitution was not possible, the claimants normally had the option to receive other state land instead of the lost property. In Lithuania, a *land reform land management plan* was prepared for each of 1,400 cadaster areas based on the claims for restitution.<sup>7</sup> In Lithuania, in total nearly 4 million ha were restituted to former owners and in total 715,000 persons claimed land to be restituted. None of the countries in former Soviet Union, except the three Baltic States, have restituted land to former owners.

<sup>4</sup> Hartvigsen, M. (2013b): *Land Reform and land fragmentation in Central and Eastern Europe*. Land Use Policy 36 (2014), 330-341.

<sup>5</sup> Swinnen, J. and Mathijs, E. (1997): *Agricultural privatization, land reform and farm restructuring in Central and Eastern Europe – a comparative analysis*. In Swinnen, J. et al. (Eds.): *Agricultural privatization, land reform and farm restructuring in Central and Eastern Europe*. Ashgate Publishing Ltd., Aldershot, p. 342.

<sup>6</sup> Hartvigsen, M., (2013a): *Land Reform in Central and Eastern Europe after 1989 and its outcome in form of farm structures and land fragmentation*. FAO Land Tenure Working Paper 24, p. 13-15.

<sup>7</sup> Daugaliene, V. (2004): *Preparation for Land Consolidation in Lithuania*. In *Modern Land Consolidation - Proceedings of a Symposium held by FIG Commission 7 on 10 and 11 September 2004 in Volvic, France*. FIG, p. 126.

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In the Czech Republic, Slovakia and Eastern Germany, the agricultural land and other property of the members of the collective farms were often not formally expropriated during the collectivization process and the owners remained in the land registers. The use rights, however, were lost to the management of the collective farms. After 1991, the formal owners or their heirs were in most cases able to take possession over their land in an informal procedure through *withdrawal of the land from the collective farms* without any formal or legal procedures.

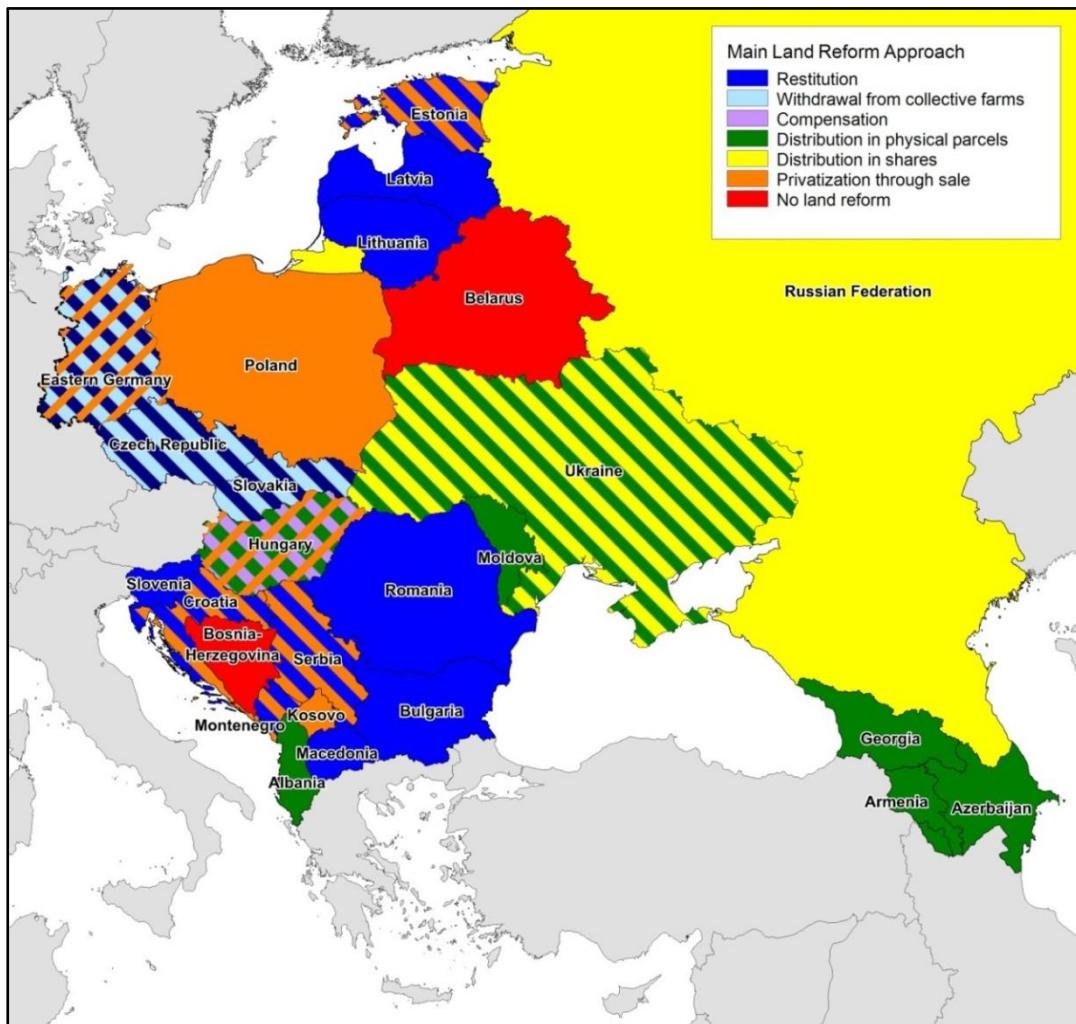


Figure 3: Main land reform approaches applied in Central and Eastern Europe.

The study has identified *compensation* as one of the applied land reform approaches in 11 of the 25 study countries. In the Baltic countries and the countries in Central Europe as well as in Romania and Bulgaria where land was restituted, the restitution procedures were accompanied by an option for compensation when physical restitution was not possible.

*Privatization of state agricultural land through sale* has been a main land reform approach in eight of the study countries and a secondary approach in additional five countries. In Poland and Kosovo, privatization through sale has been the only land reform approach applied. In the

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other countries, sale of state land has been applied in combination with other approaches, often restitution.

In seven of the 25 study countries, the state agricultural land was during the 1990s and the early 2000s privatized through *distribution of physical parcels* to the rural population as the main land reform approach. Of the countries in former Soviet Union, the state land was distributed in physical parcels in Armenia, Georgia, Azerbaijan, Moldova and Ukraine. In the latter three, physical distribution was conducted after first having distributed the land in paper land shares. Of the countries outside former Soviet Union, land was distributed in physical parcels as a main land reform approach only in Albania and Hungary and as a secondary approach in Romania.

In the Soviet Union, all agricultural land was owned by the state and used for large-scale farming in collective or state farms and typically organized with one large farm per village. Russia, Ukraine, Moldova and Azerbaijan privatized in the early 1990s most of the state agricultural land managed by the collective and state farms through the *distribution* of the ownership of the large corporate farms to former collective farm members and state farm workers *in form of paper land shares*.

Finally, two countries, Bosnia-Herzegovina and Belarus, have not yet in reality started land reform. In Bosnia-Herzegovina, where around 96% of the agricultural land was in private ownership and use in family farms throughout the Yugoslavia socialist era, transition reforms have been hampered by the war in the 1990s and by complicated administrative structures afterwards. In Belarus, private ownership to agricultural land is still only allowed to household plots, and large-scale corporate farms continue “business as usual”.

### **3. THE OUTCOME OF LAND REFORM**

Building on the work of Van Dijk,<sup>8</sup> the study found that it is essential to distinguish between land ownership and land use when land fragmentation and its impact on productivity and competitiveness of farms is discussed. Ownership fragmentation refers to the situation where the ownership of agricultural land is split between many owners of small and often badly shaped parcels. Land use fragmentation has to do with the actual use of the land. Despite fragmented ownership, the use of the land may be consolidated through lease agreement and the land utilized in large and regular fields. Excessive fragmentation of both land ownership and land use in a village in Albania is illustrated in figure 4.

Based on the study, the level of ownership fragmentation and land use fragmentation, respectively, in the 25 study countries after land reform is assessed on a scale ranking the fragmentation in the countries in three categories; low, medium and high. The ownership of agricultural land has as a result of the recent land reforms become medium or highly fragmented in all CEE countries except in Belarus, Ukraine and Russia. In Poland and in the seven countries in former Yugoslavia where the collectivization largely failed and more than ¾ of the agricultural land remained in both private ownership and use during the socialist era,

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<sup>8</sup> Van Dijk, T. (2003): *Dealing with Central European land fragmentation – A critical assessment on the use of Western European instruments*. Eburon. Delft, p. 15-24.

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the ownership of agricultural land is highly fragmented, but this is due to the pre-WWII farm structures and not the outcome of recent land reforms. The current level of fragmentation in the CEE countries is summarized in figure 5.<sup>9</sup>

When it comes to land use fragmentation, the situation is much more nuanced. In all seven countries, which distributed agricultural land in physical parcels as a main land reform approach (figure 3), the result has been excessive land use fragmentation. In these countries there is a big overlap between land ownership and land use as most of the agricultural land is farmed by the owners in small-scale family farms and leasing of land is not very common. It is characteristic, in these countries, that the rural population has few other employment opportunities than farming their own land.



*Figure 4: Excessive fragmentation of land ownership and land use in Terbuf Municipality, Albania. The illustration shows an excerpt of the orthophoto from one of the villages in the municipality with overlay of the cadastre map. In average, each family owns 1.72 ha distributed in 5.33 physical parcels after the land reform in the early 1990s. The parcels are often distributed in a distance of 3-4 km from the homestead.<sup>10</sup>*

A high level of land use fragmentation is not characteristic in countries where restitution and withdrawal from collective farms were the main land reform approaches. There are, however,

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<sup>9</sup> Hartvigsen, M. (2013b): *Land Reform and land fragmentation in Central and Eastern Europe*. Land Use Policy 36 (2014), p. 339.

<sup>10</sup> Ibid., p. 336.

exceptions. Land reforms have in Romania and Bulgaria resulted in land use fragmentation as excessive as where land was distributed in physical parcels. In these two countries, the rural population often also has few alternatives to farming as a way of living.

In the Czech Republic and Slovakia, the land reform approaches, with restitution to the former owners and withdrawal of agricultural land from the collective farms, resulted in extreme fragmentation of land ownership and in extensive co-ownership of agricultural land. In Slovakia, the average number of parcels per owner is as high as 20.59 and on average each agricultural parcel has 11.1 co-owners.<sup>11</sup> The land reforms, however, had very little impact on the land use and farm structures, which remain dominated completely by large corporate farms, often the successors of the cooperatives and state farms. In 2005 in the Czech Republic, as much as 86 % of the total utilized agricultural land was leased by corporate farms from the new owners, which often have little interest in farming.<sup>12</sup> Thus, despite extreme fragmentation of land ownership, the fragmentation of land use is low in the Czech Republic and Slovakia.

Region	Country	Level of fragmentation of ownership in agricultural land	Level of fragmentation of land use in agricultural land
Baltic countries	Estonia	Medium	Medium
	Latvia	Medium	Medium
	Lithuania	Medium	Medium
Central European countries	Czech Republic	High	Low
	Slovakia	High	Low
	Hungary	High	Medium
	Poland	Medium-high	Medium-high
	Eastern Germany	Medium	Low-medium
Balkan countries except former Yugoslavia	Albania	High	High
	Romania	High	High
	Bulgaria	High	High
Former Yugoslavia countries	Slovenia	High	High
	Croatia	High	High
	Serbia	High	High
	Bosnia-Herzegovina	High	High
	Montenegro	High	High
	Macedonia	High	High
	Kosovo	High	High
Western CIS countries	Moldova	High	Medium-high
	Ukraine	Low-medium	Low
	Russian Federation	Low	Low
	Belarus	Low	Low
Trans Caucasus countries	Armenia	High	High
	Georgia	High	High
	Azerbaijan	High	High

Figure 5: Current level of ownership and land use fragmentation in the 25 study countries.

<sup>11</sup> Juskova, K. and Muchova, Z. (2013): *Fragmentation of land ownership in Czech Republic and Slovakia as a factor of rural development limitation*. MendelNet 2013.

<sup>12</sup> Swinnen, J. and Vranken, L. (2009): *Land and EU Accession – Review of the Transitional Restrictions by New Member States on the Acquisition of Agricultural Real Estate*. Centre for European Policy Studies (CEPS). Brussels, p. 16.

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In the 15 of the 25 CEE countries with a high level of both ownership and land use fragmentation (figure 5), the farm structures are dominated by small subsidence or semi-commercial family farms restrained by fragmentation together with other constraints in an inefficient and costly production pattern. The small average size of agricultural holdings and farms represents together with the land fragmentation situation discussed above a considerable structural problem. In countries such as Albania, Romania, Bulgaria, Moldova, the seven ex-Yugoslavia countries and the three Transcaucus countries, the average sizes of arable agricultural parcels are around 0.3 ha and agricultural holdings often in a size of 1-3 ha.<sup>13</sup>

#### **4. EXPERIENCES WITH LAND CONSOLIDATION AND LAND BANKING SINCE 1989**

Some 25 years have passed since the Berlin Wall fell in 1989. Governments throughout Central and Eastern Europe have mostly recognized the need to address the structural problems in agriculture of land fragmentation and small farm sizes. This has led to the introduction of land management instruments such as land consolidation and land banking. The current status of the introduction of land consolidation in Central and Eastern Europe is illustrated in figure 6.

The PhD study has reviewed the introduction of land consolidation and land banking instruments in CEE in the first comprehensive and comparative research conducted.<sup>14</sup> It was found that seven of the 25 study countries (Poland, Slovenia, Czech Republic, Slovakia, Eastern Germany, Lithuania and Serbia) already have ongoing national land consolidation programmes. Two of these, Poland and Slovenia, already had a long tradition for land consolidation at the beginning of transition in 1989. In Poland, the first land consolidation law was adopted in 1923 and in Slovenia a law was adopted in 1957. In three countries (Czech Republic, Slovakia and Eastern Germany), land consolidation instruments and programmes were established in the early 1990s together with the launch of land reform. In Lithuania, a land consolidation programme was launched in 2006 after land reform with restitution to former owners was almost finalized. Finally, in Serbia a land consolidation programme was re-established in 2007 after modernization of the land consolidation instrument applied during the Yugoslavia era.

The driving factors behind the introduction of land consolidation in the seven countries can be divided into two sub-categories. In Poland, Slovenia, Lithuania and Serbia, land consolidation was mainly introduced as an instrument to address the structural problems in agriculture with fragmentation of both landownership and land use and small average sizes of agricultural holdings and farms, and thus as a tool to improve productivity and competitiveness of farms. In the Czech Republic, Slovakia and also to some extent in Eastern Germany, land consolidation has not been focused on improving the land use conditions but instead has

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<sup>13</sup> Hartvigsen, M., (2013a): *Land Reform in Central and Eastern Europe after 1989 and its outcome in form of farm structures and land fragmentation*. FAO Land Tenure Working Paper 24.

<sup>14</sup> Hartvigsen, M. (2015a): *Experiences with land consolidation and land banking in Central and Eastern Europe after 1989*. FAO Land Tenure Working Paper 26.

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focused more on addressing the fragmentation of landownership integrated with the land reform process and the building up of land administration systems (i.e. cadastre and land registration). Hence, in the Czech Republic, half the budget of land consolidation projects is spent on land surveying and improving land registration.<sup>15</sup> In these three countries, an additional driving factor has been the wish to establish a land management tool for improving nature, environment and landscape as well as local agricultural and rural development needs, e.g. new field roads and access to parcels that were left without road access after the land reform.

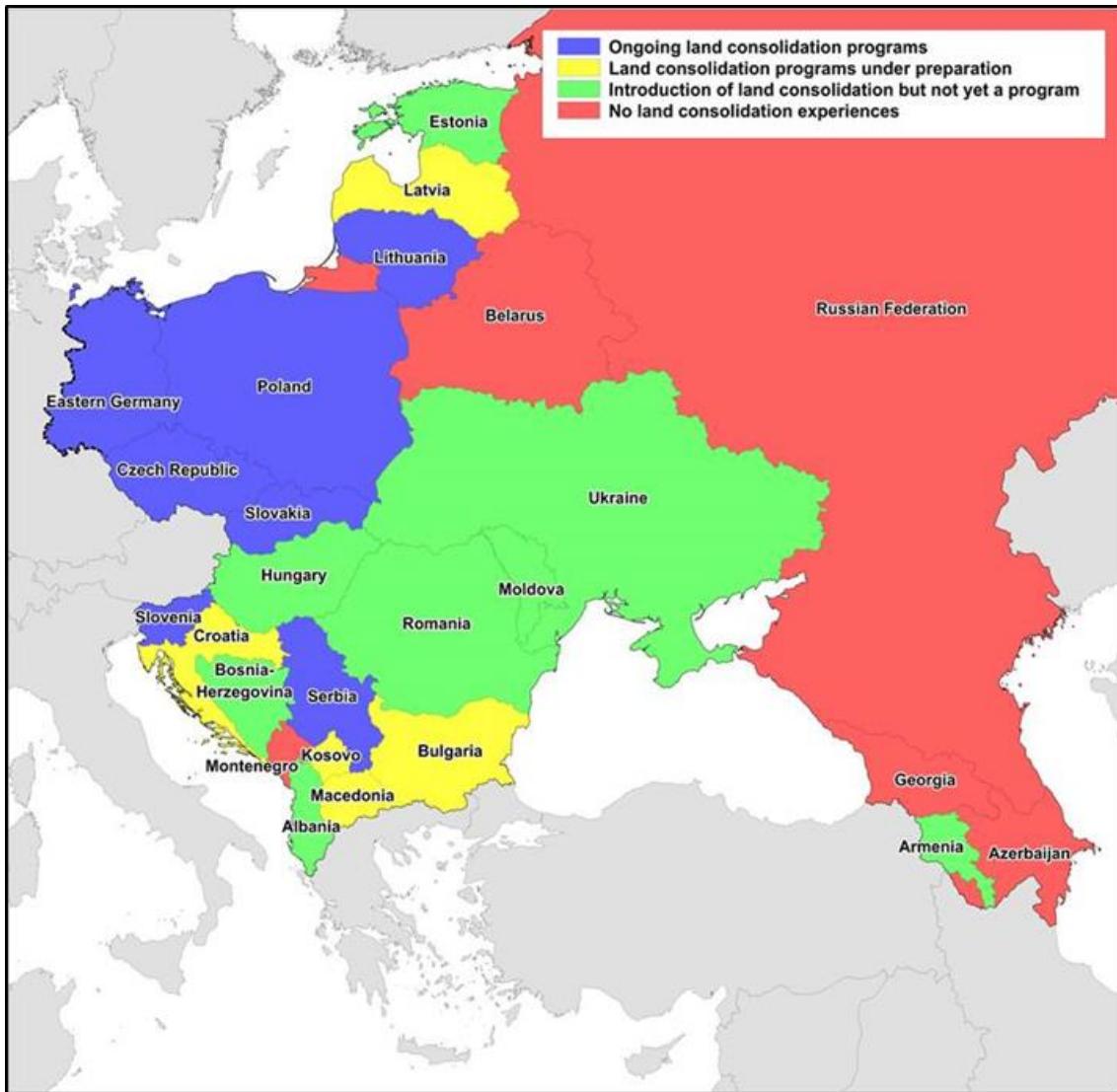


Figure 6: Status of the introduction of land consolidation in Central and Eastern Europe.

<sup>15</sup> Kaulich, K. (2013): *Importance and prospect of land consolidation in the Czech Republic*. ZfV – Zeitschrift für Geodäsie, Geoinformation und Landmanagement 3/2013, p. 197.

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For the six of the seven programme countries that have joined the EU, the membership and preparation for it opened the potential for funding of the land consolidation programmes as measures under the national rural development programmes and they have all used this opportunity. In Poland and Slovenia, EU accession has turned the existing land consolidation instruments in a direction more friendly towards nature and environment.<sup>16</sup> Serbia, the only non-EU member country with a national land consolidation programme, is funding land consolidation fully from the national budget.

Six countries (Poland, Slovenia, Czech Republic, Slovakia, Serbia and Eastern Germany), apply land consolidation in a compulsory approach where the projects are approved administratively when the majority of the landowners in the project area accept the project. In Eastern Germany voluntary projects are implemented in addition to the compulsory approach. Lithuania is the only country where land consolidation is applied only in a voluntary approach. In all six countries with a compulsory land consolidation approach, the participants in principle receive land of the same value as the land with which they joined the re-allotment planning. In Poland, a difference of within  $\pm$  three percent is accepted. The outcome of the projects is the consolidation of the parcels for each owner but the total number of owners remains basically the same. This means that the potential to use the land consolidation instruments to facilitate structural development for the agricultural holdings involved in commercial farming is not reached and that there is a potential for future development.

13 of the CEE countries have since the beginning of transition in 1990 introduced land consolidation instruments (yellow and green countries in figure 6) but are not yet having an operational land consolidation programme.<sup>17</sup> The driving factor behind introduction of land consolidation in these countries has mainly been land fragmentation and small farm and holdings sizes and the recognition of the importance of these structural problems in agriculture among decision makers. The typical introduction of land consolidation instruments in CEE has been through international technical assistance projects funded by donors and international organizations. In total, more than 50 international technical assistance projects have from the middle of the 1990s and onwards supported the introduction of land consolidation instruments in CEE. Projects have usually included the implementation of land consolidation pilot projects. In total, pilots have been implemented in 15 of the study countries of which 12 belong to the group of countries not yet with a programme and three to the group of countries already with ongoing programmes (figure 6). In all countries with pilots except in Estonia, the first pilots have been implemented with a voluntary approach. FAO has played a key role in the introduction of land consolidation in CEE through the preparation of policy guidelines<sup>18</sup>, implementation of field projects on land consolidation in so

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<sup>16</sup> Hartvigsen, M. (2015a): *Experiences with land consolidation and land banking in Central and Eastern Europe after 1989*. FAO Land Tenure Working Paper 26, p. 45-50.

<sup>17</sup> Ibid., p. 84-90.

<sup>18</sup> FAO (2003): *The design of land consolidation pilot projects in Central and Eastern Europe*. FAO Land Tenure Studies 6. Rome.

FAO (2004): *Operations manual for land consolidation pilot projects in Central and Eastern Europe*. FAO Land Tenure Manuals no. 1. Rome.

FAO (2008): *Opportunities to mainstream land consolidation in rural development programmes of the European Union*. FAO Land Tenure Policy Series 2. Rome.

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far eight countries in the region, and supporting the development of a strong informal community and network of land tenure professionals through the organization of a total of 15 regional workshop on land consolidation and related topics in the period 2002 – 2014. In recent years, the network has become known as the LANDNET.

The study reveals that five of the 13 countries with land consolidation experience but not yet a programme (Latvia, Bulgaria, FYR of Macedonia, Kosovo and Croatia) (figure 6), are coming close and may be expected to have operational programmes within the next four – five years if the preparation continues to go well. Based on the study, it can be observed that the biggest remaining challenges in these countries are to build up technical and administrative capacity to implement land consolidation projects in the field and to manage the programmes as well as to secure funding for the programme. The road from the first pilot to an operational land consolidation programme is often not straightforward. The study demonstrates very well how political support can emerge and vanish again over night, e.g. after elections. The need for further international technical assistance is these years moving from support to the first pilots to supporting the preparation of national programmes.

Finally, five of the study countries have so far had little or no experience with introduction of land consolidation and land banking (figure 6). The reasons for this vary between the countries.

The study has also reviewed the experiences with introduction of land banking in CEE. The conclusion is that land banking instruments, as compared with land consolidation instruments, have largely failed throughout the region, at least as a tool to support land consolidation instruments by making state land available for the re-allotment process and hence increase land mobility.<sup>19</sup> None of the seven CEE countries with ongoing land consolidation programmes support the land consolidation instruments with land banks as it is the case in Western European countries such as the Netherlands, Germany and Denmark. This is remarkable alone due to the fact that many countries in the region have a large stock of state land remaining after the finalization of land reform, which represents a unique possibility for improving farm structures through the combination of land consolidation and land banking. Experiences from both land consolidation programmes and pilots show that land consolidation projects, especially in a voluntary approach, are often hampered by low land mobility.<sup>20</sup> The failure of land banking is first and foremost a failure in the overall land policy in the countries and a lack of coordination between land consolidation agencies and agencies managing the state agricultural land.

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FAO (2012): *Voluntary guidelines on the responsible governance of tenure of land, fisheries and forests in the context of national food security*. Rome.

<sup>19</sup> Hartvigsen, M. (2015a): *Experiences with land consolidation and land banking in Central and Eastern Europe after 1989*. FAO Land Tenure Working Paper 26, p. 103-106.

<sup>20</sup> Hartvigsen, M. (2014a): *Land Mobility in a Central and Eastern European Land Consolidation Context*. *Nordic Journal of Surveying and Real Estate Research*. Volume 10, Number 1, 2014.

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## 5. PERSPECTIVES FOR LAND CONSOLIDATION AND LAND BANKING IN CENTRAL AND EASTERN EUROPE

The study has revealed that the CEE region has not yet fully found its own approaches to land consolidation and the instruments which, to a large degree, can be traced back to the Western European countries where they were inspired, i.e. land consolidation in Czech Republic and Slovakia is closely related with the German tradition and land consolidation in Lithuania with the Danish approach. In principle, there is nothing wrong in learning from the Western European experience. It is, however, remarkable how often the Central and Eastern European countries have ended up choosing between either a *comprehensive and compulsory land consolidation model* or a *simple and voluntary model*.

The study concluded that both these classical European land consolidation models have strengths but even more weaknesses when applied in a CEE context and both models are declined as fully suitable for the region.<sup>21</sup> A third model, *integrated voluntary land consolidation*, has been presented and discussed. The model is building on recent experiences of FAO in Armenia, Serbia, Albania and Bosnia-Herzegovina and of World Bank land consolidation pilots in Moldova and aims at combining the strengths of the two classical models.<sup>22 23</sup>

A main feature of the model is to integrate the re-allotment planning in a local rural development context because the development needs in the project communities are usually much bigger than what can be solved by land re-parceling alone.<sup>24</sup> The re-allotment process is optimized through various features such as working with a core and a secondary project area where land transactions outside the core project area are included when it can benefit the outcome of the re-allotment planning in the core area. This will make it easier to find good solutions for landowners with their main area of interest outside the core project area, which then increases land mobility and can lead to better results in the core project area as well. A second feature is the use of fixed parcels, which are not mobile in the re-allotment process (e.g. newly planted orchard, vineyard or parcels close to the homestead). Usually, the owner wants to consolidate other parcels around the fixed parcels. A third feature is the active involvement and motivation of all landowners in the project area, also those who may be absent from the community and motivate them to participate through individual interviews and negotiations. It is crucial to understand the incentives of each individual landowner in order to be able to offer the re-allotment solutions they will appreciate.

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<sup>21</sup> Hartvigsen, M. (2015c): *Integrated Voluntary Land Consolidation – A Third Model for Land Consolidation and Land Banking in Central and Eastern Europe*. Accepted for publication in Land Tenure Journal (forthcoming issue spring 2015).

<sup>22</sup> Hartvigsen, M. (2015a): *Experiences with land consolidation and land banking in Central and Eastern Europe after 1989*. FAO Land Tenure Working Paper 26, p. 80-82, 41-45, 72-77.

<sup>23</sup> Hartvigsen, M., Gorgan, M. and Palmer, D. (2013): *Experiences with Land Reform and Land Consolidation in Moldova*. FAO Land Tenure Journal nr. 2/2012.

<sup>24</sup> Hartvigsen, M. (2015c): *Integrated Voluntary Land Consolidation – A Third Model for Land Consolidation and Land Banking in Central and Eastern Europe*. Accepted for publication in Land Tenure Journal (forthcoming issue spring 2015).

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When land mobility is low, it is recommended to establish land banks to support the land consolidation instruments. The approach of the model is voluntary. This of cause means that the structural problems in the project area are not solved for those landowners who refrain from participating. The optimized re-allotment planning applied in the model as well as the use of a land bank is, however, intended to assist in increasing the number of participants and thereby increase the amount of structural problems that are addressed in a project. Hopefully, such model can be further developed and tested in the field in the CEE region in the years to come. The model most be adopted to local circumstances and tailor-made solutions must be developed in each country.

Finally, there is a need for policy recommendations on land banking in support of land consolidation instruments and especially for gaining more field experiences with the combination of land consolidation and land banking in the context of Central and Eastern Europe.

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## **BIOGRAPHICAL NOTES**

The author graduated as Chartered Surveyor from Aalborg University, Denmark. In his professional career, he was during 1991 – 2006 employed as land consolidation planner, project manager and international coordinator by the Land Consolidation and Land Banking Unit of the Danish Ministry of Food, Agriculture and Fisheries. Since 2006 he has been head of the Land Management Section at Orbicon A/S, a private Danish consultancy with a total staff of around 500 people. He has over the years been responsible for the implementation of a large number of land consolidation projects in Denmark.

Since 2000, he has worked as international consultant and team leader for FAO, the World Bank and others on projects in relation to land consolidation, land management and rural development. His international experience is mainly from countries in Central and Eastern Europe.

During 2012 – 2015, he has conducted a PhD study at Aalborg University and submitted in January 2015 the thesis “Land Reform and Land Consolidation in Central and Eastern Europe after 1989 – Experiences and Perspectives”.

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