Land reform and land fragmentation and consequence for rural development in the CEE/CIS countries

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After a decade of farm privatisation and restructuring, the organisation and structure of farming in most of Central and East European (CEE) and the Commonwealth of Independent States (CIS) has changed dramatically. Today a large portion of farming is carried out on private land in individual farms, with distinct differences between the two regions CEE and CIS.

Regardless of the dynamics of change, efficiency and productivity in terms of land, capital and labour still remains by far unsatisfactory, even declined in a number of countries in the middle of the 90ties. Land fragmentation has increased with few exceptions throughout the whole region, putting an additional burden on farm management. Implications for the rural areas tend to be dramatic in terms of ageing of population, out-migration to urban centres, increasing rural unemployment and strong economic differentiation among regions/sub-regions.

Certain districts and provinces develop fast into poverty zones, being marginalized within the national economies, disconnected from potential markets, deprived of state and private service providers and depending largely now on subsistence agriculture. Alternative income sources are scarce, former industrial “combined complexes” being substantially down-sized or even terminated. Forced collectivisation and all its side effects turned newly restituted, privatised farmers into very sceptical managers regarding collective action, which is the precondition for land consolidation on a voluntary scale, joint marketing, joint interest representation towards state administration and private companies on the agricultural supply or processing side.

Rural areas are in particular hard hit by a decreasing population in all CEEC countries with the exception of Albania and Bosnia. For example, the overall population of Bulgaria decreased from 1991 to 1999 by 405,500, or 4.71 percent. The tendency is ongoing and is stronger in the years after the 1996’ crisis and aggravated for marginal rural regions. “Ghost” and completely deserted villages are common proof of this development. Unused land claims a large portion, e.g. 25% in Estonia (Schank, 2001) of all arable land. Thus, even from the demand side, land markets are depressed and restricted to favourable regions in CEEC.

Land Reform as part of the agricultural transformation in the CEE and CIS

In particular in the CEE countries, privatisation of farms has been vigorously followed in the last decade, resulting in levels of closely 100 percent of arable land in Albania, Latvia and Slovenia to levels of 40 percent e.g. in the Czech Republic. Average level of privatised and restituted land ranges in the CEE region between 50 to 80 percent for all arable lands. However, land fragmentation has simultaneously emerged and constitutes one of the critical constraints for agricultural production. This is in particular true in a situation which is characterized by
A continued land insecurity

Title registration and access to titling is often still not yet accomplished in the CEE and might be realised for 50% of individual lands (as in the case of Bulgaria; FAO, 2002). Secure tenure rights are considered a pre-condition for economic development in several aspects: They can encourage investment in agriculture by assuring landholders that they will be able to reap returns on investment. They may also increase credit use for the same reason and be enhancing the collateral value of land. They might enable the transfer of land from less to more efficient uses through land transactions, be enhancing the certainty of contracts and lowering enforcement costs. They contribute usually to an increased political stability by providing small farmers with a more significant stake in society (Prosterman and Hansted, 1999).

Land markets do not sufficiently function

deeds markets are almost everywhere in their infancy and land sales – even where registration has been completed - negligible

Land leasing is uncommon and still insecure for the lessee and leaser, however promising according to the increase of contracts

Leasing of land by individual farms ranges between 2% of farms in Georgia to 17% in Poland (FAO, 2002) and often restricted usually to short-term contracts (1-2 years)

difficulties of marketing and market access, machinery and credit supplies; immobile labour markets

just to mention few more constraints for enlargement of farm sizes to viable economic entities

Even in countries like the Czech Republic, farm restructuring is considered necessary to continue for all farm types and not only for corporate farms. There are large numbers of individual farms that are loss making, with low factor productivity scores. During the last 10 years the share of households having off-farm employment was quite stable and has remained between 26 and 28 per cent (Davidova et.al., 2001).

In the CIS region individualised and privatised land amounts to a maximum in Armenia and Moldova (ca. 30 %), down to levels of 5-15% (Uzbekistan respectively Belarus/Ukraine). Average privatisation and restitution level regarding individual farms is approximately 15%, resulting in a very moderate land fragmentation. Farm enterprises (corporate farms) still constitute 85% of arable lands e.g. in Russia. Comparing the mean technical efficiency scores between individual and corporate farms, no significant differences can be analysed (Lerman, 2001) for countries such as Czech Republic, Bulgaria, Belarus, Ukraine, Moldova and Turkmenistan. Just in Hungary, individual farms show a distinct better efficiency.

There was a wide discussion, even in the CIS countries, that land reform should include farm privatisation and an increase in the area in individual land tenure, however guided by safeguarding an equal access to land and keeping in mind the long history of collectivisation in the CIS countries. Incentive problems of collective and state farms were obvious and had to be addressed. At the same time, fears of land speculation and land concentration in few hands of oligarchs are widespread, and, following the privatisation results in the Russian key industries, a real thread to rural communities. Supplementary, large portions of potential private farmers had and still have a high risk avoiding attitude and severe difficulties in becoming individual managers of farm enterprises (Lerman, 2001). CIS countries have chosen a share-based, restricted transfer model in contrast to the majority of CEE countries.
### Table 1. Reasons not to Become a Private Farmer (selected CIS)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Insufficient capital</td>
<td>75%</td>
<td>71%</td>
<td>52%</td>
</tr>
<tr>
<td>Difficulties with inputs</td>
<td>59%</td>
<td>84%</td>
<td>48%</td>
</tr>
<tr>
<td>Afraid of risk</td>
<td>56%</td>
<td>72%</td>
<td>33%</td>
</tr>
<tr>
<td>No wish to change life style</td>
<td>42%</td>
<td>58%</td>
<td>16%</td>
</tr>
<tr>
<td>No legal guarantees</td>
<td>40%</td>
<td>65%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Source: World Bank, Lerman 2002

### Table 2. Characteristics of Land Relations in Transition Countries

<table>
<thead>
<tr>
<th>CEE Countries</th>
<th>Potential Private Ownership</th>
<th>Privatisation Strategy</th>
<th>Allocation Strategy</th>
<th>Transferability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poland</td>
<td>All land</td>
<td>Sale of state owned land</td>
<td>None</td>
<td>Buy-sell, leasing</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>All land</td>
<td>Restitution</td>
<td>Plots</td>
<td>Buy-sell, leasing</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>All land</td>
<td>Restitution</td>
<td>Plots</td>
<td>Buy-sell, leasing</td>
</tr>
<tr>
<td>Hungary</td>
<td>All land</td>
<td>Restitution+distribution</td>
<td>Plots</td>
<td>Buy-sell, leasing</td>
</tr>
<tr>
<td>Albania</td>
<td>All land</td>
<td>Distribution</td>
<td>Plots</td>
<td>Buy-sell, leasing</td>
</tr>
<tr>
<td>Romania</td>
<td>All land</td>
<td>Restitution+distribution</td>
<td>Plots</td>
<td>Buy-sell, leasing</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>All land</td>
<td>Restitution</td>
<td>Plots</td>
<td>Buy-sell, leasing</td>
</tr>
<tr>
<td>Estonia</td>
<td>All land</td>
<td>Restitution</td>
<td>Plots</td>
<td>Buy-sell, leasing</td>
</tr>
<tr>
<td>Latvia</td>
<td>All land</td>
<td>Restitution</td>
<td>Plots</td>
<td>Buy-sell, leasing</td>
</tr>
<tr>
<td>Lithuania</td>
<td>All land</td>
<td>Restitution</td>
<td>Plots</td>
<td>Buy-sell, leasing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CIS Countries</th>
<th>Potential Private Ownership</th>
<th>Privatisation Strategy</th>
<th>Allocation Strategy</th>
<th>Transferability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russian Federation</td>
<td>All land</td>
<td>Distribution</td>
<td>Shares</td>
<td>Leasing, buy/selling dubious</td>
</tr>
<tr>
<td>Ukraine</td>
<td>All land</td>
<td>Distribution</td>
<td>Shares</td>
<td>Leasing, buy/selling dubious</td>
</tr>
<tr>
<td>Belarus</td>
<td>HH plots only</td>
<td>None</td>
<td>None</td>
<td>Use rights non-transferable, sell of HH plots dubious</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>HH plots only</td>
<td>None</td>
<td>Shares</td>
<td>Use rights transferable, sell of HH plots dubious</td>
</tr>
<tr>
<td>Kyrgyz Republic</td>
<td>Legally unsolved</td>
<td>Legally unsolved</td>
<td>Shares</td>
<td>Use rights transferable</td>
</tr>
</tbody>
</table>
Uzbekistan  None  None  Intra-farm  Use rights non- transferable
Turkmenistan  All land  None  lease  Use rights non- transferable
Tajikistan  None  None  lease  Use rights non- transferable
Armenia  All land  Distribution  Shares  Buy-sell, leasing
Georgia  All land  Distribution  Plots  Buy-sell, leasing
Azerbaijan  All land  Distribution  Plots  Buy-sell, leasing
Moldova  All land  Distribution  Plots  Buy-sell, leasing

Source: Csaki, Lerman, Sotnikov, 2000 and Sedik, 2001

In practice, the allocation of land shares, rather than physical plots, in many CIS countries has not been successful in establishing robust and secure tenure rights, however, in avoiding pre-mature land fragmentation. Ukrainian and Russian land share owners are not easily able to convert their paper shares into actual physical plots and buying and selling such shares is doubtful (Sedik, 2001). The other non-Caucasus CIS countries have even more stringent limitations on the transferability of land, which renders rights of tenure either unclear or questionable.

Analysing the Worldbank Agricultural Reform Index and Percent Change of Value of Agricultural Production per Worker (1992- 1998) an unclear picture develops. Countries with a comparatively low reform pace such as Belarus, Uzbekistan and Turkmenistan had neither productivity gains or losses, while countries transforming fast and with a similar dynamic such as Estonia (plus 32%), Hungary (plus 43 %) are facing very mixed results in Poland (no productivity gains), in Lithuania (minus 30%) and Latvia (minus 39%). Moderate reformers such as Russia, Ukraine and Kazakhstan, which have partially reformed the agricultural sector and are keeping a mixture of old and new institutions, without coherent and clear functions, perform worst in agric. worker productivity (minus 35-40%) (Sedik, 2001).

Obviously, speed and approach to land reform, degree of land fragmentation and historical background are just some of the factors influencing the agricultural development in the transformation countries, however are not sufficient to explain the diversity of results. More successful countries such as Hungary, Slovenia and Estonia seem to provide with their active rural populations, corresponding to preliminary rural strategies, an additional incentive for the young farming generation to invest into land consolidation, farm expansion and improved corporate farming. Market access to Western Europe and overall private investment into national economies are of equal importance.

Land consolidation efforts in CEE (exemplary)

Land fragmentation constitutes a severe problem throughout the CEE region, being exemplary demonstrated for Hungary by the table below.

Table 3. The structure of individual farms in Hungary, 1994

<table>
<thead>
<tr>
<th>Farm size (hectares)</th>
<th>Individual farms</th>
<th>Total land area</th>
<th>Average farm size, ha</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td>Hectares.</td>
</tr>
<tr>
<td>1 or less</td>
<td>978,101</td>
<td>81.4</td>
<td>231,665</td>
</tr>
<tr>
<td>1.1-5.0</td>
<td>173,182</td>
<td>14.5</td>
<td>378,912</td>
</tr>
<tr>
<td>5.1-10.0</td>
<td>28,723</td>
<td>2.4</td>
<td>198,303</td>
</tr>
<tr>
<td>10.1-50.0</td>
<td>18,922</td>
<td>1.6</td>
<td>359,588</td>
</tr>
<tr>
<td>50.1 +</td>
<td>2,087</td>
<td>0.1</td>
<td>214,737</td>
</tr>
<tr>
<td>Total</td>
<td>1,201,015</td>
<td>100.0</td>
<td>1,382,205</td>
</tr>
</tbody>
</table>

Source: Development of food production and processing industry, CSO, 1995.
The typical dualistic pattern of farming structures in CEE and CIS region are obvious. Middle-sized commercial farms with 5-25 hectares are in many countries viable economic enterprises, however only emerging slowly. These individual farms and down-sized corporate farms might be the future nuclei for a sustained regional rural development.

Exemplary for the more advanced transformation countries the Hungarian sample may also demonstrate the present level of reform with regard to land tenure policy:

- The intention to complete the privatisation of agricultural lands as soon as possible.
- The intention to facilitate the gathering of the fragmented parcels by supporting voluntary exchange of lands, or the buying of lands for merging purpose using the present agricultural subsidies framework.
- The adoption of the draft law on Land Consolidation by Parliament as soon as possible.
- The adoption of the draft law on National Land Fund.

It is expected that such tools as the new legislation for land consolidation, which regulates the share of costs among interested parties, including state provided long-term low interest credit rates, and the establishment of the National Land Fund (based on state-owned areas) will ensure the following:

- A more adequate parcel size, as required for viable and competitive family farming contributing to sustainable agriculture and rural development.
- The strengthening of the land market in general and provision of a stable market, based on reasonable transaction prices. (At the moment the average market price is about 150,000 HUF/ha).
- Promotion of the State’s intent to change land use patterns especially in areas endangered by frequent floods or soil erosion.

The two-year budget adopted by Hungarian Parliament in 2000 provides financial resources for the implementation of the land tenure policy programme with the expectation that draft laws will be adopted in 2001 (FAO 2002).

On the contrary, assessment of the legislative framework concerning land ownership and land consolidation definitely highlights the conclusion that there are no favourable conditions for land consolidation in Bulgaria. All laws dealing with these issues have negative or neutral influence for stimulating land fragmentation. The level of land fragmentation requires the adoption of a land consolidation law, which is not enacted or the amendments of all relevant land laws and regulations to provide legal basis for land consolidation and to encourage it.

Table 4. The influence of the existing legislation framework on land consolidation in Bulgaria

<table>
<thead>
<tr>
<th>Laws/Regulations</th>
<th>Impact on Land Consolidation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constitution of the Republic of Bulgaria</td>
<td>Neutral</td>
</tr>
<tr>
<td>LOUAL &amp; Regulations of its implementation</td>
<td>Negative</td>
</tr>
<tr>
<td>Inheritance Law</td>
<td>Negative</td>
</tr>
<tr>
<td>Land Leasing Law</td>
<td>Neutral</td>
</tr>
<tr>
<td>Cooperative Law</td>
<td>Neutral</td>
</tr>
<tr>
<td>State and Municipal Ownership Law</td>
<td>Negative</td>
</tr>
<tr>
<td>Cadastre and Property Register Law</td>
<td>Neutral</td>
</tr>
<tr>
<td>Regulation on the terms and conditions for establishing the current market prices of agricultural land</td>
<td>Negative</td>
</tr>
<tr>
<td>Ordinance for Land Settlement of the Indigent and Landless Population</td>
<td>Negative</td>
</tr>
</tbody>
</table>

Source: FAO 2002
Thus, legal coherence is not attended to or not obtained regardless of numerous efforts in the less favourable CEE countries. Legal harmonisation is considered a key to improved land consolidation and emergence of a middle-sized commercial sector.

To summarize, many CEEC countries have often focussed on the restitution of all pre-communist era rights. Privatisation of land has resulted in the formation of very small land parcels and unfavourable shapes (Riddel and Rembold, 2000). These very small parcels are very inefficient for agriculture and cannot be sold easily. Moreover, it is very difficult to get mortgage on the parcels. And even worse, land owners will not undertake consolidation processes as in Western Europe due to the cost and lack of financial support (Bogaerts et.al., 2001).

**Provision of agric. services and self-help initiatives**

In the absence of a (more comprehensive) rural development strategy, respectively in the absence of its implementation, Estonia demonstrates, how the farming community arranged for major services by self-help initiatives:

- Estonian Farmers Central Union was created in 1989 by 280 farmers. In 2001 there are approximately 5000 members. The Union operates through regional unions in every county. The objective of the union is the protection of the economic, social and professional interests, development of farming and support of co-operation. The union represents farmers common interests vis-à-vis the government, but also offers certain services. There are several electronic products the Central union offers. Electronic Farm Market provides selling and buying opportunities for farm produce and inputs.

- The Estonian Chamber of Agriculture and Commerce was founded in 1996 as a non-profit organisation. The main task is to balance out the different interests of the different parts of the food production chain, first of all primary producers and processors. The services offered by the Chamber are mainly falling in four groups:
  - Fair and exhibition services
  - Electronic sales of commodities
  - Food quality management
  - Information services

- Many product based associations were also founded or transformed from former co-operatives (milk, meat, grain, beer etc.). Many processing facilities were privatised to agricultural producer co-operatives but not the biggest market leaders.

- Farmers also established their advisory centre; the advisory system is run together with the government. The government in turn provided an advisory subsidy and established certification of advisers freely accessible to any farmer and paid jointly by farmers (own share 25%) and the government (Schank, 2001).

All these efforts demonstrate, how the target groups (farmers) have closed the gap by building ownership and made both ends meet by interrelating the effort on the side of service providers and the efforts of the service recipients, supported by the identification of intelligent service system solutions that keep efforts from both sides manageable. More detailed strategy solutions are specified in the GTZ Orientation Handbook: Regional Rural Development, Rauch, Barthels, Engel, 2001.
Challenges to overcome unfavourable farming structure and revitalize rural development

The establishment of an efficient land administration in the CEEC countries is considered as the key for consolidating fragmented farming systems and to assist in the emerging of a medium sized commercial farming sector with economically viable individual and efficient corporate farms. Pre- and post-processing agricultural industries are dependent on increased agricultural production with certified qualities. In many marginalized regions, agro-industries and profit making farms are the backbone of a regional economic development due to lack of alternatives in other industry and service sectors.

Furthermore, land administration systems of accession countries in CEE have to meet in few years the standards of EU in order to fulfil minimum requirements for accession. This applies in particular to the understanding of the role of land markets, mortgage systems and the importance of land consolidation. Regardless of numerous conferences on the topic of land administration (e.g. International Conference on the Development and Maintenance of Property Rights, The World Bank and the EU, UNECE, Vienna, 1999) joint efforts by the Western countries remain scarce. Appropriate, process-oriented solutions designed together with CEEC countries are the exception.

Instead, enforced transfer of existing guiding farming ideologies - individual private farms as only accepted farm system – has been strongly promoted by Worldbank and USAID. Wide ranges of different corporate, privatised forms of agriculture after suspension of collectives and state farms were strongly discouraged, regardless of their proven competitiveness with individual farms (FAO, 2001). Regardless of historical developments in the CEE countries with respect to their specific cadastral systems and institutions, many land administration pilot projects being undertaken in Eastern/South Eastern Europe and Caucasus by Western countries and the Worldbank are, in one sense, another form of colonisation (Bogaerts, 2001). In particular in the CIS countries the historical and attitudinal preconditions of the farming population have been widely neglected, in particular by USAID but also other western donors, contributing to enormous internal conflicts and a stagnating land policy (Worldbank, USAID, 2001).

Many cadastral systems advised promote directly multi-purpose cadastres instead of preparing a sound and accurate base for a simple cadastre, being designed to incorporate additional digital data while growing. It has to be emphasized, that an efficient cadastre is still the core for any operational land administration and functional land consolidation. This implies hard work and requires experience, dedication and sustained financial support over a long period (Boegarts et. al. 2001).

Regardless of many other shortcomings in establishing more efficient land administration systems (available budgets, restructuring of institutions due to decentralisation and transformation, role of Land Funds respect. over-supply of arable lands on markets, incoherent legislation, missing service orientation by institutions etc.) the embedding into comprehensive rural development strategies is missing in particular.

Thus, coordination structures are often not in place to focus efforts of line ministries, regional, provincial and communal administration and donors involved in agricultural, processing, land administration and rural infrastructure projects. Regional/state specific strategies for economic development are not formulated. Structures and pre-conditions are often not met to request efficiently for EU program funds (PHARE, TACIS, SAPARD).

There seems to be a severe lack of capacity to develop appropriate rural strategies, coordinate and supervise isolated pilot efforts, respond to EU rural support programs and develop as a basis an appropriate, future-oriented land administration system. The very multidisciplinary nature of land management (surveying, mapping, law, valuation, planning,
administration, environmental management, international institutions, public policy, land use planning, institutional development etc.) is not reflected in respective curricula at high schools and universities in the region. Few universities have just started to offer comprehensive and holistic master studies for land management, just to name one the TU Munich as co-organiser of this conference.

Conclusions

The unfinished, often stagnant privatisation process in CIS countries and the introduced share system enables these countries presently and unexpectedly, by designing intelligent and evolutionary land administration systems, to avoid widely land fragmentation and uneconomic agrarian structures, allowing and supporting a wide range of privatised, corporate farm models, individualised private farms and homestead farming. Special legal emphasis should be rendered to former communal/collective pasture lands to avoid open access situations and restrict utilisation.

EU accession and Caucasian countries are under severe time and political pressure, both internally and externally, to establish functioning land administrations and to reverse negative rural developments such as aging of population, out-migration, decrease in agricultural production/purchasing power and increasing unemployment. Immediate and concerted action is vital. Countries are confronted with numerous guidelines and administrative options, pilot approaches in cadastres, recommendations from international conferences and donor interests. Land commissions and special, inter-line ministry task forces might solve the necessity for coordination and policy coherence. Making the EU Cohesion Fund work with a variety of instruments seems to be the key for reversing the negative trends in rural areas.

Samples from Estonia demonstrate, how self-help initiatives from the farming population might be valuable for a minimum level of service provision in rural areas. They might even initiate more comprehensive rural strategies from governments and states to be formulated and put into action. Marketing of regions and cooperation among regions might be the prime strategy to establish functioning networks of expertise, expert personnel and even joint pooling of financial resources.

Countries from CEE and CIS, regardless of their numerous encountered problems and severe short-comings in land administration, should be self-confident and outspoken enough to select donors, reject actively donors being unwilling or unable to adjust to the country demands, insist on harmonized (cadastral) systems and technical solutions and insist on joint approaches and coordinated efforts. Diversity of donor offered solutions and systems imposes a large burden on the countries and their technical and planning capacities. In many instances, donors contribute to the piling up of problems and to a stagnating situation in land management.

Vision for CEE – a first trial

Who owns the vision and who contributes?

Some ideas:
  o Land consolidation with Western methods is a clear choice and chosen for pilot regions, however, the consolidation process is expansive, very time consuming and difficult to arrange in order to meet equality and democratic standards, balanced exchange of land and interests and efficiency criteria.
  o Simplified alternatives exist, but how far are they recognising equality and accuracy? How far are they going to be accepted?
o Is the enabling of lively rental markets a better choice to follow? They are progressing and might contribute much faster to intended allocation results than enabling the conditions for functional land markets and Land Funds.

o Is land banking presently practised and foreseen a better and faster solution for the allocation process? What are necessary conditions for a fair access by young farmers?

o Are personal credits (through EU instruments?) to young, interested commercial farmers a better alternative in comparison to land/rental market interventions?

Vision for CIS – a first trial

o Is the investment security for any private investor (legal frame and enforcement) an essential precondition for any further rural development?

o Is the alternative, to open markets for corporate farm products by EU the key issue?

o Or would the dynamics of an open share market for private investors change the agric. efficiency fast and favourable?

o Or do the CIS countries have to wait, until CEE has started the massive agricultural structural change and productivity increase? Would the technical and management expertise then trickle further east? Would the private investment follow from Poland to Belarus and Ukraine?

o Does a short cut exist, avoiding fragmentation and all negative aspects of privatisation into small farm sizes? What is socially and culturally acceptable?

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