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Hans Jörgensen
Umeå University, Sweden
&
Zsuzsanna Varga
Loránd Eötvös University, Budapest, Hungary

**Diverging Roads from the Soviet Kolkhoz-Model:
Inside and outside the Soviet Union**

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Introduction

The large-scale Soviet agricultural production model, based on nationalization of land and the merger of private farms into kolkhozes and sovkhozes, became one of the most significant features of the planned economic system. With the widening Soviet influence after World War II, this system was spread into the satellite states of CEE (Central and Eastern Europe). It is well known that the performance of socialist agriculture was unsatisfactory throughout the socialist period and the USSR had to spend large and increasing sums of hard currency on food imports. However, in spite of the spread of the Soviet system, the planned economies were far from homogenous. The diversity inside and outside the Soviet Union is worthwhile exploring. We have thus chosen to focus upon two of the most (in relative terms) productive agricultural regions of the Soviet bloc: Estonia, which here represents a Soviet Republic and Hungary which represents a Soviet satellite state.

The aim of this study is to explore two cases of the reorganization and structure of agricultural production within the Soviet bloc. This implies that the Estonian and Hungarian agricultural development – and their “relative success” – will be explored and compared in relation to the Soviet kolkhoz system. In order to accomplish this, the time frame will basically cover the events from World War II up to the period of economic and stagnation in the Soviet bloc during the 1970s and 80s, added with a historical background from the interwar period.

Our ambition is to apply what is commonly known as *encompassing comparison*.¹ We thus focus on similarities and differences between the historical units – in our case the agrarian economies of the Soviet bloc.² For this reason our examination will merge the descriptive and analytical levels.

To what extent are the Estonian and Hungarian cases comparable? Estonia was annexed by the USSR in 1940 and became a formal Soviet Republic the same year. However because of the interlude of German occupation 1941-44 a full-scale introduction of the USSR model was postponed until after WW II. Hungary, which had sided with the losers in the WW II, fell under the Soviet sphere of influence as a result of the preliminary agreements between the Allied Powers. This was followed by the installation of a Moscow friendly government and the Sovietization of political and economic life from the late 1940s. Both countries were thus subjugated to Soviet policies, planned economy, forced collectivization, and the orientation towards the CMEA-market.

Our long-term synchronic perspective will thus cover the processes of forced collectivization, reorganization of farm-work, and management. For the comparison, specific national institutional legacies, the role of informal political resistance, management, and the long-term effects on the Soviet agricultural policy will be considered. The paper is based on the results of our archival research, literature, and to some extent statements from interviews.

The first part of our paper is dealing with the interwar property relations in Estonia and Hungary. In the second part we try to summarize the essence of the Stalinist system of agriculture. The third part focuses on the export of the Stalinist model into Estonia and Hungary. In the fourth part we try to show the main features of the deviation phase. At this stage, however, conclusions are tentative and short. For a brief understanding we also added a comparative matrix as an appendix, which constituted the basis for our initial comparison.

¹ Encompassing comparison places different instances at various locations within the same system, on the way to explaining their characteristics as a function of their varying relationships to the system as a whole. Tilly Charles: *Big Structures, Large Processes, Huge Comparisons*. New York, Russel Sage Foundation 1984, p. 83.

² With regards to terminology we have chosen to denote the Hungarian collectives as *cooperatives* instead of kolkhozes since these farm units – from an organizational point of view – were different from the general kolkhoz model applied in the USSR. The term *collective farm* is also widely used in the literature.

I. Before the Soviet system: interwar property relations in Estonia and Hungary

In the aftermath of the dissolution of empires and World War I, land reforms were carried out in many parts of Europe. The area stretching from Finland in the north down to Greece in the south was by the League of Nation's experts denoted the Agrarian Reform Zone.³ Most of these land reforms took place in countries which were to end up as Soviet satellite states after World War II. The Estonian land reform 1919-26 was one of the most radical in a contemporary international perspective. It covered all lands belonging to the Baltic-German nobility, the church and the state. Only a tiny share (3.5 percent) was left intact out of which a majority was municipal land.⁴ In fact, already from the early 1900s land transfers had been frequent in the northern Baltic provinces, however, by expropriating and redistributing the lands of the Baltic-German nobility, individual peasants farming was able to dominate.

One specific element of the Estonian land reform was its emphasis on the principle on viability, which meant that it transformed the Estonian rural landscape from being dominated by Baltic-German landlords into a structure based on independent peasant proprietors and so-called viable family farms. On average this implied farms of roughly 24 ha per unit with the possibility to feed a family with two horses.⁵ Another aspect of this was that a majority of the farms were to be found in the interval between 10 and 50 ha. According to Taagepera's calculations of Gini-index, the Estonian farm-size distribution was closest to the perfect line of equality among the fifty countries compared.⁶ By 1939 the land reform had transformed the Estonian rural landscape into a distribution that is shown in table 1, which became the objective for change at the time for Soviet annexation in 1940.

With regards to market adaptation, The Tsarist Baltic provinces, dominated by Baltic-German estates, deviated from Russia in general. The construction of a railway to St. Petersburg in the 1870s along with the increased demand for agricultural products in urban areas enhanced the expansion of dairy farming in present day Estonia, Latvia and Lithuania. In contrast to many other parts of Tsarist Russia, land sales were also more frequent from the early 1900s leading to increased peasant farming. Meat and milk production underwent further expansion during the short interwar independence, partly due to the land reform and not least because of a failed re-industrialization policy, interrupted trade relations with the USSR, and a necessary turn towards increased refinement and marketing of agricultural products. Supported by the state this led the Estonian peasants to search for new markets in Western Europe. In this regard the expanding producers' cooperative associations, owned by the peasants and supported by the government, became major actors. These associations created a relatively competitive force, e.g. on the British butter market, up to the point when the severe decline in world market prices during the Interwar Depression took on, which hit all agrarian producers hard.⁷

³ See, Roszkowski Wojciech, *Land Reforms in East Central Europe after World War One*, Warsaw, Institute of Political Studies, Polish Academy of Science, 1995, p. 5.; Brassley Paul: Land reform and reallocation in interwar Europe. In: Congost Rosa & Santos Rui (eds.): *Contexts of Property in Europe. The Social Embeddedness of Property Rights in Land in Historical Perspective*. Turnhut, Brepols, 2010. pp. 145-164.

⁴ Jörgensen Hans, "The Inter-War Land Reforms in Estonia, Finland and Bulgaria: A Comparative Study", *Scandinavian Economic History Review*, Vol 54. No. 1, 2006, pp. 64 ff.

⁵ Köll Anu Mai, *Peasants on the World Market. Agricultural Experiences of Independent Estonia 1919-39*, Stockholm, Almqvist & Wiksell, 1994, p. 43.

⁶ Taagepera Rein, "Inequality Indices for Baltic Farm Size Distribution, 1929-1940, *Journal of Baltic Studies*, No. 3, 1972, pp. 26-28

⁷ See: Köll, 1994, pp. 63-73. See also: Jörgensen Hans, "Competition and Market: Swedish Views on Estonia's Agricultural Development and Butter Export 1918-39. *Acta Historica Tallinnensia*, No. 3. 1999, pp. 116 ff.

Table 1. Farm-size distribution in Estonia 1939 (in percent and numbers)

Size	Percent of holdings	Share of land	No of holdings
1-5 ha	15.8	12.7	22 051
5-10 ha	17.0	15.2	23 869
10-20 ha	28.8	27.3	40 288
20-30 ha	18.2	19.4	25 415
30-50 ha	15.5	17.4	21 704
50-100 ha	4.4	7.3	6 215
>100 ha	0.3	0.7	442
Total	100	100	139.984

Source: *Konjunktuur*, No. 64/65 1940, pp 105-106 & 129.

In interwar Hungary conditions were different (see table 2). In the beginning of the 20th century, Hungary was part of the Austro-Hungarian Monarchy. Following the end of the World War I, supported by revolutions, this dualistic state disintegrated. As a consequence of the Trianon Peace Treaty, signed in 1920, Hungary's territory, excluding Croatia, was reduced by two-thirds and its population by three-fifth.⁸ Hungary was thereby transformed from a medium-sized European state into one of the continent's small nations. Hungary belonged to the agrarian industrial countries of Europe: 53% of the active population worked in agriculture in 1930.⁹ A majority of the Hungarian farm units were so-called dwarf farms with insufficient land for supporting the rural families. In contrast, to Estonia the large-scale estates were the dominating.

Table 2. Farm size distribution in Hungary 1935 (in percent and numbers) transformed from Cadastral Yokes

Size	Percent of holdings	Share of land	No of holdings
< 2.9 ha	72.5	10.1	1 184 783
2.9-5.8 ha	12.5	9.2	204 471
5.8-11.6 ha	8.8	12.6	144 186
11.6-29 ha	4.5	13.5	73 663
29-58 ha	0.9	6.5	15 240
58-116 ha	0.4	5.0	5 792
116-580 ha	0.3	13.2	5 202
580 <	0.1	29.9	1 070
Total	100	100	1 634 407

Source: Miklos Szuhay, 1998, p.192

Hungary inherited from the nineteenth century an ill-proportioned land distribution and consequently great masses of farmers had become landless or nearly so. The bourgeois revolution of 1918 incorporated land reform in its program, but the law – declaring expropriation of estates over 290 hectares – was never enacted. Instead of a land reform, the Hungarian Bolshevik Government in 1919 saw the road to agricultural development through the socialization of large and medium estates (above 43 hectares) and by means of creating producer's cooperatives on these estates. The attempts of two revolutions intending to reform

⁸ Romsics Ignác, *Hungary in the Twentieth Century*. Budapest, Corvina and Osiris, 1999, pp. 117-125

⁹ *ibid.* p. 156.

the country's land issues left bitter memories and great disappointment among the peasants. The conservative regime coming to power after the Hungarian Soviet Republic, also implemented a land reform in 1920. It concerned a mere 8.5% of the arable land (approximately 650 000 hectares) of the country. This proportion was in fact smaller than the 27 % redistribution of arable land in neighbouring Rumania and 16% in Czechoslovakia after World War I.¹⁰

The Hungarian land reform had, alas, left the predomination of large estates untouched. The new Hungary became Europe's large estate country in its most extreme sense. Nearly half of the country's arable land was owned by a few dozen of aristocratic families, yet the proportion of non-aristocratic large estates was high. As a contrast, only about 20% of the total arable land belonged to the small peasant holdings below 5.8 hectares which made up some four fifths of all agricultural holdings. This highly ill-proportioned land distribution explains why only about 30% of the agrarian population was able to support a family from their own land. About 70% of the farmers consisted of people with very little or no landed property who, consequently, were compelled to do wage labour. Thus, with the relative increase of rural labour surplus, the rural poverty also increased since the industry was unable to absorb the redundant agricultural workers.¹¹

The world economic crisis severely aggravated the problems of the Trianon economy. The process of economic stabilization, based largely on reconstruction loans from the League of Nations as well as from Western countries could not solve the basic structural problems. The core of this problem was that surplus production in agriculture had made Hungary largely dependent on foreign markets.¹² The fall in price paid on the agricultural export markets thus affected the economy in a negative way. Throughout the interwar period more than three-quarters of the Hungarian export was based on agrarian products. Thus, exports constituted an essential share of the national income. The average fall in price paid for agricultural export products therefore gave a reduction of 60% of the share of national income that was derived from exports.¹³ In addition, the protectionist policies applied worldwide after 1929-30 narrowed down the possibilities for any agrarian export oriented economy to cope with the Depression. All this meant that agriculture was exposed to a deep and prolonged crisis for which the recovery was weak before the end of World War II.

¹⁰ Szuhay Miklós, Evolution of Hungarian Agriculture during the Inter-War Years (1918-1945), In: Gunst Peter (ed), *Hungarian Agrarian Society from the Emancipation of Serfs (1848) to the Re-privatization of Land (1998)*. New York, CUP, 1998. pp. 178-179.

¹¹ Gunst Peter, Hungarian Agriculture between 1919 and 1945, In: Estók János (ed), *History of Hungarian Agriculture and Rural Life, 1848-2004*. Budapest, Argumentum Publishing and Museum of Hungarian Agriculture, 2004, pp. 202-208.

¹² Kopsidis Michael: Agricultural development and impeded growth. The case of Hungary, 1870-1973. In: Lains Pedro & Pinilla Vicente (eds.), *Agriculture and Economic Development in Europe since 1870*. London & New York, Routledge, 2009. pp. 286-310.

¹³ Berend Iván T., & Ránki György, *Economic development in East-Central Europe in the 19th and 20th centuries*. New York/ London, CUP, 1974, pp. 242-264.

II. The Stalinist model

In order to capture the essence of Stalinist system¹⁴ of agriculture, we need to start from the late 1920s when the Communist Party within the context of “capitalist encirclement” made a decision to carry through industrialization as rapidly as possible. This involved the issue of capital accumulation.¹⁵ As Stalin explained in his speech, at the July 1928 Central Committee plenum, a rapid, state-generated industrialization drive had to be based on the forced accumulation of internal, mainly peasants, resources for capital funding.

According to Stalin, the situation in the USSR demanded that the peasantry not only paid ordinary taxes, direct and indirect to the state, but also relatively high prices for industry goods they needed. Secondly, they should not receive the full value of the agricultural products they sold. This was an additional tax put on the peasantry in the interests of the developing industry, which served the whole country, including the peasantry. This was seen as something like a “tribute” or a surtax which was necessary to extract temporarily in order to sustain and further develop the rate of industrial growth. Needless to say Stalin maintained that this situation was unpleasant. But he also meant that: “we would not be Bolsheviks if we curtailed this fact and neglected that our industry and our country, unfortunately, cannot manage this growth without the additional taxes paid by the peasantry.”¹⁶

According to Viola (2013), the Bolsheviks did not aim for forced collectivization as such immediately. Rather, the policy was based on the necessity to procure more grain for both feeding the urban proletariat as well the export market in order to purchase industry goods and technology necessary for rapid industrialization of Soviet Russia.¹⁷ With the increasing problems of grain procurements, the organizing of large-scale non-private agricultural production units, by means of collectivization, seemed to be a possible way out.¹⁸

Lenin, which prior to the revolution did not give much thought to the organization of farming, was in 1918 inspired by the ideas of the Socialist revolutionaries. Even though he claimed that a transition period was needed for persuading the peasants about the advantages of collective farming. However, even though not in a detailed way, already 19 February 1918 a decree: “On the socialization of land” envisaged the “development of collectivized farming”. The decree also stipulated that state farms should be established on the land of former estates. During the summer of 1918 legislation that favored the foundation of collectives and a charter for the formation of agricultural communes were therefore developed, which eventually led to the failures of the so-called “War-Communism” characterized by fixed and forced deliveries from the peasants. The turn towards the New

¹⁴ When considering the issue of the existence of the ‘Soviet model’, we agree with Nigel Swain’s interpretation that: until the death of Stalin the ‘Soviet model’ was a Stalinist model. However, after 1953 this model changed and became a ‘moving target’, a changing set of features, due to the Khrushchev reforms. Swain Nigel, “Decollectivization politics and rural change in Bulgaria, Poland and the former Czechoslovakia”, *Social History*, Vol. 32, No. 1, (Feb 2007), pp. 21-26.

¹⁵ It has been debated in the scholarly literature whether a capital transfer took place at all. One may correctly make the point that the net transfer was actually much less than expected. On balance, it appears from the very low level of farm incomes during the thirties that as much as possible was transferred out of agriculture. However, there were also considerable transfers in the opposite direction (e.g., industrial inputs, training of managers, high urban consumer food prices on the free, as distinct from the state-owned, markets, etc.). See: Merl Stephan, “The role of agriculture in Soviet industrialization”. In: Wädekin Karl-Eugen (ed.): *Communist Agriculture - Farming in the Soviet Union and Eastern Europe*, London/New York, Routledge, 1990, pp. 3-22.

¹⁶ For the original text in Russian: See Stalin, I, *Sochineniia*, 13 vols. Moscow, 1946-52, p. 160.

¹⁷ Viola Lynne, “Soviet Collectivization as State Building”. In: Arnd Bauerkämper – Constantin Iordachi (eds.): *The Collectivization of Agriculture in Communist Eastern Europe: Comparison and Entanglements, 1930-1980*. Budapest – New York, CEU Press, 2013. (forthcoming)

¹⁸ Fitzpatrick Sheila: *Stalin’s Peasants: Resistance and Survival in the Russian Village After Collectivization*. New York/Oxford, OUP, 1994, pp. 103-151.

Economic Policy after 1921, thus became a way to make up for these mistakes. However, after Stalin successfully had outmaneuvered the Leftist and Rightist contesters and thereafter adopting the Leftist program of collectivization, NEP was ended and followed by the introduction of the ad-hoc planned economy and forced collectivization.¹⁹

It could therefore be questioned: why did not the state farms (sovkhozes) become the leading and dominant organizational form of socialist agriculture? Wädekin argues that it would have been too costly for the state to pay for both wages and capital inputs. He also added that: "...such "state socialism" was not in line with the ideology."²⁰

During the late 1920s and early 1930s, the peasants of the Soviet Union tried to resist both the forced deliveries and collectivization. The forced collectivization 1929-34 can therefore, as shown by Allen (2003), be denoted "Preobrazhensky in action", This initial proposal of Preobrazhensky, adopted by Stalin, argued in favor of collecting taxes and a transfer of capital from the peasants in order to pay for industrialization. Prices were cut for the producers and substantially added with turnover-taxes before the foodstuffs were sold to the consumers. Towards the late 1930s this exploitation of the collectivized peasantry gave resources for the Stalinist industrialization.²¹

The *sovkhoz* sector expanded during and after collectivization. The state farms were mainly organized for grain farming in steppe regions, for technical crops such as sugar beet, and for specialized animal breeding. But on the whole their numerical importance remained small in comparison to the *kolkhoz* sector until the mid-1950s. They achieved greater significance in relation to state procurements, because they specialized in productions for the state distribution and processing network. Sovkhozes also received more capital inputs, and employed less labor per unit produced. They were financed from the state budget, which received the profits, but also had to cover for the losses. The farm workers and employees of the sovkhozes were paid regular.²² In contrast to the *kolkhoz*, the *sovkhoz* was owned by the "state of the people" and for this reason was considered a higher form of social property. The *kolkhoz* was also "social," it is true, but socialized only within the collective of its members. It was "group property" and thus on a "lower" level of socialization.

From the beginning of collectivization, the *artel'* was made the model organization of collective farming. Increasingly, the *artel'* was called *kolkhoz* (from *kollektivnoe hozyaistvo*, i.e., collective enterprise), which became the name of the Soviet collective farm. Its structure was determined by a Model Charter.²³ The Charter adopted on 17 February 1935 became compulsory for all collective farms which meant that each *kolkhoz* had to adopt its individual charter almost literally along the Model Charter's lines, only allowing for minor variations related to regional or local conditions. Although the Model Charter was changed in executive practice during the 1950s and the 1960s, it remained formally valid up to 1969. What were the main features of it?²⁴ As the land in 1917 became "governmental property of all the people", the private land ownership disappeared in Soviet Russia. In the course of the collectivization the *kolkhoz* received the right of free permanent utilization. Out of this land fund, the *kolkhoz*

¹⁹ Wädekin, 1982, pp.11-13.

²⁰ Wädekin, 1982, p. 15.

²¹ See Allen Robert. C, *Farm To Factory. A Reinterpretation of the Soviet Industrial Revolution*. Princeton/Oxford, Princeton University Press, 2003, pp. 173-175.

²² Nove Alec, *An Economic History of the U.S.S.R.* Hardmondsworth, Penguin Books, 1975. pp. 238-239.

²³ Nove, 1975, pp. 240-244.

²⁴ Davies Robert W., *The Soviet Collective Farm, 1929-1930*. London, Macmillan, 1980, pp. 1-14 & 56-67.; Trapeznikov, *Borba partiji bolsevikov za kollektivizaciju szelszkogo hozjajsztva v godii pervoj sztalinszkoj pjatiletki*. Moscow 1951. pp. 122-131., 185-197., 255-257.

allotted plots for private use to the member households.²⁵ The regulations on private agricultural activities of members constituted an extensive and important part of the Charter. The plots were rather small (although in some regions exceeding 0.5 hectare). Even more important was the right to keep livestock in sufficient numbers for the household's own consumption and even for some sales on the free market.²⁶

The kolkhoz members had been forced to hand over their tools, implements and draught animals to the kolkhoz and do all work outside the household plots collectively, in brigades or in work groups. Each member had a fixed amount of work to do, and they could only obtain a household plot under these conditions. "Labor day units," were both used for measuring various kinds of work as well as a measure for evaluating the work accomplished which served as a basis for the remuneration system. (The income of each member had been determined by the number of work units accomplished.)

It was clear that the *kolkhoznik* (the kolkhoz peasant) did not receive a fixed wage. As a consequence of the so-called 'remainder principle' the members could only get their shares after fulfilling the financial obligations to the state and after contributing to the pooling of resources of production.²⁷ The 'remainder principle', thus, guaranteed the absolute priority of state interests. As a result, the incomes derived from the work on the kolkhoz were scarce and not fixed. The underprivileged position of the kolkhozes was not only concerning the low wages or incomes. In addition, kolkhozes were discredited from owning their own machinery and therefore they were dependent on the services of the MTS (Machine Tractor Stations).²⁸ The MTS, became the extended arm of the state and could control and interfere in both production and decision-making processes on the kolkhozes. This was due to the fact that the MTS had an interest in maximizing output. During the 1950s the MTS became the major instruments for channeling grain deliveries to the state by means of payments in kind from the kolkhozes. Of no less importance was political control, which was exerted in association with the services carried out.

III. The export of the Stalinist Model into Estonia and Hungary

When dealing with comparisons of collectivized agriculture, there is no need to construct any 'ideal type' of collective farm since Stalin's decision in 1935 provided a concrete and prescriptive model for *The Model Charter for Collective Farms*.²⁹ In the newly annexed western territories (the Baltic Soviet Republics and the western parts of Belorussia, Moldavia, and the Ukraine) the Post-War collectivization was preceded by land reforms.³⁰ Then in 1948/49, after failed voluntary association among the peasantry, forced collectivization coincided with the beginning of mass collectivization in the Soviet-occupied Eastern Europe.

However, the reorganization of farming that took place in CEE from the late 1940s was not identical with the Soviet model since land was not formally nationalized. In spite of this

²⁵ Coming from the old Russian and Tsarist peasant law, the property rights of the kolkhoznik were vested with the household (in most cases identical with a family living together). The house and premises, animals, implements, and usage rights on the plot belonged to the household, not to individual persons.

²⁶ See more on this, Wädekin Karl-Eugen, *The Private Sector in Soviet Agriculture*. Berkeley, Los Angeles, London, University of California Press, 1973. (2nd ed.)

²⁷ The collective crop and animal output in kind is to be disposed of in the following way (by order of priority): state delivery obligations and seed loans, payments for work done by the MTS (cf. below), other contract obligations, seed and fodder funds for the next year's production cycle.

²⁸ Nove, 1975, pp. 181-184.

²⁹ Swain Nigel, "Eastern European Collectivisations Compared 1945-62". In: Bauerkämper Arndt & Iordachi Constantin (eds.): *The Collectivization of Agriculture in Communist Eastern Europe: Comparison and Entanglements*. Budapest, CEU Press, 2013. (forthcoming)

³⁰ Berend & Ránki, 1974, pp. 186-195.

juridical difference the title to the land became relatively similar since there were numerous regulations on how the individual land brought into the collectives could be sold or transferred further. In fact, the only legal transfers on a larger scale were those concerning land handed over from individuals to the collectives or to the state.³¹ The general effects from forced collectivization in CEE were thus similar to the ones in the USSR after 1929, implying peasant resistance and a steep fall in production, which necessitated a private capitalist concession: the introduction of private plots. Here, however, another formal legal deviation appeared in relation to the USSR. In Poland, Hungary, GDR, and Czechoslovakia these small units – up to 0.6 ha/family could – with different restrictions – be individually owned.³²

Referring to the amalgamation of kolkhozes in Soviet agriculture from the 1950s and the problems of decision making, price policies, prescribed delivery quotas, and not least the role of the private plots, Dovring (1965) concluded: “Legally the kolkhoz is a cooperative; politically it is a State farm. Economically it comes close to the concept of share cropping”.³³

Many of the cooperatives in CEE that were spontaneously formed before the introduction of the Soviet model more resembled the democratic producer’s associations in contemporary Western Europe. However, from the late 1940s both decision making and autonomy were gradually circumvented by legal changes and waves of forced collectivization aiming at transforming cooperatives into kolkhozes. Nevertheless, after Stalin’s death a turn towards a new agricultural policy in the Soviet Union and in CEE was visible. The changes under the reign of Khrushchev after 1956 concerned both the organization of production and management. This also enabled for country specific deviations that can be understood as expressions of different institutional legacies. We assume here that these legacies were decisive for the long term development within the Soviet bloc.

Forced Collectivization in Estonia

Estonia was forced to allow for the establishment of USSR military bases and troops in September 1939. In June 1940 the Red Army started with full occupation and a puppet government was installed, which was confirmed in office by the rigged parliament elections held on 14-15 July. On 21 July the new parliament voted in favor for an application implying that Estonia would join the USSR and become a formal Soviet republic. The day after President Päts had to resign and within eight days he was deported. Finally, on 6 August Moscow accepted “the Soviet dictated Estonian request”.³⁴

Soviet annexation and control in June 1940 was matched by a land reform stipulating a maximum of 30 ha per farm unit together with a proportional reduction of animals, machinery and assets. Along came deportations of more than 10 000 people 13-14 June 1941, foremost concerning the urban elite.³⁵ However, the real Sovietization of farming was not possible to carry out due to the war and not least the German interlude of occupation (June 1941 to

³¹ Wädekin Karl-Eugen, (Everett M Jacobs ed), *Agrarian Policies in Communist Europe – A critical introduction*, Allanheld, Osmun Publishers, New Jersey, 1982, p. 41.

³² These restrictions were e.g., concerning “personal ownership for own use” in the GDR and Czechoslovakia In Hungary, return of the plot to the owner if leaving the collective and free disposition and exchange was the model in use after 1959. A similar legal model was applied in Poland. See Wädekin, 1982, pp. 71-79.

³³ Dovring Folke, *Land and labour in Europe in the Twentieth Century – A Comparative Survey of Recent Agrarian History*, Martinus Nijhoff/The Hauge, 1965, p. 199.

³⁴ Taagepera Rein, *Estonia – Return to Independence*, Westview Press, 1993, pp. 60-63, Quotation, p. 63. See also and Hiden John & Salmon Patrick, *The Baltic nations and Europe. Estonia, Latvia and Lithuania in the 20th Century*, London, Longman, 1994, pp. 113-114

³⁵ Misiunas Romuald J & Taagepera Rein, *The Baltic State: Years of Dependence 1940-1990*. Westview Press, Boulder Colorado, Westview Press, 1993, p. 42.

September 1944). The German occupation did in fact did not alter the imposed Soviet policies and termination of ownership rights to any major extent. Nazi-Germany was mainly using Estonia as a means to feed their troops but without aiming for any formal changes.³⁶

According to Kõll 2013, the German ambition was to incorporate the Baltic territories as parts of the greater Germany. Industries, banks and businesses that had been nationalized under the Soviet occupation became integrated units of German War planning. This was the case for the nationalized land and agriculture as well. However, initially the Nazi administration supported peasants to take back and cultivate land that had been transferred to new settlers under the Soviet occupation 1940-41. This however, did not strengthen the previous owners' ownership rights, but towards the end of German occupation during 1943-44 some cases of privatization appeared because of the German setbacks in warfare and the needs for support from the Baltic peasants.³⁷

The campaigns against so-called speculators began in 1940 aiming at punishing those who profited from the transition from the market economy to the ad-hoc command economy. These people – often just petty traders – were among the first to be deported only a few days before the German interlude began in 1941. When the Red Army returned in 1944 they continued with the land reform, persecution of German collaborators and deportations.³⁸

Ten collective farms had been formed during the first USSR occupation 1940-41, but these were not revived after the German interlude. A main problem was the lack of general support for Soviet agricultural policies. Thus, after 1944 more emphasis was put on the land reform than was the case in 1940-41. Land expropriation now served the purpose of supplying land to Red Army veterans, the land-less, tiny farms, and to the increasing numbers of sovkhoses and newly established MTS. In other words this prepared for the later collectivization by means of a transitional stage.³⁹

During the first Post-war years the USSR strategy was to increase the size of middle-sized peasants and to establish sovkhoses, which was a uniform pattern in the entire so-called western borderlands that had been under German occupation. But this policy also aimed at increasing the amounts of land and assets in the hands of the authorities – the so-called state-land fund – as a way of both restricting the size of peasant holdings and to create a land reserve for the forthcoming Soviet-style farming expansion. Expropriation of land and assets was relatively easy accomplished in 1945 however, the redistribution was much slower.⁴⁰

The *kulaks* became a specifically targeted group for speeding up the transition towards collectivization. In Estonia, the concept of a kulak or a kulak household was just as elastically interpreted as it was in other parts of the USSR in the early 1930s. Landowners, shop keepers, anyone with incomes from commercial activities or supporters of capitalist activities, could be deprived of their assets and become prosecuted. From the summer of 1947 step-wisely increasing taxes, confiscation of assets, and propaganda were the main strategies for

³⁶ The Swedish newspaper *Svenska Dagbladet* reported that the German apprehension of these relations was based on the fact that the war had started 22 June and at this point in time no private property existed. The Germans, which regarded themselves as the liberators and as the true judicial descendants to the Soviet Union in the Baltic States, maintained that restitution of previous nationalized land and farmsteads was not of any priority. Re-privatization could, however, be possible in the long run". "The German State takes over all property in the Baltic States", *Svenska Dagbladet (SvD)*, 25 October, 1941

³⁷ Kõll Anu-Mai, *The Village and the Class War – Anti-Kulak Campaign in Estonia*, Central University Press, Budapest-New York, 2013, pp. 9-10.

³⁸ Mertelsmann Olaf & Rahi-Tamm Aigi, "Soviet mass violence in Estonia revisited", *Journal of Genocide Research*, 11(2-3), June-September, 2009, pp. 310-12.

³⁹ Raun Toivo. U., *Estonia and the Estonians*, Hoover Institution Press, Stanford University, 2001, p. 177.

⁴⁰ Marples David. R., "Toward a Thematic Approach to the Collectivization Campaign in the Soviet West (1948-56)", *Canadian Slavonic Papers*, September-December 1991, p. 293. See also Misiunas & Taagepera (1993), pp. 95-96

collectivization. However, the process of collectivization was slow. Therefore district executive committees were obliged to set up so-called kulak lists in order to collect the increased agricultural taxes which the local level was responsible for delivering. In this context a variety of definitions of kulaks appeared when the orders were to be executed.⁴¹

Kõll's study from the County of Viljandi also shows that it was quite common for farm households that were accused of so-called kulak-status to make appeals at the district level. These appeals were often supported by letters from neighbors and friends despite the potential risk it mean to show this support. Letters of denunciations were in fact much less frequent, which Kõll interpreted as a sign of weak support for the hunting of kulaks.⁴² Initially the appeals also led to large numbers of acquittal, but from the spring of 1948 things worsened. All the appeals and letters of support seemed to bring embarrassment for the party officials which led to the instructions that no official was allowed to write any letter in support of the accused.⁴³

The first Post-war kolkhoz in Estonia was founded in September 1947. Yet, from the summer of 1947 up to 20 March 1949 only 8 percent of the total farms had chosen to join the kolkhozes on a 'voluntary' basis. Between 1947 and 1948 the estimated income tax rate for kulaks increased from 40 to 75 percent. For ordinary farmers the corresponding levels were between 30 and 35 percent. Still, collectivization was met by reluctance. In fact, in districts with larger numbers of farmers classified as kulaks collectivization was faster since higher taxes and confiscation deprived them the means for subsistence. However, it was only a matter of time before the smaller farms had to give up as well.⁴⁴

Collectivization did not have any major breakthrough until the large-scale deportations began in March 1949. In fact, the poor farmers were the most reluctant to give up their land. While many households labeled with kulak-status tried to avoid taxes and persecution by simply move away, the smaller peasants were more stubborn.⁴⁵ In this context, the mass deportations of around 21 000 Estonians took place. It aimed at speeding up collectivization, eliminating enemies to the state, and to reduce the resistance to Soviet policies.⁴⁶ As Taagepera (1980), wrote: "Farmers escaping deportation had little choice but to join the guerilla, even if they had not supported them beforehand." The immediate outcome was a quick increase in numbers of collectivized farms since people deeply feared deportation.⁴⁷ Already by the end of the year collectivization had reached 80 percent even though there were substantial regional differences. In the south eastern areas where the guerilla resistance was the strongest collectivization only reached 30 percent by July 1950. For the Estonian republic as a whole, only 8 percent of the individual farms remained in the end of 1950.⁴⁸ By the summer of 1952 the process of collectivization was more or less completed. The total numbers of deportees from 1949 amounted to between 50 and 60 000 people – or eight to twelve percent of the population.⁴⁹ Deportations and resistance created huge losses of human capital and the initial years of collectivization led to declining agricultural output.

⁴¹ Kõll, 2013, p. 20-22.

⁴² Kõll, 2013, p. 91-92

⁴³ Kõll 2013, p. 122.

⁴⁴ Misiunas & Taagepera (1993), pp. 96-99. For a more in-depth account, see Rein Taagepera, "Soviet Collectivization of Estonian Agriculture", *Journal of Baltic Studies*, Vol. X No. 3, 1979, pp 263-81.

⁴⁵ Taagepera Rein, "Soviet Collectivization of Estonian Agriculture: The Deportation Phase", *Soviet Studies*, Vol. 32. No. 3, 1980, pp. 379-80.

⁴⁶ Mertelsmann & Rahi-Tamm (2009), pp. 315-16.

⁴⁷ Taagepera (1980), pp. 386-87

⁴⁸ Misiunas & Taagepera (1993), pp. 102-103.

⁴⁹ Raun, (2001), p.179

Collectivization Campaigns in Hungary

After 1945 Hungary's international situation and political manoeuvrability was decisively influenced by the fact that the country had sided with the losers in the war, and that it fell under the Soviet sphere of interest as the result of the preliminary agreements between the Allied Powers.⁵⁰ By 1949, all power was concentrated in the hands of the Hungarian Workers' Party (HWP). On 3 March 1949 at the session of the Politburo the first secretary of the HWP, Mátyás Rákosi stated that, in the course of the first five-year plan (1950–1954), the transition was to be accomplished from small peasant farming to large-scale farming.⁵¹

As things turned out, a major conflict would emerge between a socialist state, trying to push through collectivization and private farmers committed to preserving their property rights. The reason that this conflict proved to be particularly sharp in Hungary, a country based on large estates in the interwar period, was that the land reform of 1945 had brought a radical change to the structure of landed property. As the large and middle-sized estates were redistributed, the number of small-holders grew significantly up to 1941. While almost 46 percent of the agricultural population belonged to the agrarian proletariat and 47 percent were small scale farmers prior to the land reform, the following land reform altered these proportions to 17 and 80 percent respectively.⁵² It was therefore not surprising that only a small group of landless peasants and dwarf holders were attracted to collective farming in the early 1950s. The great mass of the newly created class of land-owning peasants had no intention whatsoever of giving up their land.

By way of response to this situation the representatives of the governing leadership sought to set limits to commodity production as well as to market relations; and they launched an attack on private property, especially landed property. The first victim of these violations was the wealthy 'kulak' stratum of the peasantry.⁵³ The measures used by the state in the campaign against the 'kulaks' included economic and administrative pressure as well as the use of physical force, involving arrests, imprisonment and deportation to labour camps.⁵⁴

Although the strength of the wealthy peasantry was shattered as a result of the state's agrarian campaign, the broad mass of the peasantry could neither be forced nor persuaded to abandon individual farming.⁵⁵ Only the landless and some of the poorest peasants showed any interest in collective farming. It was on the Great Plain, predominantly in Békés, Csongrád, Hajdú and Szolnok counties, that the first collective farms were formed. The vast majority was reluctant to join the co-operatives voluntarily. What they had seen as POWs or heard about the Soviet kolkhoz-system that had emerged had created profound distrust.⁵⁶ While it

⁵⁰ Romsics, 1999, pp. 220-224.

⁵¹ According to the plans of the party leadership 60 percent of arable land was to be cultivated by co-operatives, and 6 per cent by state farms, by 1954.

⁵² Szakács Sándor, "From Land Reform to Collectivization (1945-1956)" in: Peter Gunst (Ed) *Hungarian Agrarian Society from the Emancipation of Serfs (1848) to the Re-privatization of Land (1998)*, New York, CUP, 1998, pp. 257-298.

⁵³ Magyar Országos Levéltár [Hungarian National Archive, hereafter MOL] M-KS 276. f. 54. cs. 14. ő. e. A Titkárság előterjesztése a 'kulák' meghatározására [Proposition of the Secretariat on the definition of the 'kulak'] 14 October 1948.

⁵⁴ Varga Zsuzsanna, Agrarian development from 1945 to the present day. in János Estók (Ed),: *History of Hungarian Agriculture and Rural Life, 1848-200*, Budapest, Magyar Mezőgazdasági Múzeum – Argumentum, 2004, pp. 221-252.

⁵⁵ MOL M-KS 276. f. 53. cs. 81. ő. e. Jegyzőkönyv a PB 1951. augusztus 23-i üléséről. [Minutes of the PC of HWP] 23 August 1951. Agenda 1. Gerő Ernő tájékoztatója a mezőgazdaság helyzetéről [Ernö Gerő's Notice on the Situation of Agriculture].

⁵⁶ The first two attempts of collectivization generated three types of producer co-operatives: Type I, II and III. The differences between these co-operatives were related to the amount of common production and the manner in which the harvest was shared. On the type I farm the members sowed jointly but harvested individually and kept their harvested produce for themselves. On the type II farm, the members cut the harvest on an individual

was predominantly the burdens on the 'kulak' farms that increased in 1951, the burdens imposed on all peasant farms rose dramatically from 1951–52 on.⁵⁷

The subjugation of village residents to arbitrary and coercive measures did not result in open resistance, but the negative consequences grew by leaps and bounds. Hundreds of thousands abandoned agricultural work, more and more land became left uncultivated, the total agricultural output declined, and so did the productivity of land. Thus while there was a catastrophic decline in private peasant farming, the newly established and continuously expanding co-operative farm sector was incapable of compensating for the shortfall in production.⁵⁸ By the turn of 1952–1953 the situation in the agrarian sector had become threatening in its consequences for the whole of Hungarian society.

The changes that followed Stalin's death in March 1953 at once aroused expectations and lessened the danger of a violent explosion of resentment. In Hungary these changes were associated with the person of Imre Nagy. The 'New Course' he announced in July 1953 involved a re-assessment of Stalinist agrarian policies and their partial correction. The subsequent directives of Nagy's government significantly reduced the peasantry's tax burdens and compulsory deliveries. They also decreased the uncertainty involved in agricultural production. And, what was even more important, they allowed peasants to leave the collectives legally.⁵⁹

These changes were welcomed, especially in the countryside where their impact was most directly felt. But soon it became obvious that the rejoicing was premature. Hardly two years had passed when, in the spring of 1955, Nagy was forced from office and Mátyás Rákosi regained power. Rákosi and his supporters quickly reverted to the pre-1953 policies. For the agrarian population this meant an increase in taxes and deliveries as well as a second collectivization campaign. This campaign caused a severe crisis situation by the summer of 1956.

IV. The phase of deviation from the Soviet model

Large parts of the USSR had suffered under Stalinism since the late 1920s. While collectivization of the Baltic peasantry was completed in the mid-1950s, this process was far from being accomplished in Hungary. Total agricultural output in Estonia did not reach the pre-war level until around 1960. The Estonian communist party had less than 3000 members in 1949 and very few of these lived in the rural areas where thousands of small kolkhozes

basis but then pooled it. Type III groups instead operated on an entirely co-operative basis implying distribution of the surplus in relation to the amount of work performed. There was also an independent producer co-operative which was organized on the same lines as the type III co-operative group. During the third collectivization campaign (1959-61) this latter type became the dominant one because it was organized nearly the same way as the Soviet 'artel'-type co-operative.

⁵⁷ MOL M-KS 276. f. 53. cs. 83. ő. e. Jegyzőkönyv a PB 1951. szeptember 20-i üléséről. [Minutes of the PC of HWP] 20 September 1951. Agenda 1. A Mezőgazdasági és Szövetkezeti Osztály javaslata a termelőszövetkezeti gazdaságok megerősítésére [Proposition of the Agricultural and Co-operative Department on the strengthening of collective farms].

⁵⁸ The quantity of agricultural production during the five-year plan—with the exception of the positive year 1951—did not reach the levels of the last pre-war year, 1938. The production of bread grains, which was of crucial importance in public alimentation, showed similar tendencies. Animal stocks exceeded pre-war levels, by a few percentage points, for the first time in 1950.

⁵⁹ Az MDP Központi Vezetőség 1953. június 27-28-i határozata. [Resolution of the Central Leadership of HWP, June 27-28, 1953] in *A Magyar Dolgozók Pártja határozatai, 1948-1956*. [Resolutions of HWP, 1948-1956] (Budapest, Napvilág, 1998, pp. 188-206.

were established. Locally elected kolkhoz chairmen were rare since party members were predestined for these positions and local communists were often “simple activists”.⁶⁰

In Hungary, as it is generally known, the revolution in 1956 was an important turning point for the country’s political history. It is, however, by no means part of the common knowledge that, following the revolution, the agrarian policy led to changes and corrections unprecedented within the socialist block.⁶¹ The Kádár-regime, rising to power with Soviet military aid, was compelled to take these measures. They wanted to make up for a lacking political legitimacy by means of increased living standards. Fulfilling the aims living-standard policy at that time (and for a long time to come) depended mainly on food supplies.

Hungary towards agrarian and economic reforms

In order to settle things between the party-state and the agrarian population in Hungary, the severe tensions generated by the former agrarian policy had to be eased first. The most significant measure was the abolition of compulsory deliveries as it occasioned a sharp break with state Stalinist model of agriculture. The abolition of compulsory delivery system removed one of the pillars supporting the planned economy in agriculture and Hungary was among the first socialist countries to carry out this measure.⁶² As peasants were no longer obliged to part with their produce, the state could only buy if it offered a realistic price. Instead of using economic compulsion, the state was establishing commercial relations with the agricultural producers, peasants and cooperatives, and trying to give them an interest in selling. It meant that market forces applied, albeit to a limited extent, in one of the main sectors of the post-1956 Hungarian economy.

The relationship between the regime and the peasantry came under stress again when collectivization, as a result of pressures from Moscow, remerged as a policy at the end of 1958. The Party's leaders were faced with a dilemma and in order to make sure that agricultural production did not suffer from the collectivization, they had to make concessions to the peasantry. The cooperative members managed from that ‘bargaining’ position to be able to keep more cattle on the household farms, to do share-cropping on the collective farm, to receive their premium in kind etc. But these sober, traditional peasant demands created conflicts with the Stalinist model on the *kolkhoz*. Since the party leadership did not want to get into an ideological dispute with the leadership of the Soviet Communist Party; they satisfied themselves with selective appropriations of the changing Soviet model. This process could be interpreted as a learning process from the peasantry. It was not a conscious decision, but rather a result of internal as well as external pressures. In previous studies by Varga, it has been argued that the special Hungarian model of collectivised agriculture was evolving as form of ‘collective puzzlement’.⁶³

An important part of this complex ‘learning process’ was that it did not end with the termination of collectivization in 1961. Rather, it was the start of learning from the West. Hungary began to import modern agricultural technology, not only machinery for cultivation, but also closed production systems from the Western Countries, especially from the U.S. and West Germany. This new direction of ‘learning process’ was closely connected to the New Economic Mechanism (1968) which was the most radical and theoretically most innovative

⁶⁰ Abrahams Ray & Kahk Juhan, *Barons and Farmers. Continuity and Transformation in Rural Estonia (1816-1994)*, University of Gothenburg, Faculty of Arts, 1994, pp. 66-69.

⁶¹ See more on this in Varga Zsuzsanna, *The Impact of 1956 on the Relationship between the Kádár Regime and the peasantry, 1956-66. Hungarian Studies Review*, Vol. XXXIV, Nos. 1-2, 2007, pp. 155-176.

⁶² Wädekin, 1982, p. 65.

⁶³ Varga Zsuzsanna: *The Appropriation and Modification of the Soviet Model: The Hungarian Case*. In: Bauerkämper Arndt–Iordachi Constantin (eds.): *The Collectivization of Agriculture in Communist Eastern Europe: Comparison and Entanglements*. Budapest, CEU Press, 2013. (forthcoming)

reform in the region – not mentioning the one in Yugoslavia.⁶⁴ The goal of the reform was to alleviate the problems of the planned economy, and to increase the efficiency of the economy. Elements of market mechanisms (price, profit, tax, credits etc.) were thus implemented in the planned economy system.

Substantive changes in agriculture had preceded the introduction of the NEM by two years. The basic concept for management of the whole economy was only in the making in the summer of 1965, when agricultural debates were already covering practical matters of detail, such as abolishing the machinery stations and cancelling debt built up by the agricultural cooperatives. When the Central Committee approved the detailed guiding principles of the NEM in 1966, agriculture had already reached the stage of raising producer prices and starting to close an agricultural price gap that had been widening for many years. While preparations for the reform of economic management continued apace in 1967, two important pieces of agricultural legislation were passed (Act III/1967 on agricultural cooperatives and Act IV/1967 on land ownership and land utilization). The bodies for ‘protecting’, representing the interests of cooperative-farm members were also founded in that year.

One major objective of the New Economic Mechanism was to open the economy towards the capitalist world. Hungary’s policymakers were well aware of their economy’s critical dependence on the East for energy, raw materials, and markets, and on the West for technology and many basic goods and intermediate products. Continued economic growth was therefore crucially dependent on Western imports.

The Hungarian agriculture was able to identify, import, absorb and to disseminate rapidly and effectively a certain amount of the western technology it needed. By 1981, 96% of all large agricultural units (state farms, collective farms) were participating in some so-called closed production system and 90% of the country’s corn and 88% of its wheat crop were produced by system members.⁶⁵ The rapid and widespread dissemination of these new production systems meant that practically all large farms in Hungary adopted modern agricultural machinery, and combined it with modern know-how.

As it is commonly known, from the beginning of the 1970s on, Hungarian agriculture had been able to satisfy the requirements of three different kinds of market: home market, the market of COMECON and the one of capitalist countries. This was a unique achievement within COMECON. The ‘Hungarian agricultural miracle’ became a topic among western analysts who tended to talk about the ‘Hungarian model’. Later, in the 1980s Hungary became a symbol for laboratory liberalizing reforms in the socialist block.⁶⁶

Several factors explain agriculture’s success in technological renewal. First of all, we have to refer to the more consistent application of the principles of the New Economic Mechanism and to the emergence of a functioning market mechanism in the field of agriculture. The Ministry of Agriculture and Food granted relatively free hand to large

⁶⁴ For more detailed information on the New Economic Mechanism, see: Berend Iván T, *The Hungarian Economic Reforms, 1953-198.*, New York, CUP, 1990. See also Paul G. Hare, Hugo K. Radice and Nigel Swain (Eds) *Hungary: A Decade of Economic Reform*. London, George Allen & Unwin, 1981, and Christoph Boyer (Ed) *Zur Physiognomie sozialistischer Wirtschaftsreformen. Die Sowjetunion, Polen, die Tschechoslowakei, Ungarn, die DDR und Jugoslawien im Vergleich*. Frankfurt/Main, Max-Planck-Institut für Europäische Rechtsgeschichte, 2007.

⁶⁵ Romány Pál, The completion and partial dismantling of collective agriculture. in *Hungarian Agrarian Society from the Emancipation of Serfs (1848) to the Re-privatization of Land (1998)*, (ed. Peter Gunst) New York, CUP, 1998. 357-366.

⁶⁶ Harcsa Iván, Kovách Imre and Szelényi Iván, “The Hungarian agricultural miracle and the limits of socialist reforms” in: Iván Szelényi, ed. *Privatizing the Land. Rural political economy in post-communist societies*. London, New York, Routledge, 1998. pp. 21-42.

agricultural units to import a certain amount of technology. An important prerequisite for the acceptance and adaptation of such systems was the emergence in large farms, as a result of medium- and high-level agrarian training reaching mass scale, of a highly-skilled and experienced labour force by the early 1970s. The structure and relationship between the production units were fundamentally different in agriculture and industry. Even though the average size of the state and collective farms was huge, there was no monopolistic concentration like in many industrial branches. The way, the Hungarian agriculture was organised and controlled made it possible for competition to emerge not only between buyers but also between the technology's suppliers.

If we try to measure the imported technology's contribution to the growth, the following statistical data could be taken into account.⁶⁷ Within crop farming, the greatest success was with cereals—chiefly wheat and maize. Yields which had been between 7 and 8 million tons in the previous decades rose to 11.4 tons in the first half of the 1970s. With respect to the successes achieved in crop farming it should also be borne in mind that, besides the transformation of the material and technical conditions of production, there were major changes in the biological foundations. During the 1970s, a complete change of wheat variety took place. In terms of maize, hybrid selection was changed on two occasions. As a result of all these factors, average wheat yields rose from 3.3 tons in the early 1970s to 4 tons by the end of the decade. In the same period, maize harvests rose from 4.1 tons to 4.8.

The dynamic increase in average yields of wheat and maize created the foundations for the rapid development of livestock keeping and meat production. Between 1970 and 1985, total meat production rose by 37 per cent, from 957,000 tons to 1,300,000 tons. Within this, beef production essentially stagnated, while the production of pork, chicken and mutton increased more rapidly. In the first half of the 1970s an annual average of almost 1.9 billion litres of milk were produced. Ten years later this had increased to almost 2.7 billion litres. During the same period egg production rose from 3.5 billion to almost 4.4 billion and raw wool production increased from 8,300 to 12,200 tons. The results achieved in grain and meat production made it possible for Hungarian agrarian exports to triple between 1965 and 1975. This is of particular significance because, until the mid-1960s, the country had relied on imports of bread grains and meat.

The achievements of the domestic large-farming system in terms of cereal farming and meat production were significant even by international standards. Measured in terms of per capita grain production, Hungary ranked fifth in the world in 1985. With a figure of 1,391 kilograms per person, it followed such extensive—with the exception of Denmark—grain-producing countries as the United States, Canada and Australia. In terms of wheat production Hungary came second after Canada, and in terms of meat production it took fourth place after Denmark, Holland and Australia. In the mass-scale production of hens' eggs, Hungary came second to Holland.

Estonia within the Soviet farming system

During the first years after collectivization, because of the low procurement prices paid by the state, the earnings among kolkhoz peasants were much lower than the corresponding wages paid to sovkhos workers. The sovkhoses – to which a smaller private plot was attached - were given ideological priority since they represented a higher form of socialist ownership. The general kolkhoz households therefore had to rely heavily on the sales of production from the

⁶⁷ The following data was published by the Central Statistical Office of Hungary (KSH) but it is based on calculations made by the United Nations Food and Agriculture Organization (FAO). See: *A magyar mezőgazdaság nemzetközi összehasonlításban*. [Hungarian agriculture in international comparison] (Budapest: KSH, 1987) pp. 25-28.

private plots, which in addition were heavily taxed. This created widespread discontent and migration from the countryside into the urban areas/cities.⁶⁸

However, within a few months after the death of Stalin in 1953, before Khrushchev formally became the supreme leader, some restrictions were eased. This e.g. concerned the use of private plots, lower taxes as well as the abolishment of product delivery duties. In other words, this gave some eases to the Stalinist squeeze of agriculture, which up to the early 1950s was a means to generate capital for industrialization. In 1953, procurement prices paid by the state to the producers – both to *kolkhozes* and to private producers – were raised. By 1954 these prices had doubled in relation to 1952 and continued to do so up to 1959 when the average procurement price had trebled in relation to 1952. In 1959 the price indices for livestock products and potatoes (1952=100) had increased to 561 and 834 respectively.⁶⁹

In 1958 increased regional decision making power was established through the implementation of the *Sovnarkozy* in the USSR, leading to more decentralized decision making in the planning procedure. In addition the dissolution of MTS began in association with the ambition to merge several *kolkhozes* into *sovkhozes*. However, before all this took place, Khrushchev had to make a change of his initial stands. In his famous agricultural speech 3 September 1953 he was emphasizing a more powerful position for the MTS on the *kolkhoz* level since he was dissatisfied both with the supervision of agriculture and output levels. The ambition was to have more urban party members transferred into agricultural administration. But this had to be changed in 1957 when it was obvious that the efficiency of the MTS - or in fact the whole issue of economic accountability for both MTS and *kolkhozes* - was hard to calculate. Since the MTS services were paid by the *kolkhozes* – based on contractual arrangements in kind (percentages of the grain harvest etc) – the size of these payments or incomes was not possible to foresee or to calculate in monetary terms. All this led to the decision to transfer the MTS machinery into the ownership of individual *kolkhozes*.⁷⁰ From an ideological point of view, the mergers also enabled for the party to have a more direct political influence through the local cadres and the *kolkhoz* chairman. In addition, the sales of machinery to the *kolkhozes* not only cut down one out of two administrative apparatus, it was also a way to bring the larger units closer – now in possession of their own machinery – to the more aspired form of *sovkhoz*.⁷¹

Khrushchev also aimed at restricting the use and size of the private plots. This was motivated by the apprehension that: "...private subsidiary farming held back the development of the public sector and hindered the *kolkhoznikis'* work in collective agriculture. However, in spite of the policy aiming at: "accelerating the countryside's advance towards communism", a main problem was still to make sure that the seven-year plan 1959-65 could supply the large-scale *kolkhozes* and *sovkhozes* with sufficient and appropriate machinery. Furthermore, the abolition of the MTS created financial problems. Many *kolkhozes* more or less depleted their resources when they had to buy tractors and machines from the MTS.⁷²

Yet, as it turned out, contrary to the Moscow orders, there were no restrictions imposed on the private plots in Estonia. In addition, there were no reductions of the size of plots - from 0.6 to 0.3 ha per family - as it was supposed to be when *kolkhozes* were merged into *sovkhozes*. A former *sovkhoz* worker expressed: "When my *kolkhoz* was transformed

⁶⁸ Misiunas & Taagepera, 1993, pp. 190-191.

⁶⁹ Wädekin Karl-Eugen, "Attempts and Problems of Reforming a Socialized Agriculture – Case of USSR", *Economic and Political Weekly*, Vol. 24. No 42 (Oct. 21 1989), pp. 23-89.

⁷⁰ Laird Roy. D., "The Demise of the Machine Tractor Station", *American, Slavic and East European Review*, Vol. 17, No. 4. (Dec 1958), pp. 420-24

⁷¹ Laird, 1958, p. 425.

⁷² Wädekin K-E, in Karcz G (ed.) *The Private Sector in Soviet Agriculture*, Berkley, Los Angeles, London, UCP 1973, pp. 274-279. Quotations p. 274

into a sovkhos in 1970 we kept the same 0.6 ha as before”.⁷³ The first Party Secretary of the Estonian Republic, Ivan Käbin, also confirmed: “To be honest, there were no such reductions of the kolkhozniks’ plots in our republic”. This was said to be true for Lithuania too and in several nearby regions as in the Leningrad oblast deviations from the Moscow orders could be found.⁷⁴ According to Udam (1994), the Estonian Minister of Agriculture 1953-65: Edgar Tõnurist, was able to reach Khrushchev through his close relations with the leader of the Estonian CPU: Ivan Käbin. Tõnurist told Käbin to convince Khrushchev about dissolving the MTS. Tõnurist understood that the integration of Estonia into the Soviet economy was irreversible and therefore he worked for maximizing the federal resources and inputs for the specialization in dairy and meat production, which he meant was the competitive edge of the Estonian Soviet republic.⁷⁵ Tõnurist was also able to convince Moscow to expand the efforts on higher agricultural education. In the early 1950s only two percent of the Estonian kolkhoz chairmen and sovkhos leaders had professional agricultural education. But in the early 1970s there were on average 25 agricultural specialists in each large-scale Estonian farm. This was eight times higher than the corresponding figures for the nearby Pskov-region.⁷⁶

The raise in procurement prices during Khrushchev’s years in power gave better outlooks for machinery investments in the Estonian kolkhozes. Fewer deliveries were needed for purchases of implements. In addition, the dissolution of MTS was favorable since many kolkhozes paid excessive hire in kind for these services.⁷⁷ Estonia thereby began to deviate from the general Soviet production pattern. Due to the establishment of regional economic councils (so-called *sovnarkhozy*) regional autonomy also increased since Estonia became one single unit for planning. This enhanced the use of local resources and gave better access to national experts and leaders. Even if Brezhnev abolished the Sovnarkhoz reform in 1965 it left some tracks in the improvements made in Estonian agriculture.⁷⁸ In 1965 Estonia was also the First Soviet republic in which both kolkhoz members and sovkhos workers obtained most of their salary regularly and in cash.⁷⁹

Still, the major problem was the superiority of politics over common sense, which implied centralized and uniform strategies, regardless of local and regional preconditions. One reaction to these instructions from the top came from Tõnurist, who wrote a clarifying article in 1964 against the recommendations of using more mineral fertilizers for increasing yields in order to catch up with Sweden and Finland. He meant that: “Our soil cultivation tools are partly responsible...No chemistry will help if the Agro technical ABC-book has been forgotten”.⁸⁰ In other words, the problem was a general lack of proper machinery for tillage.

After the dismissal of Khrushchev in 1964 the ideological debate on private plots took on, not least due to the “new planning and incentive system”, also known as *Liebermanism*, which in a few years later generated some significant economic effects on the socialized agricultural sector. The reforms were profit oriented and they partly reduced the plan-fulfillment criteria, which meant that the agricultural enterprises could keep and reinvest a

⁷³ Quotation written down by Hans Jörgensen during an interview with the former Estonian kolkhoz chairman C.L. at his farmstead in Tartumaa, February, 2004.

⁷⁴ Wädekin, 1973, p. 314.

⁷⁵ Udam Valter, *Talust taluni. Põllumajandus läbi aegade*. Ilo, Tallinn, 1994, p. 73.

⁷⁶ Udam, 1994, pp. 69-70 & 85-87.

⁷⁷ In 1957 one Estonian kolkhoz with 4 500 ha, paid in kind: meat, milk and crops equal to a value of more than 155 000 rubles to the MTS for their services. This sum was equal to the price of eight new tractors in 1958. See: Purre Arnold, *Soviet Farming Failure Hits Estonia*, Stockholm, The Estonian Information Centre 1964, p. 41.

⁷⁸ Taagepera, 1993, pp. 91 & 95

⁷⁹ Abrahams Ray & Khak Juhan, *Barons and Farmers. Continuity and Transformation in Rural Estonia (1816-1994)*, Göteborg, University of Göteborg, Faculty of Arts, 1994, p. 70.

⁸⁰ Purre, 1964, pp. 19-20.

larger share of the profits earned. In 1973, 49 percent of the Soviet sovkhozes were operating without subsidies while all Estonian sovkhozes were placed on self-management and operated without subsidies after 1967. Labor productivity in the Estonian kolkhozes was in 1971 nearly twice as high as the Soviet average and in sovkhozes 61 percent higher.⁸¹ However, in the 1980s subsidies were decisive due to the fact that procurement prices never could keep up the pace with changes in retail prices.

Between 1960 and 1978 there was a substantial increase in gross production per agricultural worker in the USSR. However, part of that increase may be explained by the fact that gross production was measured in rubles. In a comparative perspective, however, the Baltic Soviet republics were in the lead and Estonia was the leader. In 1978 the average for Estonia was 177 in comparison to the USSR average of 100.⁸² According to Evans (1981), this was an anomaly because of the branch structure of agriculture. The specialization in livestock and dairy farming, tended to be more labor intensive and costly than other branches because of the incomplete mechanization in the USSR. But from another perspective, productivity may also have been spurred by the relative lack of agricultural work force due to the demographic trend and the level of urbanization in the Baltic and Slavic republics, while the opposite relations prevailed in Kazakhstan, Moldavia, Transcaucasia and Central Asia.⁸³ In line with this discussion about the relative efficiency of large-scale agriculture in the Estonian republic in comparison to the USSR, Järvesoo (1973) wrote: "Despite high wages for agricultural labor, the cost of production of major farm commodities is the lowest among the Union republics, an indication of efficient use of labor and other resources." Järvesoo suggested that the differences in the 1970s in comparison to the USSR largely reflected different rates of progress that took place between 1918 and 1940.⁸⁴

In Estonia the density of cattle per ha increased throughout the Soviet period, and especially from the late 1970s. Estonian and Latvian dairy and meat production retained its position as the most efficient in the Union. The average live weights of cattle delivered for slaughter in the early 1980s was e.g. 15-25 percent higher than the corresponding Soviet average.⁸⁵ One explanation to this may have been the leasing agreements which turned the private plots into resorts for the feeding of cattle that were later sold back to the socialized sector before slaughter. Thus the value of production on private plots became more important in the 1980s. Another side of the coin was that the Estonian SSR was never self-sufficient in fodder grain. Livestock production, which in the late 1980s, accounted for roughly 70 percent of total agricultural output, was heavily dependent on cheap energy and fodder imports from other Soviet republics. These inputs and the integration in the All-Union planned economy constituted a kind of hidden subsidies, which enhanced for Estonia to achieve its top position in terms of relative agricultural performance.⁸⁶

Thus, even though Estonia became the top agricultural producer of the USSR from the early 1960s, the republic was totally dependent on inputs like fertilizers and protein feedings from other republics. Increased agricultural investment from the 1960s also helped to maintain this position. From the late 1970s and throughout the 1980s the rural areas also

⁸¹ Järvesoo, "The Postwar Economic Transformation", in: Tõnu Parming & Elmar Järvesoo (Eds), *A Case Study of a Soviet Republic – The Estonian SSR*, Boulder Colorado, Westview Press, 1978, pp. 143 & 149-50.

⁸² Evans Jr. Alfred, "Interrepublic Inequality in Agricultural Development in the USSR, *Slavic Review*, Vol. 40 (Winter 1981), pp. 576-77. See also

⁸³ Evans Jr, (1981), p 579.

⁸⁴ Elmar Järvesoo, "Progress despite Collectivization", in: Arvid Ziedonis, Jr et al., (Eds), *Problems of Mininations – Baltic Perspectives*, San José, California State University, 1973, pp. 137ff.

⁸⁵ Medvedev Zhorez A., *Soviet Agriculture*, New York/London, WW Norton & Company, 1987, pp. 267-268.

⁸⁶ Tim Unwin, "Structural Change in Estonian Agriculture: From Command Economy to Privatization", *Geography*, No. 344, Vol.79, (3), 1994, p. 251.

started to attract more people because of the needs for labor and the better conditions for living. Many kolkhoz leaders were able to use federal investment, not only for agricultural purposes but also for the construction of – in a Soviet perspective - attractive housing conditions. Throughout the 1980s the access to larger private plots also spurred households to settle down in rural areas.⁸⁷ In relation to the economic stagnation after 1970, this in fact contributed to a movement back into the Estonian countryside. Since many kolkhoz and even sovkhos families lived in the old farmsteads from the interwar independence – to which the necessary plot was attached – both provision and preservation of the past was possible. Within a couple of years the U.S. grain embargo aggravated the access to foodstuffs in cities and nationalistic sentiments further spurred this migration.⁸⁸ Due to this some of the previous out-migrations from the countryside in the 1950s and 60s were covered. But more than 43 000 people had also left in the 1960s and 70s and those who returned from Siberia in 1956 were foremost moving into the cities.⁸⁹ The costly investments made in Estonian agriculture in the 1970s and 80s can thus partly be seen as a counterforce to the decrease of available agricultural workers, which led to record levels of agricultural output 1986-1989.⁹⁰

The experimental reforms in Baltic agriculture began in the early 1980s when new constellations of working groups partly replaced the traditional brigades in some kolkhozes. This was not officially acknowledged in the media before 1984, but it started a transformation towards the ‘family farm principle’ since responsibilities were transferred to a family or a group of friends. This experiment proved to yield better results than the previous work brigades, which often could shift from field to field lack responsibility.⁹¹ These types of contracts were also given to people who worked outside the farming sector.⁹² In the late 1980s the out-migration from cities was even stronger and during the first years of independence the movement towards rural areas continued.⁹³ Compared with 1940, when the average Soviet kolkhoz household had 2.2 persons occupied in the kolkhoz, it was 1.0 in 1985. Thus from the 12.6 million households on collectives only one person per household was involved in collectivized farming. The others either worked on the plot or in other occupations.⁹⁴ The economic motive to join kolkhozes was thus to get access to a plot from which a share of the produce could be sold. By using own cars or trucks supplied by the kolkhoz, many kolkhoz peasants went to Leningrad and the Pskov region for selling cucumbers, onions and potatoes produced on their Estonian plots. In the end of the 1980s this generated net annual incomes

⁸⁷ Oral source based on an interview with former kolkhoz chairman T.H. in June 2001. See also Jørgensen 2004, p. 165.

⁸⁸ Abrahams & Kahk, 1994, pp. 72-73.

⁸⁹ Misiunas & Taagepera, 1993, p. 139.

⁹⁰ *Review of Agricultural Policies Estonia*, OECD, 1996, pp. 46 & 62.

⁹¹ When a family or a group of related people took on a long-term rental contract for managing certain fields or stables it was in their interest to maximize the profit and even though this profit could not be reinvested it could at least be consumed. Misiunas & Taagepera (1993), p. 291.

⁹² An Estonian scholar told me that he as fresh teacher in 1982 and 1983 earned extra money during the period from May to September by joining a group with responsibility to clear the weeds on a large field with beetroots and sugar beets.

⁹³ Even though the figures prior to the mid-1980s are somewhat inconsistent several studies show a clear relative decline for the Estonian urban areas from the late 1980s. See e.g. Katus K, *Internal Migration and Regional Population Dynamics in Europe: Estonia Case Study*, Report prepared for the Council of Europe (Directorate of Social and Economic Affairs, Population and Migration Division, December 1998, pp. 8-10, and: Örjan Sjöberg & Tiit Tammaru, “Transitional Statistics: Internal Migration and Urban Growth in Post-Soviet Estonia, *Europe-Asia Studies*, Vol. 51, No. 5, 1999. pp 822-823.

⁹⁴ Medvedev, (1987), p. 362.

between three and eight times the earnings from their regular work on the kolkhoz/sovkhos.⁹⁵

Tentative conclusions

In this first draft of an ongoing comparative study we have elucidated the Post-War agrarian collectivization and agrarian development in two parts of the Soviet bloc. Estonia here represents the case within, and Hungary represents the case outside the USSR. Based on the fact that both cases from the 1950s did deviate from the general Soviet agricultural model in several ways, we have interpreted this deviation and the subsequent development after 1940s as being related to specific national characteristics and socio-economic legacies.

According to Haupt and Kocka, (2009) referring to comparative and transnational history: “The last decades have witnessed the rise of comparative history, but its practitioners have remained a minority, and its critics have not been completely convinced.”⁹⁶ In relation to this, we are aware of the methodological and empirical problems of comparing units like the two cases presented here, while we at the same time believe in the benefits of comparative research, not least in this stage, when it is possible to share our first results and promote productive debates among agrarian historians. The analysis here rests on the fact that the socio-economic legacies in Estonia and Hungary were markedly different from the ones in Soviet-Russia and thus the acceptance for, or the possibilities to build-up a kolkhoz-based system were different.

As it is known, the Emancipation Manifest in Russia after 1861 was not able to create a class of individual peasant proprietors out of the peasants serfs, not only because of the lack of redemption payments and resistance from the ignorant nobility, but also from the *Narodniki* in favour of the old Village Community *Obschina*. Therefore, with regional exceptions, the reform rather strengthened the *Obschina*, which held back the spread of market conditions and that of private ownership in many parts of Tsarist Russia.⁹⁷ However, up to the Russian Revolution in 1917, the development in the Russian Baltic-German provinces and in the vast and expanding Siberian areas seemed much more similar to the changes taking place in Central Europe when regarding property relations, the growth of producers cooperative associations and market conditions. Thus, Estonian, Latvian and Lithuanian independence after 1918 allowed for continued land redistribution/land reform and expanded peasant farming, while most other parts of Post-revolutionary Soviet-Russia went towards the termination of peasant farming when private ownership of land was practically abolished in 1917.

In spite of all the interwar problems associated with land reforms and the Great Depression, there were at least two divergent directions of the farming systems in the USSR and in CEE before 1940. This concerned the property relations and market adaptation. Thus, when Hungary and Estonia were forced into the Soviet system, the initial Soviet style land reforms aimed at reducing the amount of land cultivated by the large landowners/estate owners in favor of the small and medium sized peasants, which also constituted a majority in both cases. However, the Estonian and Hungarian peasants as well as the owners of larger

⁹⁵ Four of my informers (interviews carried out by Hans Jörgensen in Estonia in 2003 and 2004) made three to ten trips every year to the kolkhoz markets in the Russian SSR. These sales enabled for them to buy capital goods as well as certain products from the Central-Asian republics, which were hard to find in Estonia.

⁹⁶ Haupt Heinz-Gerhard & Kocka Jürgen (eds.) *Comparative and Transnational History. Central European Approaches and New Perspectives*. New York–Oxford, Berghahn Books, 2009. vii

⁹⁷ Moshe Lewin emphasizes in one of his essays that the concept of private property was very weakly developed in Russia before 1906. See, Lewin Moshe, *The making of the Soviet system. Essays in the Social History of Interwar Russia*. New York, 1985. pp. 186-187.

estates or farms were market oriented and were relying on private ownership of land. The cooperative associations were also well developed among the small-holders. This can offer an explanation to why the execution of collectivization by the communist parties in both countries was met with such strong resistance from the peasantry. In Estonia, this resistance could only be broken through massive deportations and in Hungary it took more than ten years to force the peasants into agricultural cooperatives, which not succeeded until the third attempt or campaign. In association with collectivization in the 50s, large-scale migration out of the villages appeared which led to shortages of labor and negative effects on production in the newly established large-scale socialist farms. For a significant period of time, conditions worsened by the fact that it was not possible to compensate for missing manpower through mechanization.

In both countries, the difficulties of food supply forced the local political administration into emergency situations, especially in Hungary. Public consumption was significantly restricted in favor of the development of heavy industry and food restrictions contributed greatly to the outbreak of the revolution in 1956. Following the repression of the revolution, the Kádár-government, aided by the USSR, was only able to pacify Hungarian society by increasing living standards. This, in turn, was only feasible through a corresponding growth in agricultural produce. In order to achieve this, they had to depart from the original Stalinist model of the kolkhoz-system. This development required a group of agrarian experts who were able to ensure the necessary political support. In Hungary, it was a lobby group formed around the Agricultural Department of the Central Committee, in Estonia it was the minister of agriculture who managed to assume a mediating role. Another important factor was the growing numbers of specialists and experts who became leaders of kolkhozes, cooperatives and state farms: trained and skilled people who actually knew about the local conditions and had the ability to adapt to the circumstances quite well.

Another important feature in both countries – away from the Soviet model – was the use of the household plots. In the original kolkhoz model, this kind of farming was – just like the kolkhoz itself – only considered as a transitional institution. Even though Khrushchev liberalized the conditions of household farming, as late as in 1958, he also set out to eliminate it. This measure was neither followed in Estonia, nor in Hungary, probably because of the fact that plan fulfillment and national subsistence became a higher priority for the policy makers than the ideological burden the plot in fact constituted for Moscow.

From the late 1960s, the modernization of agriculture in Estonia and Hungary went into different directions. In both cases, however, it seemed like deviations from the general Soviet model and instructions. This was e.g. seen in the various measures that were applied in order to compensate for the shortcomings of the price policy and planning procedure, e.g. the organizational structure of farming and the pricing reforms in Hungary and the extended role of private plots in Estonia. All this enabled for the large-scale farm units to make greater individual adjustments, both among cooperatives and kolkhozes as well as among sovkhoses, e.g. in terms of reduction of planning targets. Estonia became a kind of a show piece for the USSR and specialized in dairy and meat production.

Thus, geography, time and organizational characteristics seemed to have been important. Both Hungary and Estonia had a short period under Stalinism, implying that less damage was done before a window of opportunity appeared. In line with this, Alec Nove emphasized that what contributed to the survival of the “peasant spirit” in the Baltic republics was not only late collectivization, but also the different structure of kolkhozes based on mergers of peasants’ farmsteads instead of the compact village settlements otherwise established. Furthermore, fewer younger people choose to leave the countryside in comparison to other parts of the USSR. Infrastructure was more developed and work ethics

were different too. But a main thing was the fact that the local level had party representatives that could act more independently. Since more investments were directed towards agriculture and its associated upstream and downstream industries after 1953 it was possible to take some advantages of certain national institutional features.⁹⁸

High-quality professional training in agronomy, agricultural economics and associated fields of higher agricultural education, played a key role in both Estonia and Hungary. Towards the 1970s, Hungary could also – based on its experiences – provide influences to other parts of the Soviet bloc and take advantages from its farm structure and management, which was the outcome of the previous resistance towards forced collectivization. In fact, in the search for increased food production, party decrees from Moscow in 1977 and in 1981 emphasized the increasing role of private plot production by referring to the positive experiences of better utilization of the existing productive potential based on the Hungarian model.⁹⁹ Through the export of agricultural products to Western Europe Hungary was able to purchase western technologies and implements. This facilitated mechanization of the large farms that showed excellent results both in crops as well as live stock farming, poultry and egg-production. The Estonian kolkhozes, which had less organizational freedom, were also in relative terms more mechanized than the kolkhozes in most other Soviet republics. Yet, production itself was dependent on the symbiosis between the large-scale farming and the production on the private plots. In spite of the specialization in dairy production and meat for the USSR market.

The way forward for this work-in-progress is to develop both the relation to previous studies and research as well as a more explicit methodology. So far, we have had the ambition to elucidate a number of important features that can justify the comparison and a more in-depth study. Thus, in the appendix below, we have added a comparative matrix that can elucidate the issues that have been touched upon in this paper, but nevertheless need to be further investigated.

In the forthcoming research we will therefore continue with investigating the role, influence or impact from local politicians, kolkhoz managers, lobbying groups and the peasants themselves, in the two cases, both related to production and education. Furthermore we will scrutinize the ideological debates circumventing the altered status of private plots, the dissolution of the MTS, and the end of compulsory deliveries. Finally we will also try to find out about the effects from the changes in price policy and price differentiation, and the incentive systems used for various farm entities. All this, since we believe that a main but preliminary conclusion from the study so far can be formulated as: From the late 1950s, in both Hungary and Estonia, national political choices seemed to be to a larger extent in the hands of dedicated party members with visions for the future that allowed for specific reforms that were spread within the Soviet bloc.

⁹⁸ Nove Alec: in: Ian D. Thaxter (Ed), *Alec Nove on Communist and Post-Communist Countries – Previously Unpublished Writings*, 2, Edward Elgar 1998, p. 106-108. ”

⁹⁹ Cook Edward, “Soviet Agricultural Policies and the Feed-Livestock Sector, *American Journal of Agricultural Economics*, Vol.67. no. 5. 1985, pp. 1049-1053.

Appendix I: A comparative matrix of agricultural development in Estonia Hungary from the early 1920s up to the 1980s.

	Estonia	Hungary
Property structure 1939 – Before WW II and Soviet rule.	One of the most radical interwar land reforms (1919-26) broke up the estate system dominated by Baltic-Germans. Only 3.5 % of arable land was untouched before redistribution. 140.000 viable farms (aiming at supporting a family with two horses) with an average of 24 ha/unit emerged. In 1939, 95 % of the farms possessed between 10 and 50 ha.	Most extreme estate country in Europe. Nearly half of the agricultural land belonged to large estates. Only around 20% of total cropland belonged to the smallholders. Farms below 5.7 ha/unit made up some four fifths of all estates. Only 31% of the rural households were able to support a family from the land. Around 70% of the peasantry – with no or insufficient land - were compelled to do wage labour.
Collectivization	A few, kolkhozes established 1940-41 but these were not revived after WW II. Failed voluntary collectivization 1947-48 in spite of a tax squeeze and kulak hunting. Forced collectivization in conjunction with the large-scale deportations March 1949. Collectivization completed in 1953.	Some cooperatives were spontaneously founded during the war. However, these were not consider being in line with the Soviet model. 3 waves of forced collectivization: 1949-53, 1955-56, 1959-61
Farm structure kolkhoz & sovkhov relations cooperative & state- farm relations	In 1945, 70 state manors were transformed into sovkhovs. In 1950 this had expanded to 127 sovkhovs. 439 kolkhozes were founded 1947-48. After the deportations and forced collectivization from 1949 this had increased to 2.213 kolkhozes. By means of mergers and reorganization, 648 kolkhozes and 154 sovkhovs existed in 1960	By the end of the collectivization in 1961 there were 271 state farms, approximately 4.200 co-operatives and almost 165.000 individual farms registered. 70 % of cultivated land was owned by cooperatives, which employed three-quarters of the agricultural workforce.
National influences or deviations from the Soviet model	Up to the 1980s kolkhozes were merged into sovkhovs. The initial mergers of family farms into kolkhozes enabled for families to continue their lives on the farmstead. Native Estonians also dominated as kolkhoz managers from the late 1950s, which had impacts on the decision making. In the mid 1960s the kolkhoz/sovkhov division was about to vanish since regular cash payments also were introduced in kolkhozes.	The revolution in 1956 was an important turning point leading to agrarian policy changes and corrections, unprecedented within the socialist bloc. The Kádár-regime was compelled to secure food access and thereby increasing living standards in order to make up for lacking political legitimacy.
Soviet relations in the 1950s	1953 full-scale collectivization accomplished and thereafter a process of turning kolkhozes into sovkhovs. In 1950 the average kolkhoz had 961 ha of land. In 1980 it was almost nine times larger: 8.482 ha of land/kolkhoz. Estonia was to become specialized in dairy and meat production for the USSR market. By means of taxes and deportations of enemies of the state collectivization was accomplished. Mechanization was increasing faster in the Baltic republics than in other parts of the USSR.	Full-scale Sovietization of CEE accelerated from the late 1940s based on implementation of the Stalinist social, political, and economic model. This model was indisputable until 1953 when criticism and attempts at correction appeared. The actual turning point was the 20th congress of the CPU of USSR in Feb. 1956. The Hungarian revolution in October was the ultimate challenge for the USSR rule in CEE. This had a permanent influence on the Hungarian as well as the USSR decision-makers. After 1956 Hungary was treated with high priority by the USSR, a 'special treatment', implying a higher level of tolerance. Preserving internal stability became the major USSR goal. Otherwise, in tactical questions it showed remarkable flexibility. This was one decisive factor of the special Hungarian agrarian development.
Land status	All land belonging to the state after nationalization in 1940. Private plots on kolkhozes allowed for 0.6 ha/family and for 0.3 ha/family on sovkhovs. In the 1970s and 80s the access to a private plot was one of the reasons for the migration into the country side.	In contrast to the USSR, collectivization in Hungary did not change the ownership of land under cooperative use. Almost three-quarters of cooperatively utilized land were privately owned and the rest was under state ownership. The land law in 1967 (IV/1967) created the cooperative land ownership, stating that land in cooperative use might only be inherited by a member of an agricultural cooperative. Non-members (outsiders such as those who have withdrawn from the

		cooperative or other heirs) had to hand over the title to the land to the cooperative. This was forced upon them in exchange for a very small five-year ground rent, implying a low level of compensation. Still, the new system left landowning cooperative members with rights of ownership acknowledged by the ground-rent payments.
The role of MTS	Introduced in conjunction with collectivization as the extended arm of the party for control and maximizing plan fulfillment from kolkhozes. Up to 1958 only sovkhoses were equipped with machinery. Dissolution of MTS in 1958-59 was matched with restrictions on the use of private plots. However, insufficient machinery investments on the kolkhozes rather strengthened the dependence on the private plots.	The establishment of MTS took place under pressures to follow the Soviet model from 1948. In May 1948 there were 11 MTS in the country; by the end of the year there were 110; and a year later this had risen to 221. The establishment of the network was completed in 1952 when 364 MTS had been founded. The primary task for the MTS became to provide technical support for collectivisation of agriculture and to supervise the work of the co-operatives. Under a Central Committee decision in February 1964, MTSs had to be wound up by the end of 1965.
The role of private plots	After 1958 Khrushchev attempted to limit the private plot production in favor of large-scale and mechanized production. Mergers of kolkhozes into sovkhoses were the means to accomplish this. But the plots became even more important because of insufficient mechanization and in Estonia the plots thus remained untouched. Under the reign of Brezhnev the private plots were reintroduced all over the USSR, but now denoted as 'personal plots', and justified as an which partially was due to the native leadership in both kolkhozes and sovkhoses.	While cooperatives achieved good results in the highly mechanized branches of plough-land crops, private/household plots excelled in labor-intensive areas, such as vegetables, fruit and grape, egg and poultry, and meat. In the 1970s, household plots produced 25 percent of the combined total income from crops and animal husbandry in the co-operatives. This was achieved in spite of the fact that the private plots only represented 12 per cent of the co-operative agricultural area, and the overwhelming majority of plots being poorly equipped because of the shortage of suitable implements and prices on the market, or were too expensive.
Management & leaders	Up to the late 1950s both kolkhozes and sovkhoses were administratively – not technically - managed. Separately organized for planning and supply. Native kolkhoz managers trained in Estonia taking over from the late 1950s. Estonia as a show piece for USSR agriculture In the 1980s Estonian kolkhoz leaders were able to use federal investments even for housing projects, which together with the access to private plots on the kolkhozes implied increased attractiveness for moving into the countryside.	The typical farm president in the 1950s was a political cadre of usually 'worker' origin, placed there by the party to ensure that the collective farm followed the Soviet kolkhoz pattern and delivered the required produce to the state. During the third wave of collectivization the party showed readiness to accept successful farmers of middle-peasant or 'kulak' origin as cooperative farm presidents. Whereas in the 50s, the party had practically appointed the 'elected' presidents of the cooperatives by delegating loyal party members, in the course of the final phase of collectivization, the party organizations withdrew and let the local communities elect the head of their own cooperative. This development had well experienced and generally respected local farmers take over the leadership
Autonomy of cooperatives	The earliest agricultural reforms in the USSR. The Brigade-contract system in 1982 led to increased incentives for production and larger sizes of private plots. In 1987-88 so-called reform farms, based on eternal leases of kolkhoz land were able to function as private farms. To some extent – in relation to USSR	The Law III of 1967 created a new concept of the co-operative. On the one hand, the co-operative was defined as a large agricultural farm that carried out company-style farming on the basis of individual accounting. On the other hand, the co-operatives' organisational and economic independence was stressed.
Specific institutional features	Interwar legacies Agricultural schools Private plots - markets in St Petersburg & Pskov	A substantive organizational and institutional change in agriculture was the establishment of a body to represent the interests of cooperative farms. The National Council of Agricultural Cooperatives and its regional alliances were founded in 1967.