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DISCUSSION PAPER

Leibniz Institute of Agricultural Development in Central and Eastern Europe

THE ORGANISATION OF AGRICULTURAL PRODUCTION IN EAST GERMANY SINCE WORLD WAR II: HISTORICAL ROOTS AND PRESENT SITUATION

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ABSTRACT

Up to the end of World War II, the political-economic framework had been relatively similar all over Germany. However, the farm structure was different. While in both parts, the West and the East, about 90 per cent of all farms cultivated less than 20 ha and about one per cent more than 100 ha, the large fams cultivated about 7 per cent of the agricultural area in the West, but about 30 per cent in the East. Following the unconditional surrender of Germany in 1945 and its division by the four Allies, the differences in the organisation of agricultural production between East and West became more pronounced. In the Soviet Occupation Zone and then with the creation of the German Democratic Republic in October 1949, the socialist model of agricultural production was introduced in three phases: (1) an enforced "land reform" between 1945-49; (2) the repression of farmers cultivating more than 20 ha, starting in 1949, and finally (3) the collectivization of agricultural production starting in 1952 and finalised in the "Socialist Spring" in April 1960. While socialist agriculture had been built up on "blood and tears", it came to be fully accepted by the East German population over time and heavily defended also by those political forces which pushed for a regime change in 1989.

With the collapse of the socialist regime in 1989 and German reunification in 1990, socialist agriculture had to be transformed into a system compatible with pluralistic democracy and market economy. Similarly, those whose assets had been confiscated were supposed to be restituted. However, the legal system at reunification differentiated between those who were expropriated either before 1945 or after 1949 and those between 1945 and 1949 under Soviet occupation. While the first group was entitled to restitution, the latter group received little compensation. At the time of transition, most politicians and agricultural economists assumed that family farming would re-emerge in the East and the modes of agricultural production would adjust between the two parts. However, even more than two decades after reunification, German agriculture is characterized by two distinguished different agricultural production systems. While West German agriculture continued the tradition of small-scale family farms relying on family labour, East German agriculture is characterised by large-scale corporate farms relying on permanently employed labour. In this way, German agriculture can be characterised as "One country – Two systems".

JEL: N54, P32, Q1

Keywords: Organisation of agricultural production, Soviet Occupation Zone, German Democratic Republic, reunification, Germany.

ZUSAMMENFASSUNG

ORGANISATION DER AGRARPRODUKTION IN OSTDEUTSCHLAND SEIT DEM 2. WELTKRIEG: HIISTORISCHE WURZELN UND AKTUELLE SITUATION

Bis zum Ende des 2. Weltkriegs waren die politischen Rahmen in ganz Deutschland einheitlich. Allerdings gab es Unterschiede in der Organisation der landwirtschaftlichen Produktion zwischen dem westlichen und östlichen Teil. Zwar umfassten in beiden Teilen ca. 90 Prozent der Betriebe weniger als 20 ha und ca. ein Prozent mehr als 100 ha, doch bewirtschafteten die größten Betriebe im Westen ca. sieben Prozent der landwirtschaftlichen Nutzfläche, im Osten jedoch

ca. 30 Prozent. In Folge der bedingungslosen Kapitulation Deutschlands sowie der Aufteilung in vier Besatzungszonen wurden diese Unterschiede in den folgenden Jahrzehnten weiter verstärkt. In der Sowjetischen Besatzungszone und später der Deutschen Demokratischen Republik wurde in drei Phasen ein sozialistisches Modell der landwirtschaftlichen Produktion geschaffen: (1) entschädigungslose Enteignung von Gutsbesitzern und Nazi-Kollaborateuren im Zuge der Bodenreform von 1945 bis 1949; (2) Beseitigung des Groß- und Mittelbauerntums ab 1949; sowie (3) Kollektivierung durch Bildung von "Landwirtschaftlichen Produktionsgenossenschaften" ab 1952, die mit dem "Sozialistischen Frühling" im April 1960 abgeschlossen war. Die sozialistische Landwirtschaft wurde mit "Blut und Tränen" aufgebaut. Im Laufe der Jahre wurde sie jedoch von der Bevölkerung völlig akzeptiert. So wurde sie nach 1989 auch von jenen politischen Gruppen verteidigt, die auf einen Sturz des Regimes hingearbeitet hatten.

Nach dem Zusammenbruch des sozialistischen Regimes musste auch die Landwirtschaft nach marktwirtschaftlich konformen Prinzipien organisiert werden. Die zwangsenteigneten Betriebsmittel und Vermögen mussten an ihre ursprünglichen Besitzer zurückgegeben bzw. privatisiert werden. Allerdings wurde juristisch zwei Gruppen unterschieden: (1) diejenigen, die entweder vor 1945 sowie nach 1949 enteignet wurden und (2) diejenigen, die zwischen 1945 und 1949 während der sowjetischen Besatzung enteignet wurden. Während die erste Gruppe einen Rechtsanspruch auf Rückgabe des Vermögens hatte, gab es für die zweite nur einen auf eine relativ geringe Entschädigung. Die meisten Politiker und Agrarökonomen gingen in der Anfangsphase der Transformation davon aus, dass sich in Ostdeutschland schnell Familienbetriebe entwickeln und somit die Organisation der landwirtschaftlichen Produktion in beiden Teilen Deutschlands angleichen würde. Mehr als zwei Jahrzehnte nach der Wiedervereinigung ist die Landwirtschaft jedoch in zwei unterschiedlichen Systemen organisiert. In Westdeutschland dominieren weiterhin kleinstrukturierte Familienbetriebe. In Ostdeutschland herrschen großstrukturierte Betriebe vor, die als juristische Personen registriert sind und primär festangestellte Arbeitskräfte beschäftigen. In diesem Sinne kann man die Landwirtschaft in Deutschland als "Ein Land – Zwei Systeme" beschreiben.

JEL: N54, P32, Q1

Schlüsselwörter: Organisation der Agrarproduktion, Sowjetische Besatzungszone, Deutsche Demokratische Republik, Wiedervereinigung, Deutschland.

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ACKNOWLEDGEMENTS

The original intention for writing this paper was to provide background information about the development of East German agriculture since World War II. In 2011, the historian Joyce and agricultural economist Daniel Bromley started their project "Looking East: Reclaiming Land and Legacy in the GDR" at IAMO. They interviewed about 80 families who had lost their land in connection with the Soviet inspired land reform during the second half of the 1940s and collectivisation during the 1950s, but returned after the regime change in East Germany in 1989. Hence, the focus of this contribution is on the analysis of the organisational development between 1945 and 1960 as well as after regime change. The historical development and the policies adopted after 1989/90 seem to explain to a large extent, why agricultural production is so differently organised in the two parts of Germany, even more than two decades after reunification.

The author thanks Joyce and Daniel Bromley for their stimulating discussion when drafting this paper. In addition, special thanks is due to Klaus Reinsberg, Martin Petrick, Michael Kopsidis and Ernst Langthaler for their comments and additional information when outlining this paper.

1 INTRODUCTION

Since the end of WW II in 1945 and the division of Germany into four occupation zones, and, the creation of two separate countries in 1949, two distinct agricultural systems emerged. Collective and state farms were established in the East while family farms remained the dominant farm type in the West. With the collapse of the political regime in East Germany (German Democratic Republic, GDR) in 1989 and reunification with West Germany (Federal Republic of Germany, FRG) at 3 October 1990, the socialist central planning system were replaced by a market economic and pluralistic democratic system. This change also implied that agricultural production had to be re-organised. State and collective farms were to be privatised. This change offered the option for victims of expropriation and collectivization (or their heirs) either to reclaim their lost property ("restitution") or to buy back all or parts of their former properties. It was the intention of the (predominantly West German) politicians to re-establish family farming as the dominant organisation of agricultural production as it used to be before 1945. However, more than twenty years after reunification, agricultural production is still significantly differently organized in the two parts of Germany. While the West is still characterized by (relatively small-scale) family farms, corporate and (relatively large-scale) private farms dominate in the East.

In this contribution, we will focus on the development of agricultural production patterns in East Germany since the end of WW II up to 1960 and its transformation since regime change in 1989. It is structured as follows. After a brief description of the agricultural situation in 1945 (Chapter 2), we will explain the establishment of socialist agriculture in the East between 1945 and 1960, i.e. the land reform under Soviet administration (Chapter 3), the repression against large farmers (Chapter 4) and the subsequent collectivization of agriculture (Chapter 5). These developments will be discussed in light of the developments in other countries of Central and Eastern Europe during that period. In Chapter 6 we offer a brief assessment of socialist agriculture since the collapse of the socialist regime in late 1989. In Chapter 7 we discuss the nature and extent of agricultural privatisation and its impact on present-day production systems. Chapter 8 concludes.

2 SITUATION IN 1945

Prior to the end of WW II agricultural production in eastern Germany was characterised by a bimodal structure. A large number of small-scale farms of up to 5 ha, and a relatively small number of large-scale farms cultivating 100 ha and more on the other (Appendix Tables A2 and A4). About 55 per cent of the farms comprised less than five ha and they cultivated less than 10% of the agricultural land. On the other side, about one per cent of the farms of a size of 100 hectares and more cultivated about 30 per cent of the agricultural land. The vast majority of these farms were located in the northern parts of the country that used to be part of the Kingdom of Prussia (since 1918 Free State of Prussia), i.e. the present-day federal states of Mecklenburg-Pomerania, Brandenburg and Saxony-Anhalt. The more industrialised southern part of eastern Germany was dominated by small and medium-scale farming.

At the same time, agricultural production in the western parts of Germany was dominated by small-scale farms at the beginning of WW II (Appendix Tables A1 and A3). As in the east, farms larger than 100 ha just made up about one per cent of all farms. In contrast to the east, these large farms comprised just seven per cent of the agricultural area.

In the east, ownership of the large farms was quite heterogeneous. Nevertheless, this group had been summarised in the political discussion in 1945 as rural nobility ("*Junker*"). There were the old-settled rural nobility tracing their family roots back over a number of centuries.

Over time, many of these families lost their estates due to bankruptcy, despite heavy government support since the second half of the 18th century. By 1857, 5,296 of the 12,399 noble estates in the whole Kingdom of Prussia (or 42.7 per cent) had already been owned by bourgeois families (CARSTEN, 1988: 97). This trend of selling to common people continued over time up to the 1930s. On the other side, bourgeois families were ennobled, particularly after the set up of the German Empire in 1871. However, the strong position of the rural nobility was not only based on their land ownership, but more importantly of their growing dominance in the administration and the armed forces starting during the 18th century (Carsten, 1988: 40-55) and continuing up to the end of WW II.

Although there had been strong interchanges and intermarriages between rural nobility and bourgeois families like all over Europe, the effect had been different. While in Western Europe the values as well as the social and political agenda became more and more bourgeois during the 19th century, in Prussia the opposite became true. Here, the bourgeois families took over rural estates and adopted the values of the rural nobility. Hence, it became "feudalised" which culminated, among others, in a strong militarisation of state and society. This development seems to contribute to the strong antipathy with respect to the "*Junker*" after WW II (CARSTEN, 1988: 130-131).

Many large farms seemed to have been managed well. While there had been absentee landlords, most of farms were managed by the owners themselves (at least in that part of Prussia making up present-day East Germany). Despite the general impression that these estates were massive in scale, they were – on average – only a few hundred hectares in size. The owner-operator approach was seen as the main reason for the intensive and productive farming systems. Technical progress in agricultural production methods were fully applied and new machines had been quickly adopted. These large-scale farms were at the forefront in adopting the advantages of rationalisation and modern techniques (KRUSE, 1988: 12). Karl Brandt, a professor at Stanford University, who was recruited as agricultural advisor to the American Military Administration called the German large-scale farms as "the most productive and most important suppliers of food to the big cities" (quoted in KRUSE, 1988: 13). Carsten in his general analysis of the rural nobility in Prussia agrees to some extent, only. He admits that many "*Junker*" used to be competent farmers, but, in general, they were not the front-runners of modernisation. He characterises them to have been as conservative with respect to the adopted farm technologies as to their political agenda (CARSTEN, 1988: 195).

At the end of the WW II, eastern Germany was under intense pressure from two sources: (1) a degraded stock of necessary inputs – machines, livestock, and seeds; and (2) a stunning increase in the need for food (SCHOENE, 2000: 17). Already starting before the end of the War, a large influx of refugees began to arrive in eastern Germany – ethnic Germans evicted from the former German Eastern territories in Poland, but also from Czechoslovakia, Bulgaria and Yugoslavia and other places in the east, as well as others fleeing in advance of the coming Soviet army. By 1946, about 3.6 million refugees stayed in East Germany and most of them had to be accommodated in rural areas (BAUERKÄMPER, 1994: 119). While agricultural production had to get to work again, a re-organisation of agricultural production seemed to be a viable option in solving both existential problems: provision of food and integration of refugees (SCHOENE, 2000: 17).

With the end of fighting and the unconditional surrender of the German government (8 May 1945) East Germany came under direct Soviet occupation (Soviet Occupation Zone). Evidence suggests that Stalin was committed to a direct transfer of the Soviet system into the new areas now under Soviet military control. As he emphasised in a talk with Yugoslav communists in April 1945 that this war is different to former ones as whoever comes off as winner will impose his system on the conquered territory. However, this idea was initially set aside in favour of the

creation of an "anti-fascist-democratic order" on the basis of a multiple political party system. This did not mean that Stalin had abandoned serious interventions in the social and economic structure of the conquered territory (BECK, 1995: 179-180). In early May 1945 the first group of German communists returned from exile in Moscow. This "Group Ulbricht" had been directed to work under the guidance of the Soviet Military Administration (SMA) to establish a socialist system in Germany (KRUSE, 1988: 15).

This social and economic change implied that the agricultural sector had to be completely re-organised. This restructuring entailed three distinct phases (TÜMMLER, 1969: 20; WÄDEKIN, 1974: 142; SCHOENE, 2011: 163).

1. 1945-1949: Forced expropriation of all farms larger than 100 ha, including the farms of active Nazi-members and supporters, as well as of war criminals. This enforced change of land tenure has been termed "land reform".
2. 1949-1952/53: Heavy repression of large farmers cultivating 20-100 ha who relied on employed labour and were, hence, defamed as class enemies. This period had been labelled "crowding-out struggle".
3. 1952-1960: Collectivisation of agricultural production starting in 1952. In principle, it had been on a voluntary basis, but soon evolved into the presence of heavy pressure. The June 1953 uprising can be traced, in part, to resistance to this phase. The process slowed down between 1953 and 1957, but then escalated by 1959. The final push came with the campaign known as the "Socialist Spring" in early 1960. Collectivisation was officially finished by 25 April 1960.

In the following three chapters these distinct phases will be discussed in more detail. These developments will be put in perspective with other countries in Central and Eastern Europe.

3 LAND REFORM IN 1945

During their years in exile, the German communists were planning the re-organisation of agricultural production and rural society. The landed nobility ("*Junker*") was seen as a hotbed of Prussian militarism, reactionary forces and fascism (KRUSE, 1988: 13). This view was shared by large groups within German society and Western Allies. As early as 1944, most communists in Moscow exile expected a spontaneous uprising and occupation of the large farms by their workers once the war was over (SCHOENE, 2011: 51). They did not expect that an administrative land reform (i.e., reform form above) would be necessary. During meetings in Moscow (4-10 June 1945) Stalin apparently intervened and called for fundamental social change in rural areas. He saw this as essential for democratic renewal in Germany (LAUFER, 1996: 22). Liquidation of the large estates became part of the founding proclamation of the Communist Party on 11 June 1945. However, German communists were less interested in a complete imposition of the Soviet economic system at that time. They preferred to preserve private ownership of production means and private farming. When "land reform from below" failed to materialise, it was decided that administrative measures "land reform from above" were necessary (SCHOENE, 2011: 50-51).

Now, things moved very quickly. By late July 1945, a draft of the land reform decree was written by the SMA. In an accompanying letter the contents of the draft version were explained. It was explicitly stated that this draft was – with the exception of the expropriation limit – fully in line with on-going land reforms in Poland, Hungary and Romania (LAUFER, 1996: 27). The Central Committee of the Communist Party discussed the first draft of the land reform decree on 12 August 1945. By 22 August, the decree had been adopted and sent out to the lower units as a guiding directive (SCHOENE, 2000: 20). Once the Communist Party had

adopted the decree, the SMA pushed for a rapid implementation. It was decided to start in the Province of Saxony (now the Federal State of Saxony-Anhalt) because of the strong communist tradition in this region.

In order for the decree to gain legal status, the provisional government (the "block of the anti-fascist democratic parties" consisting of the other three legally approved parties[1]) had to vote and endorse it. When the provisional government convened on 28 August 1945 it was confronted by the Communist representative with the demand to accept the land reform decree immediately. The SMA representative supported this move, and yet the other three parties refused to comply. Serious disagreements followed, largely over the implementation procedures called for. Finally, on 3 September 1945 the provisional government agreed to the land reform decree. The other four East German states quickly followed with almost the same text – Mecklenburg-Pomerania on 5 September, Brandenburg on 6 September and, finally, Saxony and Thuringia on 11 September (BAUERKÄMPER, 2002: 80-82).

This decree was immediately implemented by the SMA and the German communists. However, since it was now harvesting season, many "rank and file" communists in the rural areas were concerned that this was a dangerous time to impose radical change on agricultural production. The Social Democratic Party argued for keeping the large-scale farms under joint production in the form of "agricultural production cooperatives" (BAUERKÄMPER, 1994: 122).

An issue which was repeatedly discussed in the following years was whether this decree had any legal basis. Officials in the Christian Democratic Party doubted its legality, primarily because the expropriated owners were denied the right to go to court to fight the action (SCHOENE, 2011: 57). More important is the fact that the provisional governments – at that time – lacked the right to make new laws. The provisional governments were merely the German "support organisations" by the SMA. Therefore, the land reform decree was seen as an order – and edict – by the SMA. The provisional governments simply had to accept it. It was not until 23 October 1945 that the SMA granted the provisional governments the right to create limited legal decrees (KRUSE, 1988: 16).

3.1 Implementation and results of the land reform

Basically, the "democratic land reform" was a large-scale land redistribution programme. The land of large-scale farmers was taken away and handed over to the large groups of landless agricultural workers, small-scale farmers and refugees. The guiding principles for expropriation were (KRUSE, 1988: 16; KUNTSCHKE, 1996: 52):

- Expropriation of all farms cultivating 100 ha and more. The land area did not refer to arable land, but agricultural land in total (including rented land).
- The expropriated land owners had to leave their farms. They were not given the opportunity to continue farming on some left-aside remaining land, i.e. a farm below 100 ha. Similarly, they were not entitled to claim any other land reform land.
- The farm families were expelled from their homes, but had to leave the county within hours. This meant a relocation of at least 20-50 kilometres. They were only allowed to take a few personal items in a rucksack. They lost their homes, their furniture, their other valuables, and irreplaceable objects of art. There was no orderly resettlement. Many of these families were arrested immediately and sent to a prison camp on the Island of Rügen.

[1] Next to the Communist Party (KPD), these legalized parties were the Social Democratic Party (SPD), the Christian Democratic Party (CDU) and the Liberal Democratic Party (LDP).

- A similar fate was experienced by those farmers who had been identified as Nazi-activists and war criminals, but who cultivated less than 100 ha.

Initially a few large-scale farmers were able to continue farming on some remaining areas of their former properties if they had been identified as non-active members of the Nazi-party or as resistance fighters. However, even this group lost its remaining property when the SMA ordered a second wave of land reform in September 1947. In the following months all remaining large-scale land owners had to leave their farms and their villages (BAUERKÄMPER, 1996b: 77).

In sum, between 1945 and late 1949, 7,160 large-scale farmers and 4,537 so-called war criminals and Nazi activists had been expropriated without compensation amounting to 2.5 million ha and about 130,000 ha of agricultural land, respectively (Table 1). On average, the large-scale farms were about 350 ha in size, with only a few of them in excess of 1,000 ha. In total, the large-scale farmers alone had to contribute about three quarters of the total land reform area. Additional land came from areas already in public control like that property previously confiscated during the Nazi era and existing state property (BELL, 1992: 85). In total, the land reform area comprised about 3.3 million ha or about one third of the total agricultural area in East Germany at that time (THÖNE, 1993: 15).

Table 1: Confiscation of landed property after May 1945 (at 1 January 1950)

Type of property	Area (ha)	Percentage
7,160 private farms above 100 ha	2,517,357	76.3
4,537 private farms below 100 ha	131,742	4.0
Already state property; 1,288 farms; includes farms expropriated under the Nazi regime, i.e. before 8 May 1945	337,507	10.2
Settlement and experimental farms; 169 farms	22,764	0.7
State forests; 384 units	200,247	6.1
Other property; 551 units	88,465	2.7
Total	3,298,082	100.0

Source: BELL, 1992: 85.

One of the major characteristics of this land reform had been the wish to implement it as quickly as possible. At the start SMA anticipated to have it finalised by 25 October 1945, already. Given the precarious conditions during the first months after the end of the War, this time frame was highly illusive (SCHOENE, 2011: 54). But, in general, the large-scale farmers and the so-called Nazi-collaborators were quickly evicted without any right to defend themselves in the court of law. The land reform was accompanied by heavy political pressure and reprisals. Their only "crime" had been that they cultivated more than 100 ha or had been declared without further ado as "war or Nazi criminal" (KRUSE, 1988: 7). The families involved had no right of legal protection. The classification as war criminals or Nazi activist was not based on a court decision, but on the judgement of an administrative agency. In addition, those families who had been expropriated during the Nazi regime already (i.e. a few Jewish families and active resistance fighters against the Nazi regime) did not get their property returned. In order to avoid any property claims in the future, all files of the cadastral registers had been destroyed (THÖNE, 1993: 14).

The execution of land reform was in the hands of the local and districts administrations under the supervision of the respective provincial and state administrations. The expropriated land was handed over to "land reform funds" which were managed by yland reform commissions". Their task had been to re-distribute the land in an orderly process. All over eastern Germany about 10,000 commissions had been established (TÜMMLER, 1969: 24). In general, a village commission comprised 5-7 persons representing agricultural workers, small-scale farmers and

refugees. They developed distribution plans of the confiscated property and assessed the claims of the potential beneficiaries, i.e. small-scale farmers, workers, tenants and refugees. Often it was decided by drawing lots (BAUERKÄMPER, 1994: 122).

About two thirds of the total land reform area was redistributed among private individuals. 559,089 persons and their families benefitted from the reform. 210,276 new farms were established by either former agricultural workers and landless farmers, or by refugees (Table 2). On average, a new farm comprised about 8 ha. Besides these two groups small-scale farmers received land to enlarge their small farms and industrial workers to set up household plots. The remaining one third of the land reform land was reserved for establishing 540 state farms, experimental stations and seed multiplication units (BELL, 1992: 86; BERGMANN, 1973: 111). These state farms comprised about 500,000 ha, while another 600,000 ha had been forestry land (LÖHR, 2002: 19).

Table 2: Beneficiaries of the expropriated land (at 1 January 1950)

Group	Number	Area (ha)
Landless farmers and agricultural workers	119,121	932,487
Landpoor farmers	82,483	274,848
Refugees (expellees from Eastern territories)	91,155	763,596
Small tenants	43,231	41,661
Workers	183,261	146,645
Forest land to small farmers	39,838	62,742
Total Number	559,089	2,221,979

Source: BELL, 1992: 86.

At that time most non-communist politicians, as well as rank and file party members, argued that an average farm size of 8 ha was much too small for viable farms. The greatest disadvantage, however, was that these newly established farmers lacked draft animals, agricultural inputs and proper farm buildings. Similarly, housing conditions were very bad due to war destruction and the large influx of refugees (BAUERKÄMPER, 1994: 123). As a way out many farmers formed joint enterprises and executed the main task jointly in an informal manner which had the traits of agricultural production cooperatives. Local and district administrations were eager to eliminate these joint arrangements because – at that time – individual farming was considered superior (SCHOENE, 2000: 20-21).

At this stage, it can be concluded that the land reform resulted in the elimination of a large group of land-owning farmers. It can be assumed that almost all of them fled to the West. Many took that route directly after receiving the news of confiscation. Others were arrested and sent to one of internment camps. Those who survived jail and internment camps left for the West as well. Almost all expropriated farm families fled to West Germany between 1945 and 1949, i.e. about 11,500 families (7,160 plus 4,537 families). On the other hand, the land reform led to a significant increase of small-scale farms. While most newly established farmers had been happy to receive some land in order to survive in the harsh post-war years, many soon gave up due to the massive difficulties in production. By the end of 1948 about 10,000 of the newly established farmers had given up. As industrial production started to improve, they left their farms and went to the Southern parts of East Germany or straight to the West. This figure increased to about 67,000 in 1951 (SCHOENE, 2011: 81). LÖHR (2002: 20) reports an even higher figure of about 80,000 newly established farmers at that time. Over the years it became more and more difficult to find suitable replacement for the outflow of farmers and much of the land remained abandoned. Nevertheless, after the harsh years directly after the War, agricultural production improved to some extent in 1948-1949, which marked the start of the second phase of rural transformation (as will be discussed in Ch. 4).

3.2 Discussion about the 100 ha ceiling

During the years in Moscow exile, the German communists had discussed the issue of expropriation of large-scale farms. In Winter 1944/45 an upper ceiling of 150 ha seemed to have been the preferred option (SCHOENE, 2010: 58). However, once the War was over and the SMA was in command, various expropriation limits were again under discussion among the communist party leadership. At that time, there had been the idea of confiscating the land of all farms larger than 40 ha (SCHOENE, 2010: 52). It was also discussed to allow those expropriated farmers to keep a residual farm if they had been identified as Nazi-resistance activists (MURKEN, 2001: 63). But in the draft version of the land reform law prepared by SMA in late July 1945, the upper limit of 100 ha became the focal point. The draft showed that there are 8,671 farms of more than 100 ha, or about 1.5 per cent of all land owners, but 46.2 per cent of all arable land. An expropriation ceiling of 50 ha would have increased the number of affected land owners to 12,560 (LAUFER, 1996: 27). Surprisingly, in the SMA draft, the further discussion and the final decree, all landed property of monasteries and other religious bodies was exempted from expropriation (SCHOENE, 2011: 53).

The final decision about the upper limit seemed to have taken by Stalin in connection with the Potsdam Conference (17 July-2 August 1945). He endorsed the 100 ha ceiling and pushed for a quick implementation despite the arguments about disrupting the on-going harvesting campaign and preparations for the imminent spring season. The German communists seemed to have favoured a 50 ha ceiling (SCHOENE, 2010: 59). The Soviet advice had been accepted in the following internal discussion and in their final decree dated 22 August 1945. The 100 ha limit seems to have been adopted from the German statistical classification that, since its beginnings in the late 19th century, designated a specific group of farms with 100 ha or more. However, this ceiling did not reflect the socio-economic differentiation of large-scale farms. In this respect, it had been applied relatively arbitrarily as this size included owned and rented land and there had been no differentiation between "agricultural" and "arable" land. Nor was there a provision concerning natural soil fertility. The 100 ha ceiling did not distinguish peasant farms on the one hand and large land holdings on the other (KRUSE, 1988: 17).

3.3 Comparison with West Germany

The importance of implementing a land reform in Germany had been shared by all Allied powers. While land reform had not been explicitly mentioned in the Potsdam Agreement, it was seen as a critical step in demilitarising, denazifying and the democratizing Germany. However, the Western Allies deferred this issue due to two major reasons: Contrary to the East, there were not very many large estates. Also, they did not wish to jeopardize the precarious food situation. The Western Allies did not interfere in the land reform activities in the East as they saw it in line with the Potsdam Agreement. They neither objected to this separate implementation of land reform in the Soviet Occupation Zone nor did they push for a joint reform for the whole of Germany. They instructed their staff not to show any disagreement to the public (KNUTSCHKE, 1996: 51; LAUFER, 1996: 34).

The issue of land reform had been revived among the Allies at the foreign minister conference in Moscow in April 1947. It was decided to execute the land reform in the respective occupation zones by the end of that year. The military administrations of the United Kingdom and United States then provided rough guidelines and left the actual design and implementation to the German side within the respective federal states. In this way, the various political parties and lobbying groups could delay the whole process and defuse major requirements (BAUERKÄMPER, 1996a: 11). Hence, the Western federal states implemented land reforms separately under their respective jurisdiction. Most of them adopted the 100 ha ceiling, but allowed provisions for natural factors. In general, it has been concluded that land reform had

been implemented at a sluggish pace in West Germany. Between 1945 and 1954, only about 211,000 ha were made available for redistribution, of which about 150,000 ha had been confiscated with compensation from private owners. About 130,000 ha had been redistributed among farmers, while the rest had been taken over by public entities (TÜMMLER, 1969: 22).

3.4 Comparison with other countries in Central and Eastern Europe

The land reform in East Germany was in line with the land reforms which had been implemented in all states in Central and Eastern Europe conquered by the Soviet army. Governments which had been more or less favourable to the Soviet system had been inaugurated and the respective communist parties played a prominent role. In all these countries, land reform was seen as a decisive step in transforming rural societies. Small-scale farmers were needed as irreplaceable allies for the final victory of a communist political system (SCHOENE, 2011: 38). However, unlike the reforms in the Soviet Union following 1917, agricultural land had not been nationalised. The farmers' ideal of private ownership had been very strong in all these countries and a complete nationalisation of the land would have been politically risky. Therefore, agricultural land of large-scale farmers, war criminals and, in some countries, of ethnic minorities (in general of ethnic Germans) had been confiscated without compensation and redistributed among landless and landpoor farmers (TÜMMLER, 1969: 18). In this way, the patterns in all these states looked quite similar although there had been some differences due to national characteristics.

For **Poland** the war ended in a massive shift of its territory to the West. About one quarter of the total arable area had once belonged to pre-war Germany. When the German population was expelled their land been taken over by Polish settlers. On 6 September 1944 a decree about land reform had been issued by the provisional government (LAUFER, 1966: 34). Farms larger than 100 ha of agricultural land, or of more than 50 ha of arable land had been expropriated without compensation. In addition, all agricultural land owned by ethnic German farmers was confiscated. In old Polish-settled areas, this affected about 18 per cent of total farm land. Large-scale farms were, for the most part, converted to state farms. The remaining land was redistributed among landless and landpoor farmers to establish about 800,000 new small farms, while another 280,000 farms had been enlarged (WÄDEKIN, 1974: 163-164).

In **Czechoslovakia**, land reform had been implemented in various steps. With the decree of 21 June 1945, all land of the "traitors and enemies of the Czech and Slovak people" had been confiscated. Almost all ethnic German and most ethnic Hungarian settlers were expelled from the country. About three million ha of agricultural land, or about 1.6 million ha of arable land had been redistributed among Czech and Slovak landless and landpoor farmers, mostly in the border areas (WÄDEKIN, 1974: 151). In a second step, based on the land reform law of 11 July 1947 (and revised 21 March 1948), all farms comprising more than 50 ha were confiscated. During this phase about 1.4 million ha of agricultural land (500,000 ha of arable land), were affected. About one sixth of this confiscated land had been redistributed, while the major part was transformed into state farms (BERGMANN, 1973: 107).

The farm structure in **Hungary** had been dominated by large-scale farms. Estates comprising 500 ha and more had about one fourth of the arable land under their control. In general, however, these farms did not promote any modern production methods. The land reform decree of 18 March 1945 called for the confiscation of farms larger than 570 ha without compensation. All farms larger than 57 ha were to be confiscated with compensation. However, compensation was rarely paid (SCHOENE, 2011: 40). The land of war criminals and of ethnic Germans had also been confiscated. In total, about 3.2 million ha (or about 35 per cent of the total agricultural area) were to be redistributed, of which about 1.9 million ha went to landless farmers. In this way about 650,000 new farms were established, cultivating 2.9 ha on average. The remaining less fertile land and forestry areas had been transferred into state property (WÄDEKIN, 1974: 171).

In **Romania** the land reform law had been adopted on 23 March 1945. There had been spontaneous land occupation before that date. All farms larger than 50 ha, land of war criminals, and of those who fled the country was to be expropriated without compensation. Ethnic German farmers were allowed to stay in the country. Most of the land had been redistributed among landless farmers, usually they were given up to five ha each. After the abdication of the King (30 December 1947), all royal domains became state property. By the end of 1950 about nine per cent of all arable land was cultivated by state farms (WÄDEKIN, 1974: 178).

Yugoslavia was the only country in Central and Eastern Europe which had not been liberated by the Red Army, but by its own partisans. According to the land reform law of 23 August 1945, all farms larger than 30 ha (or over 45 ha on poor soils) were confiscated. In addition, all land of ethnic German farmers, of war criminals and of war profiteers was expropriated. Since small-scale farming had been predominant, only about seven per cent of the total land area (about 1.6 million ha) had been available for redistribution. About 800,000 ha were distributed among landless and landpoor farmers while the remaining area became state property (BERGMANN, 1973: 140; WÄDEKIN, 1974: 207).

Bulgarian agriculture had also been characterized by small-scale farming. First initial confiscations were already implemented in 1944. The land reform law dated 9 April 1946 demanded the expropriation of all farms larger than 30 ha. In this way, about 17 per cent of all agricultural land became available for redistribution (WÄDEKIN, 1974: 188). Finally, **Albania** implemented a land reform very similar to the Yugoslav model (LAUFER, 1996: 34).

In all these countries, communist parties were the driving force for land reforms. This reform was seen as a major means to impose their political leadership. Based on the national characteristics the upper limit of land confiscation differs between the various countries. Due to the successful implementation of land reforms in the respective countries, rural societies had been transformed which can be seen as one decisive factor in integrating these countries into the Soviet bloc. It seems reasonable to argue that without Soviet support, none of these land reforms could have been implemented. If the communists had tried without this support, it would have come to compromises with the other political forces or to a complete failure (LAUFER, 1996: 34).

3.5 Development in the soviet occupation zone in Austria

A special development could be observed in this country. Austria had been absorbed by the German Empire in March 1938 and became a part of Germany ("*Großdeutsches Reich*"). In their Moscow Declaration of October 1943 the Allies referred to it as the "first of Hitler's victims", but they also stressed that Austria could not escape its responsibilities for war crimes. Therefore, Austria was liberated from the Nazi regime and the country re-established within its borders of 1938. However, as with Germany, it was divided into four occupation zones and became subject to war reparations. By late April 1945 a provisional central government had been established which was officially recognized by the four Allies over the following months (MUELLER, 2005: 19, 75-111).

In Austria's Soviet Occupation Zone, all property belonging to German associations and companies, war criminals and Nazi collaborators had been confiscated. However, unlike in eastern Germany, property belonging to the large land owners had not been confiscated *per se*[2]. In general, all land confiscated by the Nazi regime and managed by the German Settlement Society ("*Deutsche Ansiedlungsgesellschaft*", DAG) had been regarded by the Soviets as German property (LANGTHALER, 2003: 678). In total, the Soviet administration handled about 150,000 ha of

[2] There had been no strict landownership ceiling. For example, the property of the Schwarzenberg family which had been confiscated by the Nazi regime had been returned relatively quickly (SANDGRUBER, 2002: 296).

agricultural and forestry land in their zone. Similarly, the other three Allies confiscated German property, but handed it over to the Austrian government as a trust fund (KLAMBAUER, 2005: 21-22).

Unlike elsewhere in the zone of Soviet control, the Soviet administration did not enforce a land reform. But as their German colleagues, the Austrian Communist Party followed a vision of land reform which aimed at distributing land among land poor farmers in order to gain the loyalty of the farming population. The Party programme did not push for a socialist society, but aimed at a change of the political power structure (MUELLER, 2005: 45). However, the Soviet administration did not support the Communist perspective as in East Germany. While Stalin's objective of a German political and military neutralization did not come true, the four Allies agreed to return Austria its full sovereignty. After several years of negotiations, Austria ensured its full independence in agreeing to perennial neutrality in October 1955, and the remaining occupying armed forces left the country. Most of the confiscated land had been returned to the former owners or their heirs.

3.6 Assessment and implications of the land reform

There had been extended discussions about the reasons of enforcing the land reform in eastern Germany under the harsh post-war conditions. All analysts agreed that expropriation of large-scale farms, and the establishment of a large number of small-scale farms, did not make any economic sense. The German communist party, however, had several objectives when pushing for the land reform. Actually, three major ones have to be mentioned:

- The large land holders used to be an influential political group during the last decades, if not centuries, particularly in East Germany. Next to the small group of the urban (upper) middle class and bourgeoisie this societal group was seen as the only countervailing political power to the communist party in case the occupying armies might have left quickly and a united German state would be re-established. Therefore, it was aimed to get rid of this social group as quickly as possible (KNUTSCHKE, 1996: 61).
- On the other side, the communist party was in urgent need of potential partners in society to defend its claim to power. In line with the Leninist alliance theory the newly established farmers and other land reform beneficiaries were seen as partners against the medium and large-scale farmers to secure the power of the Party in the villages (SCHOENE, 2011: 47). Indeed, at the first elections in 1946 the communist party got almost half of the votes and was particularly successful in the northern areas.
- Finally, the communist party could show that its party apparatus was running smoothly in achieving the stated objective. This did not only refer to the internal organization, but it clearly demonstrated that the Party as a junior partner of SMA could get things accomplished, even against the resistance of the other (more bourgeois) parties (SCHOENE, 2011: 62).

The land reform led to a re-organisation of economic, social and political power in the rural areas. Small-scale farming had become the dominant pattern of agricultural production (Table 3). The share of large scale farms decreased significantly. Private farms larger than 100 ha no longer existed. However, the newly established state-owned farms exceeded this threshold. On the other side, while in 1939 about 20 per cent of the farms were smaller than 10 ha, this share increased to more than 40 per cent in 1951.

Table 3: Share of agricultural land cultivated by farm size group, East Germany, 1939-1951

	0.5-5 ha	5-10 ha	10-20 ha	20-50 ha	50-100 ha	≥100 ha
1939	9.1	10.6	21.2	22.5	8.4	28.3
1946	9.7	27.6	25.8	24.0	7.7	5.2
1951	10.8	31.4	27.4	21.4	4.6	4.4

Source: BAUERKÄMPER, 2002: 524.

With the expropriation of the large estates, the influence of large farmers – those cultivating between 20 and 100 ha – increased. During the early post-war period these farms benefited from the large supply of manpower. These farmers possessed a high degree of social prestige in the villages; they were better equipped with inputs and could earn relatively high incomes and, in this way, consolidate their farms. On the other side, the newly established farmers had only very limited access to vital inputs. Therefore, they were economically dependent on the larger farmers. Even the build-up of machinery exchange stations (MAS) in 1946/47 did not change this situation much, as these stations relied on a few, mostly out-of-date machines which required constant repairs (BAUERKÄMPER, 1996b: 81).

In general, all old-settled farmers had a certain advantage compared to the newly established ones as they could rely on already existing farms. They, in general, held the decision-making positions in cooperatives and the newly established Association for Farmers' Mutual Help (VdgB) which actually had been set up by SMA and the Communist Party in support of small-scale farmers. In this way, the old-settled farmers secured their access to the limited and restricted production inputs. Hence, the villages could be described as an "envious society" between old-settled farmers and newly established ones which seriously hampered social integration (KLUGE, 1996: 116). However, as KLUGE (2001a: 24) observes, in a situation of shortage common to almost all farms, solidarity and a mutually supportive farmers' community could not be developed. The economic dependence of the newly established farmers on the larger old-settled farmers was not a cause of the missing willingness for integration by the old-settled farmers, but rather a consequence of the unsettled general economic problems. These problems affected both groups alike and might have only been solved if more inputs could have been made available. However, this could not be accomplished in East Germany at that time.

Following implementation of the land reform, the communist party was eager to consolidate the new small-scale farms. However, this was difficult and thus more and more small-scale farmers were giving up farming. With the change of the overall political landscape in 1947/48 the communist party received more flexibility in its goal of establishing socialist agriculture. Up to that time, all four Allies were inclined to maintain a certain common consensus for the whole of Germany. Once the Soviet delegation left the Allied Control Commission (20 March 1948), this fiction was given up. On 8 May 1948 the Soviet command informed the SED leadership that from now on the development of a new type of democracy had started. The SED was supposed to achieve a dominant political position and should be prepared to effectively take over the power (SCHOENE, 2000: 43). Now, a gradual increase of political radicalization could be observed. With respect to the agricultural sector, this change implied a more aggressive stance against the so-called large farmers and the traditional cooperative organisations (SCHOENE, 2000: 84).

4 REPRESSIONS AGAINST LARGE-SCALE FARMERS STARTING IN 1949

During the first post-war years medium and large farmers played a dominant role in the rural areas. Due to the oversupply of rural manpower and widespread hunger these farmers were in a comfortable position since they were – relatively – well equipped with animals and machines.

They could not only fulfil the obligatory delivery requirements, but also earn a good income with their surplus production. This good economic position was also reflected in a strong social position in the villages. In general, they had been elected to the decision-making bodies of the self-help organisations, i.e. both the traditional cooperatives of the Raiffeisen type and the newly established Associations for Farmers' Mutual Help. (BAUERKÄMPER, 1994: 133).

4.1 Planning

This comfortable position was not supposed to last very long once the supply situation of food had been improved, and with changes of the overall political situation. At the first party congress of the Socialist Unity Party (SED, an enforced merger of the Communist Party with the Social Democratic Party in April 1946) in September 1948, farmers were officially separated into two diverging groups. On the one hand, there were the "working farmers" or "small food producers" who cultivated less than 20 ha and did not employ any outside labourers. On the other side, there were the large farmers cultivating more than 20 ha who recruited outside labourers. These were "capitalist entrepreneurs" who, because of their reliance on hired labour (exploitation of the labour force), were easily accused of being a class enemy. The "liquidation of kulaks" (WEBER, 1991: 65) had become the objective of state policy following the experience of the Soviet Union. Now the time had come to suppress this class in the villages in favour of the small-scale farmers (PRANGE, 2007: 31).

Starting in late 1948, a coordinated policy was implemented to achieve this objective. In a first step agricultural taxes had been differentiated according to farm-size groups in a progressive manner. Large farmers had to pay relatively higher taxes – 30 per cent more per ha – than small-scale farmers. A similar progressive scale was introduced for the obligatory delivery requirements. Large farmers had to deliver more products per ha (or per animal) than small farmers. This progressive differentiation was continuously expanded during the following years (BAUERKÄMPER, 1994: 134). The 1950 law requiring increased protection of the agricultural labour force led to an immediate shortage of – and cost increase for – agricultural labour (SCHOENE, 2011: 93). Farmers who could not meet their obligatory delivery quotas faced severe punishment such as the reduction in access to animal feed or other necessary inputs. Finally, these farmers could be punished as economic saboteurs and criminals. Penalties included an official warning, a monetary fine, imprisonment or, finally, confiscation of the farm (PRANGE, 2007: 32).

In addition to economic restrictions, the Socialist Party now pushed to eliminate the social and political influence of large farmers. They were forced out of the decision making bodies of rural self-help organisations. Finally, the traditional cooperatives were pressured to merge with the Associations for Farmers' Mutual Help in November 1950. The machinery exchange stations (MAS) which had been started during the land reform period with the remaining machines of the large-scale farmers, took over all machine-related business activities of the former cooperatives. This development increasingly placed the large farmers at a disadvantage relative to the small ones (BAUERKÄMPER, 1994: 134).

4.2 Implementation

The progressive delivery quotas, the declining supply of inputs, progressive taxes and unfavourable tariffs gradually undermined the economic situation on many large farms. As delivery quotas were increased, more and more farmers gave up farming. By 1950 the obligatory delivery quota had become three times greater for large farmers cultivating more than 20 ha compared to small farmers cultivating less than five ha. The sanctions were re-enforced, particularly with the start of the collectivisation campaign in 1952 (see below). Many large farmers were unable to meet the increasing requirements. Since failure was now a crime, many farmers left their

farms in the darkness of night and fled to the West. Between 1950 and 1953, 24,211 farmers "voluntarily" left their farms – or were forced to hand them over due to claims of economic sabotage. Farmers, who were accused of not cultivating their farms correctly, were ordered to leave within hours (BELL, 1992: 55); a fate they now shared with the large landowners of a few years earlier. About 697,980 ha (about 10.7 per cent of the arable land of East Germany) had been confiscated. While some small farms had been affected as well, the major share of these farms (14,998 or 62 per cent) and of the arable land (601,157 ha or 86.2 percent) was made up of large farms (larger than 20 ha) (BELL, 1992: 78).

The confiscated land was handed over to district farms which had been formed in May 1951. These farms were supposed to continue agricultural production although in many cases the land remained fallow. Legally, the confiscated land became state property ("second wave of expropriation"), while the land of "republic refugees" remained under the ownership of the respective farmers, but under public custody. With the decree of 11 November 1968 the latter class of land was declared state property (TÜMMLER, 1969: 54; THÖNE, 1993: 49; HAGEDORN et al., 1997: 345).

In conclusion, the majority of large farmers gave up farming within a few years. However, this social group did not disappear completely. While this group comprised 58,544 farms in 1946, some 18,381 had joined an agricultural production cooperative (APC) by 30 November 1959 (WEBER, 1991: 64-65). However, an additional 17,469 independent large farms were still operational at the end of 1959 (STATISTISCHES BUNDESAMT, 1993: 14-15). Hence, about 23,000 large farms had been given up during these years. It can be assumed that most of these farmers, and also those who had been forced into collective farms during the "Socialist Spring" in early 1960 left the country and fled to West Germany (WEBER, 1991: 65).

5 COLLECTIVISATION OF AGRICULTURAL PRODUCTION

While in official statements any reference to a collectivization of agricultural production had been avoided, this issue had been discussed internally for a number of years. Since the development of the Soviet Union had been the primary guidance for the Socialist Party, this had to be the ultimate goal. There had been first plans in 1948 when party officials studied the collectivization in Poland (see below) and proposed similar steps in East Germany. Stalin himself seemed to have stopped these plans in December 1948 arguing that it was too early for the build-up of a socialist society and the collectivization of agriculture (BAUER, 2003: 298-299; ZINKE, 1999: 45). This attitude changed over the next few years. By 1952 the Socialist Unity Party had become the dominant party of the German Democratic Republic. The structure of society had changed already. However, there was still the sword of Damocles of an envisioned unification with West Germany in the air as Stalin had not given up this option. He favoured a neutralisation and demilitarisation of Germany and unification of both German states to avoid a further integration of the Western part into the Western military alliance. That option, however, failed in March 1952 (SCHOENE, 2010: 88-91). In April 1952 the SED-leadership travelled to Moscow where collectivisation of agricultural, amongst other issues, had been discussed. At the II Party Conference of the SED at 12 July 1952 the plan for the "well-planned build-up of socialism" had been adopted. One of the core elements had been the voluntary preparation of "socialism in the rural areas" in form of setting up agricultural production cooperatives[3] (TÜMMLER, 1969: 54).

[3] While in principle the set up of agricultural production cooperatives had been voluntarily, it soon became evident that, in general, they were set up by coercive means. The term "collective farms" seems to be more appropriate. In East Germany they were known as "*Landwirtschaftliche Produktionsgenossenschaften*" (LPG). This acronym will be used in this analysis.

While this development seems to reflect the actual decisions, KLUGE (2001a: 27) called it the "Moscow collectivisation legend". According to him, the collectivisation had been the late reaction to the year-long agrarian structural crisis. The central issue of the East German agricultural question was not the feudal large-scale farms, but the many small-scale ones. For both parts of Germany an agrarian reform improving the farm structure had been very high on the agenda; not due to political or social reasons, but simply to economic ones. By early 1952 the joint production and joint delivery activities of the newly established farmers could be no longer overseen. Up to that time, this type of joint activities had been totally contrary to the (official proclaimed) agro-political goals of the state party. The small farms were characterised by their limited size spread over various plots, missing agricultural inputs and the newly established farmers by their social marginalisation in the villages. These have been the constituting elements of the first agricultural production cooperatives. Therefore, KLUGE asked whether collectivisation had actually not been the last resort of the social and economic crisis in the agricultural sector and unforeseen result of a failed structural, production and social policy (KLUGE, 2001a: 26-35; KLUGE et al., 2001: 285). It seems that both issues have to be seen complementarily.

5.1 Implementation

In 1952 there had been a slow start with the formation of LPGs. While there had been a need among many small-scale farmers for joint production, the Party quickly realized that the vast majority of farmers would not agree to this strategy. The government applied massive agitation, heavy economic and political pressure as, otherwise, there would be no "build-up of the foundation of socialism" (BAUER, 2003: 360). By the end of that year, there had been 1,906 LPG comprising 37,000 members and cultivating more than 200,000 ha (about 3.3 per cent of the agricultural area in East Germany) (TÜMMLER, 1969: 87). Farmers who joined these collectives received a number of incentives and the collectives were strongly favoured in receiving input supply and credit. During the first part of 1953, collectivisation increased rapidly (Table 4). However, in this year, as in the following ones, the major source of land had not been provided by joining small-scale farmers but rather from farm land that had been abandoned by those fleeing to the West. By late 1957, more than half of the land in the collective farms had come from "abandoned land" (KRUSE, 1988: 144).

Hence, the collective farms did not grow out of "healthy" small-scale farms, but were an agglomeration of non-viable small-scale farms and abandoned land. Although they had privileged access to agricultural inputs, machines and credit, they were, on average, never as productive as their private competitors (KLUGE, 2001b: 212). The people's uprising in June 1953, which had been very strong in rural areas, led to a short suspension of the collectivisation campaign. Farmers were allowed to cancel their membership and return to individual farming, but those who chose this route were relatively few. One reason might be that the local administrative and party staff did not endorse the more relaxed policy of the central level. In addition, the obligatory delivery system had not been relaxed at all and a serious lack of inputs still characterised the farming sector (PRANGE, 2007: 39).

Even after a short period of truth, the collectivisation process did not experience a set back. From 1954 onwards the number and relevance of collective farms was gradually increasing. In the middle of 1959, there had been 9,566 LPGs cultivating 2.6 million ha – about 40 per cent of the total agricultural land in East Germany (TÜMMLER, 1969: 88). At the end of 1959, SED leadership proclaimed the final step in achieving "socialism in rural areas". All types of incentives and threats had been applied to the remaining private farmers in an effort to force them to join the collective farms. Party and state officials had been sent to rural areas for weeks to agitate farmers day and night (TÜMMLER, 1969: 93). Within four months, about 400,000 farmers were compelled (or convinced) to give up private farming. Between early March and mid-April

1960, the 14 regional districts announced the finalisation of collectivization. By 25 April 1960 the SED leadership proclaimed the end of the collectivisation campaign in the East German Parliament. It was declared that the "Socialist Spring" had come and all farmers were liberalised from exploitation. The collectivisation was advertised as a peace-securing measure. Within a decade, the number of individual farmers had declined from about 750,000 to a few thousand. The number of collective and state farms came up to about 20,000 (SCHOENE, 2011: 21, 130-135).

Table 4: Development of Collective Farms (Agricultural Production Cooperatives) in East Germany (1952-1960)

	Number of collective farms	Members	Area cultivated (ha)/ Share of total agricultural area (%)
July 1952	59	n.a.	n.a.
15 Nov. 1952	1,204	19,902	99,300 (1.5%)
31 Dec.1952	1,906	37,000	218,000 (3.3%)
30 June 1953	5,076	146,900	882,500 (13.7%)
31 Dec. 1953	4,691	128,550	745,300 (11.6%)
31 Dec. 1954	5,120	158,356	931,400 (14.3%)
15 Nov. 1955	6,047	196,946	1,279,200 (19.7%)
31 Dec. 1956	6,281	219,599	1,500,700 (23.2%)
31 Dec. 1957	6,691	229,026	1,631,900 (25.2%)
31 Dec. 1958	9,637	352,938	2,386,000 (37.0%)
15 June 1959	9,566	n.a.	2,586,100 (40.2%)
31 Dec. 1959	10,465	435,365	2,896,900 (45.1%)
31 May 1960	19,345	945,020	5,384,300 (83.6%)
31 Dec. 1960	19,261	961,539	5,420,500 (84.2%)

Note: n.a. = not available

Source: July and Nov. 1952: BERGMANN, 1973: 114; June 1953: BAUERKÄMPER, 2002: 535; all others: TÜMMLER, 1969: 87-88.

By the end of 1960, there were 19,261 collective farms containing almost a million members. About 5.4 million ha were cultivated by them – about 84.2 per cent of the total agricultural land. In addition, another eight per cent were cultivated by state farms. Almost all agricultural land (and production) had been socialised. The remaining land was held by a few private farmers (whose land could not be attached to any LPG), by private plots of the LPG members, and by land belonging to the protestant and catholic churches. Total church land made up 13,981 ha (TÜMMLER, 1969: 94; WÄDEKIN, 1974: 147).

The collectivisation period had not been without a struggle. Over the years, thousands of families had left their farms and home areas and fled to the West (Table 5 below). In addition, the collectivisation campaign had been accompanied by an unknown number of suicides whose number jumped during early 1960 (SCHOENE, 2011: 131). With the construction of the Berlin Wall on 13 August 1961, the option of leaving the country was no longer open. Now, people had no choice but to contend with the system. Members of collective farms showed their disagreement in subtle ways. Sabotage against collecive property increased rapidly, and many members decided to shirk whenever possible (SCHOENE, 2010: 227). Local officials and representatives of LPGs were sometimes beaten (BAUER, 2003: 506). Not all those who joined a collective under pressure stayed on. In 1960, 76,632 members cancelled their membership. The political regime showed some tolerance. But this changed after the construction of the Berlin Wall. From that time forward, a "hard line approach" was followed. Members who sabotaged collective activities were jailed. There were several show trials, and four members were sentenced to death in December 1961 (SCHOENE, 2010: 291). The following two years were difficult

time. Beginning in 1963/64, conditions improved as inputs became more available. Gradually, the collective farm model began to gain general acceptance.

5.2 Implications and assessment

With the end of the collectivisation campaign independent farming ceased to exist in East Germany (KRUSE, 1988: 11). Collectivization was accompanied by various crises. The regime had the option either to make concessions or to act more repressively. It acted in both ways. But still, people had the option to leave the country (SCHOENE, 2010: 14) and during the period between 1945 and 1961 people made ample use of it. While exact figures are difficult to obtain, it is estimated that between 1949 and 1961 about 2.7 million people left East Germany and fled to the West (ACKERMANN, 1995: 127).

Table 5: Estimation of Farmers leaving East Germany (Refugee Farmers), 1949-1961

Period	Number	Source
1950-52	~5,000 large-scale farmers	BAUERKÄMPER, 1994: 134
July 1952-Dec. 1954	~13,000 farmers	BELL, 1992: 46
Oct. 1952-Feb. 1953	~6,600 farmers	BAUERKÄMPER, 2002: 170
Jan.-March 1952	455 farmers	SCHOENE, 2011: 100
Jan.-March 1953	5,681 farmers	SCHOENE, 2011: 100
Apr.-June 1953	5,391 farmers	SCHOENE, 2011: 100
Jan.-Dec. 1953	14,065 farmers (but after June 1953 1,062 farmers returned and got their farm back)	KLUGE et al., 2001: 341
1959	7,211 farmers	BAUERKÄMPER, 2002: 192
Jan.-March 1960	12,634 farmers	SCHOENE, 2011: 133
1960	14,695 farmers	BAUERKÄMPER, 2002: 192
1961 (up to 13 Aug.)	6,975 farmers	BAUERKÄMPER, 2002: 192

Note: Does not include those newly established farmers after 1945 who gave up farming by their own choice; up to the end of 1951 67,045 land reform farmers had given up farming. Many of them left for West Germany or the industrial areas in Southern GDR.

How many of these were refugee farmers is difficult to assess. Their numbers at certain periods given in different sources are compiled in Table 5. On average, it is estimated that about six per cent of all refugees fleeing to the west had been farmers. The had left in two distinct waves: (1) during late 1952 up to Summer 1953 when the first collectivization had been launched; and (2) in Spring 1960 when collectivization had been finalized under great duress. In both periods, the share of farmers had jumped to about 12 per cent of all refugees. Particularly, the first period witnessed a sharp increase in the total number of refugees (ACKERMANN, 1995: 129; 288-291). ZINKE (1999), using figures from the agricultural statistics, makes a separate calculation. Of the 417,000 established farms operational in 1950 and larger than one hectare (excluding the newly established land reform farmers), about 242,000 joined a LPG in 1960 (just 58%). The remaining 175,000 farmers decided against joining, and the large majority of those seem to have left East Germany. In addition, ZINKE concludes that about one fourth of the newly established farmers – amounting to about 50,000 – did not join a collective (ZINKE, 1999: 196).

While many of the latter group did not have a farming background before land reform, and thus might have been enticed to West Germany for other reasons, we assume that just a small share of them left the country due to collectivization. Based on these figures, we estimate that during the period of 1949-1961 about 180,000 to 200,000 farmers fled to the west. Including the victims of land reform during 1945-47, the actual figure seems to be at the upper end during the build-up of socialist agriculture. If it is further assumed that a farm family comprised about

three to four persons, the total number of refugee farm population approaches about 700,000-800,000 persons.

Refugees not only led to a decline in already-scarce manpower, they also represented visible opposition to official policies. As BERGMANN (1973: 134) emphasised, there were many beneficiaries of the new socialist agricultural policy in East Germany and most of them remained in the east. The 1950s marked the formative years of a distinct socio-political development in East Germany. The build-up of a socialist society had just started and the safeguard of political power without open force and repression was in general not yet an option. This only changed with the improvement of the economic situation since 1963/64 onwards. Now, incentives and not only repression had been the tools in securing the political system. However, this development was accompanied with a growing centralisation, growth of the state and party administrations and the expansion of the internal security bodies (SCHOENE, 2010: 14).

5.3 Comparision with Central and Eastern Europe: Similarities and differences

All CEE countries pursued a policy of collectivisation of agricultural production. However, there had been common approaches, but also some differences. Right after the War, radical land reforms had been implemented in all these countries. However, the critical food situation and the unfinished seizure of power by the communist parties put the political objective of collectivisation on hold. While this objective could not be achieved immediately, there seems to be no doubt that it had been a long term one. However, in Bulgaria, Yugoslavia and Albania first campaigns for setting up collective farms had already been executed in 1945-1946. In general, the communist parties provided hints that they would go into that direction, but they had to settle their power first. The only exception had been East Germany where the dominant party always publicly refused to aim at collectivisation. This is even more surprising since the SMA, as the highest political authority up to the creation of the GDR could have easily done so (WÄDEKIN, 1974: 100-106).

In all CEE countries collectivisation campaigns started in the late 1940s and, in general, were finalised around 1960. The speed of executions, however, differed across countries. The major reason seems to be the fact that Moscow did not press too much in following this policy. Stalin and his advisers seemed to have learnt their lesson from the disastrous collectivisation campaign in the Soviet Union during the early 1930s. While collectivisation in CEE countries was not without violence, it had been less extreme than in the Soviet Union. However, there must have been guidelines determined by Moscow in following a more cautious way to collectivisation. Otherwise, it is difficult to explain why all these campaigns culminated in a final step at around 1960, not only in CEE countries, but also in the Asian socialist countries, i.e. China, North Korea and North Vietnam (WÄDEKIN, 1974: 101-106).

In **Poland** collectivisation started in July 1948. During the years up to Stalin's death (March 1953), farmers were coerced to join. In the following years, the campaign was not accompanied by administrative pressures. By 30 September 1956 there had been 10,150 collective farms comprising 192,000 members, and cultivating 1,963,000 ha (about 9.6 per cent of the total agricultural area). More than three quarters of the agricultural land was still cultivated by private farmers, with the remaining 13.8 per cent being in state farms (BERGMANN, 1973: 165). In old Polish settled areas, the share of collectives was even smaller. They were particularly popular in the newly settled Western parts (which belonged to Germany up to 1945). In the Wroclaw Region, about one third of the agricultural land was cultivated by collective farms. However, membership did not lead to higher production or to a reduced workload for the members. Hence, after the Polish uprising in September 1956, most collective farms collapsed. Members had the option to leave, without any repression. By the end of 1956, there were just 1,534 collective

farms cultivating 260,100 ha. Since that time, collective farms have played but a minor role in Polish agriculture (WÄDEKIN, 1974: 167).

In **Czechoslovakia** collectivisation started in February 1949. By the end of 1949, just 0.1 per cent of the total agricultural area was cultivated by collectives. Collectivisation then accelerated and by the end of 1950 collective farms cultivated around 10 per cent of the land. This type of organisation had been more popular in the newly settled border areas. There had been incentives, such as debt cancellation, for farmers to join. But there had also been pressure. After Stalin's death the collectivisation campaign relaxed to some extent. The final collectivisation push, started in 1958 and was executed with a severity similar to that known in East Germany (SCHOENE, 2011: 42). Collectivisation came to an end in 1960, by which time collectives cultivated over 65 per cent of the total agricultural area. Another 22.1 per cent of the land was in state farms, while private farming (including household plots for members) made up more than eleven per cent (WÄDEKIN, 1974: 154-158). Bergmann observes that there had been only marginal resistance by the farmers to collectivisation. During the more open political period of the "Prague Spring" in 1968, there had been no calls for decollectivization (BERGMANN, 1973: 107).

In **Hungary** collectivisation started slowly in 1948. By 1950, collective farms comprised about 120,000 members and cultivated four per cent of the agricultural area. Then, a severe collectivisation campaign started with the means of severe economic pressure on private farmers – high taxes, difficult delivery quotas, price discriminations, etc. There was also severe repression. By mid-1953, collective farms controlled almost three quarters of the total agricultural area. In addition, another 13 per cent of the area was being cultivated by state farms. Following Stalin's death, the policy changed. Now, farmers had the option to cancel their membership. By the end of 1953, just about 20 per cent of the agricultural area was still managed by collective farms. Their membership totalled about 200,000. In connection with the Hungarian Uprising in Autumn 1956, almost all remaining collectives were dissolved. However, in 1958/59 collectivisation was taken up again. First, it was primarily based on incentives, but this was not very successful. Finally, in 1960, the campaign turned to repression and by the end of 1961, 65 per cent of the agricultural area was cultivated by collective farms and another 10 per cent by the members as individual household plots. State farms managed 12 per cent of the agricultural land and public organisations controlled another seven per cent (WÄDEKIN, 1974: 172-176; SCHOENE, 2011: 41).

In **Romania** collectivisation started slowly during the early 1950s. In the Summer of 1960 it was decided to intensify the campaign, and by Spring 1962 it had been finalised (WÄDEKIN, 1974: 181-185). In **Bulgaria**, collectivisation started right after the War, but was met with heavy resistance of the farmers. In 1949 collectivisation was politically enforced, and by 1959 it had been finalised (WÄDEKIN, 1974: 191-195).

In **Yugoslavia** collectivisation started as early as 1945. By 1951 there were 6,797 collective farms comprising about two million members, and cultivating 18.6 per cent of the agricultural area. Another 17.5 per cent were cultivated by state farms. In March 1953 the government relaxed the requirements for membership and gave the option for membership cancellation. During the following years their number steadily declined to 1,258 at the end of 1953, and only 924 by the end of 1954. This trend continued during the following years. Since 1960, the number of collective farms has not been recorded, anymore. Most of them seem to have been transformed into service cooperatives (BERGMANN, 1973: 141-143; WÄDEKIN, 1974: 208-213).

6 ASSESSMENT OF THE DEVELOPMENT OF SOCIALIST AGRICULTURE IN EAST GERMANY UP TO THE COLLAPSE OF THE REGIME

The development path to "socialist agriculture" in East Germany had been seen by most analysts as a consistent long-term approach. Within a short period of 15 years (1945-1960) the organisation of agricultural production in East Germany had been fundamentally changed. Century-old structures had been dismantled and replaced by new-ones. There had not been any economic or social reasons, but just political ones. Collectivisation of agriculture seemed to have been the final objectives of the Communist Party in East Germany right from the beginning (KRUSE, 1988: 11; SCHOENE, 2010: 304). In a first step, the dismantling of rural estates (large-scale farms) led to the establishment of hundreds of thousands of tiny and not viable family farms. The former owners had been expelled from their homes without any compensation. Once this task had been accomplished the medium and large farms were liquidated. Finally, a totally contrary approach had to be followed. Hundreds of thousands of private farmers were drawn into collective farms, either by incentives or by repression. All these processes had been accompanied by massive violent measures and were advertised as historical necessities. The land reform was seen as a contribution toward denazification and collectivisation as a pre-condition towards a better, more modern world.

Since the Communist Party had not been strong enough right after the War collectivisation of agriculture had to be postponed. Similarly, land had not been nationalised as in the Soviet Union. Another reason of the postponed collectivisation seemed to be the fear that agricultural production would decline leading to severe food shortages (TÜMMLER, 1969: 19). This view, however, overlooks the fact that, at least up to 1952, there was still the option of German re-unification as a neutralized and pacified state. Hence, the Soviet Union had no interest in creating facts which stressed the separation too much. Only after 1952 the door was open for establishing "socialist agriculture". As before, economic criteria were irrelevant. The SED-leadership was convinced that communism according to scientific Marxism would win anyway. Therefore, the remnants of the capitalist social order had to be eliminated. With respect to agriculture, land reform, elimination of medium and large farmers and, finally, collectivisation were tools in creating the new socialist social order which culminated in the socialist village or collective farm (SCHOENE, 2011: 163).

Actually, the path to the final goal had been accompanied by heavy economic, social and personal costs. Already the land reform and the establishment of hundreds of thousands new farms required an enormous amount of financial resources in the provision of new buildings, machines and (draft) animals. Nevertheless, it was not enough as reflected in the high drop-out rate of newly established farmers. In addition, collectivisation could only be enforced due to the heavy inflow of financial resources and in accepting foregone income due to their lower productivity (MEINICKE, 1996: 150). The road to socialist agriculture was marked with production crises which showed the deep structural shortcomings. To overcome them, the state should have taken far-reaching measures, like the viable provision of modern production inputs or the adoption of a policy which improves work and life on the farms. However, the East German government followed a strict policy of regulation which actually aggravated the long smouldering economic crisis into a civil crisis which came to the open in June 1953 as well as in 1960/61. The state administered the limited resources with an outstanding effort in form of regulation and control. Those who could not agree with this development had the option to leave. But under the special conditions of East Germany between 1945 and 1961 the rural exodus almost always led to an escape of the country (KLUGE, 2001b: 204).

Tens of thousands of farmers who opposed the agricultural policy gave up farming and most of them fled to West Germany; an option which was in principle also open to dissatisfied inhabitants of other CEE countries, but emotionally more difficult as these people had to go to

a foreign country with a different language and culture. While it had to be admitted that about two hundred thousand farmers have left East Germany up to 1961, most of them stayed on. Only after 1963/64 when the economy took off, did agricultural production improve. Since then, agricultural policy focused on the agglomeration and industrialization of farm production (WILSON and WILSON, 2001: 149). Collective farms became larger and larger and adopted many communal functions, like the provision of public, social and cultural infrastructure ("socialist village"). Collective and state farms were heavily subsidized. East German agriculture achieved a top position among the socialist countries, but stayed below West European standards (HENKEL, 2012: 273-275). The living and working conditions of the farming population improved relatively very well. In this respect, the curious situation emerged that the collective farms which had been established on blood and tears developed a positive image over time. At the time of the collapse of the GDR, even the anti-socialist forces which had fought for a regime change were prepared to defend them against West German decollectivization and restitution claims (LÖHR, 2002: 22).

Table 6: Types of farms and land use in the German Democratic Republic (1989)

Group	Number	Average farm size (ha)	Share (%)		
			Number	Labour	Land
Collective farms	4,530*	1,120**	52.3	84.2	82.2
State farms	580	800	6.7	15.1	7.6
Individual farms	3,558	94	41.0	0.7	5.4
Personal use	(375,000)	(0.8)	--	--	4.8
Total	8,668	678	100	100	100

Notes: * Arable cooperatives: 1,164; livestock cooperatives: 2,851; rest: horticultural cooperatives and specialised coordinating units.
** Arable cooperatives: 4,284 ha; livestock cooperatives: 25 ha.

Source: BECKMANN, 2000: 389.

At the end of the socialist period agricultural production was mainly organised by a relatively small number of about 580 state farms and about 4,500 large-scale, highly specialized collective farms (Table 6). Like in other countries of Central and Eastern Europe individual farming had not been completely abolished but had been continued particularly in form of private household plots. In 1989 there had been 3,558 individual farms of which 2,927 had been larger than one hectare. In addition, the number of private household plots came up to about 375,000 units. Together, these two forms managed about ten percent of the total UAA. Including the number of individual farms but excluding the household plots the average farm size stood at 678 ha (BECKMANN, 2000: 25).

7 PRIVATIZATION OF AGRICULTURAL ASSETS AND IMPACT ON FARM ORGANISATIONS AFTER 1989/90

With the collapse of the socialist regime in East Germany, the agricultural sector had to be fundamentally transformed. Collective and state farms had to be transformed into private agricultural firms. This transformation required a rapid change of the legal and institutional framework (WOLZ et al., 2009: 8). It was guided by three main requirements: privatization, restitution, and restructuring (FORSTNER and ISERMEYER, 2000: 67-68; WILSON and WILSON, 2001: 124-134).

Privatization meant the establishment of private property rights for all agricultural assets. The ownership rights of agricultural land had to be acknowledged. Since most of the cadastres had not been updated since the late 1950s, strong efforts were required. In addition, all confiscated state-owned land had to be privatized or restituted (restored) to the former owners (or their

heirs). In this regard, the treaties on German unification made a distinction between those farmers whose land been expropriated during the Soviet occupation (8 May 1945-7 October 1949), and those who were expropriated either before or after this period. In addition, farmers had the right to claim the return of physical assets (or the equivalent in monetary terms) – buildings, machines, animals or other assets which the farmers contributed to a collective farm during the collectivization period.

Finally, the former collective and state farms had to be restructured to be able to function as single, viable and competitive units in a market economy which has been labelled "de-collectivization" (MATHIJS and SWINNEN, 1998: 1). The basic regulations with respect to restructuring of the collective farms had been laid out by the Agricultural Adjustment Act of June 1990 and, particularly, after its revision in July 1991 which set the deadline for transformation by the end of 1991. Hence, former owners had the option to start their own individual farm, rent their assets to another new private farmer, or leave (i.e. rent) their assets with the transformed collective farm which would then be registered as limited liability companies, joint-stock companies or as agricultural production cooperatives based on voluntary membership. Similarly, the state farms were to be privatized, either in total or split up into several economically rational units.

7.1 Diverging interests in state-owned land by East and West German politicians under a rapidly deteriorating economic environment

On 12 February 1990, the idea of setting up a Reprivatisation Agency was launched by civil rights activists, including the option to distribute its ownership shares among the East German population. In this way, all state-owned property, including land, would have remained in East German ownership. While the last (reformed) socialist government of the GDR (in office from mid-November 1989 up to the first free elections on 18 March 1990) established this agency on 1 March 1990, it did not agree to the proposed share distribution option. However, advocates of this approach convinced the government to ask the Soviet government, on 2 March 1990, for a joint coordinated approach in the forthcoming negotiations with the other parties to German reunification. One central objective was the preservation of the existing system of property ownership. The Soviet government followed this request in its declaration to the West German government in late March 1990, wherein it demanded that all economic activities executed under the Soviet Military Administration (between 8 May 1945 and 7 October 1949) should be legally acknowledged (LÖHR, 2002: 21-22).

In early 1990, all political groups comprising those representing the *ancient regime* as well as those pushing for its collapse wanted to preserve the results of the 1945-49 land reform as well as – in most cases – the collective farms as their "East German identity". State-owned land should remain the "property of the people". Beneficiaries of the 1945-49 land reform should remain owners although many of them had given up farming during the late 1940s or early 1950s (BASTIAN, 2003: 156). Without these conditions, most East Germans were afraid that "their land" would be quickly bought up by West Germans and, particularly, by speculators. The last (reformed) socialist government of the GDR wanted to transfer all state-owned land now being cultivated by collective farms into the title of the respective collective farms. The first freely elected East German government (in office from mid-April after the free elections on 18 March 1990 up to 2 October 1990) was reluctant to a transfer of the state-owned farms into limited liability companies – a feared first step to privatisation. In addition, all state-owned land should be limited in its privatization to East German citizens for a period of ten years. West Germans were only be given the option of renting land (LÖHR, 2002: 22-23).

These conditions were rejected as the bargaining power of the East German government quickly dissipated during early 1990. The rapid economic decline, and the necessity of increased transfers

from West Germany, quickly undercut any legitimacy the dwindling East German government might have possessed. The deteriorating conditions also accelerated the urgency with which reunification must be completed. Instead of a transition period of two years, the window suddenly shrunk to months and weeks during the summer of 1990.

The West German government had its own plans concerning what to do with state-owned property in the East. Its objectives met with those of the East German side to some extent. With their Joint Declaration of Open Property Issues on 15 June 1990, the two German governments agreed to accept as irreversible all expropriations on the basis of sovereign acts by occupying powers. This declaration did not exclude the option of compensation, and it had been included in the Unification Treaty signed 31 August 1990. Language (at §143 (3)) of the German Constitution had to be adjusted accordingly. Similarly, in the Treaty of the Final Settlement with Respect to Germany (*Vertrag über die abschließende Regelung in bezug auf Deutschland*, "Two plus Four Agreement") between the two German states and the four Allies (signed 12 September 1990), it was agreed that the land expropriated during Soviet occupation would not be restituted to the original owners or their heirs (BAUERKÄMPER, 1996a: 14).

There has been a long debate in Germany as to why the West German government did not push for a revision of the land reform results. In particular, why was nothing done about securing the same restitutions rights for victims of land reform as had been secured for those who had been expropriated either before or after the period of Soviet occupation? The last two East German governments, and all parties in East Germany, were opposed to reversing the 1945-49 land reform, and agreed that the existing ownership structure should be preserved.

The West German government seemed to have a financial issue to address. Following reunification, the government of united Germany – that is, the Ministry of Finance – would have the final say about the future use and commercialization of the "government" land in the former GDR. The idea arose that this massive land base might just offer the financial means to carry out reunification. The negotiations with the four Allied Powers provided an excellent opportunity to place the blame for this position on the Soviet Union which had requested the legitimacy of its actions during their occupation period. But the Soviet Union had not insisted on their irreversibility (LÖHR, 2002: 65). This policy was embraced and it has not changed during the ensuing years. The German legal system has endorsed it on several occasions. This unequal treatment produced a "justice gap", it might explain why, during the early years of reunification, previous land owners received some limited preferential treatment when buying or renting state-owned land. However, this preference did not enjoy the broad consensus of the major political parties and so it has been discontinued (LÖHR, 2002: 188-189).

In early 1990, it was anticipated that reunification would be costly for the West German government and taxpayers in the West. At that time, the optimistic view prevailed that most of these costs could be financed with the privatization proceeds of the state-owned industrial estates and government land. In an early assessment, the Ministry of Finance valued the 2.1 million ha of GDR agricultural land at 33,000 DM/ha. Hence, a handy income of about 66 billion DM seemed to be possible (LÖHR, 2002: 26). However, with the rapidly deteriorating economic situation, these high expectations had to be downsized. Nevertheless, the opening balance sheets, which were required by all enterprises (including the agricultural ones) when the Economic, Monetary and Social Union between the two German states became effective 1 July 1990, still valued the 1.62 million ha of state property cultivated by collective farms at 7.34 billion DM. The balance sheets of the state-owned farms showed that they were (and had been) making constant losses. Hence, even, at this early stage, there was some optimism that perhaps some income could be earned to finance reunification. The second basic assumption concerned the speed of the privatization process. At that time, the majority of politicians thought that privatisation of

state-owned land could be completed within a few years. However, it soon became apparent that a quick solution was not feasible (BECKMANN and HAGEDORN, 1997: 118).

As the following weeks and months showed, most assets, including land, had been highly overvalued so that the (potential) resale value would be much smaller. In the absence of state subsidies characteristic of the central planning system, the economic situation of most farms was quite bleak. In general, most farms showed huge deficits and relied on government emergency funds for survival. To make matters worse, East German consumers shunned East German food products and rushed to buy those items now available from West Germany (WOLZ et al., 2009: 11-13). To sell much state land under such a situation would have led to an immediate collapse of land markets (WEGGE, 1999: 364). In addition, it became evident that the clarification and resolution of open property issues would take much more time than originally imagined during Summer 1990. While the expenses for reunification were rapidly increasing, the options for financing part of it through privatization proceeds became more and more doomed (LÖHR, 2002: 42-43).

7.2 Two Groups of expropriated landowners: Problems in identiying the respective areas

Based on the Unification Treaty expropriated land owners were divided into two groups:

- those expropriated during the period of Soviet occupation who were not eligible for restitution of their former property ("previous owners"), and
- those expropriated either before 8 May 1945 or after 7 October 1949 who were eligible.

In a first step, all state-owned agricultural and forestry land managed either by state farms or by collective farms, as with all state-owned property, came under the jurisdiction of the Agency for Privatization of Industry in the GDR ("*Treuhandanstalt*", THA) set up on 1 March 1990. With the adoption of the Privatization and Reorganization of State-Owned Assets Act on 17 June 1990 the focus shifted to privatization.

At the beginning, the major task had been to identify and separate those plots of land that had to be restituted from those which did not. In addition, the property owners (or their heirs) of parcels to be restituted had to be identified. While cadastres from the 1950s were still available, those from the 1940s had been destroyed. More seriously, the proper identification of owners was not an easy task. A large share of newly established farmers who were set up on expropriated land from 1945/46 had given up and abandoned their initial holding. In some cases, a "second generation" of replacing farmers could be identified. Similarly, some of the expropriations up to 1953 had been cancelled after June 1953. These changes had not always been properly recorded (HAGEDORN et al., 1997: 345).

By 1990, the total amount of state-owned agricultural land totalled about 2.1 million ha – about one third of the total agricultural area in East Germany. Out of this area, 424,205 ha were cultivated by state-owned farms. The other 1.62 million ha were cultivated by collective farms. Out of the latter area, about 500,000 ha were under restitution, while the remaining 1.1 million ha were eligible for privatization (LÖHR, 2002: 21). In addition, about two million ha of forestry land had to be privatised. Due to the long and difficult identification process, but also due to legal actions at the Federal Constitutional Court by families expropriated between 1945 and 1949, the ownership rights of most state-owned land could not be properly identified. Without that, the land could not be sold. Since the fall of the socialist regime, almost 200,000 property claims for the return of their former land had been filed by the victims of the land reform (LÖHR, 2002: 178). In addition, there was a strong political debate about the criteria under which state-owned land was supposed to be privatized. Due to this unsettled situation, much state-owned land had been rented on a short-term basis (i.e. one year) rather than sold.

Two basic routes of privatization of state-owned land can be identified: (1) land managed by state farms; and (2) land managed by collective farms or their successors. With respect to the state farms it was planned to sell them in viable pieces to private investors. State farms were regarded as similar to expropriated industrial estates. Although the East German economy had collapsed, and unemployment had blossomed, the unsettled restitution claims stifled any investments. The overriding objective of THA was to promote private investments and create employment as rapidly as possible. Industrial property, as well as parts of state farms, was for sale at almost any price. In order to overcome impediments, such as outstanding property restitution claims, two laws were adopted that would negate future restitution claims: (1) the Removal of Investment Barriers Act ("*Hemmnisbeseitigungsgesetz*") effective 23 March 1991; and (2) the Investment Priority Act ("*Investitionsvorranggesetz*") effective 14 July 1992. With these new laws, if an investor developed a viable business plan ensuring investment and employment, he (she) was entitled to full ownership rights. Any property claim which might be officially recognized later on was no longer compelling and had to be compensated in other ways (BLACKSELL and BORN, 2002: 328).

During the early years following reunification, previous (expropriated) owners had the option to buy back their former land at relatively low prices provided they took up farming. Similarly, any other person wanting to take up farming had this option as long as s/he submitted a viable business plan acceptable to THA. Nevertheless, the privatization process of state-owned land managed by former state-owned farms had been quite cumbersome. The major share had been returned to communes and the Eastern federal states which used to be the owners before 1945. By the end of 1994, the THA had sold 45,490 ha on the basis of 753 contracts. On average, one contract referred to about 60.5 ha. Of these 753 contracts, 171 went to buyers from West Germany (LÖHR, 2002: 164). We assume that most of these buyers were from the families of the previous owners. In addition, we assume that they concluded not just one contract but several. Hence, we estimate that about 50-100 previous owning families actually did buy some land – that is, parts or all, of their former estates. Therefore, it can be concluded that as of this time, less than one percent of the previous owners have actually returned to their former farms. The major shares of contracts, 567, went to buyers from East Germany. However, at a more detailed look, most of these buyers were private companies set up by West German persons. There have been just 13 cases in which contracts were concluded with former workers (managers) on state-owned farms. In general, East German competitors did not have the financial means to compete with West German buyers. Just 15 contracts had been concluded with foreign buyers (LÖHR, 2002: 164-165).

Former state-owned land managed by the successor farms of the former collectives could not be put up for sale that easily. Hence, the land had to be rented to any farmer who made an offer. While the establishment of individual farmers had been officially promoted, particularly during the first years after reunification, the successor farms of the collective entities could also apply. Hence, during the early years, private farmers were somewhat advantaged, but THA also had to emphasize economically optimal use of the state land (LÖHR, 2002: 178). In July 1992, the administration and disposal of all state-owned land, with the exception of the state farms, was transferred from THA to the newly established Land Privatization Agency ("*Bodenverwertungs- und vermögensgesellschaft*", BVVG).

At that time there was a difficult political struggle about the criteria under which the nationalised GDR land should be privatized, and which groups might benefit the most from the change of ownership. In addition, previous owners had gone to the Constitutional Court on several occasions to press their case for restitution. There was political bargaining among the various farming groups and their political representatives. The West German government was a strong advocate for private family farmers, including the previous owners, returning farmers with restitution right

("re-establishers") as well as "new establishers". This latter group included local residents (in general former LPG-members) who either re-established their farms, or started from scratch. This group was relatively important in those areas where collective farms had been dissolved in the transformation process. In addition, interested persons who had no familial roots in East Germany could apply for land if they wished to start a new farm. Finally, there were the managers of the LPG-successor farms who received their support from the East German state governments, regardless of their party affiliation, and the national opposition parties (WILSON and WILSON, 2001: 123-126).

By 1994 both THA and BVVG had about 1.25 million ha (about 20 per cent) of the total agricultural area of East Germany under their jurisdiction (BECKMANN and HAGEDORN, 1997: 110). All land which could not be sold was, in principle, rented to any interested person or company. While there had been an early preference for supporting family farmers in establishing new farms, and a prejudice against farms registered as legal entities, i.e. LPG-successor farms, this emphasis shifted over time. Legal entities had to be accepted as equal competitors. In 1990 agricultural production could only be kept afloat with the aid of emergency funds. But soon all farming groups realized that farming could be highly profitable after restructuring, and especially with the benefit of German and EU support programmes. Therefore, the competition for land increased (LÖHR, 2002: 118).

Nevertheless, by 1994 THA and BVVG put a different focus on the various groups when renting state-owned land under their respective jurisdiction (Table 7). The THA showed a strong preference for previous owners (about 40%) and newly establishing farmers (mostly from West Germany, but also from the Netherlands and Denmark; about 22%). The main beneficiaries of the state land under the supervision of BVVG were the LPG-successor farms (about 61%) and local residents seeking to reestablishing their farms (about 28%) (LÖHR, 202: 165; BECKMANN and HAGEDORN, 1997: 127). Since, it was understood that privatization would be a long-term exercise, land had been rented for periods of twelve years or longer.

Table 7: State-owned land leased by THA and BVVG in Eastern Germany, 1994

Type of applicant	THA (end of 1994)		BVVG (mid 1994)	
	ha	%	ha	%
Re-establishers without restitution claims (previous owners)		40.0	52,380	4.59
Re-establishers with restitution claims		1.0	13,938	1.22
Local residents who re-established farms		26.5	209,928	18.39
Local residents who established new farms			109,636	9.61
Legal entities (corporate farms)		11.0	693,025	60.72
Persons who establish new farms and become local residents		21.5	62,521	5.47
Total	103,079	100	1,141,428	100

Source: THA: LÖHR, 2002: 165; BVVG: BECKMANN and HAGEDORN, 1997: 127.

A compromise over the criteria of land privatization could be reached in the form of the Indemnification and Compensation Act ("*Entschädigungs- und Leistungsausgleichsgesetz*", EALG) effective 24 September 1994. All active farmers could take part in the privatization programme at concessionary prices if they fulfilled the following requirements (FORSTNER and ISERMEYER, 2000: 70; WILSON and WILSON, 2001: 124-125).

- They had to be farmers regardless of their legal entity.

- The land which they wanted to buy has already been leased to them; in general, on a long-term basis of 12 years or longer.
- The prices of this land were about half of the market value in East Germany.
- The previous owners of expropriated land were now eligible to obtain either a small compensation, or to lease or purchase for a subsidized price a small amount of their original land.

The Act reflects the changing political power of the various farming groups. The original predominant objective of providing previous owners having no restitution rights with an option to buy back their former property gradually lost considerable influence in the political decision-making process. In the end it played a rather insignificant role. The privileges were predominantly available for those who had long-term leases on state-owned land. Those previous owners who were no longer active as farmers were eligible for a small compensation (BECKMANN and HAGEDORN, 1997: 125).

But the Ministry of Finance was unable to achieve its original objectives. During the coming years, competition for land was not foreseen. Land could not be auctioned off to the highest bidder, but was sold at preferential prices (i.e. below market value) to the present lease holders (HAGEDORN et al., 1997: 451). In this respect, it had been a victory of the present lease-holders who, for the most part, were the LPG-successor farms rather than the previous owners. These farms were also privileged in comparison with the financially strong farmers from the West who wished to establish a farm in the East. The previous owners fought the EAGL in the Federal Constitution Court but their action was finally dismissed in November 2000 (LÖHR, 2002: 136).

The main reason why the land disposal process went in favour of the present lease holders – and thus the LPG-successor farms – was that they were highly successful in organising their members, and then joining the (West German) Farmers' Union (WOLZ, 2011: 469-471). These farmers were very fast learners and they adapted quickly to the political system of West Germany so as to strengthen their positions. They showed a growing ability to exert influence and forced the previous owners to scale back their original intentions and goals.

There were two reasons why a more market-oriented process had been rejected. First, East German farmers were afraid of their weaker position in the market based on their lack of cash or collateral. Second, political actors were afraid that they would no longer be able to control the conflicts caused by privatization. The dominant Farmers' Unions were very effective in rallying public opinion. During the periods of fundamental transformation, public opinion and public protests had been very important; social peace was an important pre-requisite of successful development (WILSON and WILSON, 2001: 125-126). Equally important, the previous owners had not been successful in organising themselves, nor were they able to convince other groups to support their cause. They had quickly formed an Association of Agricultural Issues ("*Arbeits-gemeinschaft für Agrarfragen*", AfA) in March 1990. Their membership had been relatively small and only reached 1,900 members over the next two years (March 1992) (LÖHR, 2002: 53). In other words, only about one sixth of their potential members (about 11,500) had joined the Association. Their major activities had been the political lobbying and taking legal actions.

The privatization of farm land started in 1994 and yet by mid-2012, about 399,000 ha (about 40 percent) of the total agricultural land under the BVVG had been sold to previous owners and lease holders at preferential prices. By the end of 2010, previous owners just managed to purchase approximately 9,600 ha. An additional 325,500 ha had been sold at market prices, particularly during the last few years. In addition, state-owned land had been dedicated to nature conservation and public infrastructure. About 284,500 ha continue to be rented out, predominantly under lease contracts up to nine years. This land will need to be privatized over the next few

years. The BVVG plans to finalize the privatization process by 2025 (BVVG, 2012: 1-8). During the last few years land prices in East Germany have steadily increased. On the one hand, this development supports those who had argued for a gradual privatization process. On the other hand, the administrative system established to transfer former GDR state property has taken much more time to dispose of its holdings than anyone could have anticipated.

7.3 Impact on the agrarian structure after more than two decades of unification: One country – Two systems

With the collapse of the socialist regime in East Germany – as in other former socialist countries – it had been assumed by most politicians and economists that collective and state farms would quickly give way to family farms. These entities had shown their competitiveness all over the world and the recent successful transformations in China and Vietnam had underlined this aspect (DEININGER, 1993). In East Germany, private (family) farms were certainly re-established, but the successor farms of former collective farms continue to dominate the agricultural landscape. The intentions of most (West) German politicians and expectations by most agricultural economists (SCHMITT, 1993) have not been realized.

After the collapse of the socialist regime, there was certainly no rush to the East by former refugee farmers now living in the West. In 1995 just 450 previous owners without restitution rights had concluded 608 long-term leases with BVVG amounting to 61,049 ha (WILSON and KLAGES, 2001: 286). And as stated above, by 2010 only 9,600 ha had been sold to previous owners. In addition, some previous owners had bought (at least parts of) their former property under the privatization process of the THA during the early 1990s. Therefore, we estimate that the number of returning previous owners to be only about 500, or less than five per cent of the 11,500 expropriated farm families. The number of returning farmers with restitution rights is even more modest. Just 170 had concluded 213 long-term lease contracts with the BVVG in 1995 (for 12,135 ha) (WILSON and KLAGES, 2001: 286).

While these farmers could have returned and re-established their ancestral farm without the need for leases from the BVVG, this tactic would have been very cumbersome and problematic. Recall that the average size of the collectivized farms in the 1950s had probably been 5-20 ha. This means that an aspiring farmer who wished to return to his/her ancestral farm would have to convince a very large number of other land owners in order to establish a viable farm. Even in areas where the former LPG had to be dissolved, this would have been very cumbersome. It is not surprising that less than 200 returning farmers with restitution rights have taken up farming again in the East. And therefore it is not a surprise that most of the newly established farmers are former LPG members and, to a lesser extent, former workers on state farms. Another group of farmers who had no links to the east came from the West and started farming from scratch. These individuals generally relied on an East German partner in order to gain access to land.

When comparing the organisation of agricultural production between West and East Germany, it is striking that after more than two decades, large differences can be observed. We will focus on three major features:

- farm size structure,
- legal registration (entity), and
- employment patterns.

The current farm size structure and different size groups both reflect the history of the socialist system in East Germany (Appendix Tables A1-A4). In 1939, when the political-economic framework had been relatively similar all over Germany, large-scale farms were more common in the Eastern part, while small-scale farming was predominant in both parts. At that time,

about 90 per cent of all farms were under 20 hectares in size. In the East farmers just cultivated about 40 per cent of the total utilized agricultural area (UAA), while in the West they made up about two thirds. There were about 600,000 farms in the East compared with about two million in the West. After the War, the number of farms increased in the East following land reform, but then, around 1950, their numbers rapidly declined as farmers fled to the west under the collectivization imperative.

In the West, the number of farms had gradually declined after the War as a result of rapid growth in the non-farm sectors and the increasing number of alternative employment opportunities. In 1960, the number of farms in the West still stood at 1.5 million, whereas in the East their number had drastically declined to about 38,000[4]. The relationship of the number of farms between West and East Germany increased from about 4:1 in 1939 to 40:1 in 1960. During the next three decades, up to the end of the socialist period, the number of farms declined in the West to about 670,000 while their number in the East stood at less than 9,000. Hence, the relationship of the number of farms increased to about 75:1. In 1989, agricultural production in East Germany was highly concentrated (Table 6 above). More than 90 per cent of the UAA was managed by farms larger than 1,000 ha. In the West, less than 10 per cent of the UAA was cultivated by farms larger than 100 ha. When the socialist regime collapsed in 1989, both German states contained completely different farm models: small-scale family farms in the West and large scale collective and state farms in the East.

Two decades after reunification the structural effects of the socialist model in East Germany can be still observed. While the number of farms in the east almost tripled as a result of de-collectivization, and average farm size declined, their total number remained much below the figures of the 1950s. Family farms have been set up in the East as intended by the politicians; they have not become the dominant form, again. The number of farms increased rapidly during the first decade after reunification, but is declining since then to about 25,000 in 2010. On the other hand, restructuring of farms has accelerated in the West as numbers declined from about 670,000 in 1990 to about 275,000 in 2010. Still, the relation stands at 11:1 which is still more than double of the ratio in 1939. Similarly, average farms size is about six times higher in the East compared to the West – 33 ha compared to 185 ha in 2007 (Appendix Table A5). In 2007, about 93 per cent of the UAA in East Germany was managed by farms larger than 100 ha, of which 46 per cent in farms larger than 1,000 ha. In the West, farms larger than 100 ha now make up about 10 per cent of all farms, they only cultivate 36 per cent of the UAA. While farm structures in both parts of Germany have become more similar following reunification, they continue to differ in important respects.

Not only with respect to farm structure, but also with respect to the legal registration of agricultural production units there are still big differences between West and East Germany (Appendix Table A5). In West Germany, family farming and, to a small extent, partnerships continue to dominate as they always have. Together, they make up about 99.5 per cent of all farms in the West cultivating about 99 per cent of the total UAA. There are a few corporate farms, but they are, in general, quite small. In the East, family farms and partnerships also represent the dominant type of farm organization when looking at the sheer numbers. They make up about 88 per cent of all farms. However, they cultivate less than half of the total UAA. They have not become the dominant organisation in agricultural production. However, they are far larger than family farms in the West – 63 ha in the East versus 31 ha in the West. Corporate farms, particularly limited liability companies and agricultural production cooperatives,

[4] The figures about the number of farms and their cultivated area have to be taken with caution as agricultural statistics in the GDR concentrated on the socialist sector, i.e. the collective and state farms. In general, they did not show any reference to the remaining private and church farms. Similarly, there are discrepancies with respect to employment figures.

which are in general the successor farms of the former collective farms, provide a significant share in agricultural production. While their share among all farms declined to 11.5 per cent, they cultivate more than half of the total UAA.

Table 8: Number of farms and farm employees in West and East Germany, 1939-2007

	West Germany		East Germany	
Year	**No. of farms**	**No. of employees**	**No. of farms**	**No. of employees**
1939	2,009,000	5,309,000	597,000	1,695,000
1949	1,646,000	5,113,000	745,000	1,972,000
1960	1,385,000	3,581,000	20,300	1,401,000
1970	1,017,000	2,262,000	9,870	1,067,000
1980	780,000	1,473,000	5,010	885,000
1988	666,000	1,311,000	4,750	928,000
1992	614,404	1,460,300	20,386	202,100
2001	416,672	1,161,100	30,695	161,700
2007	343,159	1,092,000	30,080	159,400

Source: 1939-1988: BAUERKÄMPER, 2002: 547.
1992: BMELV, 2000: 54.
2001, 2007: BMELV, 2011: 59

While the number of farms had been drastically reduced between 1950 and 1990, the number of farm labourers did not decline that much. Between 1949 and 1988 their number was just halved in the East – from about two million to less than one (Table 8). During the same period the number of farm labourers declined by three quarters in the West – from 5.1 million to 1.3 million. However, right after reunification, agricultural work force had been drastically downsized in the East. Within two years, it had been reduced by more than three quarters. Since the mid-1990s their number stagnates at about 160,000 agricultural workers. In the West, a more gradual decline in the number of agricultural labour force could be observed. By the end of the first decade of this millennium their number stood at about one million labourers.

Table 9: Agricultural employment in West and East Germany, 2007

	West Germany		East Germany		Total	
	Persons	**AWU***	**Persons**	**AWU***	**Persons**	**AWU***
Family labour	689,300 (63.1%)	313,500 (72.1%)	39,200 (24.7%)	16,200 (17.1%)	728,500 (58.2%)	329,700 (62.6%)
Permanently employed	106,400 (9.7%)	74,500 (17.1%)	80,200 (50.3%)	71,300 (75.1%)	186,600 (14.9%)	145,800 (27.5%)
Seasonal labour	296,300 (27.1%)	46,800 (10.8%)	40,000 (25.1%)	7,400 (7.8%)	336,300 (26.9%)	54,200 (10.2%)
Total	1,092,000 (100%)	434,800 (100%)	159,400 (100%)	94,900 (100%)	1,251,400 (100%)	529,700 (100%)

Note: * AWU = annual work unit.

Source: BMELV, 2011: 59-60.

When looking at the structure of agricultural employment, another distinguishing feature becomes evident. In West Germany, as traditionally characteristic of East Germany before collectivization, family labour provides the bulk of the labour force (Table 9). Close to two-thirds of the employed persons and three-quarters of the total annual work unit (AWU) are made up by them (BMELV, 2011: 59-60). Permanently employed staff just comes up to about 10 per cent of the total workforce, but contributes about 17 per cent of the total work. While the number and share of seasonal (non-regular) labourers is relatively large, they just contribute

about 10 per cent of the total work. On the other side, permanently employed staff dominates the agricultural labour force in East Germany. They make up about half of the total number of the workforce, but contribute about three-quarters of the total work. Family labour only plays a minor role in East Germany. Its share is less than one quarter of the employed labour force and just about 17 per cent of the total work load. As in West Germany seasonal labour stands at about one quarter of the employed persons, but they just contribute about 10 per cent of the total work.

East German agriculture is, by far, more labour extensive than the West. On average, just 1.7 AWU are gainfully employed per 100 ha in the east, while the figure of the West is 3.9 AWU/100 ha. While this figure might reflect the different natural factor endowment in both parts of Germany, it shows that most of the labour-intensive farm activities (like animal husbandry) have been given up with transition.

In this respect, German agriculture is characterized by two distinctly different agricultural production systems. While West German agriculture is dominated by relatively small-scale family farms relying on family labour, East German agriculture is made up by large-scale corporate farms (as well as large-scale private farms) relying predominantly on permanently employed labour.

8 CONCLUSIONS

German agriculture is characterized by two distinctly different systems divided by the former inner-German border. In this way, it can be concluded that the socialist agricultural policy created an agricultural structure whose repercussions can be felt even more than two decades after reunification (SCHOENE, 2010: 304). It seemed that the intensions of the Soviet-oriented land reform and collectivization have achieved their objectives, but in a different way. The agricultural structure in Germany can be described as "one country – two systems". Large-scale farms, much larger than the former large estates of the German Empire dominate agricultural production in East Germany. They are organised as private partnerships and as corporate farms, like agricultural production cooperatives and particularly as limited liability companies. Family farms still dominating agricultural production in the West only play a minor role. While the farming structure in the West developed gradually over time, it has been established by strong coercive means on "blood and tears" in the East. However, at the end of the socialist regime, socialist agriculture had been fully accepted by the population and, even, heavily defended by those which pushed for a regime change. Hence, this transition did not imply a return to the traditional farm model from the times before 1945. The transformed and newly established farms in East Germany seem to be very successful. In these days, they are highly competitive on the European level.

The break-up of large-scale collective and state farms did not materialize that quickly as anticipated at the time of regime change. Nevertheless, the share of farms larger than 1,000 ha has declined over the previous two decades. Still farms in East Germany cultivate, in general, several hundreds of hectares using little labour. In the West a gradual restructuring process could be observed which accelerated during the last two decades. Farms operating more than 100 ha have become more and more prominent. We suggest that farm restructuring in the West will continue in the coming years. The quadrupling of the size of agricultural land managed by farms larger than 100 ha between 1990 and 2010 seems to support this suggestion. In the long run, we suggest that the farm structure will assimilate over the next decades. A difference will remain with respect to the organisation of agricultural production, however. While it will be mainly organised by family farms in the West, corporate farms will predominate in the East.

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ANNEX: SUMMARY TABLES ABOUT THE ORGANISATION OF AGRICULTURAL PRODUCTION IN WEST AND EAST GERMANY, 1939-2010

Table A1: Distribution of farms in West Germany, 1939-2010 (% of number of farms)

Year	0.5 – 5 ha	5 – 20 ha	20 – 50 ha	50 – 100 ha	above 100 ha	Total
1939	1,156,000	680,400	156,900	29,300	14,800	2,037,100
	(56.7)	(33.4)	(7.7)	(1.4)	(0.8)	(100)
1949	1,003,848	659,954	112,421	12,621	2,971	1,791,815
	(56.0)	(36.8)	(6.5)	(0.7)	(0,2)	(100)
1960	732,923	629,487	122,015	13,672	2,639	1,500,736
	(48.8)	(41.9)	(8.1)	(0.9)	(0.2)	(100)
1970	469,574	500,498	157,557	16,284	3,011	1,146,924
	(40.9)	(43.6)	(13.7)	(1.4)	(0.3)	(100)
1980	296,862	330,420	177,878	26,897	4,395	836,452
	(35.5)	(39.5)	(21.3)	(3.2)	(0.5)	(100)
1990	227,535	235,825	156,138	40,598	7,200	667,296
	(34.1)	(35.3)	(23.4)	(6.1)	(1.1)	(100)
2001	103,676	144,271	98,763	52,461	17,501	416,672
	(24.9)	(34.6)	(23.7)	(12,6)	(4.2)	(100)
2010	25,100	103,300	72,200	49,100	24,700	274,400
	(9.2)	(37.7)	(26.3)	(17.9)	(9.0)	(100)

Source: 1939: RAUP, 1949: 65.
1949-2010: BMELV, 2011: 35-36.

Table A2: Distribution of farms in East Germany, 1939-2010 (% of number of farms)

Year	0.5 – 5 ha	5 – 20 ha	20 – 50 ha	50 – 100 ha	100 – 1000 ha	above 1000 ha	Total
1939	320,100 (55.9)	188,100 (33.1)	48,600 (8.5)	8,100 (1.4)	6,300 (1.1)		597,000 (100)
1950	435,880 (50.9)	371,591 (43.4)	43,304 (5.1)	4,253 (0.5)	596 (0.1)	-	855,624 (100)
1959	137,568 (38.9)	188,116 (53,2)	16,785 (4.8)	684 (0.2)	9,864 (2.8)	268 (0.1)	355,285 (100)
1960	7,315 (18.0)	10,529 (27.7)	938 (2.5)	38 (0.1)	18,459 (48.6)	802 (2.1)	38,081 (100)
1970	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1980	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1989	-	-	2,851 (32.9)	1,158 (13.4)	3,215 (37.1)	1,444 (16.7)	8,668 (100)
1991	10,528 (48.6)	4,135 (19.1)	1,924 (8.9)	1,066 (4.9)	2,102 (9.7)	1,908 (8.8)	21,663 (100)
2001	8,191 (26.7)	7,524 (24.5)	3,727 (12.1)	2,474 (8.1)	7,180 (23.3)	1,599 (5.2)	30,695 (100)
2007	7,744 (25.7)	7,266 (24.1)	3,687 (12.3)	2,350 (7.8)	11,162 (37.1)	1,507 (5.0)	30,080 (100)
2010	2,199 (9.0)	7,181 (29.4)	3,694 (15.1)	2,354 (9.6)	7,564 (30.9)	1,463 (6.0)	24,455 (100)

Note: n.a. = not available.

Source: 1939: TÜMMLER, 1969: 156; WEBER, 1991: 68
1950-1960: ZINKE, 1999: 228-230; STATISTISCHES BUNDESAMT, 1993: 14-15.
1989: BECKMANN, 2000: 389 (in addition: about 375,000 household plot farmers cultivating about 4.8% of total agricultural area).
1991-2007: BMELV, 2010: 35.
2010: BMI, 2012: 20.

Table A3: Distribution of cultivated area among farm size groups in West Germany, 1939-2010 (1000 ha and % of cultivated area)

Year	0.5 – 5 ha	5 – 20 ha	20 – 50 ha	50 – 100 ha	above 100 ha	Total
1939	2,246.0	5,738.4	3,571.5	1,235.4	925.4	13,716.7
	(16.4)	(41.8)	(26.0)	(9.0)	(6.8)	(100)
1949	2,330.4	6,403.3	3,244.0	817.3	544.1	13,339.2
	(18.2)	(47.4)	(24.1)	(6.1)	(4.2)	(100)
1960	1,669.5	6,473.8	3,504.5	884.5	450.1	12,982.3
	(12.9)	(49.9)	(27.0)	(6.8)	(3.5)	(100)
1970	1,090.8	5,539.2	4,494.9	1,050.2	502.4	12,667.5
	(8.6)	(43.7)	(35.5)	(8.3)	(4.0)	(100)
1980	679.4	3,721.2	5,342.9	1,736.2	712.6	12,192.4
	(5.8)	(30.5)	(43.8)	(14.2)	(5.8)	(100)
1990	497.2	2,660.4	4,873.9	2,682.7	1,077.3	11,791.5
	(4.2)	(22.6)	(41.3)	(22.8)	(9.1)	(100)
2001	260.2	1,653.8	3,244.8	3,622.6	2,691.3	11,472.9
	(2.3)	(14.4)	(28.3)	(31.6)	(23.5)	(100)
2010	50.2	1,209.1	2,411.4	3,451.1	4,015.5	11,137.2
	(0.5)	(10.9)	(21.7)	(31.0)	(36.1)	(100)

Source: 1939: RAUP, 1949: 65.
1949: KRUSE, 1988: 137.
1949-2010: BMELV, 2011: 35-36.

Table A4: Distribution of cultivated area among farm size groups in East Germany, 1939-2010 (1000 ha and % of cultivated area)

Year	0.5 – 5 ha	5 – 20 ha	20 – 50 ha	50 – 100 ha	100 – 1000 ha	above 1000 ha	Total
1939	519.3 (8.1)	1,886.2 (29.5)	1,541.9 (24.1)	733.3 (9.8)	2,339.4 (28.5)		6,385.4 (100)
1950	952.9 (14.6)	3,609.2 (55.3)	1,318.4 (20.2)	274.1 (4.2)	372.0 (5.7)		6,526.6 (100)
1959	815.4 (12.7)	1,932.8 (30.1)	471.3 (7.3)	42.0 (0.7)	2,806.5 (43.7)	359.8 (5.6)	6,427.4 (100)
1960	446.4 (6.9)	49.8 (0.8)	10.2 (0.2)		4,812.2 (75.0)	1,101.2 (17.2)	6,419.8 (100)
1970	-	-	n.a.	n.a.	3,988.0 (63.4)	2,298.4 (36.6)	6,286.4 (100)
1980	-	-	11.7 (0.2)	11.1 (0.2)	506.9 (8.1)	5,741.3 (91.6)	6,269.1 (100)
1988	-	-	12.1 (0.2)	9.8 (0.2)	510.8 (8.3)	5,649.2 (91.4)	6,181.9 (100)
1991	17.4 (0.3)	44.3 (0.8)	61.4 (1.2)	74.8 (1.4)	795.5 (15.0)	4,288.8 (81.2)	5,282.3 (100)
2001	20.5 (0.4)	81.9 (1.5)	119.6 (2.1)	179.5 (3.2)	2,396.8 (42.8)	2,800.3 (50.0)	5,597.2 (100)
2007	20.4 (0.4)	79.2 (1.4)	118.6 2.1)	169.7 (3.1)	2,594.3 (46.6)	2,582.6 (46.4)	5,563.8 (100)
2010	3.8 (0.1)	78.6 (1.4)	118.7 (2.1)	170.4 (3.1)	5,175.6 (of which 4,803.1 among farms above 200 ha) (93.3 or 86.5, respectively)		5,547.2 (100)

Note: n.a. = not available.

Source: 1939: RAUP, 1949: 65.
1950: TÜMMLER, 1969: 157.
1950-1988: STATISTISCHES BUNDESAMT, 1993: 16-17.
1991-2010: BMELV, 1992: 31; BMELV, 2010: 35; BMELV, 2011: 37.

Table A5: Major characteristics of the organisation of agricultural production in West and East Germany, 2007

	West Germany				East Germany			
	Number of farms	**Percentage**	**Average farm size (ha)**	**Share of total UAA**	**Number of farms**	**Percentage**	**Average farm size (ha)**	**Share of total UAA**
Individual farms								
Family farms	325,602	94.9	31	88.9	23,412	77.8	63	26.4
Partnerships	15,748	4.6	73	10.1	3,235	10.8	385	22.4
Corporate farms								
Agricultural production cooperatives	86	0.0	79	0.1	1,028	3.4	1,419	26.2
Limited liability companies	690	0.2	32	0.2	2,102	7.0	614	23.2
Joint stock companies	31	0.0	301	0.1	77	0.3	1,139	1.6
Others	1,002	0.3	69	0.6	226	0.8	80	0.3
Total	**343,159**	**100**	**33**	**100**	**30,080**	**100**	**185**	**100**

Source: BMELV, 2011: 39.

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