

Key words: Land Consolidation, Fragmentation, Leasing, Farmland, Land Bank

SUMMARY

Leasing of farmland is increasingly common in Norway and comprises approximately 45 percent of the agricultural land in use. Active farmers are in need of more land, because technological and market forces are pushing towards fewer, bigger and more efficient farms. This is not unique to Norway; it is a global phenomenon. To get access to more land, farmers lease land, but it is random whom they lease from. That often leads to fragmentation of leased farmland, causing operating costs to increase. The purpose of the paper is to evaluate whether land consolidation is suitable to reduce the problems caused by leasing of farmland. There are at least three main possibilities for using land consolidation: first, the land consolidation court may allocate leased farmland closer to the active farmer's operational farmstead; second, it may allocate leased farmland in a central position in the land consolidation area so that many farmers will want to lease it; third, it may modify the properties so that the lessee gets farmland in exchange for forest or outfield areas. These three fundamentally different ways of solving the problems are analysed and practical examples are presented. This study is mainly based on legal method and legal sources, such as preparatory documents to the relevant acts, circulars and reports from the Ministry of Agriculture and Food. We conclude that there are few obstacles in the Land Consolidation Act, Allodial Act, Land Act or Concession Act for using land consolidation to implement these options in practice. Our main finding and overall conclusion are therefore that land consolidation can be a useful tool for reducing the fragmentation of leased plots and leasing per se.

Leasing of Farmland and Land Consolidation

Helén Elisabeth ELVESTAD and Per Kåre SKY, Norway

1. INTRODUCTION

In Norway, as in other European countries, land consolidation was justified by the need for modernization, i.e. to do away with outdated property right structures, especially fragmentation of land and collective rights. The legally defined aims of land consolidation vary from country to country. In Norway, we define land consolidation as measures that can change properties, physically or organizationally, to improve their utility to the owners (Sky and Bjerva 2018:21). This definition also applies to leased farmland. The definition is wider than in most countries; cf. de Vries et al. (2019:2) and Vitikainen (2004:25-26).

In Norway, land consolidation activities are organised under a special court, but there are no sharp distinctions between the court and government administrations when it comes to land consolidation. Norway is, in fact, the only country to have organized its land consolidation activities entirely within the court system (Sky 2015:84). The first dedicated Land Consolidation Act was enacted in 1821 and the Norwegian land consolidation court has been regarded as a special court since 1882. Although land consolidation in Norway is organised within the judicial system and the organization and the objectives of land consolidation vary from country to country, the actual land consolidation process is surprisingly similar internationally (Sky 2015:81). This means that a comparison between different nations is also relevant with respect to land consolidation and how leased farmland is handled in the land consolidation process.

Until well into the 1960s, farmers in Norway normally owned the whole unit they farmed. Since then, many farm owners have left active farming for other occupations, but the majority of them and their successors have kept ownership of the farm and leased out the farmland to neighbours that need additional land (Sevatdal 2008:59). Leasing farmland is increasingly common in Norway and today comprises approximately 45 percent of the agricultural land in use. Active farmers are in need of more land, because technological and market forces are pushing towards fewer, bigger and more efficient farms (Holden et al. 2018:248). Scattered or divided agricultural land is experienced as a problem by a significant proportion of Norwegian farmers, and around 1 in 5 farmers fully agree that this is a problem. An analysis has shown that farmers who lease farmland from 2-4 other farms experience scattered plots as a problem (Forbord and Zahl-Thanem 2019:15).

The problem we are discussing in this paper is illustrated in figure 1. It shows examples of fragmentation of leased farmland in Flatanger Municipality in the county of Trøndelag. Farmsteads are shown with black dots, owned properties are coloured, and leased farmland are shown with the same colour, only hatched. The maps show the extent of leased farmland and the fragmentation. From the maps we see that there are leased farmland all over the displayed area. D lease farmland in three places and this is causing a lot of transport requirements. F lease farmland more than 3 kilometres from his farmstead in Flatanger. At

Leasing of Farmland and Land Consolidation (10249) Per Kåre Sky and Helén Elisabeth Elvestad (Norway)

the same time there are farmland close to F's farmstead that are leased out to others (as shown on the map at the right side).



Figure 1: Maps showing farmsteads in black, owned properties and leased (rented) farmland in Flatanger. Left: D (yellow) leases farmland in three places and this is causing a lot of transport requirements. Right: F (green) leases farmland more than 3 kilometres from his farmstead in Flatanger, also causing a lot of transport requirements. Source: Direct payments 2016 (Norwegian Agriculture Agency), The National Land Resource Map AR5 (NIBIO) and Map: Toporaster WMS (Norwegian Mapping Authority).

Parallels can also be drawn to Finland with respect to land leasing. The leasing of farmland has increased rapidly in Finland and land fragmentation causes a lot of problems, with the most obvious ones being rising production costs and greenhouse gas emissions (Luke 2013). Due to land fragmentation, the farming industry is not increasing its profitability. The problems caused by land fragmentation could be mitigated through land management activities, especially through farmland consolidation (Hiironen et al. 2016).

In Norway, we have the same trend as in Finland in terms of an increase in leased farmland and a reduction in the number of agricultural enterprises. The number of agricultural enterprises in Norway has decreased from 213,400 in 1949 to 41,800 in 2015 (Rognstad et al. 2016:12). Although the number of agricultural holdings has decreased, the total area of active farmland has remained relatively stable. This is because the leasing of farmland is becoming

Leasing of Farmland and Land Consolidation (10249) Per Kåre Sky and Helén Elisabeth Elvestad (Norway)

more widespread in agricultural enterprises. In 2014, 66 percent of agricultural holdings leased farmland, and leased land accounted for 44 per cent of active farmland. The 28,200 landholdings with land leases in 2014 had a total of 110,200 tenancies, giving an average of four tenancies (Rognstad et al. 2016: 31-33).

The average farm size in Finland was 22.9 ha in 2000 (in Norway 15.2 ha) and 37.8 ha in 2012 (in Norway 22.2 ha) (Hiironen et al. 2016 and SSB 2019). In Finland, from the development and distribution of different farm sizes it can be observed that only farms larger than 50 ha have increased in number. Furthermore, the number of cultivated field parcels has increased among all farms, by over 60 percent on average. In 2000, a typical farm had 10 parcels to cultivate, whereas in 2012 the number was around 16. The property structure has significantly worsened among Finnish farms. Overall, farmers are travelling twice as much as they were twelve years ago (Hiironen et al. 2016). Land consolidation is available as a measure for reducing fragmentation. In Norway there are also many examples of farmers who lease land from five or more farms (Forbord and Zahl-Thanem 2019:15-17).

Without going into more detail, it is clear that the fragmentation of leased farmland and the fact that active farmers are in need of more land, because technological and market forces are pushing towards fewer, bigger and more efficient farms, are serious problems in Norway. The purpose of the paper is to evaluate whether land consolidation is suitable to reduce the problems caused by leasing of farmland. Three research questions are asked:

- Are there measures in the Land Consolidation Act that can be used to reduce land leasing and fragmentation of plots?
- How can land consolidation be used to reduce land leasing and fragmentation of plots?
- Are there any restrictions in related legislation for using the measures in the Land Consolidation Act?

Section 1 has introduced the paper's topic and presented the research questions. Section 2 gives a description of the method and a literature review. Section 3 gives a short presentation of the prerequisites for land consolidation in Norway. Section 4 evaluates the measures in the Land Consolidation Act and evaluate whether other related acts, such as the Allodial Act, the Land Act and the Concession Act, provide guidelines for or place restrictions for using the measures in the Land Consolidation. Lastly, Section 5 draws conclusions based on the findings.

2. METHOD AND LITERATURE REVIEW

2.1 Method

This study is mainly based on legal methods and legal sources, such as preparatory documents to the relevant acts, circulars and reports from the Ministry of Agriculture and Food. There are a limited number of land consolidation court hearings that focus on leased farmland, and none of them would be able to shed light on the problems discussed in this paper.

Leasing of Farmland and Land Consolidation (10249) Per Kåre Sky and Helén Elisabeth Elvestad (Norway)

The most relevant preparatory documents are those for the Land Consolidation Act from 1979 and 2013 (Ot.prp. nr. 56 (1978-1979) and Prop. 101 L (2012-2013)).¹ Especially the preparatory documents from 1979 are relevant to the question of land leasing and land consolidation. This is probably because land leasing started to increase and to create problems for farmers around that time.

A report from a working group appointed by the Ministry of Agriculture (Klepp et al. 1995) discusses a more radical use of land consolidation in areas with fragmentation of leased farmland. They propose, among other things, to allocate leased farmland in a central position in the land consolidation area. This is discussed in Section 4 and illustrated in figure 2.

2.2 Literature review

Relevant scientific literature from Norway is very limited, but one thesis must be mentioned. Bjørnbet (2018) did a qualitative survey with in-depth interviews of 13 land consolidation judges. They had to decide on six different cases that differed from the traditional exchange of farmland with more or less the same land use, to exchange of farmland for parcels with planning permission. He found that most land consolidation judges accepted the untraditional exchange of parcels. Most of the judges also considered that this was within the law, but a few disagreed. This issue has not yet been dealt with in court.

International experience can also be drawn from land consolidation, land leasing and land banking. A sort of land bank was established in Norway in 1955, but the decision was taken to phase it out in 2005. The term land bank is understood as a state/public institution delegated to purchase land in rural areas from private owners, hold it temporarily and sell it again, often in conjunction with land consolidation projects and in order to fulfil their objectives. This is the same understanding as in Hartvigsen (2015:9), which draw examples from Dutch, German and Danish cases. The land bank in Norway was used in connection with land consolidation and in situations where the farmer had left active farming and wanted to sell the farmland but keep an appropriate parcel and the farmhouse. The farmland was sold to the surrounding properties. The division of properties, the design of the new layout of the properties and cadastral work were done by the land consolidation bought the farmland. Bjerva (2012:9) reported an increase of such cases in the land consolidation court from 1985-2005.

In Galicia in Spain, the land bank facilitates lease agreements between landowners and farmers. Until the creation of the land bank, the main planning tool in Galicia to tackle land fragmentation in rural areas was land consolidation. Although land consolidation in Galicia has sometimes been effective in retaining farmland in agricultural use, the overall outcome has not been successful, because it has been unable to clearly improve the ratio of agricultural area per farm (see Tubío-Sánchez et al. 2013:1285-1286). Land banks may contribute to the successful conclusion of contracts, or to the timely payment of rental property, etc. The Land

¹ The preparatory works are in Norwegian, but the legal text from 1979 and 2013 is translated into English (Ministry of Agriculture 1979; Ministry of Agriculture and Food 2013).

Bank of Galicia is a good example of these activities and has become a way of dealing with land fragmentation.

In Denmark, the state land bank supports the implementation of land consolidation projects through a voluntary approach by first purchasing agricultural land from private owners who are willing to sell under normal market conditions before starting a land consolidation project, and then holding the land temporarily and exchanging it with landowners in the land consolidation area who are asked to sell land for a nature restoration project (Hartvigsen 2015:9).

In the next section, we will discuss the prerequisites for land consolidation in Norway and the land consolidation process.

3. PREREQUISITES FOR LAND CONSOLIDATION

From an economic point of view, one may say that the basic, underlying goal of land consolidation is to reduce transaction costs. Because land consolidation is mainly confined to transactions the parties could have done by agreements amongst themselves, one of the means to achieve this is by reducing transaction costs (Sevatdal and Bjerva 2007:81-82). According to de Vries et al. (2019:2), land consolidation is a land management instrument whereby both the structure of the landscape and the shape of the parcels are transformed in order to improve the agricultural and ecological potential of the area.

In Norway, a land consolidation case always starts with some sort of "problem", perceived and recognised by somebody, and this "somebody" brings the problem before the court. The problems are to be stated by the parties themselves, in their own terms and in their own language. It is not up to the court to define or to come up with the problems (Sevatdal and Bjerva 2007:90). It is within the power and duty of the land consolidation court to decide whether claims are justified and should be accepted.

Before land consolidation can proceed in Norway, there are three cumulative requirements that must be fulfilled: first, the land consolidation court may effectuate land consolidation if at least one property or easement in the land consolidation area is difficult to use gainfully at the current time and under the current circumstances; second, the land consolidation court may only proceed in this way in order to make the property arrangements in the land consolidation area more advantageous; and third, for any given property or easement, the land consolidation settlement shall not result in costs and other disbenefits that are greater than the advantages. These requirements apply to land consolidation in most countries (Oldenburg 1990:183).

The land consolidation court follows the basic principles of civil procedure set out in the Dispute Act, such as the principle that the parties themselves are responsible for the allegations, proof and disposition of the case. The parties themselves gather and present evidence such as documents, witnesses, etc. and present it to the court. Although civil procedure is followed, lawyers rarely represent the parties, who normally represent themselves (Rognes and Sky 1998:10).

Leasing of Farmland and Land Consolidation (10249) Per Kåre Sky and Helén Elisabeth Elvestad (Norway)

Although land consolidation is organized within the judicial system and the organization and the objectives of land consolidation vary from country to country, the actual land consolidation process is surprisingly similar internationally. The process can be said to include the following stages (for a more detailed description of the process, see Rognes and Sky (2004:61) or Elvestad and Sky (2019:65):

- applying for land consolidation;
- preliminary decision as to whether the case shall proceed;
- clarifying the boundaries and mapping the consolidation area;
- valuation of anything that is subject to the exchange;
- preparation of a draft consolidation plan after input from the parties involved;
- presentation of the plan to the parties for discussion; feedback from the parties;
- alterations the land consolidation court deems right and proper on the basis of feedback on the plan;
- formal adoption of the plan;
- formal conclusion of the land consolidation proceeding.

In the stage where the land consolidation court clarifies the boundaries and maps the consolidation area, data about leased farmland must be gathered.

In the next section we will look in closer detail at the Land Consolidation Act and at the possibilities provided and restrictions imposed by the law and discuss if and how the measures in the Act can be used to solve the problems relating to land leasing. We will also evaluate whether related legislation places restrictions on the kind of solutions we suggest.

4. IS LAND CONSOLIDATION SUITABLE TO REDUCE THE PROBLEMS CAUSED BY LEASING OF FARMLAND?

4.1 Measures in the Land Consolidation Act that can be used to reduce land leasing and fragmentation of plots.

The purpose of the Land Consolidation Act is to facilitate the efficient and advantageous use of real property and resources for the benefit of owners, easement holders and wider society. This should be done by the land consolidation court remedying impractical property ownership arrangements and easements, clarifying and determining boundaries and rights, carrying out appraisals and issuing other rulings pursuant to this and other legislation; cf. Section 1-1 of the Land Consolidation Act. It is obvious that this covers the situation we are discussing in this paper – fragmentation of leased farmland plots. There is also a separate section of the Land Consolidation Act – Section 3-24 – that gives directions on how to handle leased parcels. We will discuss it in further detail later in this section.

There is one important restriction in the Land Consolidation Act: Section 1-5 states that lessees are not entitled to bring a case before the land consolidation court. A hearing can be

Leasing of Farmland and Land Consolidation (10249) Per Kåre Sky and Helén Elisabeth Elvestad (Norway)

requested only by owners of real property, easement holders and tenant farmers. But since most of the lessees are also owners in a possible land consolidation area, this is rarely a problem in practice. It is sufficient that one owner of a property or a right of use requests the proceedings.

The measures used in land consolidation are listed in Chapter 3 of the Act. There are 10 separate measures that can be used individually or together in each case (Ministry of Agriculture and Food 2013):

(1) Project-related land consolidation in conjunction with private and public projects, cf. Section 3-2.

(2) Conservation-related land consolidation as the result of the public authorities imposing constraints on the exercise of ownership rights, cf. Section 3-2.

- (3) Modifications to property and perpetual easements, cf. Section 3-4.
- (4) Establishing joint ownership, cf. Section 3-5.
- (5) Dissolution of joint ownership and joint use, cf. Section 3-6.
- (6) Division of property, cf. Section 3-7.
- (7) Rules on joint use (shared use arrangements), cf. Section 3-8.
- (8) Orders to carry out joint measures and joint investments, cf. Section 3-9.
- (9) Creating owner associations and establishing articles of association, cf. Section 3-10.
- (10) Distribution of net added value from rezoning, cf. Section 3-30 to 3-32.

In Norway, to proceed with a land consolidation case, one of the above measures must be able to solve the problem raised. In our context, Section 3-4 is the most relevant measure: The land consolidation court may modify properties and perpetual easements. The easement must relate to real property. This section is used to reduce fragmentation and can be used to reduce land leasing and fragmentation of plots. We can find similar measures in other countries' legislations on land consolidation.

More detailed measures and instructions are found in Sections 3-19 and 3-20. Section 3-19 deals with how the land consolidation court shall allocate land and easements. The land consolidation court shall allocate land and easements in accordance with e.g. Sections 3-20 to 3-23 and in a way that is advantageous in view of the grounds for land consolidation. With reference to the allocation of land and easements, Section 3-20 states that the land consolidation settlement may involve exchanging land for land, easements for easements, land for easements and easements for land. Section 3-22 states that if a party needs land for special purposes, he can request that this will be allocated from his share. Section 3-23 states, among other things, that if the land consolidation court believes that land and easements in the land consolidation area may in the future be used in a way that will result in a large change in value, the ownership of such land or easements should not be transferred unless required for an advantageous land consolidation. In other words, there is great flexibility in the Land Consolidation Act.

However, one group of transactions falls largely outside the jurisdiction of the courts: the buying and selling of farmland. However, these and other transactions can be arranged during

land consolidation. The reason for this is that the land consolidation court has become, with increasing frequency, a venue for the parties to negotiate many types of transactions. Consequently, the role of the land consolidation judge has become that of mediation in these issues (Rognes and Sky 2003). Hence, the formalization of agreements, subdivisions and amalgamations of property units have become part of the land consolidation process, but with a specific set of rules and regulations (Sevatdal and Bjerva 2007:92). A working group appointed by the Ministry of Agriculture and Food (2009:169 and 228) proposed an expanded jurisdiction for the land consolidation court to lay out the properties after land consolidation with the purpose of facilitating the leasing of farmland. The proposal was not adopted.

Furthermore, it is clear from the preparatory documents to the Act that the land consolidation court does not have a general authority to change the character of the property substantially by the exchange of properties; cf. Prop. 1011 (2012-2013), page 173. To do this, the parties must agree. One reason for this is that subsidies for farming are linked to the size of the parcel and not to the amount of agricultural production. Another reason is that farmers have machinery, equipment, barns, outhouses, etc. adapted to their current production.

Section 3-24 of the Land Consolidation Act is about leased parcels. If land consolidation affects a lessee or any other person with similar rights, the land consolidation court shall resolve the relationship between him and the owner where necessary. The land consolidation court should consider leasing arrangements in the land consolidation area, but there is no requirement that this must be considered since lease contracts follow the new layout of plots. Consequently, the land consolidation court needs information and data about lease contracts in the land consolidation area. Recall that approximately 45 percent of agricultural land in use is leased. Leasing of farmland is an issue in almost every land consolidation case in relation to reducing the fragmentation of plots. This must be investigated at an early phase of land consolidation, before the new layout of plots is drafted.

4.2 How can land consolidation be used to reduce land leasing and fragmentation of plots?

There are at least three possible options for using the measure in the Land Consolidation Act Section 3-4 to reduce the problems caused by leasing of farmland. The first two options will reduce fragmentation of leased farmland, while the last one will reduce land leasing per se.

A first option for using land consolidation to solve problems regarding leased farmland is to allocate leased farmland closer to the active farmer's operational farmstead. Klepp et al. (1995:33) believed that the provision in the Land Consolidation Act (Section 3-19 and 3-24) on the layout of the property should have a more differentiated goal for the design of the property. They pointed out, among other things, that instead of a common goal for all properties, the properties should instead be designed according to a concrete assessment of how one can expect the property to be utilized for the next ten years.

As a second option, the land consolidation court could allocate leased farmland in a central position in the land consolidation area so that many farmers will want to lease it. In Klepp et

Leasing of Farmland and Land Consolidation (10249) Per Kåre Sky and Helén Elisabeth Elvestad (Norway)

al. (1995:32-33) the question of layout of leased land was also discussed. One solution was to allocate leased land in a central part of the land consolidation area. The leased land would then border more properties and hence more people might be interested in leasing it (see figure 2). This assumed that the leased land had road access. If the parties agreed, all leased parcels could be allocated in one area and could be leased out jointly. Income and expenses could be distributed among the owners. From our point of view, this can be considered in today's land consolidation cases.



Figure 2: Left: fragmentation of leased land (R - yellow and blue). Right: leased land (R - yellow and blue) consolidated and located in a central part of the land consolidation area (illustration).

A third option is to modify the properties so that the lessee gets farmland in exchange for forest or outfield areas. As mentioned above, only owners of farmland are intitled to bring a case before the land consolidation court. In most cases, however, the lessee is also owner of farmland in the land consolidation area, so this will rarely be a problem in practice. If the landlord wants to exchange farmland with forest and outfields, this can be done within a land consolidation case. The two examples given below can be characterized as untraditional exchanges of properties and plots.

Example 1: exchange of cultivated land with forest. Property A has forest land and some cultivated land (farmland), which is currently leased out. Property B is an active agricultural farm, which leases the farmland from property A. Property A wants to exchange farmland for forest land.

Leasing of Farmland and Land Consolidation (10249) Per Kåre Sky and Helén Elisabeth Elvestad (Norway)

Example 2: exchange of cultivated land with unproductive forest land and outfields. Property A has cultivated land, but the owner has left active farming and leased the land to B. Property B is an active agricultural farm. Property A wants to replace farmland with unproductive forest land and outfields. Assuming the same area of cultivated farmland as in the first example, this will require a much larger area of land to be exchanged.

With respect to untraditional exchanges, we cannot, based on the legal review above, see any legal restrictions on such an exchange if the parties agree. However, if the parties are opposed it will be more problematic since the preparatory documents to the Act state that the land consolidation court should not change the property substantially.

4.3 Are there any restrictions in related legislation for using the measures in the Land Consolidation Act?

Section 3-17 of the Land Consolidation Act states that all necessary official permits shall be in place when the land consolidation court issues its final ruling. The land consolidation court may also apply for the permits required to affect the land consolidation. This means that requirements in other laws must be taken into consideration. A closer look at the Allodial Act, the Land Act and the Concession Act is therefore needed.

4.3.1 The Allodial Act

In Norway, the allodial right is a special kinship right that applies to farms and which may have contributed to the almost total absence of legal persons as owners of farms. As far as we are aware, Norway is the only country in Europe that still has an act relating to allodial rights. The essence of this right is that a farm owned by a person for a minimum period, currently 20 years, becomes subject to this right, not only with respect to the present owner, but also members of the extended family of the owner, in a certain order of succession. Once this right is established for a farm and a family, it will apply in perpetuity to the family members, for as long as the farm remains within the family's ownership.

The practical aspect of the allodial right is a right to claim ownership to the farm in certain circumstances, for instance if the farm is sold or otherwise conveyed to somebody outside the family. The same applies if the farm is conveyed to a family member further down the line of priority of succession. The right is held by all people owning a farm with an allodial right, and it is passed on to successors (conveyed) by blood relationship (or adoption) only.

The claim must be made within one year of the conveyance being made public. The right can only be held by natural persons, never by legal persons. Because the right applies to most farms in Norway, it is understandable that most owners are natural persons. Any transfer from a natural to a legal person is likely to trigger a claim of this kind. And any sale from a legal person to a natural person will establish an allodial right after 20 years. At present this institution is under pressure. It is, however, specially protected in the constitution and enjoys strong support in public opinion so it is unlikely to be abolished. Instead it may be reduced in importance by legal regulations in various ways, but that falls outside the scope of this paper.

In Norway, a property is considered allodial land when the cultivated area on the property is over 35 decares or the productive forest area on the property is over 500 decares. The land consolidation court must be aware of this especially in cases of untraditional exchanges as discussed above, because the property can change status as allodial land. The principle is that the same allodial rights should exist before and after the land consolidation. It follows from the Allodial Act that, in the event of land consolidation, allodial rights are transferred to the new properties after land consolidation. However, Falkanger (2007:261) states that allodial issues can arise as a consequence of land consolidation, but that allodial rights cannot prevent land consolidation itself. We share Falkanger's view and based on that the allodial Act will not cause hindrance for any of the options discussed above.

4.3.2 The Land Act

The purpose of the Land Act (Section 1) is to provide suitable conditions to ensure that the land in the country, including forests and mountains and everything pertaining thereto (land resources), may be used in the manner that is most beneficial to society and to those working in the agricultural sector. Furthermore, land resources should be disposed of in a way that ensures an appropriate, varied system of use with a view to the development of the local community and with an emphasis on settlement, employment and efficiency.

Ensuring that resources are used in a manner beneficial to society entails taking into account the fact that the resources shall be disposed of with a view to the needs of future generations. Land resource management shall be environmentally sound and, among other things, take into consideration protection of the soil as a production factor and preservation of land and cultural landscapes as a basis for the life, health and well-being of human beings, animals and plants.

Section 12 of the Land Act deals with the division of property. In cases where land is bought or sold, Section 12 of the Land Act on the division of property is relevant. Property that is used or may be used for agriculture or forestry may not be divided without the consent of the Ministry of Agriculture and Food. Consent to division may be given on such conditions as are necessary for achieving the purposes of the Land Act. The Ministry of Agriculture and Food may give its consent if societal considerations of considerable weight so dictate, or if division is justifiable in view of what the property can yield. In its decision, it shall take into account, inter alia, whether division may result in operational or environmental disadvantages for agriculture in the area. Account shall also be taken of already approved plans for land use pursuant to the Planning and Building Act and of the cultural landscape.

However, in situations when a land consolidation settlement involves exchanging land for land, easements for easements, land for easements and easements for land in order to reduce fragmentation, it is not necessary to require permits. This is an exception granted for land consolidation cases regarding modifications to property and perpetual easements, cf. Section 3-4. Hence, the Land Act will not cause hindrance for any of the options discussed above.

Leasing of Farmland and Land Consolidation (10249) Per Kåre Sky and Helén Elisabeth Elvestad (Norway)

4.3.3 The Concession Act

The purpose of the Act relating to concession in the acquisition of real property (Concession Act) is to regulate and control the sale of real property in order to effectively protect areas of agricultural production and achieve the conditions of ownership and utilization that are most beneficial to society, inter alia in order to safeguard: first, the needs of future generations; second, agricultural industry; third, the need for development sites; fourth, the environment, general interests of nature conservation and outdoor recreation; and fifth, the needs of settlements, cf. Section 1 of the Concession Act.

Land consolidation does not involve buying and selling and does not fall within the scope of acquisition and the Concession Act; cf. circular from Ministry of Agriculture and Food (2017:8-9). Hence, the Concession Act will not cause hindrance for any of the options discussed above.

Based on the evaluation above we can conclude that the Land Consolidation Act poses few obstacles to handling the fragmentation of leased parcels. It is up to the court to apply the provisions on specific cases, c.f. Section 3-17. Allocations of the kind outlined above should therefore be possible through land consolidation, and we cannot see any legal restrictions in neither the Allodial Act, the Land Act or the Concession Act against these kinds of allocations.

5. CONCLUSION

The leasing of farmland is an increasing global phenomenon and cannot be overlooked in land consolidation cases. If one ignores leased farmland, it will be impossible to solve the farmers' problems. A better layout of leased farmland also entails an important environmental benefit, by reducing transport distances. This is also important financially, in that costs are lowered, and revenues increased. There is often instability in lease agreements. In Norway, land lease agreements are characterized as short-term. This means that in the event of a land consolidation case, thorough consideration must be given to the location of the parcels, since the situation may change.

The use of land banks has proved effective in other countries and in Norway the land consolidation courts reported an increase in the number of such cases. One consequence of the combined use of a land bank and land consolidation in Norway was that land leasing could be reduced. It is therefore remarkable that the land bank was phased out and we recommend a reassessment of the Norwegian land bank.

In this paper we have evaluated whether land consolidation is suitable to reduce the problems caused by leasing of farmland. To answer the question if there are measures in the Land Consolidation Act that can be used to reduce land leasing and fragmentation of plots, we found that the land consolidation court may modify properties and perpetual easements, cf. Section 3-4. This section is used to reduce fragmentation and can be used to reduce land leasing and fragmentation of plots.

Leasing of Farmland and Land Consolidation (10249) Per Kåre Sky and Helén Elisabeth Elvestad (Norway)

To the question of how land consolidation can be used to reduce land leasing and fragmentation of plots we have shown three possible options: first, the land consolidation court may allocate leased farmland closer to the active farmer's operational farmstead; second, it may allocate leased farmland in a central position in the land consolidation area so that many farmers will want to lease it; and third, it may modify the properties so that the lessee gets farmland in exchange for forest or outfield areas. The first two options will reduce fragmentation of leased farmland, while the last one will reduce land leasing per se. All three options that we have evaluated are possible solutions. If the leasing arrangements have been stable over a long period of time, we recommend that the land consolidation court may allocate leased farmland closer to the active farmer's operational farmstead. When leasing conditions are more unstable, we recommend that the land consolidation court may allocate leased farmland in a central position in the land consolidation area so that many farmers will want to lease it. If the parties agree to it, we recommend untraditional exchange of properties and layouts of plots as exchange of cultivated land with forest or exchange of cultivated land with unproductive forest land and outfields.

To answer the question if there are any restrictions for using the measures in the Land Consolidation Act, we have evaluated the Land consolidation Act and related legislations. As our discussion shows, there are no obstacles in the Land Consolidation Act, Allodial Act, Land Act or Concession Act of using land consolidation to implement these options in practice.

If the parties agree to it, we find no legal restrictions against implementing untraditional exchanges of properties, such as the exchange of farmland with forest and farmland with outfields. Such exchanges will benefit all parties. They will reduce leasing and provide opportunities for those who rent out farmland to get other types of land that may be more suitable for the individual's agricultural production. The allocation process will improve the layout of leased farmland.

We do not recommend one of the options over another, the issue is at an exploratory stage. So far there are no appealed court hearings on leased farmland and land consolidation that can shed light on the issues discussed in this paper. Our main finding and overall conclusion are nevertheless that land consolidation can be a useful tool for reducing the fragmentation of leased plots and land leasing per se.

ACKNOWLEDGEMENTS

This research was done with the support of The Agriculture and Food Industry Research Funds, reference: 267710. Project: LANDFRAG. Project no. 6360.

REFERENCES

Leasing of Farmland and Land Consolidation (10249) Per Kåre Sky and Helén Elisabeth Elvestad (Norway)

Bjerva, Ø.J. (2012). Jordskiftedomstolene i endring. PhD-thesis, Institutt for landskapsplanlegging, Universitet for miljø- og biovitenskap.

Bjørnbet, T. (2018). Utradisjonell omforming av landbrukseiendom. Jordskifteloven § 3-4 – et gammelt verktøy brukt på et landbruk i utvikling. Master thesis, Department of property and law, Norwegian university of life sciences.

De Vries, W.T., Wouters, R. and Konttinen, K. (2019). A Comparative Analysis of Senior Expert Experiences with Land Consolidation Projects and Programs in Europe. FIG Peer Review Journal, FIG Working Week 2019, Hanoi, Vietnam April 22-26. 2019.

Elvestad, H.E. and Sky, P.K. (2019). Effects of land consolidation in Norway. Nordic Journal of Surveying and Real Estate Research 14:1, pp. 64–78.

Falkanger, T. (2007). Odelsrett og jordskifte. In: Ravna, Ø. (ed.) Areal og eiendomsrett. Universitetsforlaget, pp. 361-370.

Forbord, M. og Zahl-Thanem, A. (2019). Bønders opplevelse av spredte jordbruksarealer. Resultater fra en spørreundersøkelse. Rapport nr. 1-2019, RURALIS – Institutt for rural- og regionalforskning.

Hartvigsen, M. (2015). Experiences with land consolidation and land banking in Central and Eastern Europe after 1989. Working Paper no. 28, Food and Agriculture Organization of the United Nations, Rome.

Hiironen, J., Krigsholm, P., Riekkinen, K., Kolis, K., and Vitikainen, A. (2016). Evaluation of land fragmentation in agricultural areas: Farmers perspective. FIG Peer Review Journal, FIG Working Week 2016, Christchurch, New Zealand, May 2-6. 2016.

Holden, S.T., Strand, G-H, Berge, E., Sjaastad, E.O. and Steinsholt, H. (2018). Regional variasjon i jordleie og bruksstruktur: En studie basert på tre utvalgte kommuner. Kart og Plan, Vol. 78(3), pp. 247-260.

Klepp, S., Syrstad, J.O., Sevatdal, H., Karlsen, S., Vindal, I., Berentsen, R. and Klev, K. (1995). Jordskifteverkets framtidige arbeidsoppgaver. Rapport fra arbeidsgruppe nedsatt av Landbruksdepartementet. Oslo.

Luke (2013). Farm Register - Farm Structure 2012. Natural Resources Institute Finland. [Available 4.1.2016]: <u>http://stat.luke.fi/en/farm-register-farm-structure-2012_en</u>

Ministry of Agriculture (1979). The Land Consolidation Act. https://app.uio.no/ub/ujur/oversatte-lover/data/lov-19791221-077-eng.pdf

Ministry of Agriculture and Food (1995). The Land Act. https://www.regjeringen.no/en/dokumenter/The-Land-Act/id269774/

Leasing of Farmland and Land Consolidation (10249) Per Kåre Sky and Helén Elisabeth Elvestad (Norway)

Ministry of Agriculture and Food (2006). Act relating to concession in the acquisition of real property (Concession Act). https://www.regjeringen.no/globalassets/upload/lmd/vedlegg/konsesjonsloven-engelsk.pdf

Ministry of Agriculture and Food (2009). Høyingsnotat om ny jordskiftelov (og endringar i andre lova). Report from working group.

Ministry of Agriculture and Food (2013). The Land Consolidation Act. https://lovdata.no/ dokument/NLE/lov/2013-06-21-100

Ministry of Agriculture and Food (2017). Circular M-3/2017 - Konsesjon, priskontroll og boplikt.

Oldenburg, P. (1990). Land consolidation as land reform, in India. World Development, Vol. 18(2), pp. 183-195.

Ot.prp. nr. 56 (1978-1979). The Land Consolidation Act. Preparatory works of the Act. Ministry of agriculture [only in Norwegian].

Prop. 101 L (2012-2013). The Land Consolidation Act. Preparatory works of the Act. Ministry of agriculture and food [only in Norwegian].

Rognes. J.K. and Sky, P.K. (1998). Mediation in the Norwegian land consolidation courts. Working paper, No 14, North America Series, Land Tenure Center, University of Wisconsin-Madison.

Rognes. J.K. and Sky, P.K. (2003). Intervention methods in land disputes. European planning studies, Vol. 11(8), pp. 965-978.

Rognes. J.K. and Sky, P.K. (2004). Mediation in land consolidation and in boundary disputes. In: Deakin, M., Mansberger, R. and Dixon-Gough, R.W. Methodologies (Eds.), Models and Instruments for Rural and Urban Development. Ashgate, Aldershot, Hampshire, pp. 59-74.

Rognstad, O., Løvberget, A.I. and Steinset, T.A. (2016). Landbruket i Norge 2015: Jordbruk – skogbruk – jakt. Statistics Norway. <u>https://www.ssb.no/jord-skog-jakt-og-fiskeri/artikler-og-publikasjoner/_attachment/286656?_ts=158d4106ca0</u>

Sevatdal, H. and Bjerva, Ø.J. (2007). The land consolidation court – an efficient mechanism for solving land disputes in Norway. In: Brøther, M.E. and Solberg, J-A. (eds.) Legal empowerment – a way out of poverty, Norwegian Ministry of Foreign Affairs, Oslo, pp. 81–96.

Leasing of Farmland and Land Consolidation (10249) Per Kåre Sky and Helén Elisabeth Elvestad (Norway)

Sevatdal, H. (2008). Land Administration in Norway. In: Onsrud, H. and Busch, E. (eds.) Norwegian land tools relevant to Africa: Workshop Outcome Report 3–4 May 2007, Norwegian Mapping and Cadastre Authority. Oslo, pp. 49–75.

Sky, P.K. (2015). Land consolidation in Norway in an international perspective. Spanish Journal of Rural development, Vol. VI(1–2), pp. 81–90.

Sky, P.K. and Bjerva, Ø.J. (2018). Innføring i jordskifterett. Universitetsforlaget. Oslo.

SSB (2019). Fakta om jordbruk. <u>https://www.ssb.no/jord-skog-jakt-og-fiskeri/faktaside/jordbruk</u>

Tubío-Sánchez, J.M, Ónega-López, F., Timmermans, W. and Crecente-Maseda, R. (2013). Institutional change in land planning: Two cases from Galicia. European Planning Studies, 21:8, pp. 1276-1296.

Vitikainen, A. (2004). An Overview of Land Consolidation in Europe. Nordic Journal of Surveying and Real Estate Research. Vol. 1, pp. 25-44.

BIOGRAPHICAL NOTES

Helén Elisabeth Elvestad holds a masters degree and a Ph.D in land consolidation from the Norwegian university of life sciences. She is associate professor and head of Department of property and law.

Per Kåre Sky holds a masters degree and a Ph.D in land consolidation from the Norwegian university of life sciences. He is professor in land consolidation at Department of property and law. He also professor at Bergen University College and has been a judge in Nord- and Midhordland land consolidation court and Gulating Land Consolidation court of appeal.

CONTACTS

Associate professor Ph.D. Helén Elisabeth Elvestad Norwegian university of life sciences Faculty of landscape and society Department of property and law P.O.B. 5003 NMBU N-1432 Aas NORWAY Tel. + 47 67231237 Email: helen.elvestad@nmbu.no Website: https://www.nmbu.no/emp/helen.elvestad

Professor Dr. Per Kåre Sky Norwegian university of life sciences Faculty of landscape and society Department of property and law P.O.B. 5003 NMBU N-1432 Aas NORWAY Tel. + 47 67231242 Email: per.sky@nmbu.no Website: https://www.nmbu.no/emp/per.sky