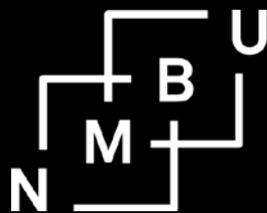


From rural to urban land consolidation– An analysis of recent changes in Norwegian land consolidation

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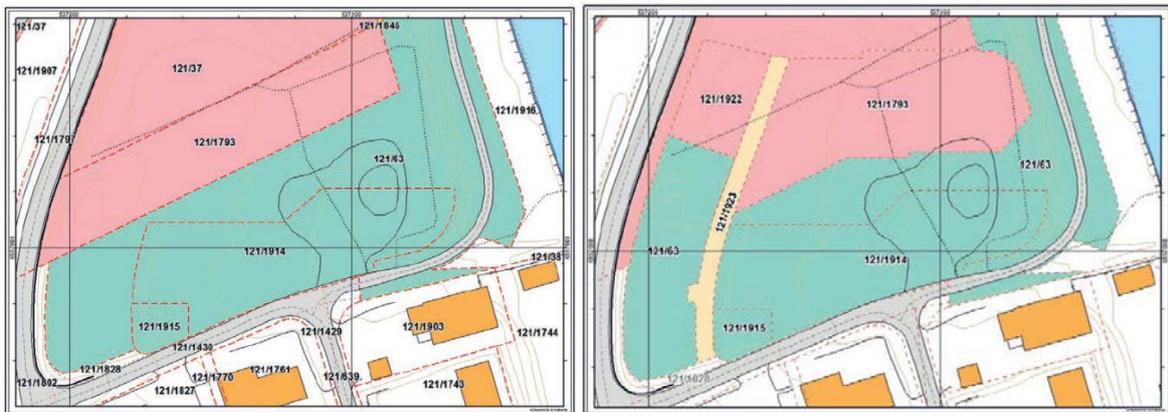


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Abstract

In most countries, land consolidation was first introduced in rural areas, with legislation suitable for urban areas being drafted at a later date. This is also true of Norway. The first evidence of urban competency in the legislation is found in the Land Consolidation Act from 1950. It is important to note that in Norway land consolidation remains the exclusive province of the court system. This, as far as we know, is unique for Norway. In the article we investigate how the original measures in the Land Consolidation Act for rural areas has been adapted to accommodate application in urban areas. We also investigate three urban cases brought before the Land Consolidation Court for settlement. Unfortunately, there are no national statistics that distinguish between land consolidation cases in rural and in urban areas. We can conclude that only small changes were needed to be made to the Act to suit it to land consolidation in urban areas. Properties are often difficult to use gainfully at the current time and under the current circumstances. The layout of the property is not adapted to developments that will take place. Land consolidation is therefore of great importance to urban development.

Frontpage: Before and after urban land consolidation. Case: JSKI-2007-68, Nedre Telemark Land Consolidation Court

Keywords: Land consolidation; Land readjustment; Urban areas; Rural areas; Norway

JEL Codes: K11, Q15

1. Introduction

The legally defined aims of land consolidation procedures vary from country to country. According to Vitikainen (2004:25-26), the general objective is to improve land division and promote the appropriate use of the real estate. This objective is pursued by consolidating plots through land exchange to form plots that are better adapted to their proper use. In Norway, we have an even wider general objective. We define land consolidation as measures that can change properties' physical or organizational nature, to make them more advantageous (Sky and Bjerva 2018:21).

Land consolidation in several countries expanded and evolved into the modern process of land consolidation with multiple goals including village renewal, recreation, environmental protection and nature conservation, see Thomas (2004) (Germany), van den Brink (2004) (The Netherlands), van Dijk (2004) (The Netherlands), Bullard (2007) (multiple countries) and Vitikainen (2004) (multiple countries). A similar process has occurred in Norway to some extent with the introduction of project-related land consolidation in conjunction with public and private projects and conservation-related land consolidation resulting from the imposition by public authorities on constraints on the exercise of ownership rights in 1979.

Land consolidation in urban areas was formally introduced with an amendment to the Land Consolidation Act in July 2006. This was confirmed in the revised Norwegian Land Consolidation Act that came into force in 2016.¹

The purpose of this article is to investigate the differences between rural and urban land consolidation, the impact on procedures and what legal changes have been made in the Land Consolidation Act. We will illustrate these differences by examining three case studies.

To better understand land consolidation in Norway, chapter 2 will provide a brief outline. The history of urban land consolidation is presented in chapter 3, the land consolidation process in chapter 4 and the legal changes to the Land Consolidation Act in chapter 5. Then, in chapter 6, we present our research methods and in chapter 7, the case studies. Finally, in chapter 8, we summarize the case studies and make our concluding remarks.

2. What characterizes land consolidation in Norway?

It is important to note that in Norway land consolidation is the exclusive province of the court system. The Norwegian Land Consolidation Court, which has been regarded as a special court since 1882, currently sits in 34 different places and has approximately 250 employees of whom around 90 are judges. This means that most of the courts are small units. Small courts face challenges such as lack of experience in dealing with urban cases, since they rarely have such cases.

The government has had an intentional strategy to include land consolidation in the judicial system and as a specialized court for real estate. This has been discussed in Norwegian National Reports several times and lately in NOU 2002: 9. One reason why Norway has opted for a specialized court is because of all disputes about property boundaries (Sky 2015:82). Despite the long tradition of surveying and mapping in Norway, the cadastral system often falls short because the cadaster is incomplete and quality varies especially in rural areas (Mjøs 2016:8 and 58). Dispute resolution and land consolidation in the same process does increase processual efficiency. Norway is considered to be a country with efficient land consolidation processes (Crecente et al. 2002:146).

At the time of writing, the future of the Land Consolidation Court is again being examined by the Court Commission. The Court Commission is looking at the relationship between the District Court and the Land Consolidation Court and how to divide the responsibilities of the two courts. This idiosyncratic

¹ English translation of the Norwegian Land Consolidation Act (2013) that came into force 1 January 2016: <https://lovdata.no/dokument/NLE/lov/2013-06-21-100>

organization stands in contrast to developments in many other countries, where land consolidation is part of the administration and is often associated with technical work.

Norway has had laws regulating land consolidation activities since as far back as 1274. 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. This means, among other things, that the land consolidation process and language are highly influenced by legal terms. Despite that, the land consolidation process is surprising similar to those of countries where land consolidation is undertaken by the administration. In this sense, the organizational form does not matter (Sky 2015:81-83).

Every Norwegian Land Consolidation Court has a senior presiding judge who also acts as a land consolidation judge. There are as many land consolidation judges at any given time as stipulated under the Land Consolidation Act, section 2-3. Each Land Consolidation Court may have at least one assistant judge who can act as substitute for the land consolidation judge. The law requires the Land Consolidation Courts to have the necessary technical staff, cf. section 2-3 second paragraph. Today, technical staff or engineers make up approximately 35 percent of the employees of the Land Consolidation Courts. They carry out technical work for the Land Consolidation Courts, such as registration, mapping, boundary marking etc. and general preparation before cases are dealt with in court.

Rulings issued by the Land Consolidation Court can be appealed to one of the six courts of appeal in Norway. On reviewing land consolidation rulings, one of the court of appeal judges must be a Land Consolidation Court of appeal judge, cf. section 8-7 second paragraph.

The appeal judges in land consolidation cases, the land consolidation judges and assistant judges must all hold a Master's degree related to land consolidation, covering the subjects stipulated by the Ministry, cf. section 2-4.

The Land Consolidation Courts' jurisdiction is threefold; land consolidation (chapter 3 in the Act); legal clarification and boundary determination (chapter 4); and appraisals (chapter 5). In this article, we focus on the first, land consolidation.

Table 1: *Percent of cases by main areas of jurisdiction in the Land Consolidation Court (Norwegian Courts Administration 2018).*

Land consolidation	33.4 percent
Legal clarification and boundary determination	61.4 percent
Appraisals	5.2 percent

According to statistics collated by the Norwegian Courts Administration (2018), approximately 450 land consolidation cases are heard each year. What is important is to understand that land consolidation cases in Norway are very small comprising approximately eight parties. This number has been rather stable for a long period, at least since 1997 (Bjerva 2011:188 and Rognes and Sky 1998:2). The Land Consolidation Court, with some exceptions, only seeks to resolve issues between two private owners.

Unfortunately, there are no national statistics telling us the ratio of rural to urban land consolidation cases, but there has been an increasing number of urban cases in the published court records at The Lovdata Foundation. The Foundation is there to create, maintain and operate systems providing information on laws and court cases, and has now more than 1,100 published court records from Land Consolidation Courts, both urban and rural cases.

The measures used in land consolidation are listed in chapter 3 in the act. There are nine separate measures that can be used individually or together in each case. Unlike most countries, Norwegian Land Consolidation Courts can apply several different measures to resolve the land consolidation problems indicated by the parties. The parties describe the nature of the problems in the land consolidation area, while the Land Consolidation Courts decides which steps to take.

According to our definition of land consolidation the options are grouped into changes affecting the physical attributes of a property and changes affecting the organizational set-up. For more details, see the wording in The Land Consolidation Act (2013).

Changes to physical attributes:

- (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.

Organizational change:

- (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

There are three cumulative requirements before land consolidation can proceed in Norway. (1) 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, cf. section 3-2. (2) The Land Consolidation Court may only proceed in this way in order to make the property arrangements in the land consolidation area more advantageous, cf. section 3-3. (3) For any given property or easement, the land consolidation settlement shall not result in costs and other disadvantages that are greater than the advantages, cf. section 3-18. All three criteria must be fulfilled. If not, the Land Consolidation Court must dismiss the case, cf. section 6-23 fourth paragraph letter a.

3. The history of urban land consolidation in Norway

In Norway, as in most other countries, a system of land consolidation was first introduced in rural areas, with legislation targeting urban areas being drafted at a later date (NOU 2002: 9 p. 57). Archer (1984), Doebele (1982) and Larsson (1993) each provide an account of urban land consolidation internationally. Several countries have introduced these measures in cities and urban areas, such as Sweden, Germany, Japan, India, Taiwan, South Korea, Canada and Australia. Internationally, the terms “land readjustment” and “land consolidation” are used for urban and rural consolidation respectively. Norway has not used the former term, nor has it distinguished between land consolidation in urban and rural areas.

While the first signs of urban competency in Norway is found in the Land Consolidation Act from 1950, and in extended form in the 1979 Act, urban land consolidation was not a key issue in this preparatory works of the act. Agricultural issues were the main focus. A working group focusing on planning across property boundaries concluded that land consolidation facilitated densification in already developed areas and in the planning of new urban areas (NOU 2001: 7). In 2002, The Norwegian Ministry of Agriculture appointed a working group (the Movik Commission) to draw up proposals for legislative changes relating to the allocation of land values, costs and funds for mitigating measures when implementing projects pursuant to the Planning and Building Act (Landbruksdepartementet 2003).

In order to improve project implementation, the Commission proposed putting a framework in place to make it easier to make changes in urban areas that are already developed, based on the same principles as the framework for land consolidation (NOU 2001: 7, p. 20). Complicated, unclear and inappropriate property ownership arrangements are common barriers to developments and other measures, particularly in built-up areas. Property boundaries and rights often need changing to allow a

development to go ahead in a practicable manner. On page 95 of its report, the Commission said that the remedies set out in the Planning and Building Act for dealing with this kind of problem – primarily expropriation and compensation – are sometimes contradictory or impracticable because the available solutions and approaches are insufficiently flexible. The Commission urged the government to look more closely at expanding the use of land consolidation measures.

The Land Consolidation Act was amended in July 2006 and urban land consolidation was now included, but the preparatory works of the act were still heavily tilted towards agriculture. This bias was addressed in the preparatory works of the current act that came into force in 1 January 2016. Findings in a survey conducted by Bjerva (2012:46) show that the provisions of the Land Consolidation Act were applied to urban issues in cases as early as in 1985, and there has been an increasing use of land consolidation in urban areas.

4. The land consolidation process

We will not detail the land consolidation process, merely note how surprisingly similar the actual process is between countries (Sky 2015:81; Vitikainen 2004: 31-38; Rognes and Sky 2004:61; Crecente et al. 2002). The process is also more or less equal in rural and urban areas.

On the other hand, it is important to mention that land consolidation can only be requested by an owner of real estate or an easement holder, cf. section 1-5. There is no requirement stating that a majority of owners has to apply for land consolidation. A single owner can apply for land consolidation for a larger area even if all the other owners oppose the move. Of course, land consolidation can take place more painlessly if more owners support the request. Vitikainen (2004:26) also points out that the relative value and ownership of the real estates are normally kept constant in land consolidation. That is also true in Norway.

The Norwegian land consolidation process has the following main stages (partly after Rognes and Sky 2004:61):

- applying for land consolidation;
- deciding substantive and geographic limits to the case;
- preliminary decision whether the case shall proceed, see the cumulative prerequisites;
- inform the cadastral authority that a land consolidation claim has been made;
- clarifying the boundaries and mapping of 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;
- comments from the parties;
- alteration on bases of comments on the plan the Land Consolidation Court deems rights and proper;
- check out the need of official permits;
- formal adaption of the plan; marking out of all new boundaries in the fields;
- formal conclusion of the land consolidation proceeding in the court;
- when the case is enforceable the Land Consolidation Court shall inform the cadastral authority (municipality) on the outcome of the case; and
- registration of the outcome in the land registry.

Thanks to the way the court is organized, procedures in the Land Consolidation Courts tend to follow more or less traditional dispute resolution provisions as set forth in the Dispute Act. This entails a very formal procedure. Given that land consolidation is a practical means of organizing the operation of properties, this is not necessarily the most appropriate procedure in all cases, insofar as approximately three-quarters of the parties present their cases to the court in person without a lawyer (Rognes and Sky 1998:10). This can be exemplified by the fact that, in the case of smaller land consolidation, the court

must often deal with a dispute concerning property matters, and at the same time discuss how a property should be designed after being consolidated. See statistics from the Land Consolidation Courts and the number of disputes resolved in connection with land consolidation cases (Norwegian courts administration 2018).

A formal case procedure must be balanced against efficiency and, as shown earlier, land consolidation proceeds very rapidly in Norway.

5. The legal changes

An interesting observation is that the former Land Consolidation Act was more or less neutral when it came to the linguistic description of the Land Consolidation Courts jurisdiction and competence. There were few places in the Act that remind us that the act was originally written with rural areas in mind, but in the preparatory works of the Act the focus was on rural issues.

The mission statement of the Land Consolidation Act does not distinguish between rural and urban areas, cf. section 1-1. In scope, the Act applies to real estate and easements relating to real estate, watercourses and the sea throughout Norway, unless otherwise specified in Land Consolidation Act or other acts, cf. section 1-2. In other words, the Act and all the measures presented in chapter 3 apply to urban areas in general. The preparatory works contain little about urban issues specifically, but more importantly, nor do they focus on agricultural issues.

However, a few places in the preparatory works of the Act urban issues are highlighted. For example, the Ministry argues that urban land consolidation can make the land use more effective and climate-friendly and agricultural areas be saved for development (Prop. 101 L (2012-2103) p. 411). The latter is also an issue in land consolidation in Germany (Thomas 2010).

Under the Land Consolidation Act of 2013, the Land Consolidation Court competencies empowered to establish joint ownership. However, jurisprudence shows that a number of joint ownerships have also been established under older legislation as a part of a larger case. This may indicate that it is a useful conflict-reducing option, as was also suggested in the preparatory works of the act. The introduction of this provision giving the Land Consolidation Court powers to establish joint ownership in urban areas came in response to the need to connect infrastructure such as roads, water and sewage, parking areas, playgrounds etc. to the properties in need of it, cf. section 3-5. It is called “modern joint ownership to land” (Prop. 101 L (2012-2013) pp. 132 and 424). An argument for introducing this measure was to reduce the potential for conflict between owners and easement holders in situations where they, for instance, have right of way over the original property (Prop. 101 L (2012-2013) p. 132). Ownership rights have little value compared to the value of the easement, since the latter can have a dominant position. If the ownership of common infrastructure is divided between the holders of rights, their legal rights are clarified.

In another example, the Ministry of Agriculture and Food argued that extinguishing negative covenants in connection with land consolidation would make the provisions in the act better suited to resolving impractical property arrangements in urban areas (Prop. 101 L (2012-2013) p. 119). An example of a negative covenant is a prohibition against different types of building in a specific area. Negative covenants are more frequently found in urban areas than in rural ones (Elvestad 2018 and 2019).

6. Method and data collection

We use the case study method because a detailed investigation of cases helps us formulate hypotheses explaining why the same land consolidation measure may have a different effect in rural and urban areas. Analysis of single cases allows us to identify differences between rural and urban land consolidation processes. Fang, Shi and Niu (2016:464) also see case studies as an ideal methodology for land consolidation studies.

Out of the nine measures in the Land Consolidation Act, we have chosen four for further analysis:

1. Exchange of properties in an urban area, cf. section 3-4
2. Rules for the use of a private road, cf. section 3-8
3. Establishing joint ownership, cf. section 3-5
4. Orders to carry out joint measures and joint investments, cf. section 3-9

The reason for the selection is mainly related to our earlier division of land consolidation cases into two main groups; a) measures that can change properties physically and b) measures that can change properties organizationally. Exchange of properties is a physical measure and rules for the use of a private road are an organizational measure. Joint measures have both a physical and organizational part and are interesting because they combine the two main remedy groups. Establishing joint ownership is a new and special device, designed for urban settings.

The concrete cases are chosen partly because of their ability to illustrate differences between rural and urban land consolidation processes and partly because they are typical of cases often brought before the Land Consolidation Courts.

The measures in the Land Consolidation Act are meant to be general, and useful in both rural and urban areas. However, there are various factors that are emphasized differently depending on whether it is a rural or an urban land consolidation. In addition, some factors will be emphasized differently according to whether the case involves rural or urban land consolidation. There may be differences in whether a rural land consolidation takes place inside a farmyard or in the outskirts / inland areas. Similarly, it will make a difference if urban land consolidation proceeds in built-up or undeveloped areas. While this can affect the suitability of a measure, more importantly, it can affect the assessments of the material prerequisites of land consolidation, cf. section 3-2, 3-3 and 3-18.

Having said that, it is important to note that these differences can vary a lot from case to case, depending on the attributes of the particular area. For example, some factors will become more prevalent in a rural area with a very active agricultural sector, than in one with little farming activity. Many areas have differentiated settlements and can be categorized as semi-urban or semi-rural. It is therefore impossible to be categorical, as there will always be moving transitions. The differences we highlight under each case are meant to be general. We focus on the differences that are typical of our categories. The cases are not exhaustive in terms of differences between urban and rural land consolidation, but are used to exemplify such differences.

7. Case studies

7.1 Exchange of properties and easements and establishing joint ownership

The first case concerns the urban reorganization of properties, cf. section 3-4. Traditionally, this measure have been used to reduce fragmented agricultural properties such as are seen in several places of the world, including Norway (Lisec et al. 2012), see for example Crecente et al. (2002) (Galicia, Spain), Niroula and Thapa (2005) (South Asia), Burton and King (1982) (Cyprus), Jürgenson (2016) (Estonia) and van den Brink and Molema (2008) (The Netherlands). Use of this measure in Norway to customize urban properties to zoning plans and to facilitate smaller modifications between a few properties has flourished.

In the further discussion, we have focused on a case where the Land Consolidation Court customized properties to fit a zoning plan. This case involved three properties, two of which were owned by one person. The land consolidation area was approximately 14 000 m². The properties did not fit the zoning plan.

In short, the properties were customized to the zoning plan. In this case the parties agreed on the plan proposed by the Land Consolidation Court. If the parties reject the court's remedy, the court can force the parties to accept. The final plan also included establishing joint ownership in an area set aside for road. The court records show that there were no property boundary disputes in this case.



Figure 1: Part of a land consolidation map in an urban area. Before land consolidation (left) and after land consolidation (right) in the municipality of Porsgrunn (Nedre Telemark Land Consolidation Court, case: JSKI-2007-68).

As shown in figure 1, the pre- and post-land-consolidation situations are very different compared to traditional maps showing fragmentation of plots in rural areas. To understand the post-land-consolidation situation, we need to retrieve information from the zoning plan. A section of the actual zoning plan is shown in figure 2. If the zoning plan is adopted, the land value is distributed among the owners. If the zoning plan includes a provision to distribute the net added value from rezoning, the situation is different. We do not discuss this any further in this article, but see Elvestad and Sky (2019) and Sky (2008:3-12) for further reading.



Figure 2: Site plan (left) and draft of the land consolidation plan combined with the zoning plan that determined the formulation of the final plan in this case (right).

Plot reorganization according to a zoning plan needs precise valuation because of the high value of land. This type of situation needs in turn cadastral work. The case is brought to the relevant Land Consolidation Court, and the court's technical staff carry out the cadastral work. This makes the process more efficient. The fees paid for the cadastral work are also less than if the surveying department in the municipality had done the work.



Figure 3: *Orthophotos of the same area in 2004 (left), 2008 (in the middle) and 2018 (right). Source: The Norwegian Mapping Authority.*

The orthophotos in figure 3 are illustrative. In 2004 the area was undeveloped. By 2008 it was partly developed, but construction had stopped because of unfeasible property structure. The Land Consolidation Court handled the case in 2008 and the area was finally developed in 2013-2014. As the 2018 orthophoto shows, it is now an established residential area.

The Land Consolidation Court may impose joint ownership to properties if doing so remedies the impractical property arrangements more effectively than could be achieved by creating rules on joint use. As mentioned above this expedient was only introduced in the Land Consolidation Act that came into force in 2016 and only a few cases have been heard so far.

In the case presented above, joint ownership in the private road into the development area was prescribed. This is a typical use of this measure. The obvious benefit for the parties involved is to simplify the legal situation by parceling out ownership to the road to everyone. It is of great importance that the users have ownership in the infrastructure because co-owners are more likely to shoulder their responsibility for maintenance. So far, we have little experience of this new expedient's ability to prevent future conflicts, which the Ministry highlighted as one of the objectives of the amendment.

This measure challenges the way we think about land consolidation. One of the traditional measures in the Land Consolidation Act was to dissolve joint ownerships, not establish new ones. The scope of the procedure is wide and covers several different types of infrastructure such as private sewerage and water, parking, recreational areas etc. This requires the Land Consolidation Court to have access to expertise on a wide range of subjects.

Based on the presented case, the court record and general experience of these types of case, we shall describe the differences between urban and rural areas, in terms of the exchange of properties (section 7.1.1) and joint ownership (section 7.1.2).

7.1.1 Differences between urban and rural areas: exchange of properties

Urban areas are strongly regulated; have high land value; valuation errors can have great consequences; the property conditions are often clear and there are few conflicts regarding property boundaries; and there is a need for a rapid land consolidation process, due to the development project. The relationship to the property of the parties involved is often influenced by economic interests and how the properties should be laid out in light of the zoning plans.

Rural areas are less regulated; have lower land value; the property conditions are often unclear and disputes often arise regarding property boundaries. We have to take into consideration the disbursement of governmental subsidies to the agricultural sector on the basis of area rather than production rates. The layout of properties should be suitable for agricultural machinery, production, etc. Finally, properties should be exchanged at certain times of the year, for example, in connection with seeding and harvesting. In rural areas land leasing is usual in Norway and has to be taken into consideration. The relationship of the parties involved to the property is often influenced by social interests. People are often emotionally attached to the farmland, see Cay et al. (2010:262); Goodale and Sky (1998:266); and Coehlo et al. (1996:130) for further reading and references.

7.1.2 Differences in joint ownership in urban and rural areas

In urban areas, the main purpose of land consolidation is to ensure provision of necessary infrastructure for the residential area, such as roads, water and sewage, playgrounds and parking lots. Land use is often homogenous. Shares in the common infrastructure are determined by the Land Consolidation Court and new users are charged a connection fee to access the infrastructure.

In rural areas, the main purpose of land consolidation is to create a more rational use of agricultural areas out of several properties, for example floating docks and parking lots. Stipulated land use is often heterogenous. Shares in the common infrastructure are determined by the Land consolidation Court and new users are charged a connection fee to access the infrastructure.

This case is a good example of the use of several means by the Norwegian Land Consolidation Courts, in this case exchange of properties and establishment of joint ownership, to resolve the problems raised by the parties (Rognes and Sky 1998:9).

7.1.3 Differences summarized

As we can see, especially in point 7.1.1, there are large differences between urban and rural land consolidation processes. The Land Consolidation Court must look at other factors in urban areas. The expedient, however, is no less suitable for urban areas than rural, although the Land Consolidation Court must consider two challenges in particular in urban areas; time spent and valuation. Time is money for a developer and if a land consolidation process is slow and cumbersome, the result can be at great cost for a development project. Elvestad (2018:82) shows that a development project can have daily financial costs of approximately EUR 1000. Furthermore, because property values are significantly higher in urban areas, accurate valuations are particularly important, also considering the rule the land consolidation settlements shall not result in costs and disadvantages that are greater than the advantages, cf. section 3-18. Because of a more precise system of land registration the number of property boundary disputes is less in urban areas, see also Mjøs (2016:82). Land leasing is not an issue in urban areas.

7.2 Rules of joint use

The Land Consolidation Court may establish or modify rules for existing shared-use arrangements. It may also impose new shared-use arrangements where no such arrangement or rules on joint use exist, if there are special grounds for doing so. It may clarify the arrangements between an owner and an easement holder and between easement holders. Among other things, the Court may delineate the area covered by an easement, and establish rules on how it is exercised. It may institute both permanent and temporary rules, cf. section 3-8 paragraph one and two.

The second case is a private road and the expedient provided for under the Land Consolidation Act is rules of joint use, section 3-8. This is a very common type of case. The vast majority of private roads in Norway fulfill several purposes. This is also true of this road. It was an existing road located in an urban area and provides access to mainly residential buildings, but also outfields, mooring places and boathouses. The road began at the junction of municipal road. Altogether, 14 owners and 16 properties were involved.

The parties were involved in several disputes to do with rights of way. In addition to these disputes, the parties could not agree on how to utilize and maintain the road. One such issue was how to share the cost of maintenance. In consequence, the road was not maintained properly. The Land Consolidation Court had to resolve the disputes before recommending a solution to utilizing and maintaining the jointly owned and used road.

After listening to the parties, the Land Consolidation Court rendered several verdicts. When these verdicts were confirmed, the parties were invited to comment on the proposed rules in accordance with the land consolidation process presented in chapter 4. One dispute was resolved by a mediated settlement; see Rognes and Sky (2003) for mediation in the Norwegian Land Consolidation Courts.

The proposed rules are based on the same examples of the statutes (see middle of figure 4). The statutes will be modified in accordance to the type of case and in response to comments from the parties involved.

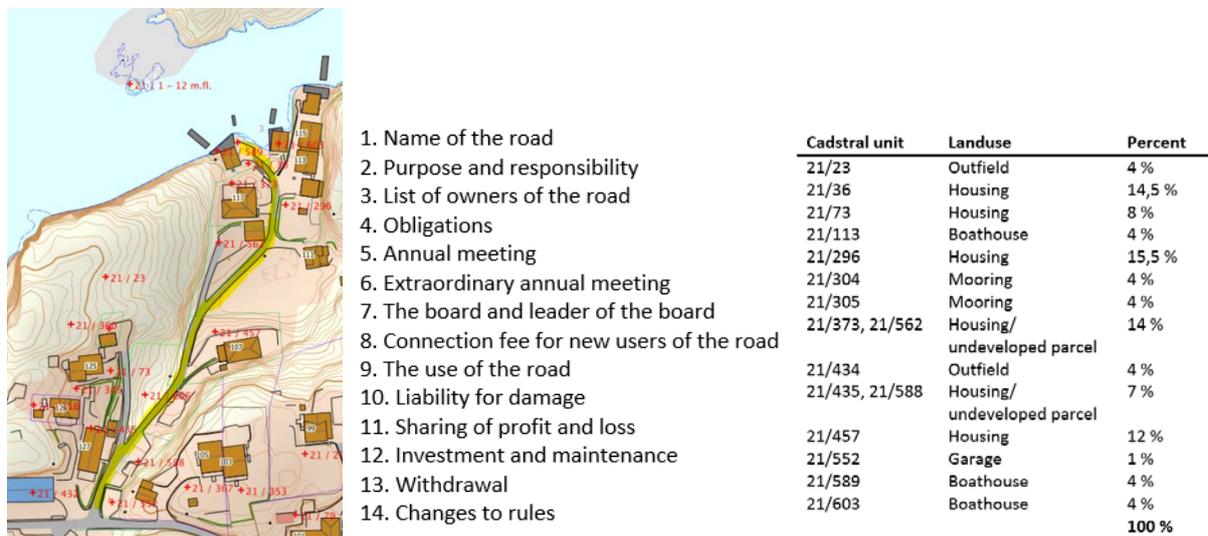


Figure 4: Map of the road (to the left), heading of the rules (in the middle) for the private road highlighted in yellow in an urban area and prescribed shares in the maintenance of the road (right) (Nord- and Midhordland Land Consolidation Court, case: 1200-2001-0006). Source of map: The Norwegian Mapping Authority.

Based on this case, the court record and general experience of this type of case, we shall describe the differences between urban and rural areas.

7.2.1 Differences between urban and rural areas, in rules of joint use

The main purpose of urban private roads is access to housing. The use of the road is often homogenous; rules on rights of way might be contradictory or confusing; the Land Consolidation Court determine a connection fee for new users of the road. The number of residential units on each parcel is a key issue.

The main purpose of rural private roads is agricultural. The use of the road is diverse; rules on rights of way might be contradictory or confusing; the Land Consolidation Court determine a connection fee for new users of the road. The uses of the area serviced by the road can vary, with, for example, forest area.

Roads in rural areas must be considered in light of the increasing numbers of farmers closing farm operations down, albeit while still using the farm as housing and the road for access, but for another purpose than farming.

The exodus from the farms has diminished the differences between urban and rural private roads, making use of the roads more homogeneous in rural areas too. When use is homogeneous, valuation will also be simpler insofar as only one type of property is considered, such as housing.

7.3 Orders to carry out joint measures and joint investments

The Land Consolidation Court can impose joint measures and joint investments in conjunction with the use of properties or easements, including on parties involved in reindeer husbandry, landowners or easement holders, cf. section 3-9.

The third case study is of a road in an urban area in need of maintenance, investment and widening. The several owners of the road and easement holders needed rules prescribing their joint use of the road, cf. section 3-8. This project presupposed a minor change to the zoning plan. This change has to be approved by the planning department in the municipality, cf. section 3-17. The court records show that there were no disputes.

Joint measures and joint investments are often combined with exchange of properties to ensure proper infrastructure corresponding to the new layout of the plots. This is also the case in other countries, such as for example Galicia in Spain (Crecente et al. 2002:145) or Cyprus (Demetriou et al. 2012:131), but this is not a widely discussed topic in the literature.

The Land Consolidation Court's main task is to divide the costs of joint measures and joint investments among the parties involved. This involves some sort of valuation to find each property's share. This share shall not result in costs and other disadvantages that are greater than the advantages, cf. section 3-18. If this happens, the Land Consolidation Court will have to dismiss the case or change the shares if possible, cf. section 6-23 fourth paragraph letter a.

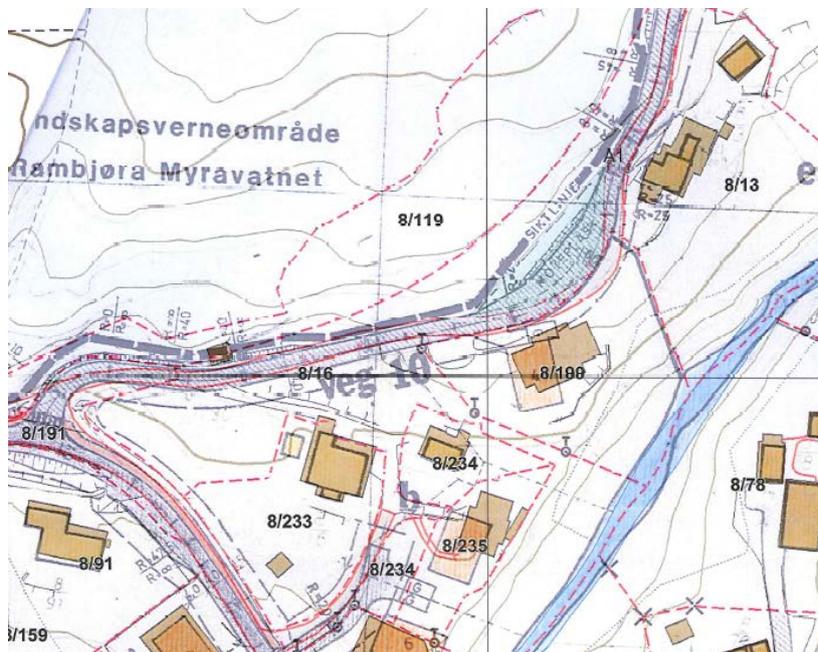


Figure 5: Section of map of the road in a residential area in Bergen municipality (Nord- and Midhordland Land Consolidation Court, case: JBER-2011-37).

One of the joint measures in this case, was the widening of the road near cadastral unit 8/13 (northeast in figure 5). Among other things, mountains had to be blasted, excess mass removed and the road paved. The costs were to be distributed among users of the road. This widening led to a slight change in the zoning plan, something the municipality must approve before the land consolidation case can be terminated, cf. section 3-17.

Based on this case, the court records and general experience of this type of case, we shall describe the differences between urban and rural areas when joint measures and joint investments need to be put in place.

7.3.1 Differences between urban and rural areas to enable joint measures and joint investments.

Joint measure and investments, roads and infrastructure in urban areas are strongly regulated by the Planning and Building Act. Formal requirements regarding access to roads, water and sewerage are a prerequisite for urban development. There are fewer conflicts regarding property boundaries and easements in urban areas than in rural. This is mainly because the properties and easements have been recorded more accurately (Mjøs 2016:82). The joint measure often has just one purpose, such as the

building of a road or infrastructure in a housing area. If the joint measure is a road, it will often require a higher standard. The land value is also higher than in rural areas.

Rural joint measures will often be undertaken to facilitate agricultural operations. Roads are built in compliance with provisions in the Planning Regulations. Approved agricultural roads will have often a lower standard than roads in urban areas. Property attributes are often unclear, increasing the propensity for disputes over property boundaries. If the joint measure is a road, it will often be expected to fulfill several purposes, such as providing access to agricultural land, housing and leisure homes.

There is nothing in the urban situation preventing the use of measures, but the Land Consolidation Court must take other considerations into account than in rural areas. These factors include the stricter regulation and higher technical demands of urban areas, for example, when building a road or establishing new infrastructure. The values of the properties are also considerably higher in urban areas and if the joint action involves acquiring land, as in this case, to widen the road, we have the same situation as mentioned above in the exchange of properties. Correct valuation is important, to fulfill the principle that no one should lose out through the land consolidation, cf. section 3-18.

8. Case studies summarized and final conclusion

Even before the Land Consolidation Court was given formal judicial competence in urban areas, urban land consolidation processes had already been undertaken. Our analysis shows that there are differences between urban and rural land consolidation for all four measures analyzed: exchange of properties and easements; establishing joint ownership; rules of joint use; and orders to carry out joint measures and joint investments.

The differences between urban and rural land consolidation is clearest in cases involving the exchange of properties. The stricter regulation of urban areas has to be taken into account in the transformation process.

One of the differences we pointed out in the analysis of exchange of properties concerns the often strong influence of the economy in urban areas and social interests in rural areas on owners' relationship with the property. This is a truth with modifications. We can foresee situations where an exchange of properties involving an agricultural property has no social consequences for the owner. On the contrary, changes to unbuilt land in the gardens of single family homes in densification projects may well have a major social impact on the owner, who has a personal connection to the property in question. However, the parties in urban cases are often professional property developers whose objective is to develop and sell property, and their relationship with the property will thus be influenced by economic interests.

Furthermore, the analysis shows that when establishing a joint ownership and rules of joint use, the same differences between urban and rural areas will apply. For example, in urban areas the main purpose will be access to housing in both joint ownerships and rules of joint use, while in rural areas, the main purpose of both measures will be agricultural.

Another difference is that value of land or property is higher in urban areas. To make sure that no one loses out from the land consolidation process, estimates of value need to be accurate, requiring specific expertise at the Land Consolidation Court. In one and the same case, the Land Consolidation Court provides services in relation to legal questions, issues to do with real estate, and technical matters. It is an efficient process, but requires high levels of expertise at the Land Consolidation Courts. For urban land consolidation, issues in the Neighbor Act, Planning and Building Act, and principles under the Expropriation Act, among other things, will become much more prevalent than in cases of rural land consolidation. Particularly challenging are matters relating to advantages and valuation. It is essential that the land consolidation judge and the Land Consolidation Court have sufficient expertise to undertake a balanced consideration, because these are also criteria for carrying out land consolidation, cf. sections 3-3 and 3-18. The Land Consolidation Court has a great deal of experience of dealing with cases in rural areas, but not as much in urban areas. This can be challenging. Land consolidation judges,

however, are specialized in real estate issues. The expertise required to preside over carry out land consolidation cases does not exist in the ordinary courts in Norway.

Based on the case studies, there do not seem to be more disputes in rural areas than in urban areas, albeit Mjøs (2016) has documented shortcomings in the Norwegian cadaster. It is incomplete and varies in quality, especially in the rural areas. We can therefore say that quality of cadasters of urban areas in larger towns is far higher than the rural areas.

The Land Consolidation Act is neutral when it comes to the language employed to describe the Land Consolidation Courts' jurisdiction and competence. Only small changes to the act were needed to adapt it to land consolidation in urban areas. Properties are often difficult to use gainfully at the current time and under current circumstances. Complicated, unclear and inappropriate property ownership arrangements are often the reason why developments and other measures are hard to implement, particularly in built-up areas. The layout of the property does not conform to the development that will take place. As the Norwegian Official Report says, "*smaller exchanges of properties, joint measures and rules of joint use have constituted a growing part of the amount of cases in rural areas. Said measures may have at least as great effects in towns and cities.*" NOU 2002: 9 p.47. We agree, experience has shown that land consolidation is of great importance for urban development.

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