



Land consolidation

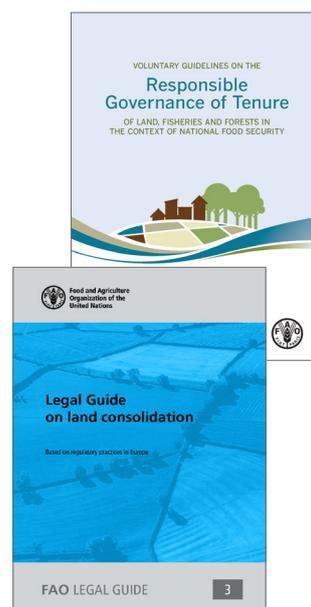
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This legal brief on land consolidation is based on the guidance contained in the ***Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the context of national Food Security (VGGT)***.

The brief summarizes the FAO **Legal Guide on land consolidation: Based on regulatory practices in Europe**, as well as relevant FAO and international experiences.

It explains the concept of land consolidation, provides relevant policy recommendations and in particular, the necessary legal and regulatory framework for efficient land consolidation programmes.

Land consolidation allows for the improvement of the structure of agricultural holdings and farms, which increases their economic and social efficiency and brings benefits both to right holders as well as to society in general. It may also facilitate the allocation of new areas with specific purposes other than agriculture, such as for public infrastructure or nature protection and restoration.



What is land consolidation?

Definition

Land consolidation is a legally regulated procedure led by a public authority and used to adjust the property structure in rural areas through a comprehensive reallocation of parcels, coordinated between landowners and users, in order to reduce land fragmentation, facilitate farm enlargement and/or achieve other public objectives, including nature restoration and construction of infrastructure. The land consolidation professionals involved in the process prepare a *Land Consolidation Plan*, which upon its approval by the landowners and the responsible public body, is registered in the Land Registry and implemented.

Land included

Land consolidation focuses on the re-allotment of privately owned agricultural land. However, it is fundamental to also allow the inclusion of publicly owned land into the process, which facilitates the re-allotment through exchange and/or sale of publicly owned land within the project area. Publicly owned land also provides space for enlargement of farms and taking agricultural land out of production for nature restoration, construction of infrastructure and other public purposes.

Two recommended types of land consolidation

- **Voluntary land consolidation** – all landowners participate in the project by their own will and at the end of **negotiations** provide their written consent with the draft Land Consolidation Plan.
- **Majority-based land consolidation** – the Land Consolidation Plan is approved through **voting** by the **qualified** (increased) **majority** of landowners within the project area.

A voluntary approach is recommended to introduce land consolidation in the country, on the grounds that it is more respectful of the land tenure rights of all landowners and right holders. However, a majority-based approach may be more feasible when a project has the strong support of the large majority of landowners, or where there is a need for a comprehensive reorganization of the territory in order to support critical rural infrastructure works, such as rehabilitation or construction of irrigation and drainage systems.

Objectives

Land consolidation is an instrument that is used to support the following objectives:

- **agricultural development** through re-allotment of parcels (reduction of land fragmentation and facilitation of voluntary enlargement of holding and farm sizes);
- agricultural development through re-allotment of parcels, integrated with **rehabilitation of nature** or construction of the local agricultural infrastructure;
- implementation of large-scale **infrastructure** projects (e.g. railways, roads, irrigation);
- **nature restoration**, environmental protection, climate change adaptation and mitigation (including water management, creation of nature reserves, restoration of river courses, etc.); and

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- fully **integrated local** rural development, village renewal, in order to strengthen and diversify the rural economy as well as to sustain social and environmental development.

It is highly recommended to apply so-called *multi-purpose land consolidation*, which in the same project targets a combination of the aforementioned objectives.

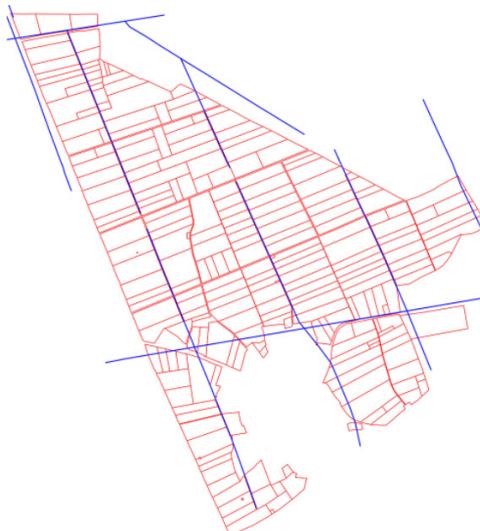
Example of re-allotment of parcels. The illustrations below show two maps from a majority-based land consolidation project in Egri village, North Macedonia, implemented with technical assistance from FAO and funding by the European Union in 2020. In the project area of 336 hectares, 874 land parcels before the project (left) were consolidated into 260 parcels after the project (right) along with improvements to the agricultural infrastructure (construction of new roads, construction of new and rehabilitation of existing drainage channels, and upgrades of the existing irrigation system). After the project, the average parcel size is 1.30 hectares, compared to an average of 0.38 hectares before land consolidation, while the number of land parcels is reduced by factor 3.4.

Parcel structure before and after the majority-based land consolidation project in Egri, North Macedonia

Before



After



Benefits of land consolidation

Land consolidation projects can bring positive benefits of different nature both within the land consolidation project area and on a wider regional and national scale. Key benefits brought by this land management instrument are presented below. The numerical expression of such benefits would largely depend on the specific country and projects.

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Improved parcel and farm structure

The structure of parcels and farms within the project area is improved, making the farm more productive and adapted to the rural development, environmental and other relevant needs. The re-allotment planning is performed in a way, which leads to:

- reduced number of parcels and land fragmentation;
- enlargement of parcels and farms;
- improved shape of parcels;
- reduced distance from household to parcels and between parcels; and
- reduced number of landowners within the project area (during the process part of the landowners sell land on a voluntary basis).

Legal benefits

In order to implement the re-allotment of parcels, legal certainty and formal clarity regarding the land ownership rights within the project area must be established. Therefore, land consolidation also brings the following legal benefits, leading to improved functionality of the formal agricultural land markets:

- formalization of informal land transactions;
- updating land ownership data (e.g. identification of deceased landowners and unregistered heirs);
- correction of errors in the land registry (e.g. correction of spelling mistakes in names) and elimination of mismatches between the cadastral data and the actual situation on the ground (e.g. mismatch of boundaries, parcel size etc.); and
- reduction of land related conflicts.

Improved agricultural and rural infrastructure

Based on local needs, the re-allotment planning can be integrated with the improvement of local agricultural infrastructure, which could include:

- rural roads (e.g. each parcel becomes accessible by field and access roads);
- drainage and/or irrigation;
- recreational areas and protection of ecosystems;
- cycling paths; and
- other types of infrastructure (e.g. social spaces, ecotourism).

Economic benefits

Improvements in the landownership and farm structures and of the rural infrastructure in the project area bring a number of economic benefits for both the farmers and society in general:

- reduced area of abandoned land and larger areas under crops;
- reduced labor costs for farmers;

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- reduced machinery and fuel costs and reduced emission of green-house gasses;
- increased agricultural productivity;
- increased private investments in agriculture; and
- stimulated agricultural land market development (lease and sale).

Social benefits

Land consolidation can also have social benefits, through integrated community development creating new social spaces, improved opportunities for young farmers, reduced outmigration, improved public infrastructure and strengthened gender equality, e.g. through the promotion of registering land rights after land consolidation in the name of both spouses.

Environmental safeguards and benefits

All land consolidation projects must, as a minimum, be implemented in an environmentally sound way, which relevant procedures will ensure. Land consolidation should contribute to better environmental management and also allow for the implementation of “land demanding” environmental projects. A multi-purpose approach can be used for the creation of nature protection areas, the reduction of emissions into the water environment (e.g. nitrogen and phosphorus), water management and nature restoration. Before their approval and implementation, draft Land Consolidation Plans should be screened for negative impact on nature and environment and only be implemented when feasible.

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Infrastructure development

Land consolidation also allows to implement “land demanding” infrastructure projects (e.g. roads, irrigation or railways) without destroying local farms affected by the public initiated projects. Farmers have in land consolidation the option to be compensated with agricultural land in another location instead of a monetary compensation and therefore may continue and even develop their agricultural activities.

Costs and funding sources

Costs

Costs of the land consolidation projects depend on the specifics of the country and each land consolidation project. They relate to the implementation of the feasibility study, drafting and implementation of the Land Consolidation Plan, including costs of necessary cadastral surveying and registration of land rights. If infrastructure or other field works are part of the project, the relevant costs should also be included.

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Funding sources

Land consolidation is a public purpose instrument and without public funding, it could not attain the wider objectives. Also, without public funding, many landowners would be excluded from participation in the projects. In many cases, financial participation of the landowners would not be feasible due to their economic situation. Therefore, *state budget funding* plays a key role and land consolidation should be envisaged as part of a necessary public investment in agricultural and rural development, i.e. a national land consolidation programme. Since land consolidation projects often have a duration of 2-4 years, the land consolidation programme budgeting should not be based on annual planning but have a longer-term budget horizon. The land consolidation activities could also be funded by the agencies implementing “land demanding” public infrastructure and nature projects as well as from international public sources.

Phases of land consolidation projects

Land consolidation projects follow three main phases:

Feasibility phase:

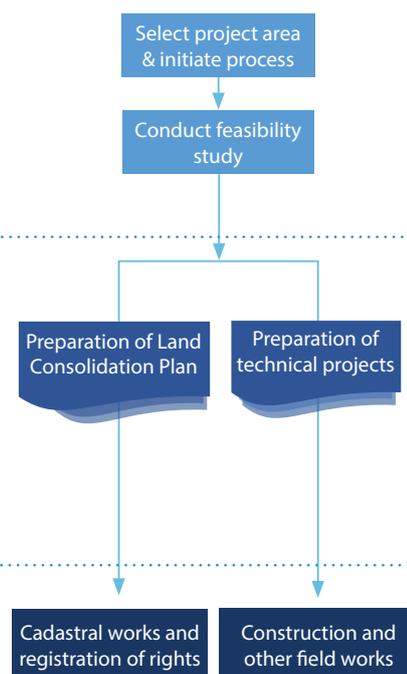
Selection of project area; performance of a feasibility study with interviews of landowners and farmers in the suggested project area, including environmental impact screening; and conclusion if the project is feasible or should be discontinued and whether there is a need for infrastructure and other works.

Re-allotment phase:

Negotiations and consultations with project stakeholders performed by the land consolidation professionals and based on the results of the feasibility study; land valuation; preparation of a Land Consolidation Plan and if relevant, technical projects; and approval of the plan by the landowners and subsequent adoption by the authorized public institution.

Registration and implementation phase:

The Land Consolidation Plan is executed through the implementation of the necessary cadastral surveying works, registration of rights and implementation of construction and other field works.



Regulation of land consolidation

Specific law level regulation

Land consolidation is closely linked with many key aspects of the legal system, such as ownership rights, land registration, valuation, mortgages, tenancy, state land management and others. The

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success of land consolidation depends largely on the efficiency and rapidity of the legal procedures involved. To ensure the cost-efficient and simultaneous implementation of the Land Consolidation Plan, it must be recognized by law as a sole basis for the registration of the new land rights, instead of having a multitude of separate bilateral agreements (transactions). Therefore, land consolidation regulations often create exceptions to the general regulatory norms and necessitate a law level specific regulation. It may take the form of a separate land consolidation law accompanied by lower-level legal acts or be integrated into a wider law, such as the law on agricultural land or land code. The law could contain objectives, principles, institutional framework, key provisions for each phase of land consolidation, monitoring and evaluation and legal remedies.

The success of land consolidation depends largely on the efficiency and rapidity of the legal procedures involved

Protection of all legitimate tenure rights

Land consolidation should not only consider formally registered tenure rights but also those rights that have not been registered or have only been otherwise partially formalized¹. The land tenure rights of non-registered legitimate owners, heirs, unknown or inaccessible owners, should be recognized and respected.

The “at least as well off” principle

The “at least as well off” principle is the key principle of land consolidation stemming from the VGGT, meaning that the situation of legitimate landowners and other right holders should improve or at least remain as it was before the implementation of a land consolidation project.

Sustainability and environmental protection

Land consolidation should promote economic, social and environmental sustainability as well as contribute to achieving the Sustainable Development Goals (SDGs). Well-designed land consolidation has the potential to significantly contribute to several SDG targets.

Consultation and participation

The land consolidation process involves different stakeholders, from landowners and other right holders (e.g. tenants, mortgagees) to municipalities and farmers’ organizations. It is therefore important to ensure inclusiveness in project consultation and participation so that different rights and interests are safeguarded and protected. Stakeholders should actively and meaningfully participate in the process and the negotiations facilitated by the land consolidation professionals.

Transparency

Land consolidation projects should strive for the highest transparency in order to create trust amongst its participants. In addition to public meetings, individual interviews and negotiations,

¹ Land consolidation regulations could not normally recognize socially legitimate tenure rights, only those that already enjoy legal recognition.

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transparency is ensured by providing project related information on the websites of dedicated public institutions as well as through local announcements and publications and media campaigns.

Gender equality

Even when gender equality is provided for in legal acts, the reality is different in many cases and various forms of informal discrimination take place. Land consolidation regulation and practice should ensure gender equality in the process through a number of instruments, including the identification of legitimate joint owners (spouses), who are not visible in the Land Registry, and their involvement in decision-making, registration of spouses as joint-owners in the Land Registry, and distribution of landownership certificates to all joint-owners.

Land consolidation regulation and practice should ensure gender equality

Institutional framework

Lead agency

The implementation of land consolidation is generally the responsibility of the respective public institution (lead agency) responsible for the formation of **the land consolidation policy** and the overall **programme management**. Such entity is often the Ministry of Agriculture or its subordinated agency. The institutional framework for land consolidation may be based on the national or sub-national level, depending on the specificity of the country and the issues tackled through land consolidation. Usually, the lead agency is responsible for the following functions:

- land consolidation policy formation;
- management of the land consolidation programme in the country; and
- actual implementation of the land consolidation projects.

The lead agency should be conferred the right to outsource to **private service providers** works related to the implementation of the land consolidation projects. This allows rapid scaling up (or down) of the land consolidation programme and relevant capacity building among land professionals.

Land Consolidation Commission

As an alternative to entrusting all responsibilities to the lead agency, land consolidation commission(s) could be established. They would be conferred the right to adopt the Land Consolidation Plan for each specific project upon its approval by the landowners. Subsequently, the decision of the commission serves as a basis for the registration of the new land related rights. Depending on the specificity of the national legal system, the land consolidation commission may have even much broader powers, allowing them to solve legal issues and even land related disputes within the land consolidation project area.

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Land Registry

The Land Registry plays a number of important key functions in the process and therefore, it is fundamental to the success of land consolidation and must be taken fully on board in the land consolidation process. For example, the cadastre maps are used to clarify the ownership situation and to define the land consolidation project area; extracts from the Land Registry represent the legal basis for the identification of the formally registered landowners and other right holders. Once the Land Consolidation Plan is approved and adopted, records in the Land Registry must be updated.

Local governments

Local governments should be consulted about the project and its eventual solutions, and they can disseminate project related information or provide necessary documentation. The support of local governments is essential for the successful implementation of land consolidation. They also ensure that the land consolidation project aligns with the spatial development plan and may participate in the projects as landowners or initiators.

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Combination with land banking

The efficiency of land consolidation may be strongly increased by combining it with a land banking instrument. In land banking, a specific public entity (land bank or land fund) **buys and sells** in a planned way agricultural land in the local land market, aiming to facilitate the implementation of different land related public projects, like land consolidation, nature restoration and infrastructure development. The land bank would buy land in **future or ongoing land consolidation** project areas in order to include this land into the project, increase the re-allotment options (land mobility) and provide space for public infrastructure and farm enlargement. This catalyzes the land consolidation process and can also bring unutilized land back into production.

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Key messages

- Land consolidation is a legally regulated procedure led by a public authority and used to adjust the property structure in rural areas through a comprehensive reallocation of parcels, coordinated between landowners and users, in order to reduce land fragmentation, facilitate farm enlargement and/or achieve other public objectives.
- It is recognized in the *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT)* as a valuable tool for countries where land fragmentation is a problem or where land is needed for public purposes.
- Land consolidation needs a legal framework to define objectives, establish a speedy and effective process, ensure procedural safeguards, and provide for the possibility of registering the outcome of all changes at once.
- FAO recommends voluntary and majority-based land consolidation.
- Land consolidation has three phases: feasibility phase, re-allotment phase and registration and implementation phase.
- Land consolidation is a public investment that facilitates increased private investment.
- Land consolidation can strengthen the economic viability of small farms and increase their competitiveness.
- Land consolidation should be implemented in a participatory and consultative, gender-responsive and transparent way.
- Land consolidation should contribute to improved land management and environmental protection.
- The process should ensure that participants of the land consolidation projects are “at least as well off” after the land consolidation compared to before.