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NOTE ON LESSONS LEARNED FROM THE INTRODUCTION OF LAND CONSOLIDATION IN NORTH MACEDONIA DURING 2014-22



**13TH REGIONAL LANDNET WORKSHOP
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*Prepared as background document for the 13th regional LANDNET workshop
organized in Skopje, North Macedonia, as a hybrid event
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1. INTRODUCTION

In the late 1990s, land fragmentation and land consolidation re-appeared on the agenda in Central and Eastern Europe where land reforms launched in the early and mid-1990s generally led to excessive land fragmentation and small farm sizes. Since the early 2000s, the Food and Agriculture Organization of the United Nations (FAO) has through its Regional Office for Europe and Central Asia (REU) supported several member countries in the region to introduce land consolidation instruments and build up national land consolidation programmes². An informal regional technical network, LANDNET, has been established with participants from Western and Eastern Europe and Central Asia and representing governments, academia, civil society and the private sector. The Munich Symposium in 2002 was a milestone in the process and the first of more than 20 regional workshops held to date on land consolidation, land banking, land market development and related topics.³

North Macedonia has in recent years developed into the flagship country for FAO support to land consolidation in the region. The first Technical Assistance Project (TCP) began in 2014. Since 2017, support to the national land consolidation programme has been scaled up with EU IPA funding through the FAO implemented MAINLAND project.⁴ The experiences from North Macedonia related to the introduction of land consolidation are highly relevant for other countries in the region that politically aim to address inefficient farm structures characterized by small average farm sizes and excessive land fragmentation and widespread land abandonment. As highlighted in the FAO Legal Guide on Land Consolidation published in 2020⁵, land consolidation has potential that goes far beyond agricultural development. When it is applied in a multi-purpose approach, the instrument can be an efficient enabler of climate change adaptation and mitigation and be used to acquire privately owned agricultural land for public projects related to nature restoration, environmental protection, or construction of large-scale infrastructure where the landowners and farmers are compensated with other land and the existing farm structures are preserved or even improved.

The aim of this brief note is to provide background and share experiences from the FAO support to land consolidation in North Macedonia in the period 2014 – 2022 to the participants in the 13th LANDNET workshop organized in Skopje, North Macedonia, during 25-27 May 2022.

² Hartvigsen, M. (2019): FAO support to land consolidation in Europe and Central Asia during 2002-2018 – Experiences and way forward. FAO Land Tenure Journal 1/2019.

³ Proceedings from FAO LANDNET workshops from 2002 and onwards are available at: <http://www.fao.org/europe/resources/land-tenure-workshops/en/>

⁴ MAINLAND land consolidation project website: <https://www.fao.org/in-action/mainstreaming-national-land-consolidation-programme/en/>

⁵ Versinkas, T., Vidar, M., Hartvigsen, M., Mitic Arsova, K., van Holst, F., Gorgan, M. (2020): Legal Guide on Land Consolidation - Based on regulatory practices in Europe. FAO Legal Guide 3. Rome.



2. FARM STRUCTURES AND STATE OWNED AGRICULTURAL LAND IN NORTH MACEDONIA

The farm structures in North Macedonia are dominated by small family farms with an average farm size of around 1.6 ha and an average of seven land parcels per agricultural holding.⁶ The average size of privately owned agricultural land parcels is approximately 0.22 ha. 89 percent of all family farms are smaller than 3 ha, and they cultivate 54 percent of the utilized agricultural area.⁷ Excessive fragmentation of both land ownership and land use exists, not so much as a result of the land reform process but related to the farm structure prior to the WWII, which still exists to a large degree.



Photo 1: The land parcel structure in the Egri land consolidation project area before land consolidation (2017).

The average farm size has decreased since independence in 1991 and as much as one-third of the total arable land is nowadays abandoned. Managed by the Ministry of Agriculture, Forestry and Water Economy (MAFWE), the State owns around 240,000 ha of arable agricultural land.⁸ This represents around 40 percent of all arable land in the country. The state land is distributed either in large blocs (parcels), usually rented out to large corporate farms on long-term rental agreements, or in small and scattered parcels that are usually either unutilized or used informally by neighboring private farmers. The average size of state-owned land parcels is 0.56 ha.

⁶ Hartvigsen, M. (2019): FAO support to land consolidation in Europe and Central Asia during 2002-2018 – Experiences and way forward. FAO Land Tenure Journal 1/2019.

⁷ SSO 2007: Agricultural Census.

⁸ FAO (2019): Report on management and sale of state owned agricultural land. Unpublished project report prepared under TCP/MCD/3701/C1.



3. BACKGROUND FOR LAND CONSOLIDATION IN NORTH MACEDONIA

North Macedonia (then the Socialist Republic of Macedonia) was a republic in the Socialist Federal Republic of Yugoslavia until its independence in September 1991. Croatia, Slovenia, Serbia and Bosnia and Herzegovina had long traditions for the application of land consolidation instruments, dating back to the 19th century.⁹ During the Yugoslavia era, land consolidation projects began again in the 1950s in Slavonia and Vojvodina regions and also on a small-scale in Slovenia. In Serbia, during 1955-1969, an average of 10,000 ha were consolidated annually. Between 1970 and 1990, 40,000 ha were consolidated on average per year.¹⁰ In Bosnia and Herzegovina and in the central part of Serbia, land consolidation projects started in the 1980s. With the objective to begin land consolidation projects, the Law on Land Consolidation (komasacija) was adopted in 1990 in the Socialist Republic of Macedonia shortly before the break-up of Yugoslavia. Projects were to follow the same approach and procedures applied in other parts of Yugoslavia. However, only one pilot project was started at the time in North Macedonia, but was not finalized due to the uncertain political situation. The 1990 Land Consolidation Law was abolished in 2008 in North Macedonia.

In the mid-2000s, land consolidation again became a political priority in North Macedonia. The background was the structural problems in agriculture with excessive land fragmentation and small sizes of agricultural holdings and farms, and also a need for improved agricultural infrastructure, such as rural roads, irrigation and drainage. International technical assistance for land consolidation and rural development was provided by DLG and SNV from the Netherlands through two projects funded by bilateral Dutch development programmes. In the "EMERALD project", implemented between 2008-2009, voluntary land consolidation pilots were carried out in two pilot areas. In Taor, a re-allotment plan with 17 ha was finalized. However, none of the pilot transactions were implemented on the ground and registered due to problems with unfinished forced parcel exchanges during the collectivization era (arondacija), land registration problems and the lack of a legal framework to ensure proper land valuation and involvement of state land in the project.¹¹ The second Dutch project, the "STIMERALD project", was implemented during 2010-2012, with a voluntary land consolidation pilot project in Konce municipality. A re-allotment plan, which included 20 landowners, 23 land parcels and a total area of four ha, was finalized, implemented on the ground and officially registered.¹²

The MAFWE developed a National Strategy on Agricultural Land Consolidation for the period of 2012-2020 with Dutch support through the STIMERALD project. The Strategy was politically adopted in March 2012.¹³ The strategy document includes in Part I a situation analysis of the

⁹ Hartvigsen, M. (2015): Experiences with land consolidation and land banking in Central and Eastern Europe after 1989. FAO Land Tenure Working Paper 26.

¹⁰ Haldrup, N. et al. (2003): Land consolidation and land tenure assessment mission, Republic of Serbia – Pre-feasibility study. FAO, p. 18.

¹¹ Ivanoski, P. (2013): Land consolidation in Macedonia. Powerpoint presentation for FAO regional land consolidation workshop in Sarajevo, February 2013 and DLG (2009): EMERALD project - Final

¹² DLG and SNV (2012): STIMERALD project - Piloting land consolidation in Konce.



land structure, relevant policies, legislation and institutions, while Part II contains the strategic framework and the objectives of agricultural land consolidation. According to the Strategy document, the strategic objective of agricultural land consolidation in North Macedonia is:¹⁴

“Mitigation and graduate overcoming of the unfavourable structure of the agricultural land as a main resource for the economic activities in the rural areas in order to increase the competitiveness of the Macedonian agricultural production, to improve the living conditions in rural areas and to provide sustainable use of natural resources.”

The 2012 Strategy follows the principle of the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forest in the Context of National Food Security (VGGT) that participants in land consolidation projects must be “at least as well off” after the project compared with before.¹⁵ The formulation in the Strategy document is: “The main principle of land consolidation is that the landowner must not be damaged and his/her property must not be of a lesser value compared to the property value before the land consolidation process was implemented”¹⁶.

From the beginning of 2013, MAFWE established a Land Consolidation Department with responsibility for the preparation and operation of a National Land Consolidation Programme. During 2013, MAFWE drafted the Law on Consolidation of Agricultural Land based on the principles of the national land consolidation strategy. The law was prepared without specific international technical assistance and adopted by the Parliament in December 2013. In the first half of 2014, as a continuation of the efforts to embed the land consolidation instrument into the legal framework, MAFWE prepared five by-laws to support application of the land consolidation law.

¹³ Ministry of Agriculture, Forestry and Water Economy (2012): National strategy on agricultural land consolidation in the Republic of Macedonia for the period 2012-2020.

¹⁴ Ibid., p. 36-37.

¹⁵ CFS (2012): Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security. CFS Rome, section 13.1.

¹⁶ Ministry of Agriculture, Forestry and Water Economy (2012): National strategy on agricultural land consolidation in the Republic of Macedonia for the period 2012-2020, p. 38.



4. FAO SUPPORT TO LAND CONSOLIDATION PILOTS DURING 2014 - 2017

The main objective of implementing land consolidation, according to the law, is to reduce land fragmentation, improve parcel shapes and increase the size of agricultural holdings, and hence contribute to increased productivity and competitiveness in the agricultural sector. Additional objectives are to reduce the amount of abandoned agricultural land, improve rural infrastructure and improve environmental protection and sustainable management of natural resources. The law opened for implementation of land consolidation in two different approaches: majority-based – where the qualified majority of the landowners in the project area adopt the Re-allotment Plan, and a voluntary approach – where all included land transactions are agreed by written consent of the owners.

In 2013, MAFWE requested FAO to provide technical assistance to support the implementation of the national land consolidation strategy. In response, the FAO funded TCP project “Support to the formulation and implementation of a national land consolidation programme” (TCP/MCD/3502) was formulated in 2014 and began from December 2014 with a total budget of USD 435,000 and a planned duration of two years.

The main objective of the project was to assess and test the newly adopted legal framework for land consolidation in two pilot areas, and to provide legal and operational recommendations based on pilot experiences and towards a fully operational national land consolidation programme. The project had three main outputs:

1. Legal basis adapted
2. Land consolidation pilots implemented (one voluntary and one majority-based project)
3. Land consolidation programme operational

As part of the project activities, two pilot villages, one with a fully voluntary approach and the other with a majority-based approach, were chosen according to a developed set of 13 selection criteria. The criteria included the existence of farms with potential for commercial farming and a desire to form contiguous parcels and enlarge the farms, a high level of land fragmentation and a relatively clear situation in relation to the registration of land ownership. An initial list of proposed candidate villages was evaluated against the selection criteria and the two villages with the highest score were selected as the most suitable for the implementation of the project.

However, as the field work, which included awareness-raising, collection of preferences, and land valuation, and as the preparation of the draft re-allotment plans progressed, numerous



legal and operational bottlenecks were identified that prevented further implementation. Such obstacles included but were not limited to unsolved inheritance issues, unclear property titles, unrealistic deadlines envisaged in the legislation, overly complicated administrative procedures and multiple administrative approvals.

To mitigate the issues identified during the implementation of the pilots, a comprehensive screening of the legal and institutional frameworks for land consolidation for compliance with the VGGT was conducted as part of the project, and a compliance matrix was prepared. The main conclusion of this exercise was that while the 2013 Law on Consolidation of Agricultural Land provided an initial legal basis for the initiation and implementation of land consolidation projects in the country, the implementation process was not fully harmonized to ensure smooth and operational implementation.

The prepared compliance matrix and the pilot experiences formed the basis for the preparation of a detailed legal assessment report, which exposed existing legal bottlenecks and constraints preventing the land consolidation legislation from being operational. Furthermore, a specific set of recommendations on how to address these issues and fine-tune the legal framework to mainstream the implementation of the National Land Consolidation Programme was provided. The recommendations referred to a wide range of topics, including the improvement of the institutional framework, decision-making processes and bodies, land consolidation approaches, use of state agricultural land in the land consolidation process, costs /finances/ incentives and rights other than ownership in the land consolidation process, including gender mainstreaming to ensure that both men and women benefit, e.g. through the registration of land rights after land consolidation in the name of both spouses.¹⁷

¹⁷ FAO 2017: Terminal Report for TCP/MCD/3502: "Support to the formulation and implementation of a national land consolidation programme".



5. MAINLAND LAND CONSOLIDATION PROJECT 2017-2022

The MAINLAND¹⁸ land consolidation project, funded by the European Union and co-funded by FAO, is implemented by FAO to provide support support to the MAFWE in the operational mainstreaming of the National Land Consolidation Programme by developing the expertise and strengthening the capacities for land consolidation in MAFWE, key public agencies, including the Agency for Real Estate Cadastre (AREC), and the private sector. At the same time, the project aims to assist small-scale farmers and local rural communities overcome the problems arising from excessive agricultural land fragmentation, small farm sizes and insufficient agricultural infrastructure, in order to increase productivity, competitiveness and efficiency of farms, enhancing the potential of the Macedonian agricultural sector as a whole. With a total budget of EUR 2,860,000¹⁹ and a duration of 68 months (from March 2017 to November 2022), the project is considered a major step forward in the implementation of both the National Land Consolidation Programme and Strategy with the following five project outputs:

- **Preparation and implementation of land consolidation projects on the ground.** This is the core component of the MAINLAND project and it includes activities under the three phases of land consolidation projects in line with the FAO Legal Guide on Land Consolidation²⁰ – i) Land consolidation feasibility study, ii) Land re-allotment planning and technical design of the improvement of local agricultural infrastructure, and iii) Registration of the newly formed land parcels and construction and rehabilitation of agricultural infrastructure.
- **Capacity development** aimed at strengthening the technical and administrative capacities of MAFWE at central and local level, of AREC and other key public agencies and private geodetic companies to ensure successful management and implementation of the National Land Consolidation Programme.
- **Procedures and tools for operationalization of the National Land Consolidation Programme.** This output includes technical assistance in the improvement and adjustment of the national legal framework for land consolidation, preparation of detailed technical procedures for selection of land consolidation projects, preparation of feasibility studies, land re-allotment plans and technical design and construction of agricultural infrastructure, as well as support in the establishment of national financing mechanisms for land consolidation in order to ensure sustainability in the implementation of the National Land Consolidation Programme.
- **Awareness raising** through public campaigns, workshops, local farmer meetings, TV and radio interventions and a broad range of communication tools have been conducted to

¹⁸ More information about the project is available on the project website: <https://www.fao.org/in-action/mainstreaming-national-land-consolidation-programme/en/>.

¹⁹ EUR 2.5 million from the EU Instrument for Pre-Accession Assistance with EUR 0.36 million as FAO financial contribution.

²⁰ Versinkas, T., Vidar, M., Hartvigsen, M., Mitic Arsova, K., van Holst, F., Gorgan, M. (2020): Legal Guide on Land Consolidation - Based on regulatory practices in Europe. FAO Legal Guide 3. Rome.

Land consolidation in Egri village

The village of Egri, Bitola Municipality, became the first majority-based land consolidation project to be finalized in North Macedonia after the Re-allotment Plan was adopted by the qualified majority of the landowners in January 2020. The project in Egri is the first land consolidation project where improvement of the land parcel structure was complemented with construction of agricultural infrastructure, based on local community needs, including new drainage channels, extension of the existing irrigation network and construction of gravel roads.

Egri land consolidation area - before land consolidation



Egri land consolidation area - after land consolidation



	Before land consolidation	After land consolidation
Number of land parcels	874	260
Average parcel size	0.38 ha	1.30 ha

The improvements in agricultural infrastructure were constructed between June 2021 - January 2022 and included construction of 8.4 km of new drainage channels, a 3.0 km extension of the existing irrigation network and the construction of 11 km of field (gravel) roads.

The improved irrigation, drainage and access to the land parcels in Egri not only contributes to better agricultural productivity and efficiency, but also makes farms more resilient to extreme weather conditions, such as floods and droughts. It is expected that many of the private farmers will invest in further improving their farms on top of the public investments in land consolidation and improved agricultural infrastructure.

Box 1: Land Consolidation in Egri village



increase awareness, understanding and interest for land consolidation among agricultural landowners, farmers and other key stakeholders and to communicate how the EU, FAO and MAFWE work together to support the implementation of land consolidation in North Macedonia.

- **Monitoring and evaluation.** This output aims at supporting MAFWE in establishing procedures for monitoring and evaluation of land consolidation projects.

Legal framework

In addition to strong capacities in both the public and the private sectors, and relevant administrative procedures and tools, successful consolidation of agricultural land requires a sound legal environment to ensure a cost-effective and efficient implementation of land consolidation projects, with full respect for the legitimate land tenure rights and in line with the VGGT. Land consolidation is not a one-size-fits-all instrument and it needs to be tailored to the specific national and local circumstances. With FAO assistance, MAFWE has been systematically improving the national land consolidation legislation based on international best practices.

The legal assessment report prepared under TCP/MCD/3702 (see Section 4) served as a basis for amendments to the Law on Consolidation of Agricultural Land prepared with the support of the MAINLAND project and adopted by the Parliament of North Macedonia in May 2018.

As a result of the improved legal framework and with technical support of the FAO, MAFWE is currently successfully implementing the first round of modern land consolidation projects in the country, developing the expertise and strengthening the technical and administrative capacities of the Ministry in the process.

Based on the principle of the Agenda 2030 of leaving no one behind, the EU principles on gender equality and women's empowerment and employing a human rights-based approach, the amended Law on Consolidation of Agricultural Land enables women's equal access to ownership and control over agricultural land. In reality, this means safeguarding the joint ownership over the land acquired during marital union in the process of land consolidation, with a possibility of the new property rights over the consolidated land to be registered in the name of both spouses.

Land consolidation feasibility studies

As one of the first project activities, a country-wide multi-criteria assessment was conducted in 2017 to identify the most suitable land consolidation areas in North Macedonia.²¹ Criteria such as the level of land fragmentation, soil quality and potential for agriculture, were calculated at the level of cadastre municipality (smallest administrative unit). The map in Figure 2 shows

²¹ FAO 2017: Country-wide feasibility study report - Applying a multi-criteria decision analysis to determine areas most feasible for land consolidation. Unpublished project report prepared under GCP/MCD/002/EC.

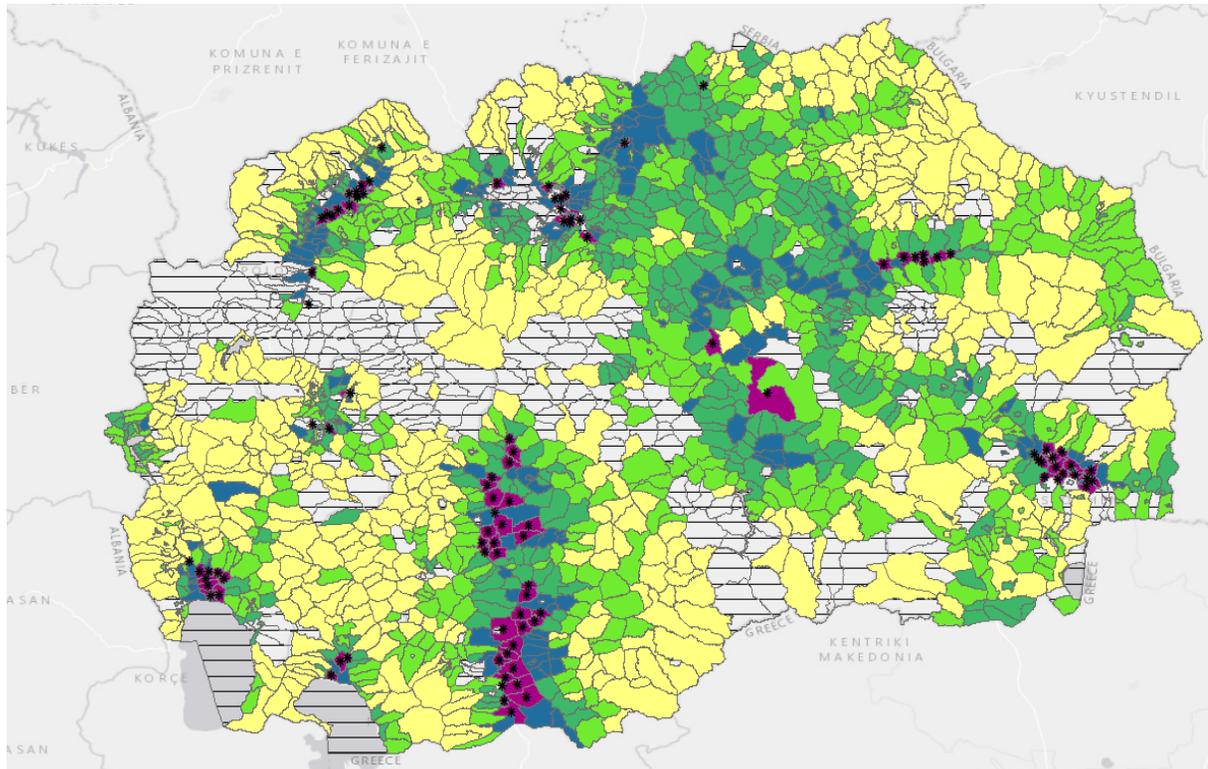


Figure 2: Country-wide multi-criteria assessment conducted in 2017 to identify the most suitable land consolidation project areas in the country. Darker color indicates more feasible for land consolidation. The multi-criteria assessment did not include any data on the interest for land consolidation among the landowners and farmers. This was tested during the selection of project areas.

the result of the assessment.

Under the MAINLAND project²², based on the country-wide multi-criteria assessment and two rounds of expression of interest, selection and screening against pre-determined criteria for selection, a total of 21 potential project areas were identified as preliminarily suitable for implementation of land consolidation projects. Following the selection process, the implementation of the first phase of the land consolidation process – a feasibility study – was conducted in 14 project areas nationwide. The studies were prepared for the villages of Logovardi, Opticari, Trn, Zabeni, Sokolarci, Spancevo, Ciflik, Cesinovo, Dabjani, Kozle, Konce, Stojakovo, Lesani and Carev Dvor. The project areas where a feasibility was conducted are displayed in Figure 3.

²² FAO 2019: MAINLAND Project Annual Progress Report.

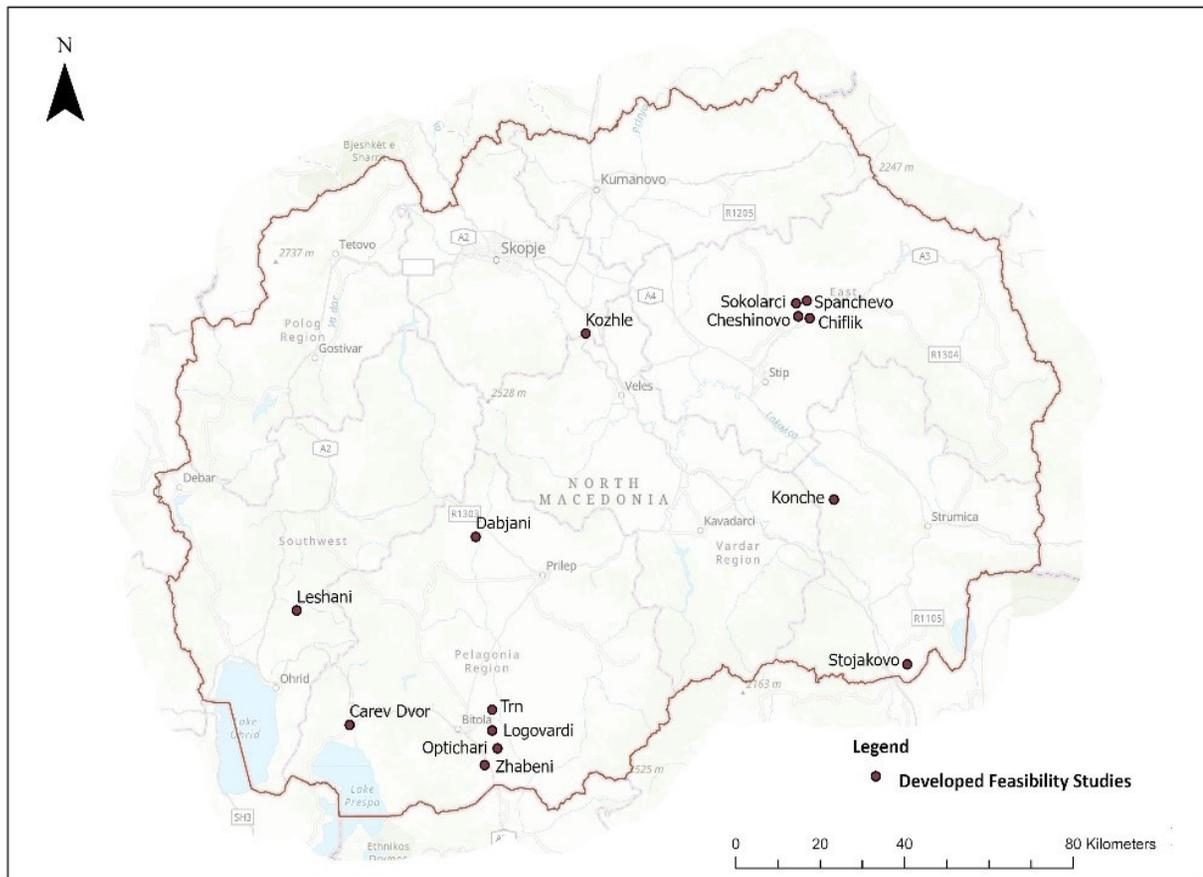


Figure 3: Conducted Feasibility Studies under the MAINLAND project.

Private service providers (geodetic companies) strengthened with additional legal, agriculture and community mobilization experts, were contracted through a tendering process to carry out feasibility studies. Every formally registered landowner was individually interviewed about existing agricultural activities and their interest in and specific wishes for land consolidation, e.g. interest to sell, exchange/consolidate or purchase agricultural land. The studies assessed the feasibility and costs of implementing a land consolidation project for each project area by analysing the current level of land fragmentation, the size and shape of agricultural land parcels, the ownership structure, the volume and structure of the ongoing agricultural production, as well as the current state of the existing agriculture infrastructure (field and access roads, irrigation and drainage systems, etc.) and the budget needed for improvement. The studies also assessed the needs and interest of the landowners within the area and their readiness to actively participate in the process. The studies also recommended the most feasible land consolidation approach (majority-based or voluntary). During the preparation of the feasibility studies for each area, the service providers, MAFWE and the MAINLAND team worked jointly and closely with the landowners and farming communities to assess the baseline situation and farmers' support for the project.

Out of the 14 areas where the feasibility of land consolidation was assessed, 11 areas were deemed to be feasible, two areas were identified as conditionally feasible, while only one area was considered as not feasible for implementation of land consolidation. The reasons why the areas were considered not feasible include but are not limited to a broad number of cases of unsolved legal and property related issues or ongoing juridical processes, extensive number of inaccessible or deceased landowners and construction of big infrastructure projects that would influence the structure of the agricultural production of the region. In addition, majority-based land consolidation was the recommended land consolidation approach for 12 areas, while voluntary land consolidation was recommended for two.

The land consolidation interventions in the feasibility phase included approximately 4,600 hectares of agricultural land and 6,500 landowners in total.

Re-allotment planning

The second phase in the land consolidation process is the re-allotment planning. This phase includes land valuation and the planning of consolidation of the land parcels, aiming to enlarge them and improve their shape, which is more suitable for agricultural production and

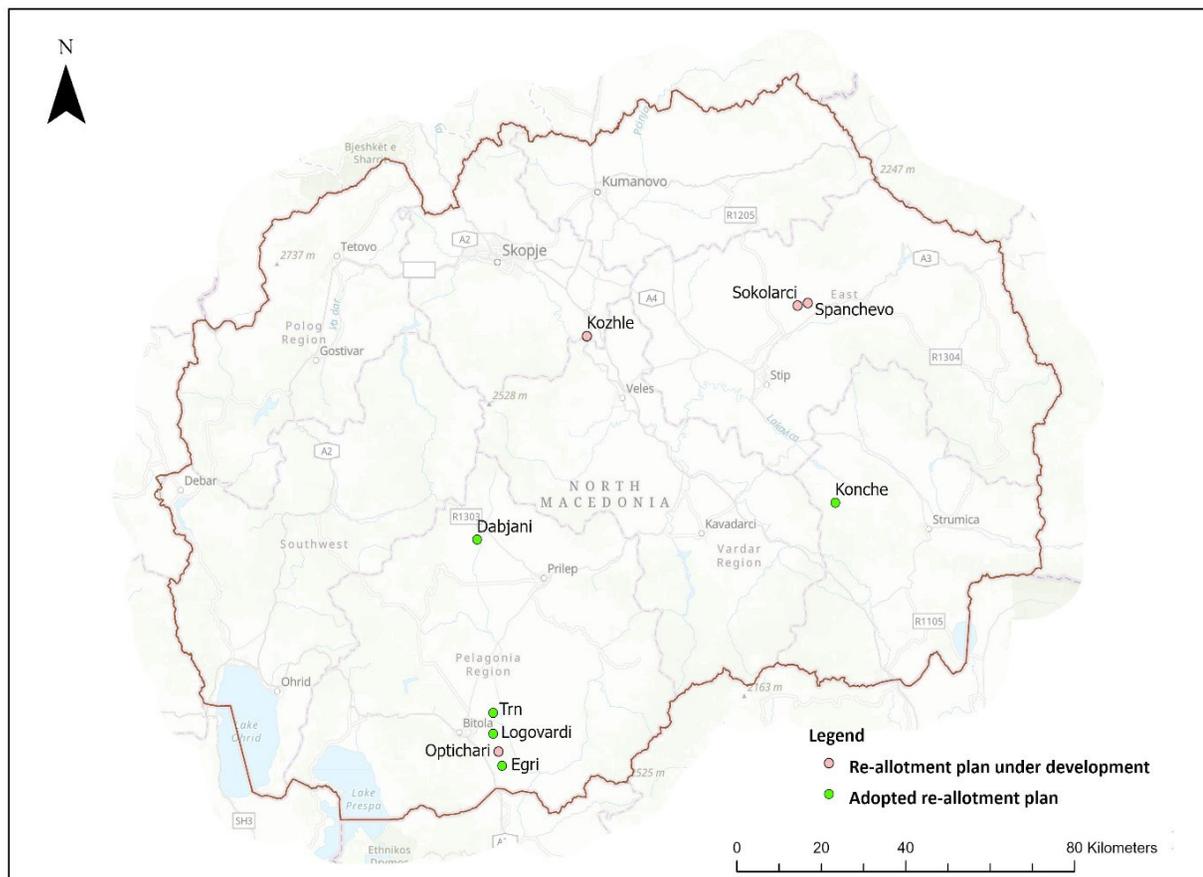


Figure 4: Projects in re-allotment phase in North Macedonia (as of May 2022).



with better access to agricultural infrastructure (access roads, irrigation, drainage systems, and others). The re-allotment phase of land consolidation in North Macedonia was initiated in 9 land consolidation project areas under the MAINLAND project and is fully finalized in five project areas, while it is in an advanced stage in the remaining four areas (as of May 2022).

In North Macedonia, the average time to prepare a Re-allotment Plan varies from 10 to 25 months and mainly depended on the size of the land consolidation area, the number of land parcels and the number of participants/landowners.

Licensed geodetic companies, comprised of professional teams of land surveyors, valuers, lawyers and construction engineers, were actively engaged in the re-allotment phase, working as a multi-disciplinary team supporting specific tasks, including valuation of the land parcels, planning the necessary improvement of the agricultural infrastructure, intensive and guided consultations and negotiations with all participants in the process, preparation of the Re-allotment Plan and its adoption by the landowners. In North Macedonia, the Re-allotment Plan is subject to adoption by the landowners at the land Consolidation Assembly. For majority based land consolidation projects, the Plan has to be approved by at least 70 percent of the total number of landowners owning at least 50 percent of the area, while in the voluntary projects, all landowners with land transactions included in the plan are providing approval in form of written consent.

Land consolidation is an administrative process and the Re-allotment Plan (Land Consolidation Plan) adopted by the landowners is further approved through an administrative decision. Accordingly, administrative process rules apply, including the remedies. The land consolidation process is safeguarded by the opportunity to lodge complaints in several different phases of the re-allotment planning, including the valuation and draft Re-allotment Plan. The approved Plan after the adoption through the administrative procedure may be subject to judicial review before entering into force.

Land consolidation in Dabjani area

Dabjani became the second majority-based land consolidation project to be finalized in North Macedonia under the MAINLAND project, after the Re-allotment Plan was adopted by the qualified majority of land-owners in January 2022.

Dabjani land consolidation area - before land consolidation Dabjani land consolidation area - after land consolidation



	Before land consolidation	After land consolidation
Number of land parcels	602	127
Average parcel size	1.2 ha	5.8 ha

Dabjani is the largest of the MAINLAND project areas in North Macedonia. It includes 742 ha of agricultural land, owned by 85 private landowners (435 ha) and by the State (307 ha). In the land re-allotment process the number of land parcels in Dabjani was reduced by almost five times and the newly formed parcels are regularly shaped with access to infrastructure and allow for much more efficient farming practices.

Land consolidation brought additional benefits to the rural population in Dabjani. Many land parcels in the land consolidation project area, which were restituted to the private owners as part of the land reform process (denationalization) during the 2000s were either located in the middle of state-owned agricultural land blocks, or in land plots in co-ownership with the State. Through the land consolidation process with the support from the MAINLAND project, both the private landowners in Dabjani and the State managed to resolve longstanding and complicated land rights issues, which has negatively affected the utilization of the agricultural land in the whole area. Thus, implementation of the land consolidation project is expected to bring back into production around 200 ha of agricultural land that has been unutilized for decades.

The final step in the land consolidation process in Dabjani, the improvement of the agriculture infrastructure (including rehabilitation and construction of field access roads in the land consolidation area) is expected to begin in mid-2022, with additional financial support from the European Union.

Box 2: Land Consolidation in Dabjani area



Registration and implementation of land consolidation

After the Re-allotment Plan is adopted and administratively approved, registration of the new ownership of the land parcels and the construction of the envisaged agricultural infrastructure are considered the third and final phase of the implementation of land consolidation projects. In North Macedonia, the Re-allotment Plan is registered as a single Plan with a geodetic survey and a Ministerial Decision of approval of the Plan used as a basis for registration in the Real Estate Cadastre. In parallel, for majority based land consolidation projects, staking out the boundaries of the new land parcels is done, transfer of the property in the field and technical documentation for the construction is prepared in order to initiate the construction of the planned interventions in the irrigation, drainage and road networks after the registration.

Capacity development for the public and private sectors

Bringing in FAO expertise and strengthening the technical and administrative capacities of the MAFWE (at both central and local levels), key public agencies and private geodetic companies is at the heart of the efforts of the MAINLAND project and crucial to ensuring the sustainability of the technical assistance on land consolidation provided to North Macedonia.

MAFWE staff has worked hand-in-hand with the MAINLAND team to ensure that the country has built its own capacities to mainstream and scale-up the National Land Consolidation Programme country-wide based on local demand. Training programmes, including on-the-job trainings for different target groups have been conducted to help build the national capacities to successfully manage and implement the National Land Consolidation Programme as well as project activities in the field.

The MAINLAND project has supported the development of a Staffing Plan to strengthen the capacities of the MAFWE Land Consolidation Department and the process of its implementation is ongoing. In a step-by-step approach, MAFWE staff have gradually been taking over responsibility for the different steps in the land consolidation process in the active land consolidation project areas, including the administrative organization of the public hearings and landowner assembly meetings, identification of the landowners, collection of the remarks from the landowners during the hearings and preparation of the administrative documents. MAFWE also actively participates in the monitoring and supervision of the re-allotment planning processes conducted by the private service providers. However, the Land Consolidation Department of MAFWE still lacks human resources in the areas of legal/regulatory reform, GIS, land surveying, and participatory planning, and needs further capacity building.

In order to be able to implement the land consolidation procedures, the licenced service providers / geodetic companies have been requested to strengthen their teams with additional expertise (law, civil engineering, agriculture), but their technical capacity during the MAINLAND implementation has varied in quality. The service providers have shown strong

Multi-Purpose Land Consolidation projects in Logovardi and Optichari



In many countries in the European Union, land consolidation is a well-proven, multi-purpose instrument, which facilitates implementation of projects that, in addition to promoting agricultural development, integrates multiple public objectives, such as nature restoration, large-scale infrastructure construction and measures to tackle climate change. MAFWE and FAO are piloting multi-purpose land consolidation projects in two villages included in the MAINLAND project: Logovardi and Optichari. This project is the first multi-purpose land consolidation effort in the country. In addition to improving the land structure for agricultural development, the reallocation of land parcels in Logovardi and Optichari also supports the construction of a large infrastructure project – the expressway from the town of Bitola to the Greek border.

The integration of the two project objectives – land consolidation and large infrastructure construction – is considered as a ‘win-win’ solution for both the farmers and the Government. Farmers benefit from the improved structure of their parcels and from compensation in land instead of a monetary compensation. Thus, the damage from the expressway construction on the local farm structure is mitigated by the land consolidation project, and the Government can smoothly construct the planned infrastructure. The Re-allotment Plan for Logovardi was adopted by the landowners in April 2022, while the adoption of the plan in Optichari has been planned for June/July 2022.

Box 3: Multi-Purpose Land Consolidation projects in Logovardi and Optichari

capacity in surveying works, but relatively low performance in the other activities related to the identification of the legal and property issues, land valuation, agricultural development and especially in facilitating negotiations with and between landowners to find re-allotment solutions.²³

The MAINLAND team has extended the training curriculum on introduction to land consolidation and has adjusted it to the needs of the geodetic companies in order to also increase the capacity of the private sector to execute works related to land consolidation.

With more draft re-allotment plans under finalization, the focus in the last year of implementation of the MAINLAND project is to further strengthen MAFWE's and the private sector's capacities in land consolidation project implementation, based on the field experiences.

6. LESSONS LEARNED AND THE WAY FORWARD - TOWARDS MULTI-PURPOSE LAND CONSOLIDATION IN NORTH MACEDONIA

As mentioned in the introduction, North Macedonia is currently the flagship country for FAO support to land consolidation in the region and the experiences and lessons learned are very relevant and important for other countries following the same path. The process towards a fully operational national land consolidation programme in the country has in particular been enhanced through the many activities of the EU-funded MAINLAND project during 2017-22 (see Section 5). The process has to a large degree followed the optimal process for introduction of land consolidation recommended by FAO (see Figure 9).

Two Dutch-supported pilots were implemented during 2008-2012, which resulted in the land consolidation instrument being embedded in the overall land policy through the adoption in

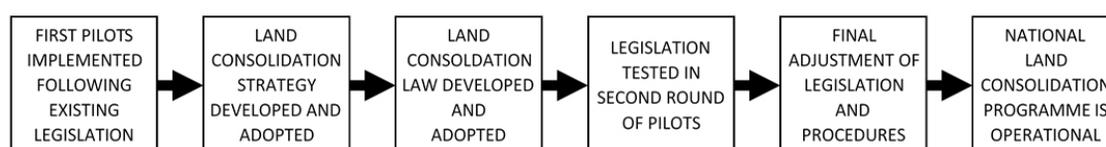


Figure 9: The optimal process from the introduction of land consolidation to an operational programme.
Source: Hartvigsen, 2019.²⁴

²³ FAO 2020: Third Annual Progress Report of the MAINLAND project (March 2019 – February 2020).

²⁴ Hartvigsen, M. (2019): FAO support to land consolidation in Europe and Central Asia during 2002-2018 – Experiences and way forward. FAO Land Tenure Journal 1/2019



2012 of the National Strategy on Agricultural Land Consolidation. Today land consolidation is fully integrated in the country's National Agricultural and Rural Development Strategy 2021-2027.²⁵ The Law on Consolidation of Agricultural Land was adopted in 2013 and tested in two pilots during 2014-2017 in the FAO TCP project (see Section 4). The test of the legislation in the field found that the legal framework was to a large degree not operational and it was not possible in the lifetime of the pilots to adopt, register and fully finalize the two re-allotment plans prepared for the pilot areas in Egri and Konce. This experience shows very well, that fully operational legislation is a precondition and a cornerstone in a national land consolidation programme. The law was amended in May 2018.

Currently four land consolidation projects with a majority-based approach and one with a voluntary approach have been approved and implemented (as of May 2022) since the adoption of the amendment of the land consolidation law. However, it is still the recommendation that the land consolidation legislation should be reviewed and possibly amended a second time during 2022-23 to further streamline and optimize the land consolidation process.

Land consolidation is according to the legislation in North Macedonia implemented in three overall phases in line with the FAO Legal Guide on Land Consolidation²⁶: i) feasibility phase, ii) re-allotment phase, and iii) registration and implementation phase. As part of the MAINLAND project, feasibility studies were conducted in 14 project areas selected based on expressions of interest from the communities (local government and local farmers and landowners). An important lesson learned is that the projects chosen for the feasibility study must be carefully selected and more focus should be put to assessment of the genuine interest of the landowners in land consolidation. Land consolidation is only feasible if it is demand-driven and if the demand comes from the local community. A crucial outcome of the feasibility phase is to assess and decide what is the most feasible approach to land consolidation; voluntary or majority-based. This again depends on several factors such as the level of support and interest of the landowners and farmers, homogeneous or inhomogeneous soil quality / land value, percentage of parcels with perennials (e.g. vineyard or orchard), percentage of landowners with only one parcel in the project area, etc.

In the re-allotment phase, the drafting of the Re-allotment Plan should ideally build on the information already collected during the feasibility phase, e.g. from the individual interviews with all landowners and farmers in the project area. However, this has proven to be difficult in the projects in North Macedonia that have continued from the feasibility to the re-allotment phase. The quality of the feasibility study reports varied from case to case mainly due to the fact that the service providers were conducting them for the first time and with little capacity available in the country for supervision.

In the re-allotment planning, it has been the intention to equally focus on the reduction of land fragmentation and the enlargement of holding and farm sizes. The land necessary for the enlargement can come from either private landowners that decide on a fully voluntary basis to sell their land parcels at the market price in the land consolidation process or from state land. In North Macedonia, the State owns around 240,000 ha of arable agricultural land,

²⁵ Government of the Republic of North Macedonia (2020): National Agricultural and Rural Development Strategy 2021-2027.

²⁶ Versinskas, T., Vidar, M., Hartvigsen, M., Mitic Arsova, K., van Holst, F., Gorgan, M. (2020): Legal Guide on Land Consolidation - Based on regulatory practices in Europe. FAO Legal Guide 3. Rome



which is as much as around 40 percent of all arable land.²⁷ The current government is interested to privatize state agricultural land, in particular small and fragmented parcels. However, the Law on sale of state owned agricultural land is not yet fully operational and it has so far not been possible to privatize state land in the land consolidation process but this has a very high potential. On the other hand, it has proven to be difficult to motivate private owners to sell land through the land consolidation process, even those not using their land and often leaving it abandoned (around one-third of all arable land in the country is abandoned), e.g. owners or their heirs living for decades abroad. Thus, it is the experience that the potential to enlarge farms through land consolidation has not yet been fully reached in the country and a strong focus should in the future be given to promote voluntary sales agreements integrated in the land consolidation process. This is furthermore important because land purchased in the land consolidation process, in particular in a majority-based approach, can be fully consolidated together with the consolidation of the land owned before the project. The alternative is that active farmers purchase land after the finalization of the land consolidation process but that would immediately result in new land fragmentation.

Another experience from the re-allotment planning has been that the concept of integrating land consolidation with the improvement of the agricultural infrastructure in the project area (roads, irrigation and drainage) as needed has been very feasible and strongly motivated landowners to participate in the process.

The background for the political interest in introducing land consolidation in North Macedonia has been driven mainly by a wish to facilitate agricultural development. However, with the integration of non-agricultural objectives in the two projects in Logovardi and Optichari (see Box 3 in Section 5), where a second objective of the projects is to acquire land for the construction of a new expressway and compensate the landowners and farmers in other land and avoiding destruction of the local farm structure, North Macedonia already has experiences with multi-purpose land consolidation as it is practiced in many Western European countries. With the fully operational land consolidation instrument, the country is in a very favorable position to further develop multi-purpose land consolidation and a project is currently (May 2022) under formulation where the land consolidation instrument is suggested to be applied in the Radovish Valley integrated with climate change adaptation through large-scale rehabilitation of the existing poor irrigation system (currently around 70 percent of the water is lost before it reaches the fields).

As mentioned, the MAFWE is the lead agency for land consolidation in North Macedonia. The FAO projects have contributed to developing the capacities of both the Ministry staff (at central and regional level) and of the private sector as private geodetic companies have been contracted as service providers to conduct field work supervised by the ministry and the project teams. The lessons that have been learned are that it takes considerable time to build up the necessary capacity both to conduct fieldwork and to manage the programme. Land consolidation is a very multi-disciplinary instrument and experts with different educational backgrounds and experiences, such as land surveyors, agronomists and lawyers, need to work together in small project teams. Project experiences show the need for continued capacity development, both in the form of in-service training of professionals working on projects and through the education at universities of new land consolidation professionals.

²⁷ FAO (2019): Report on management and sale of state owned agricultural land. Unpublished project report prepared under TCP/MCD/3701/C1.