



Land Consolidation in Hesse

Overcoming borders...
forging the future!



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Dear Readers -

Land consolidation in the German Federal State of Hesse looks back on a 200-year tradition. Land consolidation practices in the past pursued different goals under varying political influences - from the Nassau Consolidation to the Apportionment and the Land Consolidation Act - whereby the general focus was on agrarian productivity.

Revision of the political goals and legal basis over 30 years ago expanded the range of action for land consolidation procedures, raising nature conservation and the creation of integrative settlement areas to the status of major procedural objectives.

The procedures now followed are defined by the Land Consolidation Act (FlurbG), the purpose being to "encourage and advance the adaptation and development of rural areas," both economically and ecologically, and encompassing social and cultural aspects as well. The defining objectives are defined by the "Development Plan for the Rural Region of the State of Hesse." With financial support from the European Union (EU) within the framework of the Development Plan, land consolidation procedures have gained new significance in terms of the sustained development of rural areas.

The future of rural areas often requires development and planning measures, in addition to which land conflict issues - e.g. between agricultural, nature conservation, settlement and transport interests - demand resolution.

Resolution of these conflicts is generally only feasible by means of specific consolidation of

property according to land parcel location, form and size (land apportionment) - in accordance with our guiding principle for rural areas: **"Overcoming borders... forging the future!"**

Within the framework of modernization of Hesse's state administration, The Hessian State Office of Land Management and Geoinformation (HVBG) bundles the state's land survey, cadastre and land consolidation authorities, thus consolidating key land management competencies.

In times like these, characterized by shortfalls in financial and staff resources, intelligent utilization of all possible modes of action pertinent to a future-oriented and sustainable development of rural regions is a priority. The purpose of this brochure is to provide the reader with an overview of the process of land consolidation in Hesse.

Truly yours,

Wulf Schröder
President, Hessian State Office of Land Management and Geoinformation (HVBG)

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Land Consolidation in Hesse –

...Overcoming borders - forging the future!

Overcoming borders - forging the future. This motto is central to land consolidation: The concept aims at the preservation, organization and sustainable development of rural regions.

Land consolidation in Hesse means, above all, the implementation of procedures tailor-made to each particular region and problem configuration in accordance with the Land Consolidation Act.

In addition to measures geared to improvement of agrarian structures, equal weight is given to efforts to enhance the balance of nature and the structure of the landscape.

Measures in the following fields are carried out and supported in the sense of land consolidation: natural development of bodies of water and water retention, soil protection, microclimate enhancement, improved rest and recreation value and improvement of transport infrastructure.

Focal tasks

Land consolidation in Hesse is focused on the following areas at the beginning of the third millennium:

- Improvement of general conditions of living in rural regions with regional and temporal bundling within the framework of structural and development programmes, the idea being to ensure agricultural land use, improve natural land productivity and enhance recreation and tourism facilities (e.g. in the central mountains of Hesse)
- Improvement of conditions for working and production (reduction of costs and investments) in agriculture and viticulture, in connection with measures to improve the landscape ecology
- Land consolidation measures to support transport route projects of regional and supraregional importance, including realization of large-area compensatory nature conservation measures (e.g. for extended and new construction of federal motorways, the autobahns A 66, A 49 and A 44 and other federal and state roadway construction projects).
- Contributions to flood protection in the form of creation of decentralized retention areas, including legal clarification of relevant land ownership issues
- Ensuring at least extensive land use in localities with unfavourable natural preconditions, the goals being to maintain the openness and integrity of the landscape as a whole as well as to preserve ecologically valuable areas (e.g. in the following regions: Land-Dill hill country, Knüll, Odenwald, Rhön)
- Contributions to realization of concepts of biotope integration and river basin protection (e.g. in these regions: Wellerau, Eder, Fulda and Lahn) and to renaturation of natural bodies of water and official protection of shore areas, including resolution of conflicts with agrarian interests
- Contributions to realization of projects requiring land parcel integration (e.g. Regional Park in the Rhine-Main conurbation) with resolution of relevant land use conflicts.

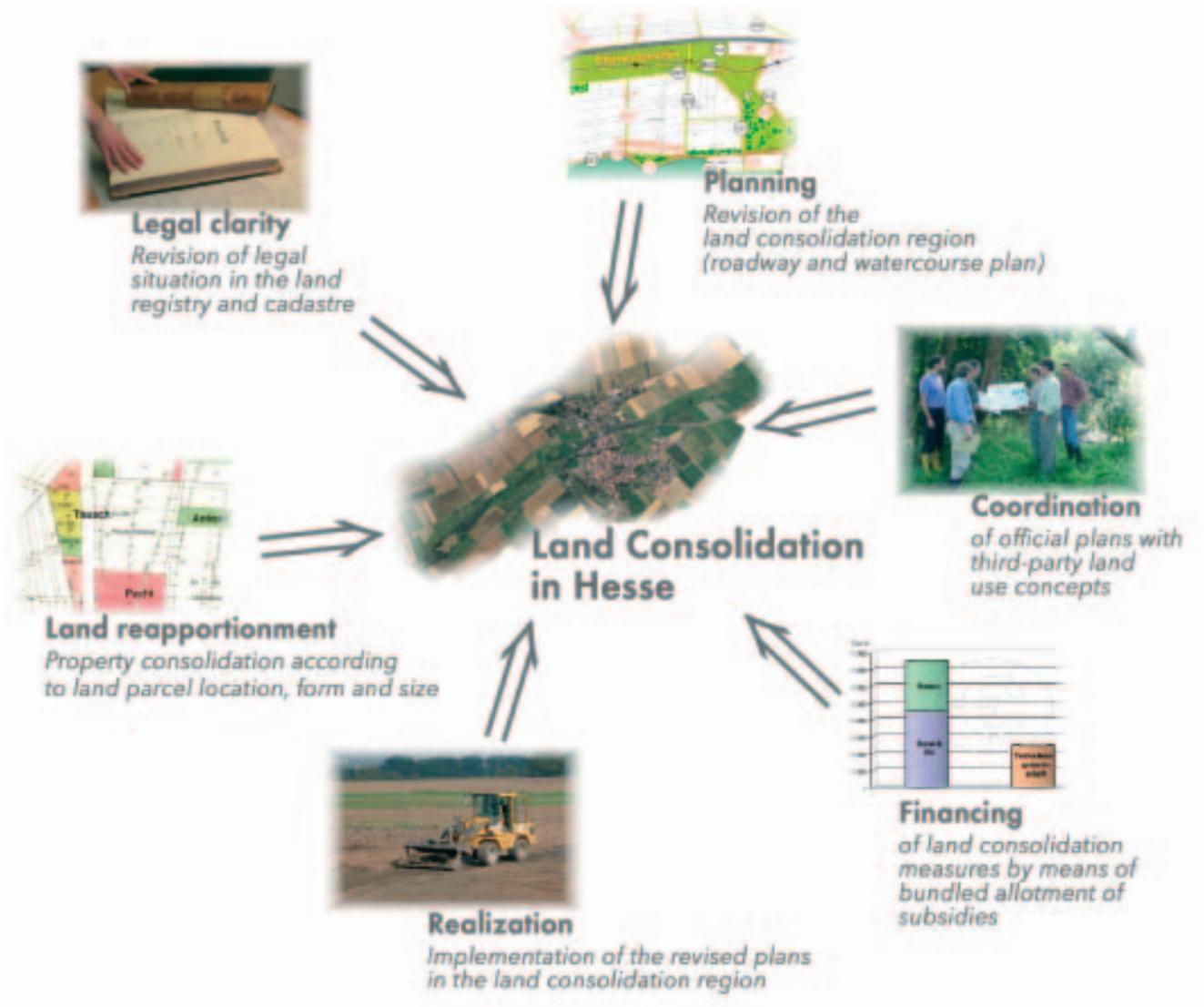
Concept for success

“Single-source management” is the decisive principle for economical realization of land consolidation. By bundling numerous competencies in the land consolidation authorities, both citizens and public bodies can be provided with an integral package of measures characterized by both social and environmental compatibility.

Land Consolidation in Hesse – ...Single-source management

Bundled competencies

The land consolidation authorities are important partners when it comes to reform and consolidation, or functional reappropriation, of rural land. These authorities coordinate and regulate all activities required for preparation and implementation of procedures in accordance with the Land Consolidation Act (see also p. 29).



Single-source management

Bundling these tasks in a single state office facilitates lean implementation of rural region plans.

The coordinating body in contacts with both private parties and public institutions is fixed – the Land Consolidation Office.

Land Consolidation in Hesse – ...Solves utilization conflicts

Balancing of interests – no easy task

According to The Land Consolidation Act, the interests of both the parties involved and public interests must be taken into account (see extract on this page).

“Would a given piece of land better serve the common good as a flood protection area or as arable land?”

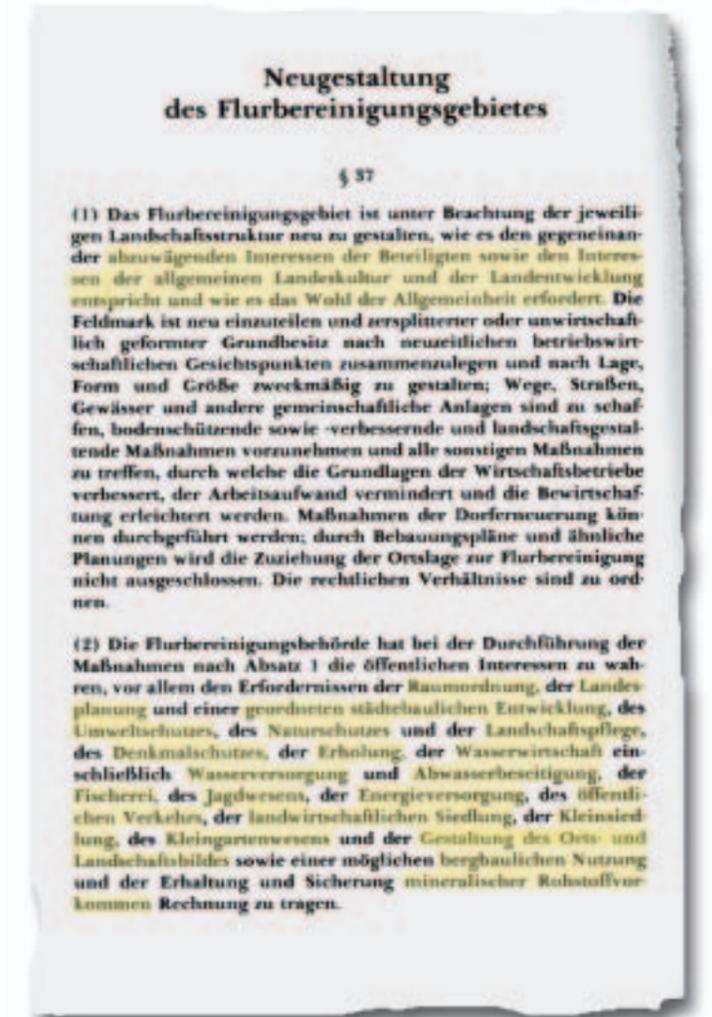
According to this motto, the land consolidation authorities attempt to balance and reconcile the different interests in each given region. In view of the many different aspects of “public interests” alone, it is quite clear that final decisions can often only be arrived at after long and intensive discussion.

But the effort is worthwhile. **The result of a land consolidation procedure should be supported by all parties involved.** This is the only way to avoid potential land use conflicts over the longer term.

Land use conflicts demand holistic solutions

Land consolidation can also contribute to solving existing land use conflicts, e.g. between the competing interests of agriculture and nature conservation. The land consolidation authorities assume the role of a neutral mediator. Their task is to optimize the different land uses in the sense of economical utilization of land resources and to implement holistic, sustainable solutions. One principle such solutions are based on is that land is a limited resource that cannot be multiplied.

Above all, **such conflicts must be resolved within the framework of a partnership** including all property owners, land users, planners, authorities and other institutions.



Extract from the Land Consolidation Act

Land Consolidation in Hesse – ...For agriculture and forestry

Agriculture in Hesse demands a perspective for the future

One of the standing objectives of land consolidation in Hesse remains support of agricultural and forestry operations to improve their profitability.

To give the rural regions a secure future, agriculture and forestry must be supported in a sustained manner. They form the economic sector that ensures the upkeep, conservation and development of landscape under cultivation on a regional basis, preserving its attractive qualities in the eyes of the populace as a whole. Efficient, market-oriented and environmentally compatible operations enhance the economic strength of rural regions. Profits from such operations in Hesse amount to approx. 3 1,000 per annum. Together with Bavaria and Rhineland-Palatinate, Hesse is therefore at the bottom end of the scale in Germany today.

One of the main reasons for this is the unfavourable landowner structure, which situation has been exacerbated in Hesse by laws providing

for fragmented real estate inheritance (i.e. equal distribution of land ownership amongst all heirs).



Considerable improvements in the situation of the agrarian operations can be achieved by means of land consolidation measures or, in simpler cases, by voluntary exchange of leasehold (see p. 27).

Land consolidation thus represents a low-cost, highly effective investment in the future for the agrarian economy.

Reduction of expenditures and costs in agrarian operations can increase agricultural income on a long-term basis.

Land consolidation includes a broad pallet of measures with positive financial and work facilitation effects for Hessian farmers:

- purpose-optimized farming land parcels
- optimized roadway network
- establishment of common facilities



Multifunctional farming

Increased productivity and time savings can open up opportunities for non-farming activities and alternative incomes. Besides direct marketing and rural tourism, landscaping and other services are suited to realization by agricultural operations.

Investment in the future

The aerial photographs show intensively cultivated land before and after land consolidation, which improved the competitiveness of local farming operations.

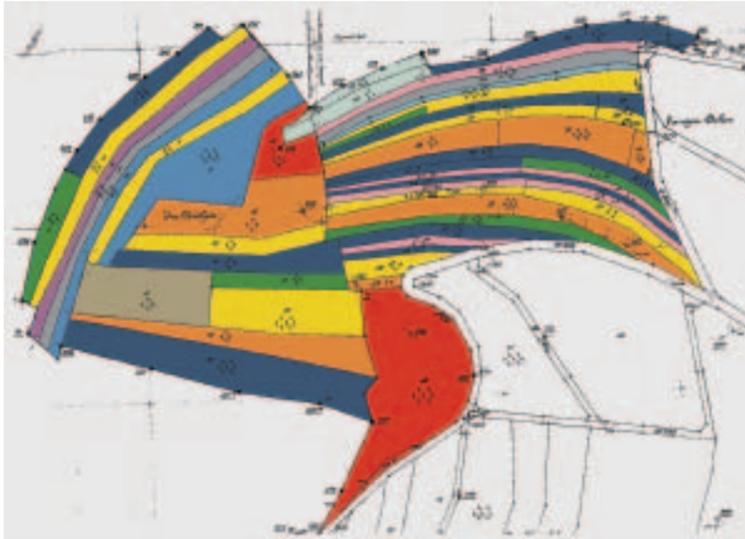


Villmar, before land consolidation

Villmar, after land consolidation

...For agriculture and forestry

Rationalized cultivation land parcels



Landowner situation, before

In areas in which land consolidation has not yet been carried out are characterized by predominantly splintered landownership. Most land parcels are small, with uneconomical forms.

Consolidation of land parcels to produce useful cultivation land parcels contributes essentially to reduction of investment and expenditure in a farming operation.

These objectives are achieved by so-called land reappportionment in a land consolidation procedure, as shown in these illustrations in "Waldhessen" (Kirchheim-Kleba, Hersfeld-Rotenburg district).



Landowner situation, after

As a result of reappportionment, each landowner receives a maximum of 2 rationally formed land parcels with appropriate roadway access.

Optimized roadway network

Land consolidation, within the framework of its legal objective, provides for a newly laid-out, rationalized roadway network. In combination with favourable field shapes, the following advantages result for farming operations:

- shorter roadway travel and turning times, hence reduced machine use and working times
- more efficient cultivation
- cost savings with more economical utilization of fertilizers and lower fuel consumption levels
- creation of favourable conditions for machine sharing

On the whole, this means a significant improvement in working conditions and reduced production costs. Reductions in exhaust pollution also help control pollution of the natural environment.



Roadway network, before

Fields with unfavourable roadway access for farming vehicles mean increased driving times, fuel consumption and repairs.



Roadway network, after

Fields with favourable roadway access, i.e. direct access for farming vehicles mean advantages for farmers and the environment. The resulting fuel savings reduce both expenditures and air pollution levels.

...For agriculture and forestry

Individual solutions

There is no all-in-one solution to planning an efficient roadway network. The illustrations on this page document ways in which a variety of local aspects have to be taken into account such as climate, soil conditions and landscape.



Landscape form

This agricultural roadway link has been gravelled. Its course has been harmonized with the surrounding landscape form.



Bridges

An efficient roadway network must also include safe and intact bridges. This 200-year-old bridge was restored from the foundation walls up within the framework of land consolidation and in accordance with historic monument legislation.



Intensity of cultivation

Asphalt paving is often used on intensively used main farming roadways. Unfavourable climate and soil conditions may also make asphalt paving necessary to ensure year-round field access.



Landscape / landscape ecology

To minimize soil sealing, only the wheel tracks have been asphalt-paved here. The greened-up roadside helps integrate the connecting road into the landscape.

Shared facilities

To improve the working and production conditions for farming operations, additional shared facilities have been realized within the framework of land consolidation in addition to a new farm road network, e.g.:

- shared machine sheds with washing facilities
- fire ponds and fire cisterns
- pasture fences and livestock drinking troughs.



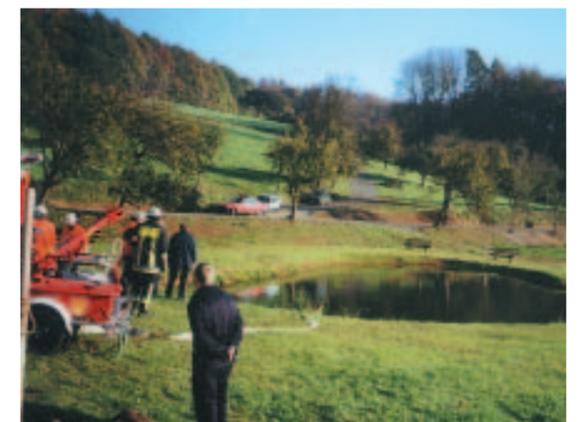
Shared machine washing facility

To avoid wasting precious drinking water, the washing water required to clean farm machines and equipment is first collected from the roofs of the local farm into a cistern. After the machines are cleaned, the wastewater is then precleaned and conducted into a plant-based clarification plant, in which it is purified using the reed-grown bottom filter, then pumped back into the cistern.



Pasture fences

Stationary pasture fences facilitate large-area grazing operations and protect adjacent bodies of water, stage 7r, from livestock.



Fire ponds

Prepared to fight fires by virtue of land consolidation: This fire pond was established as a shared outdoor facility.

Land Consolidation in Hesse – ...For conservation of natural bodies of water and river basins

Watercourses water need room

The many different functions of near-natural watercourses and their basins must be ensured, restored and developed. Specific measures contributing to flood protection and watercourse protection are undertaken within the framework of Hessian land consolidation.



Rivers and streams run through our cultivated landscape like vital arteries.

In the past, hydraulic engineering projects have often enough degraded natural watercourses to runoff canals with simplified structures. Their natural biological balance has also often been disturbed by discharge of wastes and pollutants. The natural environment of many animal and plant species in

Advantages at a glance: near-natural watercourses

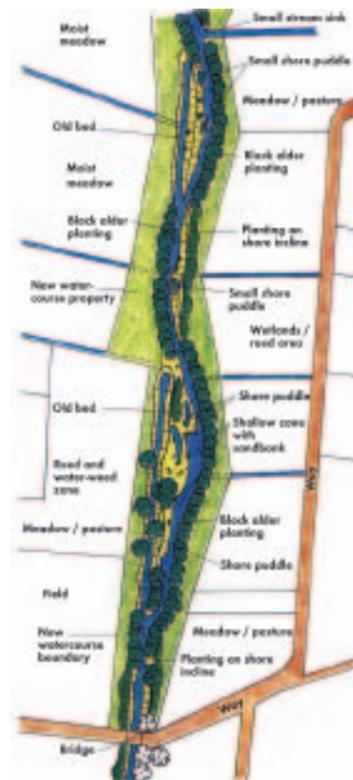
- provide the natural living and propagation environment for natural local plant and animal species
- are highly self-regulatory
- provide a flood drainage buffer
- reduce pollutant loads
- require a minimum of maintenance
- are a valuable addition to our landscapes
- increase rest and recreation value as well as quality of life

and near these bodies of water are in many cases gone, threatened or reduced in size.

The increased flooding we are seeing now is also an indirect result of construction measures that disturb the natural structure of watercourse basins. These basins provide natural flooding areas for rivers and streams. Only when left in their natural state can these areas absorb excess rain volume, thus reducing peak flooding. The sealing over of river basin areas, e.g. when roadways, industrial structures or commercial facilities are constructed, therefore has far-reaching effects on natural water retention and seepage.

For the above reasons, realization of special **measures to protect watercourses and prevent flooding** play an important role in land consolidation projects in Hesse.

The foremost goal is the renaturation of watercourses, e.g. restoring rivers and streams to a near-natural state with generous basins in which flood waters can spread out, then drain off gradually.



Measures to protect watercourses

Littoral zone

The renaturation of watercourses requires the striking of a careful balance with the surrounding area and its uses. The success of renaturation measures depends essentially on the available room. If a watercourse is allowed to spread out at will once again, its intrinsic dynamics and natural developments often assume control of the further process.

Land consolidation therefore demands the designation of sufficient wide littoral zones. These watercourse protection strips are subject to special regulations. In most cases, only extensive cultivation is permitted on them. This prevents direct discharge of fertilizers and plant protectants into the watercourse.

Removing barriers

To form an intact ecosystem, a watercourse must be passable. Mill and irrigation dams, bed drops, culverting and other barriers may prevent fish and other aquatic organisms from wandering upstream or downstream. Land consolidation can provide land or finance restructuring measures or bypass channels to help overcome such obstacles.



Good example

Lengthwise and crosswise basalt formations structure the unobstructed flow of the river. Inlets, bushes and trees along the shoreline have sufficient room in the sufficiently wide littoral strip to develop according to their intrinsic dynamics. The naturalness of this aquatic biotope is the precondition for development of a high level of species diversity. The watercourse requires only minimum maintenance.



Life in an next to the water.

Every fish wants to get to the source. Among the fauna that wander along with the fish are crayfish, worms, larvae and insects. Conversion of barriers and dams into flat ramps or bypass channels can make these wanderings possible again.

...For conservation of natural bodies of water and river basins

Flood protection measures

Flooding is a naturally recurring, and unavoidable, phenomenon. Preventive measures can, however, clearly reduce flood damage or even prevent it altogether. Within the framework of land consolidation, two main strategies are pursued in this sense: land management and decentralized water retention.

Land management

In cooperation with the environmental authorities, as well as in self-initiated projects, land consolidation in Hesse promotes the recovery of natural and potential flooding areas..

The detailed work involves location of cultivation land parcels where they make the most economical and ecological sense. Real estate acquisition and exchange are employed to remove utilizations that are at risk from the flooding area. This creates room for near-natural watercourse and river bed development.

On the whole, such measures achieve river bed utilization that is compatible with the body of water involved and restore natural water retention capacity to the river bed (see also the example on p. 15).



Decentralized water retention

So-called decentralized measures are also carried out in the land consolidation procedure with a view to flood protection. The aim of such projects is to reduce the drainage rate of precipitation and to create a large number of small retention areas. Examples include:

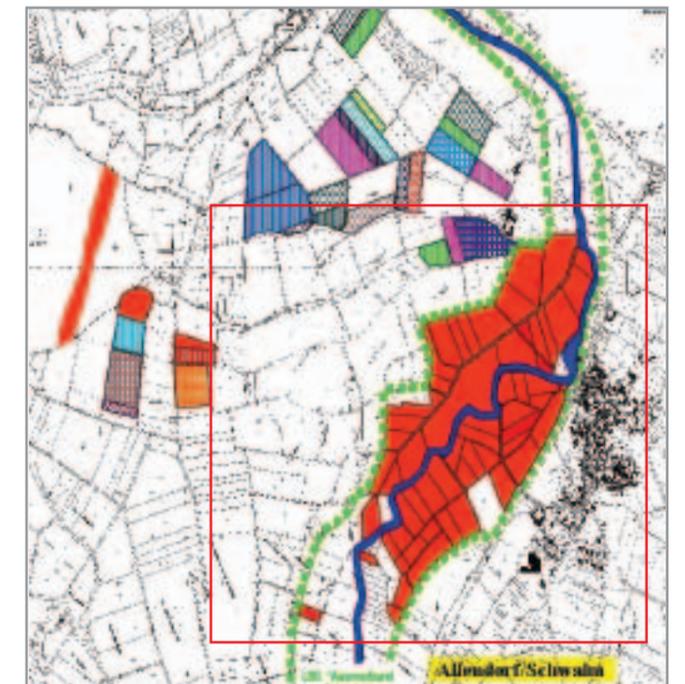
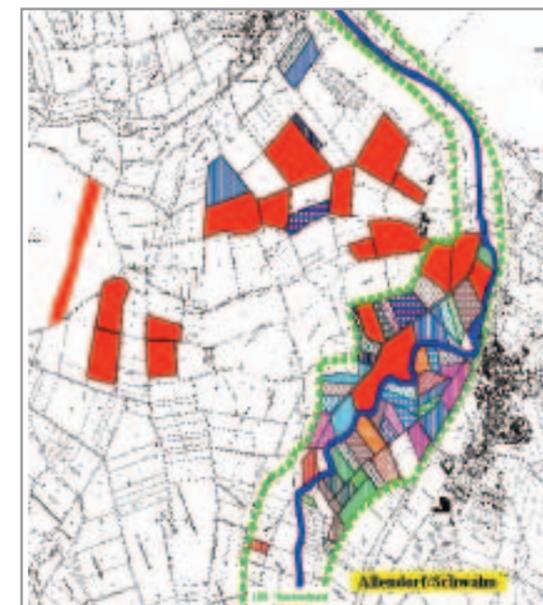
- seepage and evaporation hollows
- flooding basins
- unsealing of asphalt-paved roads
- liming to improve soil qualities.

The positive effect of these decentralized measures cannot necessarily be measured on site, since the volumes of water held back by them is much smaller than is the case with special rain retention basins. All told, however, they do contribute significantly to preventive flood protection and are comparatively cheap to realize.

Success story

The reappropriation of typical local grassland as intensively cultivated fields in the Schwalm river basin over the past decades led to unavoidable conflicts between water management and agricultural interests. Floods repeatedly threatened the harvests, and thus the very existence of the farming operations. The Land Consolidation Office solved the conflicts by relocating the crop fields to higher ground are marginal portions of the river basin. The field crop farming along the river was replaced by extensive grazing and a near-natural river basin landscape with wet biotopes and waterlogging zones in which floodwaters can once again spread out without causing damage.

The land purchases required for the exchange land parcels were made with the help of equalization funds for roadbuilding measures. In this way, land consolidation helps prevent future flood damage.



Landholdings in the Schwalm river basin before and after the land consolidation procedure

Land Consolidation in Hesse – ...For nature and landscape

Cultivated landscapes demand harmony between man and nature

Land consolidation encompasses obligations to present and future generations. Reappropriation measures pay special tribute to protection of natural resources.

What we demand of our many different cultivated landscapes has changed over time. Today, the focus is not only on high-volume crop yields, but also on sustaining the regeneration capacity and the diversity of animal and plant species that make up the natural balance. Cultivated landscapes should also be an attractive place to live and spend leisure time for the human population.

To fulfil these vital functions, planting, care and maintenance of near-natural landscaping elements such as trees, hedgerows and other biotopes is essential in intensively used landscapes.

These principles are carefully kept in mind as guidelines for all measures carried out within the framework of land consolidation measures. Special attention is paid to natural, regionally typical landscape forms.



These principles are carefully kept in mind as guidelines for all measures carried out within the framework of land consolidation measures. Special attention is paid to natural, regionally typical landscape forms.

- Assistance in implementation of environmental protection, nature conservation and landscape maintenance projects (e.g. for communities) with a view to the interests of the landholders and land utilizers,
- Assistance in establishing biotope integrity systems by integrating near-natural land parcels and securing this status on a permanent basis,
- Upgrading the landscape by means of reappropriation and greening measures,
- Implementation of landscape planning by means of land management,
- Realization of water retention measures, including acquisition of land as necessary and soil protection measures (e.g. prevention of soil erosion).



Historical landscape elements

*This row of pollard willows was planted in the Lahn river basin near Marburg / Cölbe within the framework of a land consolidation procedure. Pollard willows are typical inhabitants of river basin landscapes. In earlier times, material used to weave household items was obtained from these trees. Today they enhance the landscape. Old trees in particular serve as nesting places for the Little Owl (*Athene noctua*).*

Integrated field boundary strips

In areas dominated by open fields in particular, flowering field boundary strips like this provide important biotopes and integrative elements for many animals and plants. They were planted as legally defined nature protection equalization measures in the land consolidation procedure realized in Hungen-Ulphe. In summer, these colourful strips of land are populated by many insects and birds.



A well-cultivated landscape

These juniper downs in Uckersdorf developed as the result of decades of grazing. When utilization was abandoned, the bushes threatened to overgrow this valuable area entirely. Within the framework of the current land consolidation project, the rare juniper bushes were cut free again. A herd of sheep belonging to a local farmer now ensure that the landscape is kept open by grazing.

...For nature and landscape

Nature conservation area Stollwiese

In a special way, the simplified land consolidation procedure Reichelsheim-Stollwiese in the Odenwald served the purposes of both nature conservation and the interests of landholders. The Reichelsheimer Stollwiese Nature Reserve, with its mosaic of cultivated and natural landscapes, is a typical Odenwald cultural landscape, the result of traditional agricultural utilization. In order to better harmonize the goal of protecting nature with the interests of agriculture and forestry, a utilization concept for extensive agriculture was developed for the land consolidation procedure and implemented as follows:

- Land parcel acquisition and land reappropriation to disentangle conflicting utilization claims
- Expansion of the nature reserve area and reappropriation of the protected land parcels as public property
- Designation of buffer zones between nature reserve and field parcels
- Removal of displaced woody plant species foreign to the Stollbach basin site (spruces)
- Renaturation of culverted canals
- Supplemental plantings and establishment of mobile livestock drinking troughs

The simplified procedure initiated in 1995 was already complete in 2000, including realization of all projects and revision of the public registries..



A mosaic of valuable biotopes

The special ecological value of the Stollwiese Nature Reserve lies in the rapid alternation of old extensive orchards, species-rich dry meadows, wet and moist meadows and reeds. Numerous threatened plant and animal species thrive here, for example an indigenous orchid.

A ditch comes to life

A successful land consolidation procedure carried out in Geisenheim in the Rheingau demonstrates that even small-scale renaturation measures can have significant effects. A precipitous drainage ditch running through the vineyards was restored to a near-natural state. This project was part of the model project "Landscape-Integrated Viniculture" realized by the Geisenheim Research Institute, the Technical University of Wiesbaden and the City of Geisenheim. The objective was to restore the original ecological richness and visual attractiveness to part of the vineyard landscape.

A so-called accelerated consolidation procedure was initiated, whereby the wide variety of services covered by the Land Consolidation Office was highly advantageous, including, for instance

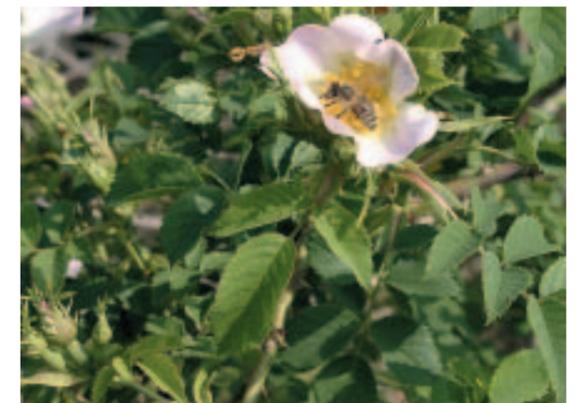
- preparation of the planning documentation required for approval of the watercourse-related measures and the financing application,
- acquisition of the necessary land parcels, which were either purchased or donated by the State of Hesse,
- construction, land management measures (consolidation plan, surveying, cadastre and land registry corrections).

The model project was financed by means of equalization funds for nature conservation. Rapid implementation of the procedure was facilitated by cooperation on the part of all parties involved.



A highly diverse small-area biotope

The flow rate of the water is considerably reduced by the meanders and hollows. Precipitation can collect in small puddles in some places. At others the ditch has been widened and partly filled with field stones, creating surfaces on which more dryness and warmth can develop. That way, plant and animal species with a wide variety of requirements can find a new home here.



Indigenous woody plants replanted

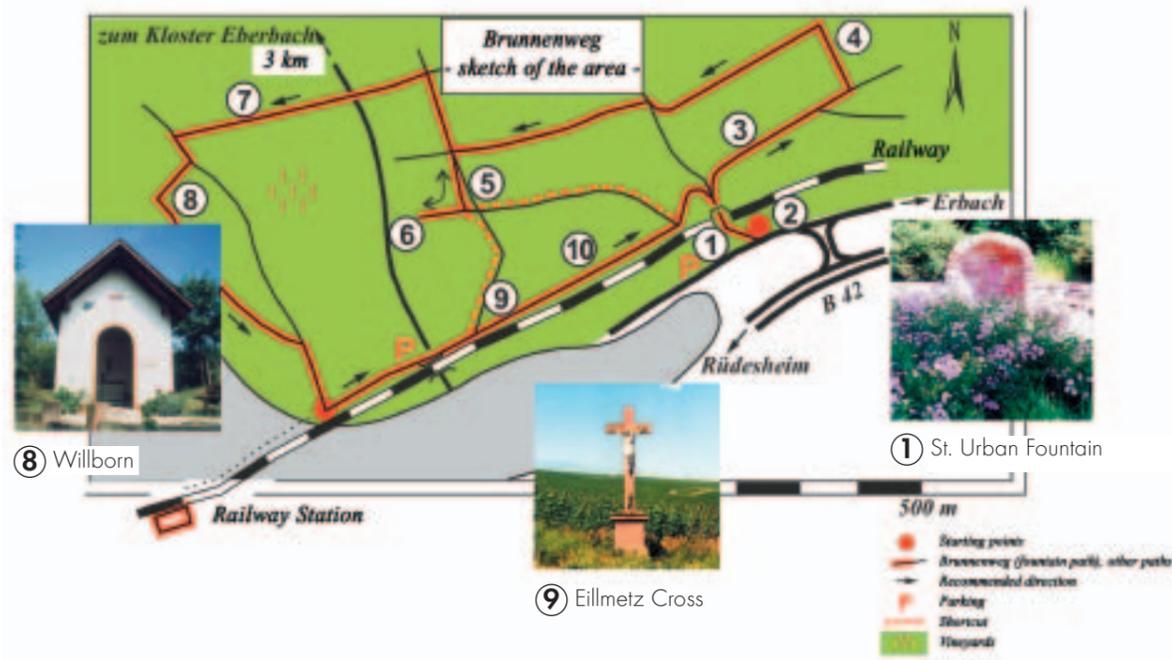
Wild roses indigenous to the area were planted along the ditch. Indigenous plants are defined as species that not only grow here but are particularly well-adapted to the region as well, i.e. genetically optimized for the soil and climate found in the area. The land consolidation procedure supports the use of such plants in many projects.

Land Consolidation in Hesse – ...Creates rest and recreation facilities

Regional rest and recreation facilities for more quality of life

Land consolidation procedures often initiate or realize projects that pursue the goals of creating and maintaining recreational facilities near big cities. Project content is often oriented towards local cultural aspects.

In the state of Hesse, half of whose 6 million inhabitants live in the Rhine-Main area, the demand for rest and recreation activities in natural surroundings is enormous. Areas such as the Mittelgebirge and Rheingau offer what all of these people need. Land consolidation contributes to the recreation quality of rural areas by establishing (and acquiring the land parcels for) small-scale local rest and recreation facilities.



The Brunnenweg in Hattenheim

A cultural learning path was established within the framework of the ongoing vineyard land consolidation procedure. The work involved restoration of old monuments and creation of new outlooks and fountain squares. A folder helps visitors to the area find their way along the circuit path.



World Cultural Heritage - Historical cultural treasures in Muschenheim

A Roman citadel on the Limes is one of the many historical sites located within the region of the land consolidation procedure Lich-Muschenheim. To make these historical sites more accessible to the public, the Land Consolidation Office is developing a concept for a network of hiking paths complete with informative wayside signs. In order to protect these cultural treasures in the future, these sites are set apart from intensive agricultural utilization in the land consolidation procedure.

Examples of rest and recreation facilities in land consolidation areas:

- outlooks, benches, fountains
- picnic grill sites
- information and orientation signs
- learning paths, recreational lawns
- parking spaces
- cycling paths, riding paths
- hikers' cabins, playgrounds
- hiking paths, therapeutic Kneipp pools



Land Consolidation in Hesse – ...Helps realize transport route projects

Roads need room

Land consolidation facilitates rapid realization of transport route projects and helps resolve the conflicts inherent in them. During the construction phase, the land consolidation authority also acts as a mediator and contact for all of the landholders involved.

The central location of Hesse within Germany, with the attendant upwards trend in traffic volume, means a welter of new problems to be solved in the form of destination, source and transit traffic in many rural areas.

Current constructions projects include new extension routes of the German Federal Railway and new autobahns (A 44, A 49 and A 66) in central and northern Hesse. A number of city beltways to be integrated in new federal and state thoroughfares are also in planning.

New motorway structures cut through existing structures and land parcels used for other purposes.

Land consolidation can help prevent expropriation of the affected landowners. At the same time, it helps avoid disadvantageous results for agriculture and the natural environment and landscape. Land consolidation procedures are particularly valuable when it comes to realization of major construction projects. In addition, such projects are integrated in property, social and ecological structures of their rural surroundings.



Example of a major construction project supported by land consolidation: Railway bridge over the Fulda Valley on the ICE segment Hanover-Würzburg.

Transport route projects cut through existing structures and disturb their functions

The consequences:

- Fields, pathways, natural bodies of water and biotopes are severed, that is to say their integrity and interconnection in a larger overall system are disturbed
- Detours due to reduction of crossings and openings
- Residual land parcels of reduced size, farming of which is unprofitable
- Landowners and those farming the land are affected in different ways, i.e. the loss of land is concentrated on certain farming operations, potentially threatening their existence
- Leaseholding structures are subjected to shifts and changes

Beltway bypass

The Lich-Langsdorf beltway (B 457), in the Gießen district, is being built with the support of the responsible Land Consolidation Office. Equalization of the loss of land caused by the motorway construction is being realized by purchasing land parcels both inside and outside the beltway circuit. Land parcel exchanges are being used to provide landholders with arable replacement land of equal value.



...Helps realize transport route projects

The purpose of land consolidation to allocate plots for public projects:

- Elimination of dissection damage and reappropriation of dissected land parcels in the form of a roadway, water and biotope network compatible with the construction measure,
- Avoidance of detours on the basis of early-stage planning of suitable overpasses and underpasses combined with reallocation of farming land parcels,
- Distribution of land loss amongst a larger number of parties to avoid existential hardship for individual farmers and
- Smooth procedure during the construction phase based on the coordinating efforts of the Land Consolidation Office.



Old: Dissected structures prior to consolidation to allocate public project plots



New: Functional infrastructure, rationally integrated farming parcels

Schematic comparison

Land Consolidation in Hesse – ...Clarifies the legal situation

Landowners need legal security

The Land Consolidation Offices make an important contribution to the updating and quality of real estate property data and public registries.

Public registries are irreplaceable for documentation and securing of public and private proprietary rights to real estate property, e.g.

- Land Registry
- Real Properties Cadastre
- Water Rights Registry
- Directory of Building Obligations.

Rights to real estate property are revised at the conclusion of a land consolidation procedure. The results of planning and land reallocation have to be entered in the public registries.

One important result of the procedure thus an updated documentation of consolidated real properties, in particular in the land registry and real properties cadastre, i.e. secure legal documentation of the proprietary situation.

Combining the Hessian Land Consolidation and Cadastre Offices into a single authority has resulted in cooperative procedure simplifications, especially in the areas of surveying and data exchange.

Further simplifications are planned for the future. All property-related data (so-called geobasis data), and thus the public registries as well, are to be combined in a single office.



Extract from the Real Properties Register



The Land Registry and Real Properties Cadastre must be updated at the conclusion of a land consolidation procedure.

Land Consolidation in Hesse– ...What we have to offer!

Procedure in accordance with the Land Consolidation Act (FlurbG), an overview

Local concerns and realities determine what form a procedure in accordance with the Land Consolidation Act will take. The smaller the number of required measures, the faster and more simply the procedure can be implemented.

Integral procedure

The **integral procedure** provides for all-inclusive solutions concerning the maintenance, revision and development of economic, residential and recreational land functions in complex cases, and also takes the ecological functionality of rural areas into account (land development). The core task is improvement of production and working conditions in agriculture and forestry. The projects that can be realized include rural roadbuilding, water management, soil protection, landscape development and village renewal.

Simplified procedure

The **simplified land consolidation procedure** is a suitable instrument for facilitation and implementation of measures of agrarian structure improvement, village renewal, environmental protection, near-natural watercourse development, nature conservation and landscape maintenance and revision of towns and landscapes.

In particular, land use conflicts can be resolved and consolidations of real estate proprietorship can be realized in hamlets and small townships.

The Land Consolidation Act provides for procedural simplifications.

In realization of large-scale public-funded projects such as auto-bahns and railway routes, considerable areas on rural land parcels have to be used. The resulting land loss is distributed amongst a larger group of owners by a public project land consolidation procedure; disadvantages in terms of general rural culture (e.g. dissection damage) are avoided. The costs of the procedure and elimination of dissection damage are paid by the public builder.

To speed up improvements in production and working conditions in agriculture and forestry or realize necessary nature conservation and landscape maintenance measures, an accelerated consolidation procedure can be carried out. In such a procedure, no new roadway or watercourse network is laid out. The goal of the procedure is achieved mainly by (rapidly realizable) exchange of entire real estate parcels.

A rapid and simple procedure that can be used to improve agrarian structures is voluntary land exchange. This procedure can also be used to achieve goals of nature conservation and landscape maintenance.

A small number of landowners agree to exchange their land parcels on a voluntary basis.

Land consolidation to allocate plots for public projects

Accelerated consolidation procedure

Voluntary land exchange

Leased parcels can be consolidated to improve agrarian structures by means of voluntary exchange of usufruct. Efficient farming parcels are thus created without changing proprietary rights.

Voluntary exchange of usufruct

Land Consolidation in Hesse – ...Cooperation partners?

Successful land consolidation is, on the whole, only feasible with support in the form of the ideas, proposals and wishes of the landowners, parcel users, citizens, communities and other authorities and institutions active in the procedure area (public interest representatives)!

Landowners

- form the Community of Landowners (a public law body)
- contribute their knowledge concerning local circumstances and ideas to consolidation planning of an integrated roadway, watercourse and biotope network
- formulate their wishes concerning reappportionment of real estate property
- reach agreement with the Land Consolidation Office concerning the location, form and size of their new land parcel

The Managing Committee of the Community of Landowners

- is elected by the landowners involved
- handles the business dealings of the Community of Landowners
- represents the interests of the Community of Landowners as party to the procedure
- contributes to reappportionment planning for the integrated roadway, watercourse and biotope network and to implementation of the plan
- issues the building orders

The community

- is an important partner of the Community of Landowners and Land Consolidation Office
- defines the framework and represents the interests of community development
- contributes to reappportionment planning for the integrated roadway, watercourse and biotope network

The farmers and other land users

- provide information on the development of their operations and contribute their ideas
- advise the Managing Committee of the Community of Landowners concerning realization of community tasks

Bodies responsible for public projects

- coordinate their planning with the Land Consolidation Office
- contribute to reappportionment planning for the integrated roadway, watercourse and biotope network

The success of a land consolidation procedure depends to an essential degree on contributions from all participants. This applies in particular to reappportionment planning and land management.

The Land Consolidation Office

- manages the procedure in cooperation with all parties involved
- is the competent party concerning all technical matters and advisory functions
- coordinates, plans, finances, reapportions real estate property and establishes legal clarity
- supervises the Community of Landowners

The State Land Consolidation Office

- realizes the objectives of the State of Hesse for procedures in accordance with the Land Consolidation Act
- ensures quality continuity of land consolidation procedures state-wide
- administers the financing of these measures and confers building rights
- serves in an advisory and supervisory capacity in operation and technical functions of the Land Consolidation Offices as the legal arbiter

The superior state authority responsible for land consolidation matters

- defines the framework for pursuance and implementation of land consolidation in Hesse



Land Consolidation in Hesse – ...Where does the funding come from?

Two types of costs are generated by a procedure in accordance with the Land Consolidation Act:

Procedure costs,

i.e. **staffing and material costs** pertinent to the organization of the authority (personnel, experts, ecological opinions, office building, furnishings). These costs are paid in full by the **State of Hesse**.

Costs of execution,

i.e. **costs for execution of the procedures**, which are normally paid by the **Community of Landowners**, an exception being procedures to allot plots for public projects. How high the costs of execution are depends on the local situation and the expansion measures required. Costs of execution accrue, for instance, for roadway and watercourse construction measures, landscape maintenance, shared agricultural facilities, soil improvement, surveying of new real estate parcels and administrative expenditures by the Community of Landowners.

Funding of costs of execution:

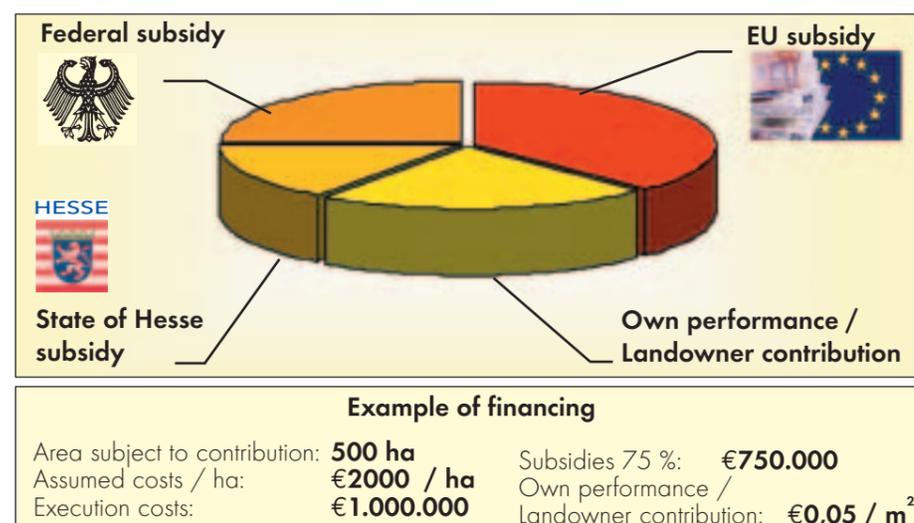
National funding is based on the (Ger.) Constitution and legislation concerning the public

task "Improvement of Agrarian Structures and Coastal Protection" [GAKG]. It is the primary instrument of national agrarian structure policy aimed at improving the competitiveness of agricultural operations within a framework of sustainable rural development. Funding is available for measures to realize reapportionment of rural landownership and rural regional structuring measures and to ensure sustainable productivity in terms of natural resources.

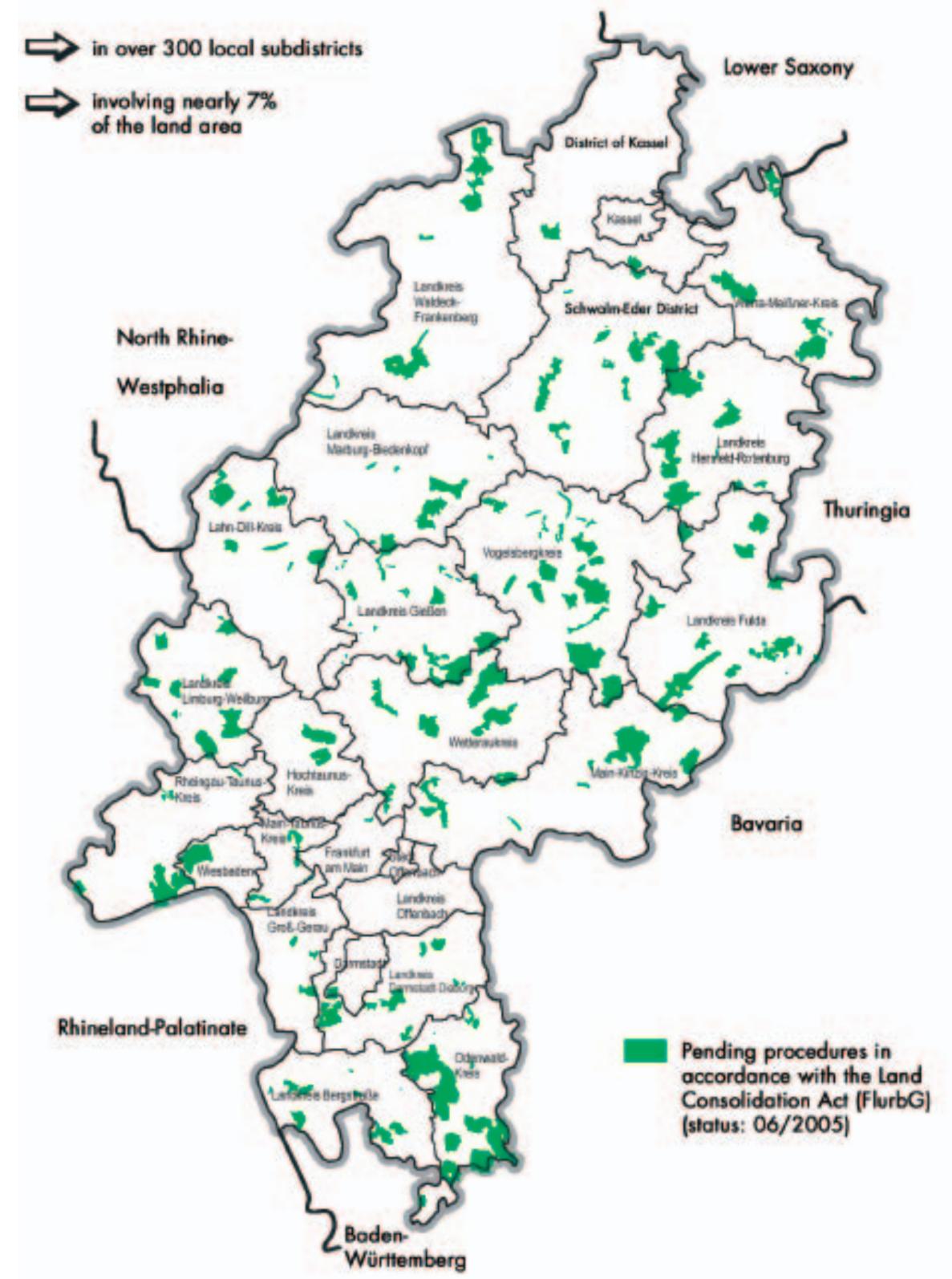
To make these costs feasible for the landowners, the Communities of Landowners receive **federal and State of Hesse subsidies** to the amount of approx. € 5 million annually.

Since the year 2000, **European Union (EU) subsidies** have been made available to the amount of approx. € 2 million annually within the framework of the "Rural Development Plan for the State of Hesse."

All told, public sources provide subsidies amounting to 50-80% of the subsidizable costs of execution; the actual subsidy sum is contributed by the EU (50%), federal sources (30%) and the State of Hesse (20%).



Land Consolidation in Hesse – ...Pending procedures



Land Consolidation in Hesse – ...The Administrative Districts



Land Consolidation in Hesse ...Contact!

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