



# Land Consolidation as Alternative to Compulsory Land Acquisition in Case of Big Public Infrastructure Projects

Joachim Thomas, Germany

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- What does happen by public infrastructure projects concerning land use?
- Analysis of the LC methodology
  - generally
  - in case of a lack in available land
- Summary, key-questions

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## Big public infrastructure project



## Compulsory Land Acquisition ever creates losers

- █ (1) Property and the right of inheritance shall be guaranteed. Their content and limits shall be defined by the laws.
- █ (2) Property entails obligations. Its use shall also serve the public good.
- █ (3) Expropriation shall only be permissible for the public good. It may only be ordered by or pursuant to a law that determines the nature and extent of compensation. Such compensation shall be determined by establishing an equitable balance between the public interest and the interests of those affected. In case of dispute concerning the amount of compensation, recourse may be had to the ordinary courts.



### What does happen by big public infrastructure projects ?

- █ Rededication and loss of agricultural lands,

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- █ loss of agricultural lands,
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- █ land which the affected farmers mostly need for keeping their productivity.

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- land which the affected farmers mostly need for keeping their productivity.
- Uncomfortably shaped parcels and useless residuals remain.

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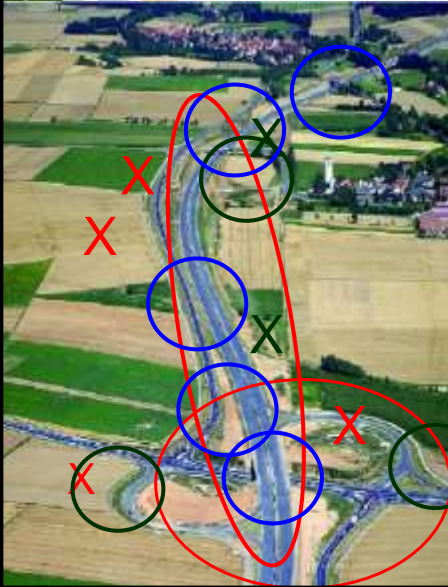


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- Public streets, rural roads and waterbodies are interrupted, which have to be bridged or passed under by high expenditures,
- even or cut off.

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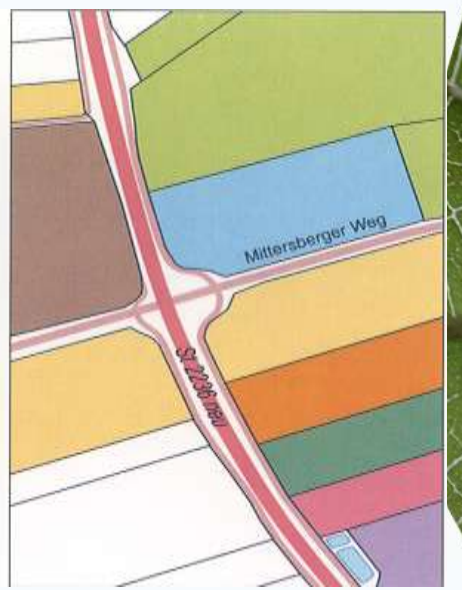
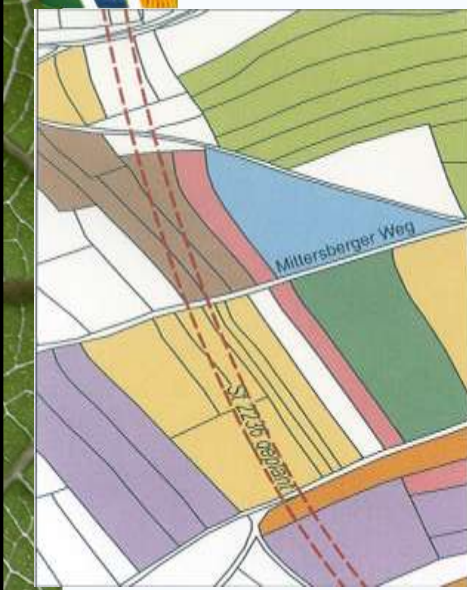


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All together: the effects of the project on the rural space are merely „repaired“, but not functionally adapted!

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## Methodology



## How to proceed?



## Appropriate land consolidation instruments

### 1. Voluntary Land Exchange of single parcels

#### Result

- █ is very limited:
  - █ finding adequate partners
  - █ „voluntaryness“ (!)
- █ not able to guarantee full acquisition of needed land
- █ is not predictable
- █ very time-consuming



## Appropriate land consolidation instruments

1 Voluntary Land Exchange of single parcels

2. Comprehensive exchange and merging of parcels

Result is very limited:

Disadvantages in agricultural production are more or less **abolished**.

- In case of voluntary participation of the land owners:
  - very time-consuming
  - needed land at needed location can not be guaranteed.
- In case of obligatory participation of all land owners:
  - provision of needed land at needed location is (regularly) guaranteed.

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## Appropriate land consolidation instruments

3. Comprehensive land consolidation

(with obligatory participation of all land owners)

Provision of needed land at needed location

- as well in the line
- as to compensation measures.

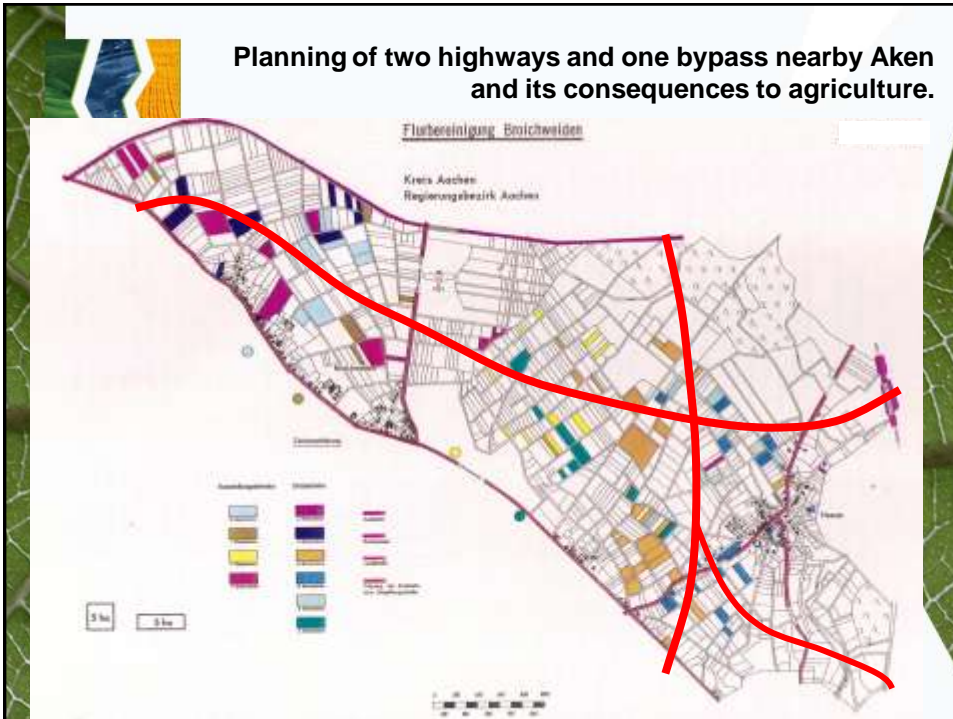
Rural infrastructure is functionally fit to the new situation (by a „Road and Water Resource Plan“).

Through a new and adapted rural road and water body network

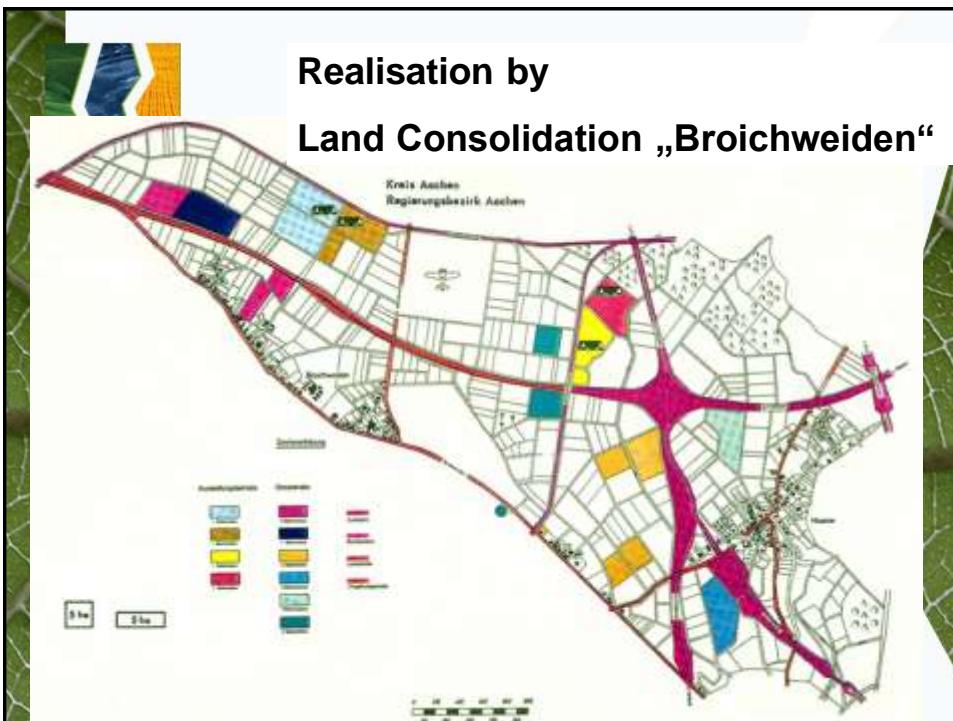
- affected parcels can be comfortably shaped,
- residuals are avoided.

„Conditio sine qua non“ for all cases is: the developer brings with enough land as compensation for the participants

**Planning of two highways and one bypass nearby Aken and its consequences to agriculture.**



**Realisation by  
Land Consolidation „Broichweiden“**





#### 4. Land Consolidation in case of permissible compulsory land acquisition

- That type of Land Consolidation can be applied, once the developer is not able to purchase the full amount of the needed land, free-hand at the land market.
- Prerequisite: Plan Approval of the project, in which the permission of expropriation is stated.
- In such case, a land consolidation can be requested, in order to apportion the loss of land among all participants of the procedure; the owners are compensated by money for their contributed land (at market value).
- Principally, the amount of contribution of land per owner is not allowed to exceed 5% of the value of land that was brought in by the owners concerned!
- Although the apportioning and contribution of land to the public project a manner of expropriation represents, this kind of realisation is favoured by the farmers compared to traditional expropriation.

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#### Calculation of the “contribution of land”

• <b>Needed land of the highway project</b>	
○ in the line	102 ha
○ for environmental compensation	88 ha
In total	<u>190 ha</u>
• <b>Available land for the project</b>	
○ already in ownership of the developer	17 ha
○ purchased by the Land Consolidation Agency	112 ha
In total	<u>129 ha</u>
• <b>Missing land (difference)</b>	<u>61 ha</u>
• <b>Magnitude of the land consolidation area</b>	2345 ha
• <b><u>Needed “contribution of land”</u></b>	<u>2,6%</u>
(61ha/2345ha)x100	
• <b>In order to don’t exceed the limit of 5% (see above), the land consolidation area concerned would have to get a <u>minimum size of</u></b>	1222 ha
(61ha/5)x100	



## Objectives of Land Consolidation in case of permissible compulsory land acquisition

- █ Apportioning the loss of land
- █ Prevention (or minimising) disadvantages on the general use of land caused by the project
  - █ shape, size and location of plots
  - █ accessibility by rural roads
  - █ reconstruction of common facilities



## Chain of land consolidation projects occasionally the construction of the high-speed-railway Mannheim- Stuttgart



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## Summary

- Each kind of LC can support land acquisition in context of big public infrastructure projects.
- Its impact depends on the gravity of the encroachment in the given rural infrastructure and ownership / farm structure.
- The strongest instrument is applied in Germany by the „Land Consolidation in case of permissible Compulsory Land Acquisition“.
- That instrument has actually high and further increasing relevance within the political and farmer's scene.

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### Questions:

- Why is that instrument so very in demand by developers and farmers?
- Which role does play that LC instrument?
- Which preconditions have to be fulfilled, in order to be able to apply that instrument?
- Why does need that instrument adequate legal rules?

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## Sector planning versus

## Comprehensive Land Consolidation

- █ project plan approval procedure is normally restrained to the direct vicinity of the project
  - █ problem solving somewhat spatially restricted:  
e.g. rebuilding of deleted access ways, rebuilding of bridges to reconnect rural structures, replanting of uneconomic or close-by parcels
- █ road and water resources plan with accompanying landscape conservation plan may cover the whole consolidation area
  - █ far-reaching upgrading to minimise disadvantages/ to achieve betterment for agriculture and environment
  - █ involving the body of participants and the developer
  - █ considering the permanent maintenance of public/common structures
  - █ (eventually improve the common facilities)

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