

### Getting Better Acting, Learning, Sharing

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### **A short introduction**



Surveying in land consolidation (in The Netherlands): The implementation of these projects requires a database, GIS and surveying technology. New (spatial) data are generated during the design and the data are established as new boundaries in the field.

parties. My main task is advising about (legal)

process-steps and so ensuring the rights of owners.



### **This presentation**

Getting better (at it)

-Acting on the "watersnoodramp 1953"

- Recovery; formal landconsolidation can help
- -Learning from these experiences
  - How to be prepared in the future?
- -Sharing
  - Knowledge and open data to help act in future



### **Getting better? What happened?**



If we want to be **prepared** in the **future** we will have to look to the **past**.

The year 1953 is a year when a natural disaster hit The Netherlands.



1835 people died and more than 150.000 hectare was flooded.





Most known are the technological actions/solutions like the Deltawerken:

The construction of new dams, barriers and heightening existing dams. These works protect us from flooding.





5 | Getting Better, Acting, Learning, Sharing

### Acting

Less known is that, to make land suitable again for agricultural use a formal landconsolidation was executed.

The consequences in the rural area were dramatic. Many farm houses and roads were so severely damaged that they could not be used.

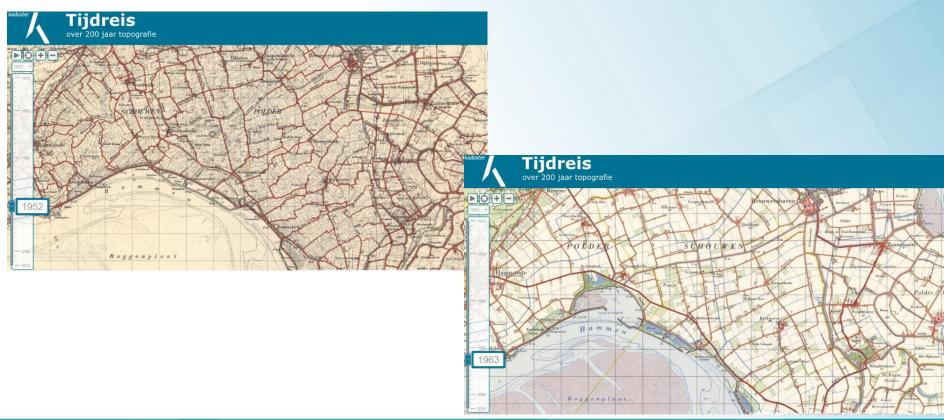
Next to that; the soil was drenched with salt water

Results: 440 km primary pipelines (water) 550 new bridges and culverts 110 dams

660 km new roads Parcels were merged together and upgraded; new ditches, drainage Farm holdings were enlarged en relocated.

And....(remember it was 1953...) 1160 houses were connected on the electricity network and 830 on the water network

### **Acting - result**



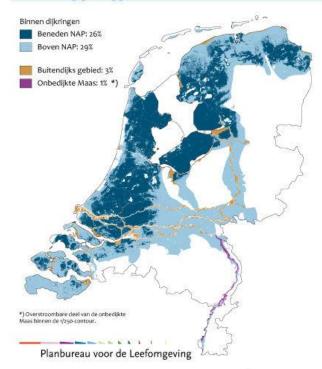
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### So, we're safe!?

### Quote from our Minister for Infrastructure and the Environment:

"Climate change is having considerable consequences in this vulnerable delta: higher storm surges at sea, an increased volume of water passing through rivers, more frequent downpours, heat and drought. We need stronger dykes and wider rivers, and more options for retaining rainwater in those places where it falls. This will cost a great deal of money and require plenty of space"

#### Overstromingsgevoelig gebied



Natural floodplains are being used intensively for functions like housing and agriculture.



### kadaster

## Learning

"We need stronger dykes and wider rivers, and more options for retaining rainwater in those places where it falls. This will cost a great deal of money and **require plenty of space**"

Landconsolidation has changed since the fifties. From a more top – down perspective it has evolved and often a more bottum-up approach is chosen.

You can ask yourself; Isn't watersafety an issue that SHOULD be regulated by the government? Will people cooperate when the goal is bigger than individuals? Will the result be maximal? Should it be?

I invite you to join me at my presentation at the working week!



# Sharing

As mentioned, in the case of landconsolidation (an voluntary reallotment) a more bottum – up approach developed. And the role of the advisors changed from an executing role into a more facilitating and advising role.

A great development is the possibility to share data with the public so they have the facts and figures to make and realize their spatial plans

We have introduced internet portals for rural and urban landconsolidation, it provides people with lots of information and an opportunity to actively take part in the process.

## Sharing

A lot of data used is geographical data. A lot of data is open and free available.

This helps to make better plans....





## Wrap up

I told something about

- -Acting after the "watersnoodramp 1953"
- -Learning from these experiences, how can our experiences help in the future?
- -And...Sharing, it's easy and available so use it!

### By sharing, we all learn more and we can take better actions and descisions every time!

