Integrated Protection of Surface- and Groundwater in Agricultural Regions

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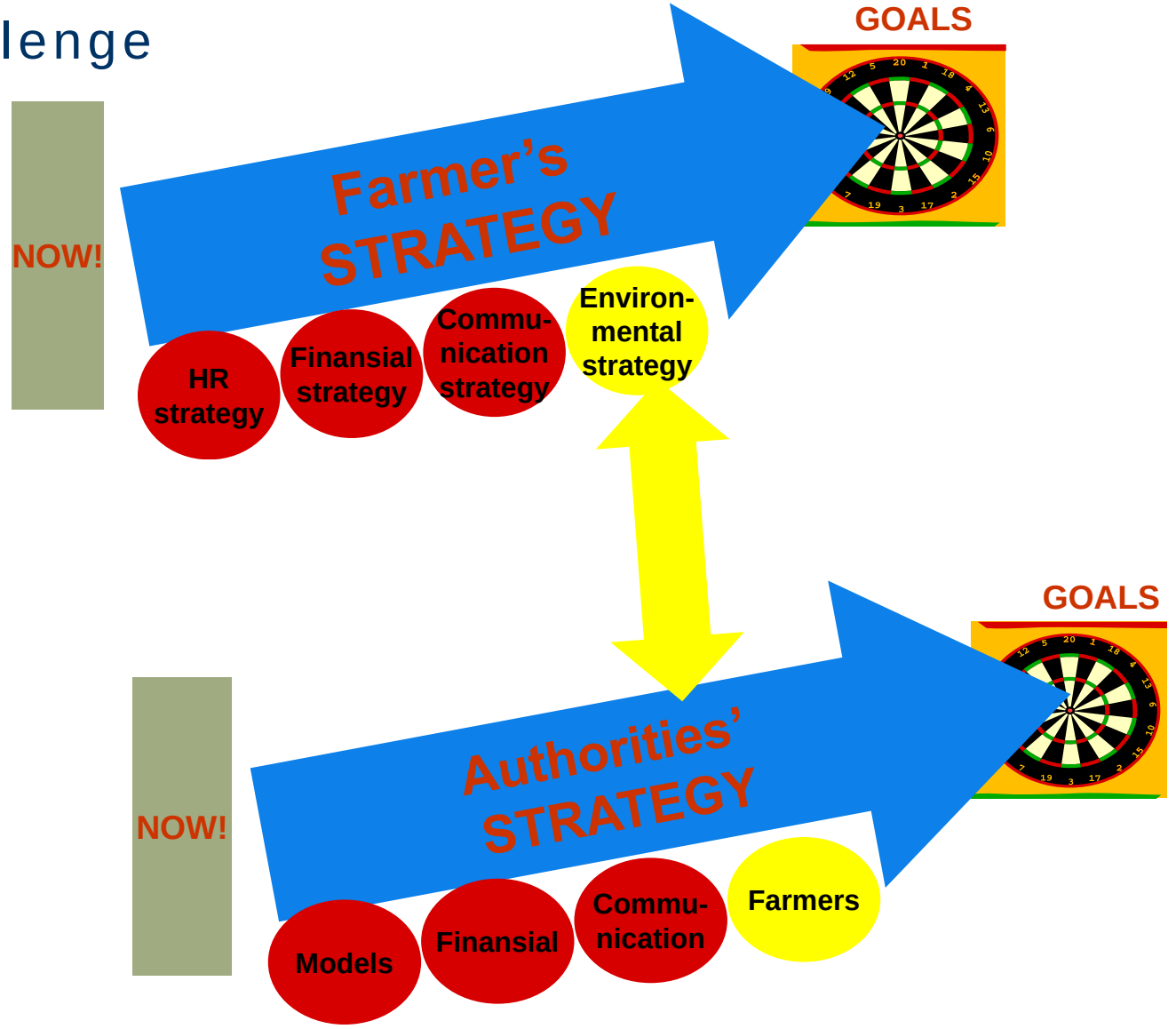
New farming systems, research and innovations in the agricultural sector: implications for water issues

- What are the effects of water from environmentally-friendly agriculture? Are there clear differences between this type of farming and more conventional farming?
- What do we want farmers to do and what are the key challenges for them? Are there limits to what they can do id they are to continue farming?
- What are the most urgent research needs?

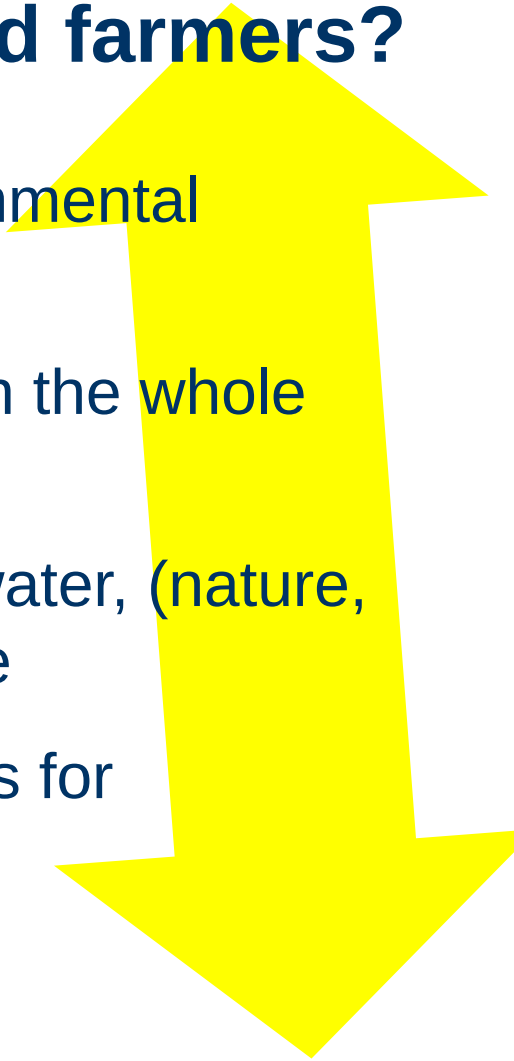
- Experiences from the AGWEAPLAN-project

The challenge

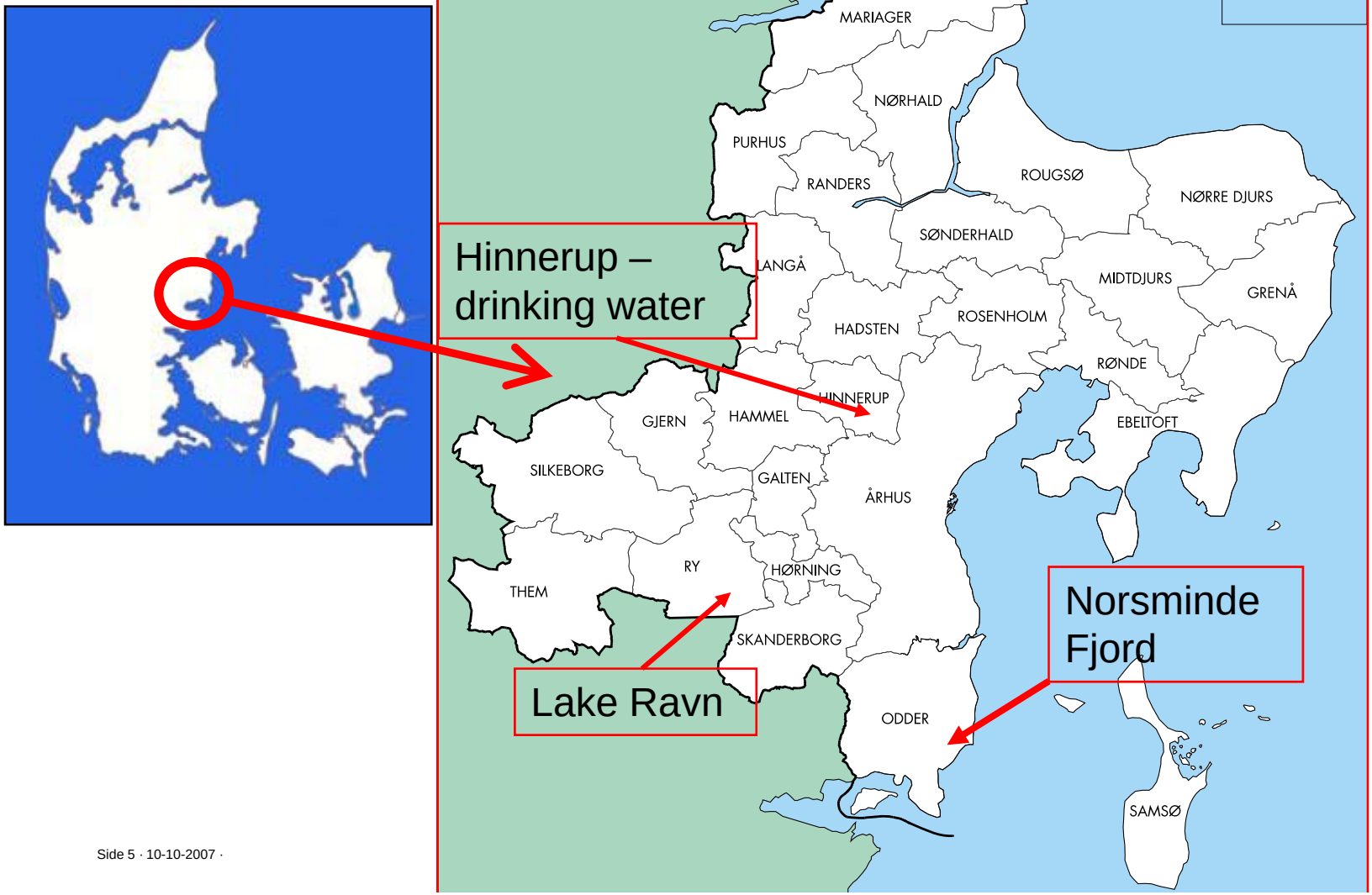


How can we achieve good environmental status with success for society and farmers?

- The farmer need to understand the environmental challenge for the farm
- Involve the farmers from day 1 and through the whole process
- Use a holistic process where production, water, (nature, air and soil) are dealt with at the same time
- Co-operation creates cost effective benefits for environment



Three Pilot Areas in AGWAPLAN



Tools

Concept for
Integrated Advising
on farm level and
on catchment level

GAP (Good Agricultural
Practice-manual)

DIS
(Data Information System)

GAP

- GAP-catalogue of measures developed in co-operation between agriculture and authorities
- Examples of what the farmers do
  - Reduction of Nitrogen load in specific areas
  - Change in crops - catch crops
  - Non-cultivated zones
  - Wetlands
  - Technology

The farmers just do it in order to survive as farmers in the society

Development of business

Outcome & Benefits

Experience from the AGWAPLAN project relevant for future implementation of WFD

- Improving environmental conditions
- Cost-effective implementation of measures
- Reduce the impact on environment on overall agricultural productio
- High degree of dialog between all participants
- Personal interest and commitment by involved farmers
- Public awareness and acknowledgement of efforts made by farmers

Most urgent research needs

- Improved knowledge on hot spots (P)
- Knowledge on retention of N (transport from rod zone to recipient
- Effictivenes of seminatural/ constructed wetlands in relation to retention of N
- How to achieve goals in the WFD with climate changes