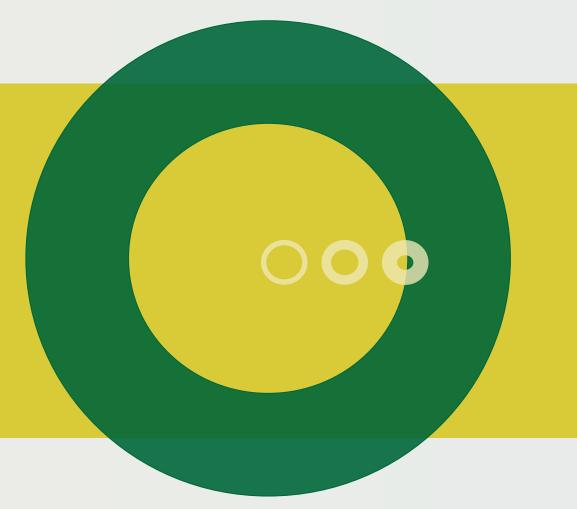


# **Experience groups in Danish advisory services**

Jens Erik Jensen VFL e-mail jnj@vfl.dk

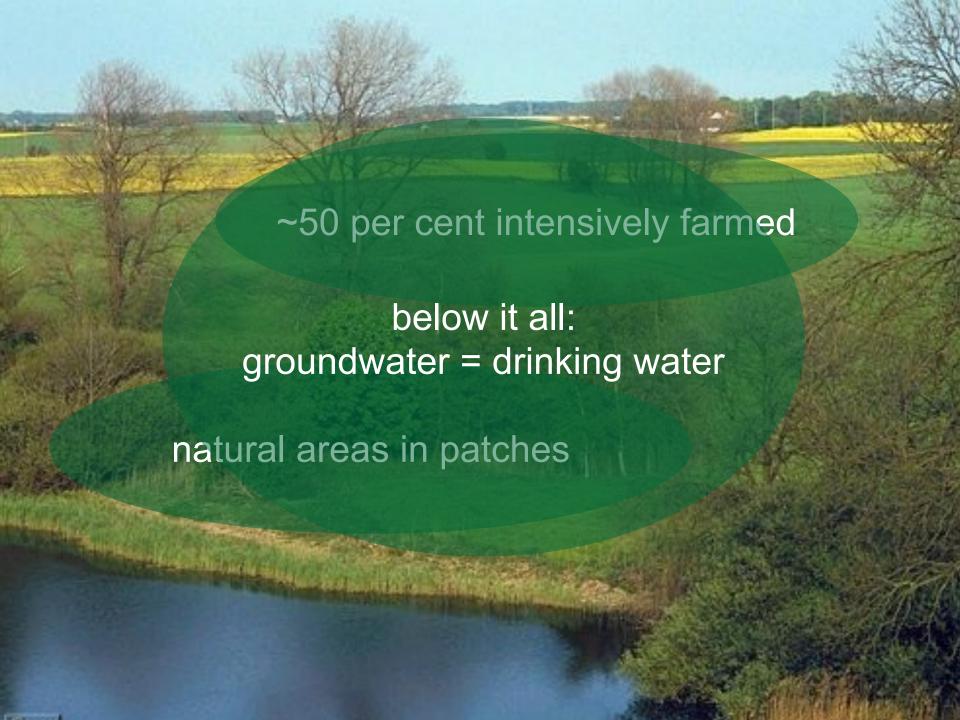








The police must be much tougher if we want to protect our nature and ground water. Higher taxes on the most harmful poisons is simply not enough. Cartoon: Jørn Villumsen



### **Danish Action Plans**

- 1986: Pesticide Action Plan I
- 1997-99: Bichel Committee
- 2000: Pesticide Action Plan II
- 2003: Pesticide Plan 2004-09
- 2009: Green Growth Plan
- 2012: Protect water, nature...
- Details available on internet

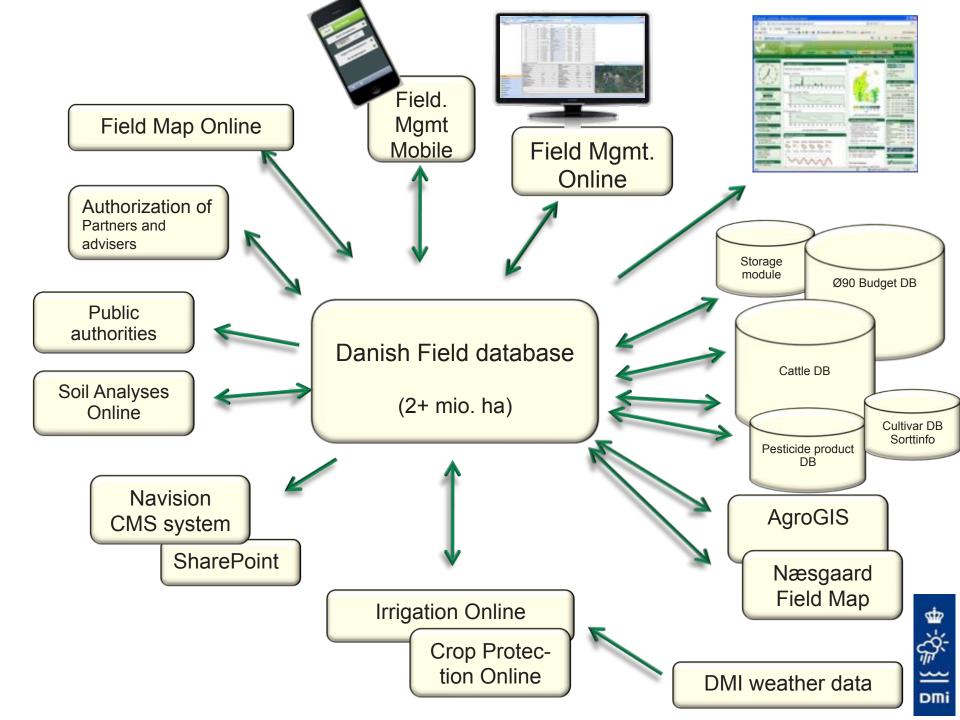
25+ years of focus on crop protection and many successes!



## Innovation in crop protection – Danish strengths

- Strong, unified advisory service
  - Farmers own farmers run farmers pay
  - Strong infrastructure
  - Efficient information flow internet and apps

www.landbrugsinfo.dk



## Danish Agricultural Advisory Service (DAAS)



#### 2013:

- Partnership
- 31 regional advisory companies and Knowledge Centre for Agriculture in Skejby
- O 3,600 employees
- Turnover approx. EUR 350 million



## Relations between DAAS and farmers

Farmers are:

Owners
Users
Customers

Key words:

Best and cheapest advisory services Impartiality Non-profit





## **Knowledge dissemination**

- 105,000 documents
- 27,000 page references per day
- 55,000 visitors per week

- 50 interactive programs
- plant protection tools
- calculation of animal units and area requirement
- weather forecast
- 2.3 million people visit www.landbrugsinfo.dk and www.landmand.dk every year

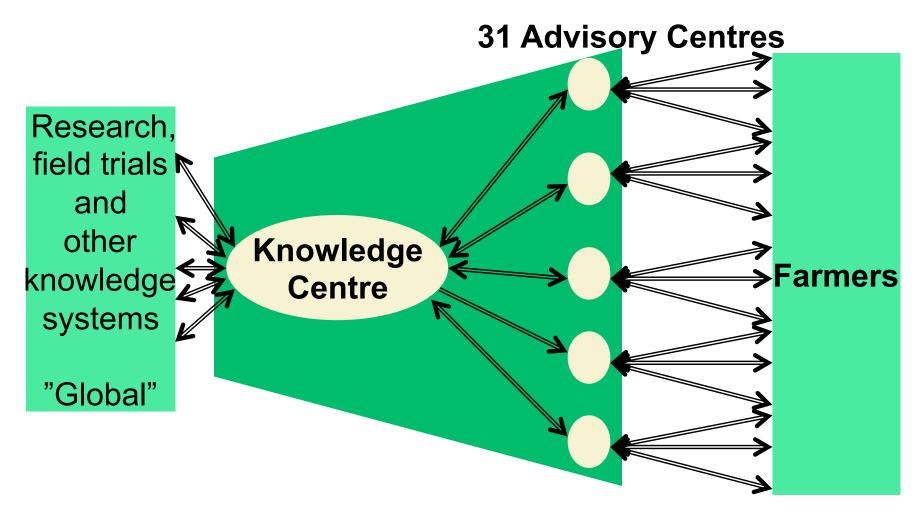








# Danish Agricultural Advisory Service Knowledge moves both ways!



### One-on-one or group-based advice?

Traditional approach



>20 years experience



## Individual advisory activities

Year	No. fertilizer plans	No. field mgmt. plans	No. subscribers to newsletters	No. subscribers to SMS-news
2002	36927	20297	17766	
2003	35491	19813	17549	
2004	34600	17228	15710	
2005	35779	17406	13355	936
2006	33321	17345	15127	2006
2007	31754	17705	10271	4342
2008	32067	17354	9938	7992
2009	29863	17563	13267	11044
2010	28794	19007	13727	11484
2011	27744	17380	13559	11236
2012	26014	19350	12699	12079



Experience
Groups
(ERFA-groups)

Using experience groups to share knowledge and reduce pesticide use Roll Thompson Forders, Ford Messang Friends

Source: ENDURE IPM Training Guide

## Experience (ERFA) groups

- Developed in Denmark early 1980s
- Improved concepts late 1980s
- 5-10 farmers and 1 or 2 advisers
- Majority of groups: Professional farmers
- Allows for sharing of costs
- Normally meetings every 7-14 days during season – occasional meetings in winter
- Venue changes from meeting to meeting
- Openness and willingness to share required
- Age / Production type / Knowledge

## Tell me and I will forget; show me and I may remember; involve me and I will understand



Number of experience/ERFA groups

Hallibei	OI CAPCITO	ICC/LIXIA 9	1 Oups
	Total no. ERFA	No. organic ERFA	No.
Year	groups	groups	participants
2002	659	77	4455
2003	611	68	3991
2004	605	60	3826
2005	549	53	3699
2006	565	66	4104
2007	486	44	3230
2008	429	49	3072
2009	408	44	2867
2010	409	40	2966
2011	415	32	3091
2012	415	37	2977

Data source: Oversigt over Landsforsøgene

Low pesticide use: Competition among farmers for best results



## **Advisory aspects**

- Take advantage of dynamics in group
- Important to set new goals each year
- Farmers naturally think in systems rather than single factors
- Uncertainties must out in the open
- Farmers challenge/compete with each other for low pesticide use or other skills
- Adviser often more facilitator than expert
  - Alternatively different roles among advisers
- 'Openness internally, confidence externally'.

# Beer and/or coffee promotes discussion! Social aspect is very important



Rädgivning Svin Tværfagligt

Spinist hade

Planteni

Algrader

Bevi

Orienting ConsulCAP

Gedskning

Havebrug

Jordbearbejdning

Jordbund

Landsforsag og resultater

-

**Plantekongres** 

Plantevern

Dehandingsindeks

Bekæmpelsesnider

Integreret

plantebeskyttetse - IPM

PM - Demotrug

Nedaret pestiodforbrugst i

getheri og frugtavi Opfelgningskursus til

spradebevis/ certifical

Pesticithandlering

Pesticidplan

Plantesygdomme

Plantevern Online

Skadedyr

Sprapeteknik

Ukrudt

Varsing/registreringsnet

Vankstregulering

Produktionerådgivning - merk Produktioneskonom - plantesvi Do at her: Landings info > Plansavi > Plansavi arm > Integrant plantabaseymise - IPN

#### Integreret plantebeskyttelse - IPM

IPM handler især om at opnå tre ting

- At forebygge problemer med ukrudt, sygdomme og skadedyr
- At sproite efter behov

Byggeri Energi Fjerkræ Får Heste IT Jura Kvæg Ledelse Maskiner Milje

At få bedre økonomi - ikke mindst på sigt.

Vigtige IPM-redskaber er bl.a. et godt sædskifte, resistente sorter, varslinger, opsyn i marken, nedsatte doseringer, radrensning og at undgå resistens over for midlerne.

#### Nyheder



#### Pas på afdrift ved efterårssprøjtning

Selv meget små mængder af pesticider kan gøre skade eller måles, hvis de kommer på afveje.

Less mere



#### Ida Auken besøgte Magerholm Frugtplantage

Miljøminister Ida Auken besøgte onsdag den 14. august Magerholm Frugtplantage i Vejstrup.

Lees mere



Filmen "Sprøjt marken mindre" handler om IPM og brug af ny teknologi i planteprodyktionen.

Se filmen

## **(**

#### Nye videoer

- . Brug sensorer og få større effekt af svampemidlerne
- Alle videper

Bliv et hak bedre til at bruge sortsblandinger

#### Log på

Imaged

Clent kodeors?

Få adgang til Landbrugsinfo

#### IPM på sociale medier

Veiret Økologi Økonomi

Pli på Facebook

Spot på hvedemarken hvedespot blogspot di:

Pit i frugtplantagen iprs-frugt.blogspot.dli

I marken med Lars og Lars imarkenhosiars blogspot di:

#### Demonstrationsbrug



Fem landbrug og to gartnerier arbejder aktivt med at udvikle PM.

Little more

#### Nye artikler

Enfaninger med arbrevning of Septonstimeren i 2013 13-11-13

## First DK co-innovation experiences

 Speed up innovation process by involving end users and stakeholders from beginning









## Working idea

- Grow wheat with better feed and milling quality while complying with Danish regulations (N-quotas) and IPM
- Grow wheat in rows
  - Incorporate fertilizer / slurry
  - Mechanical inter-row hoeing
- Grow variety mixtures for feed
  - Compose best possible mixtures (yield, overwintering, disease resistance, resistance to lodging, etc.)
  - Optimize/minimize funigicide inputs



## Look at the happy faces ;-)





