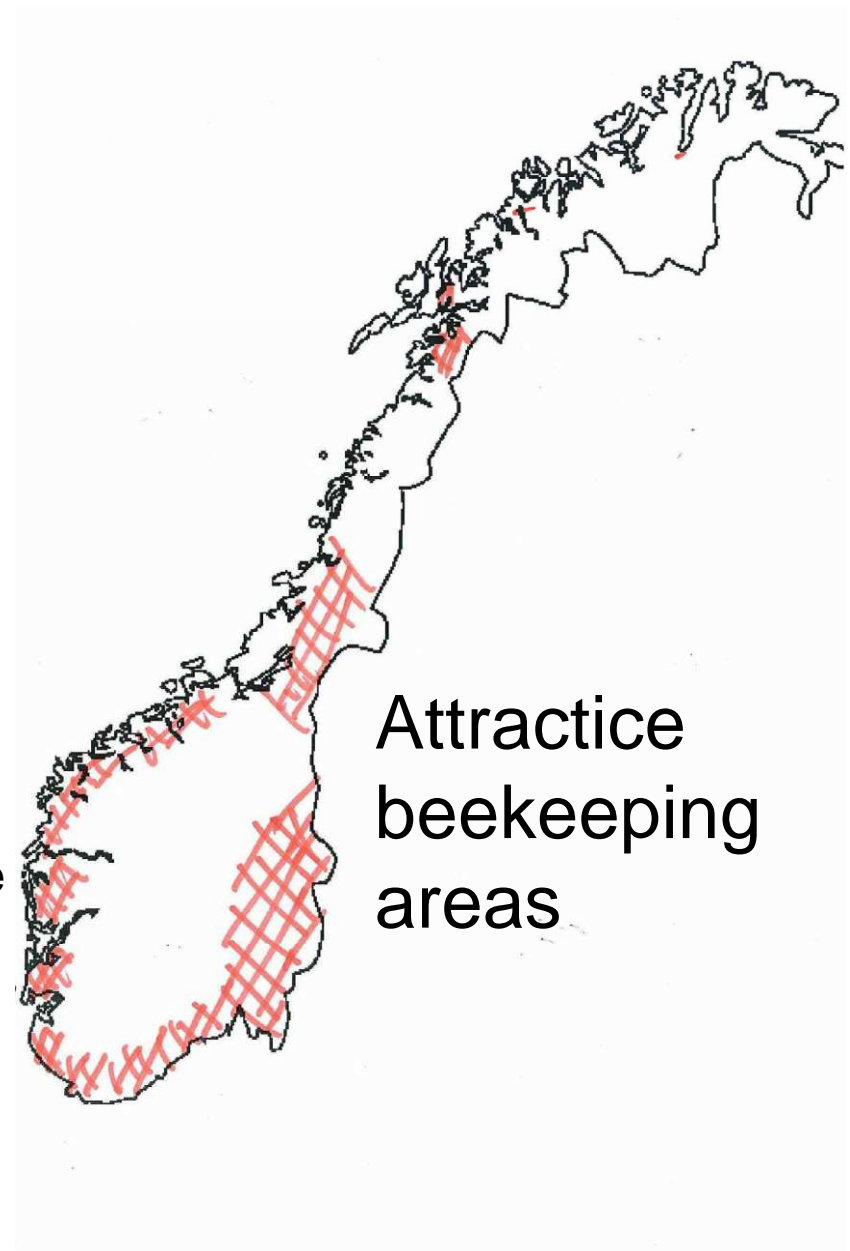
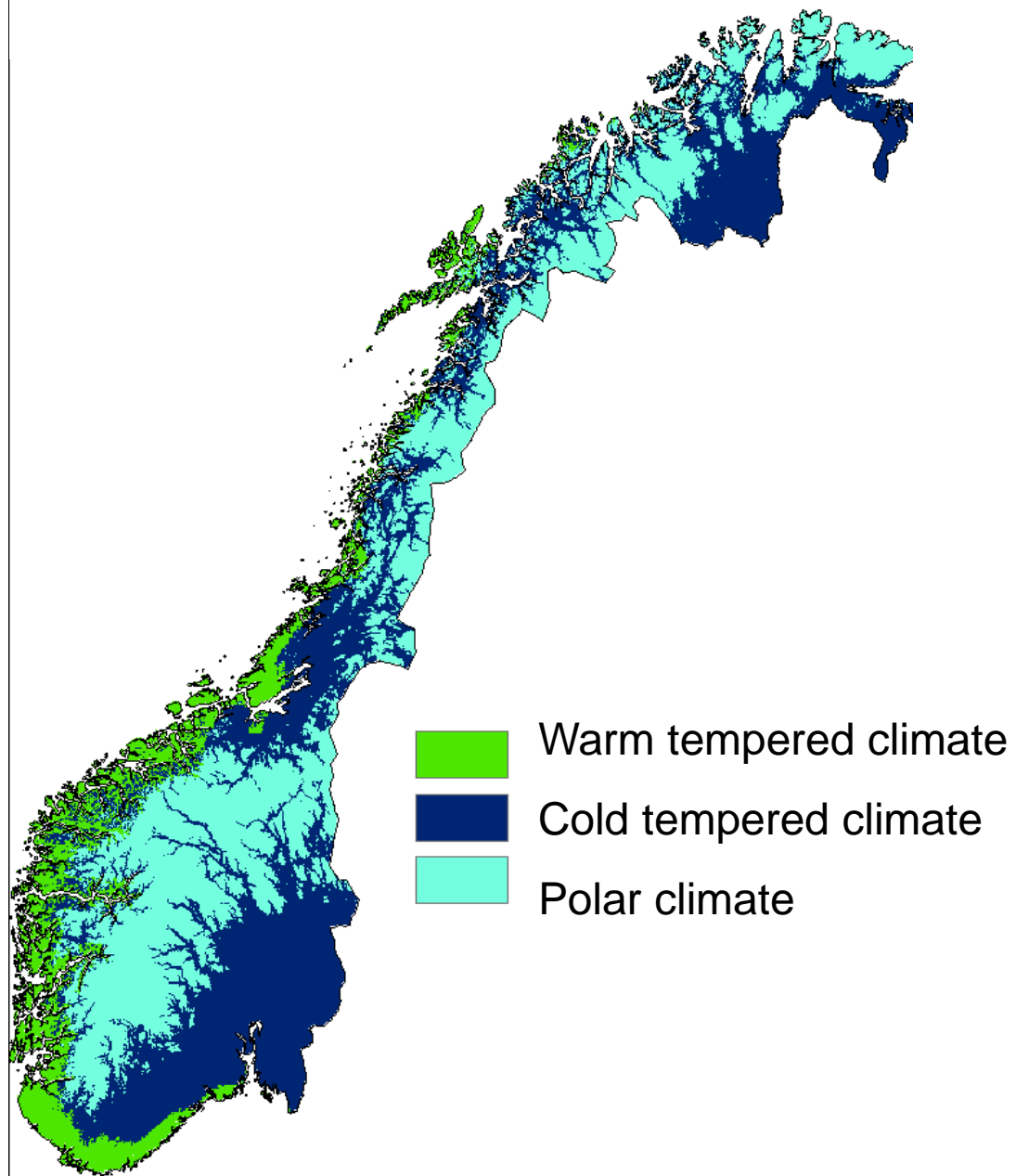


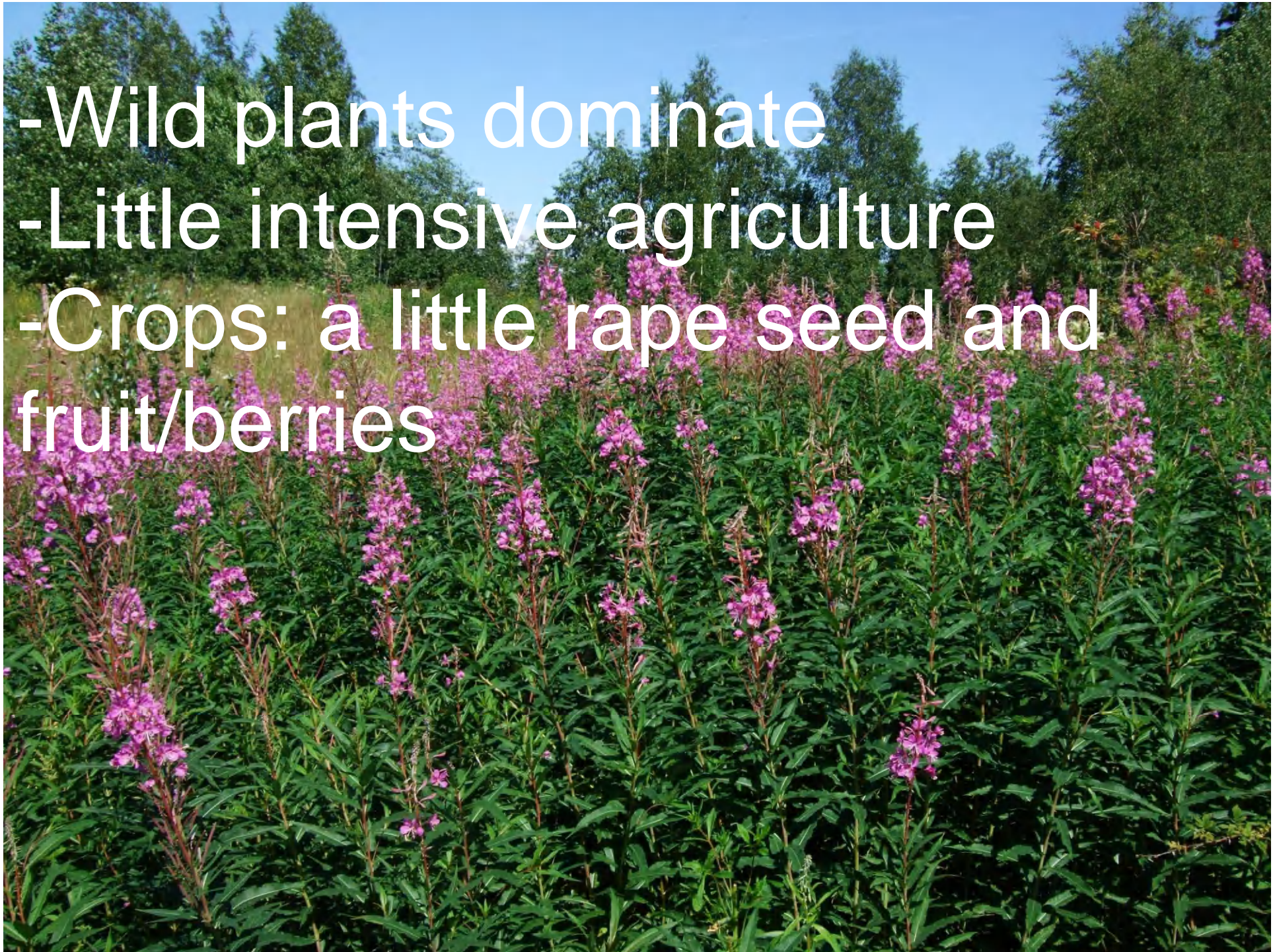
NORWAY







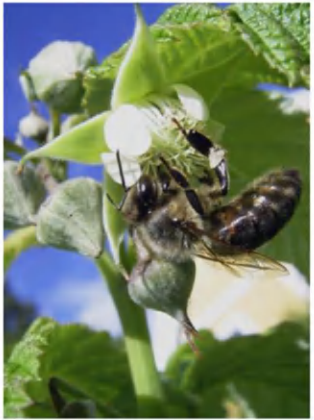
- Wild plants dominate
- Little intensive agriculture
- Crops: a little rape seed and fruit/berries



Typical honeys

Mixed floral honey, dominated
by wild raspberries

Heather/ ling honey





Some pollination of fruit and berries

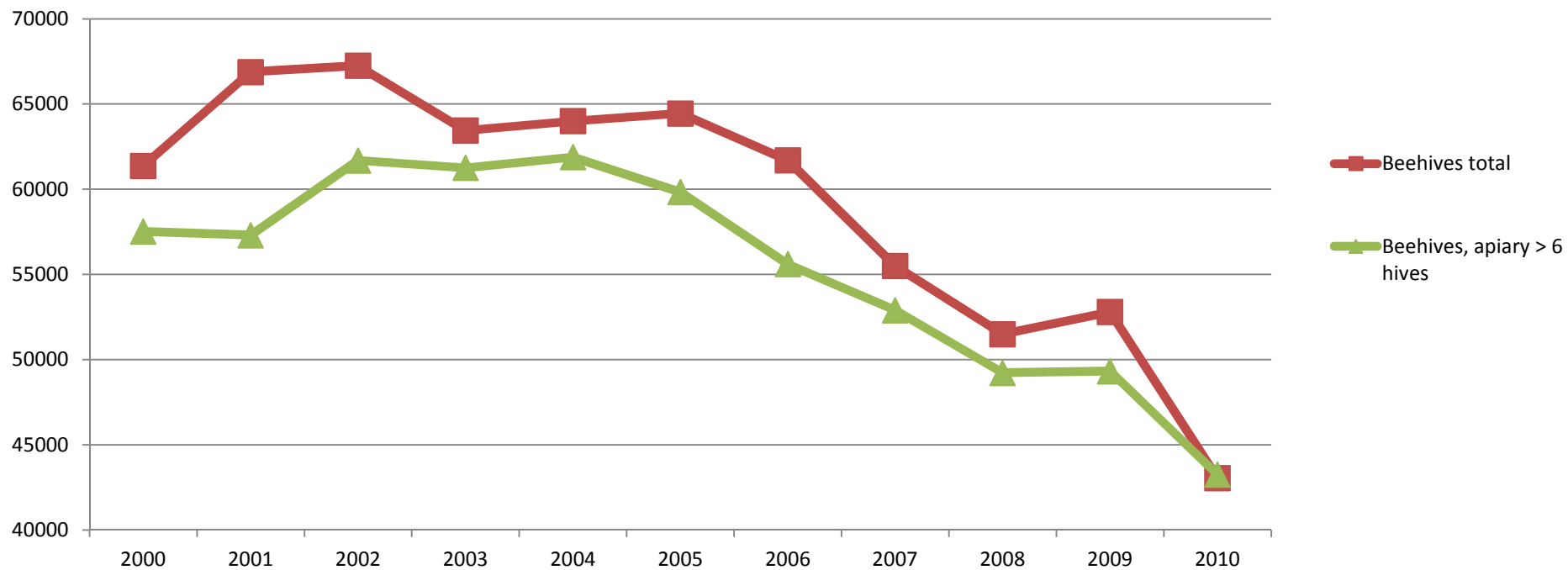
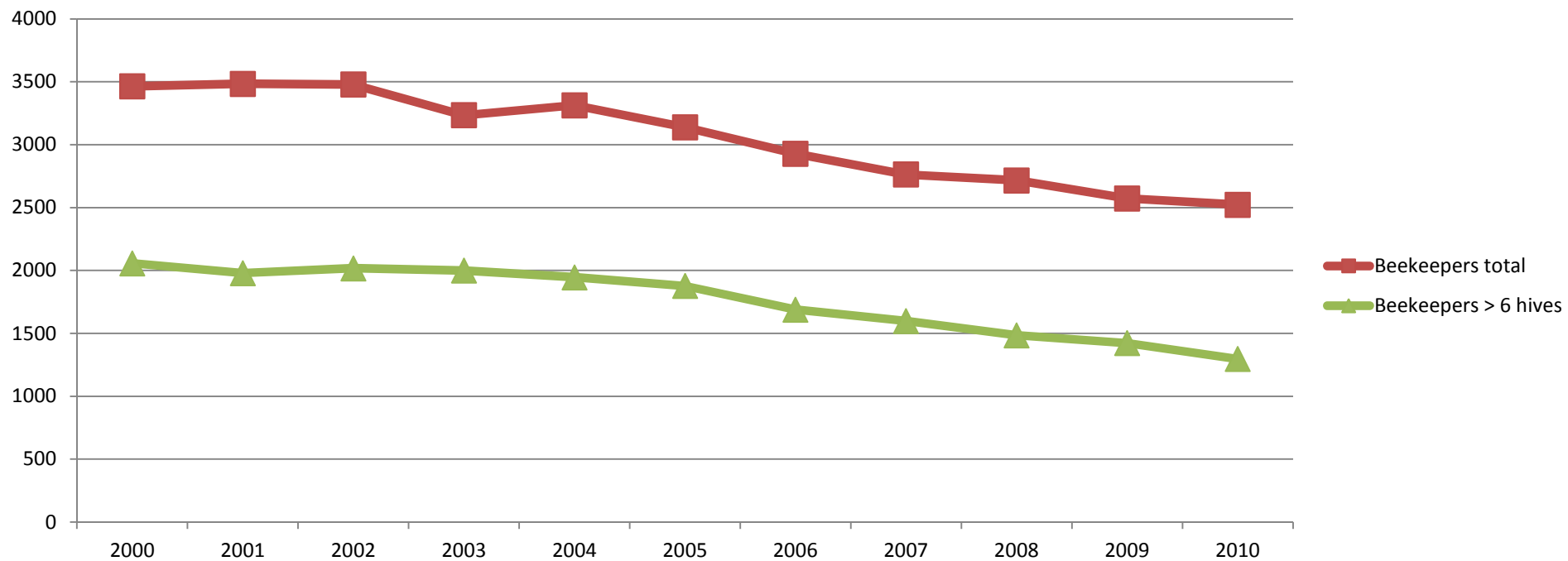
Nordic-Baltic Bee Council meeting

Nordic Baltic Bee Research Symposium



Beekeeping in Norway

- 3.000 beekeepers (almost 5 mill inhabitants in Norway)
 - Approximately $\frac{1}{4}$ of the beekeepers migrate with aprx. $\frac{1}{2}$ the hives
- 50.000 hives
- 1.500.000 kg honey
- 0-100 kg honey pr. Beehive
 - Professional beekeepers average: 40-60 kg pr hive



Norwegian standard

1/1-frame: 36,5 X 26 cm

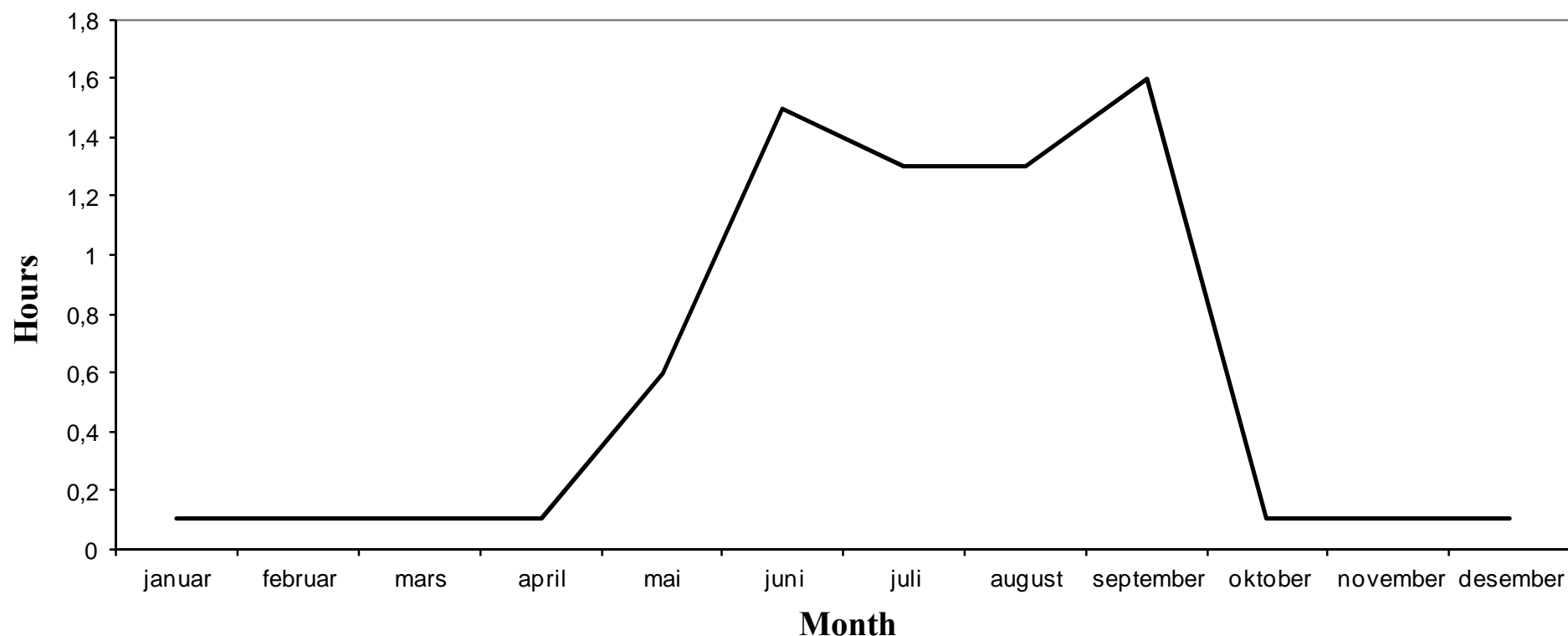
1/2-frame: 36,5 X 16 cm



Hive: the norwegian standard



Average hour use pr hive during a year



January/february/march: the bees spring cleaning trip

March/april/may: feeding if necessary

Mai/june/july: swarm control/prevention

July: important nectar period (mixed summer honey), harvesting summer honey

August: traveling to heather area, important nectar period, harvesting ling honey

September: Feeding for the winter

November/desember: oxalic acid treatment



Varroa
Varroa destructor

Tracheal mite
Acarapis woodi



Varroa: oxalic acid



Main cause of
mortality: beekeeper-
related



Winter losses

(1999-2008):

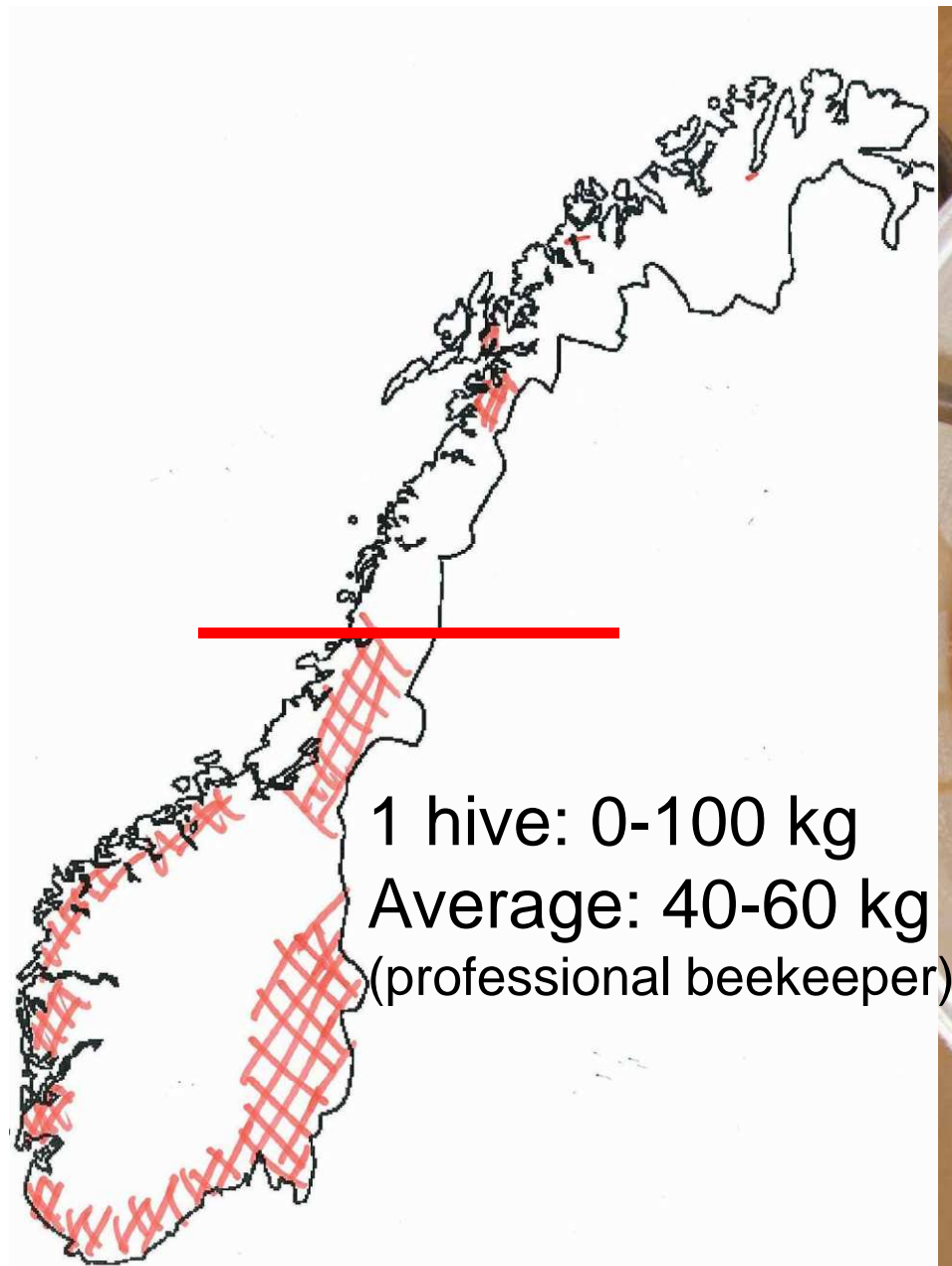
10.3% with varroa

6.3% without varroa

Importation
legislation:
The EU laws

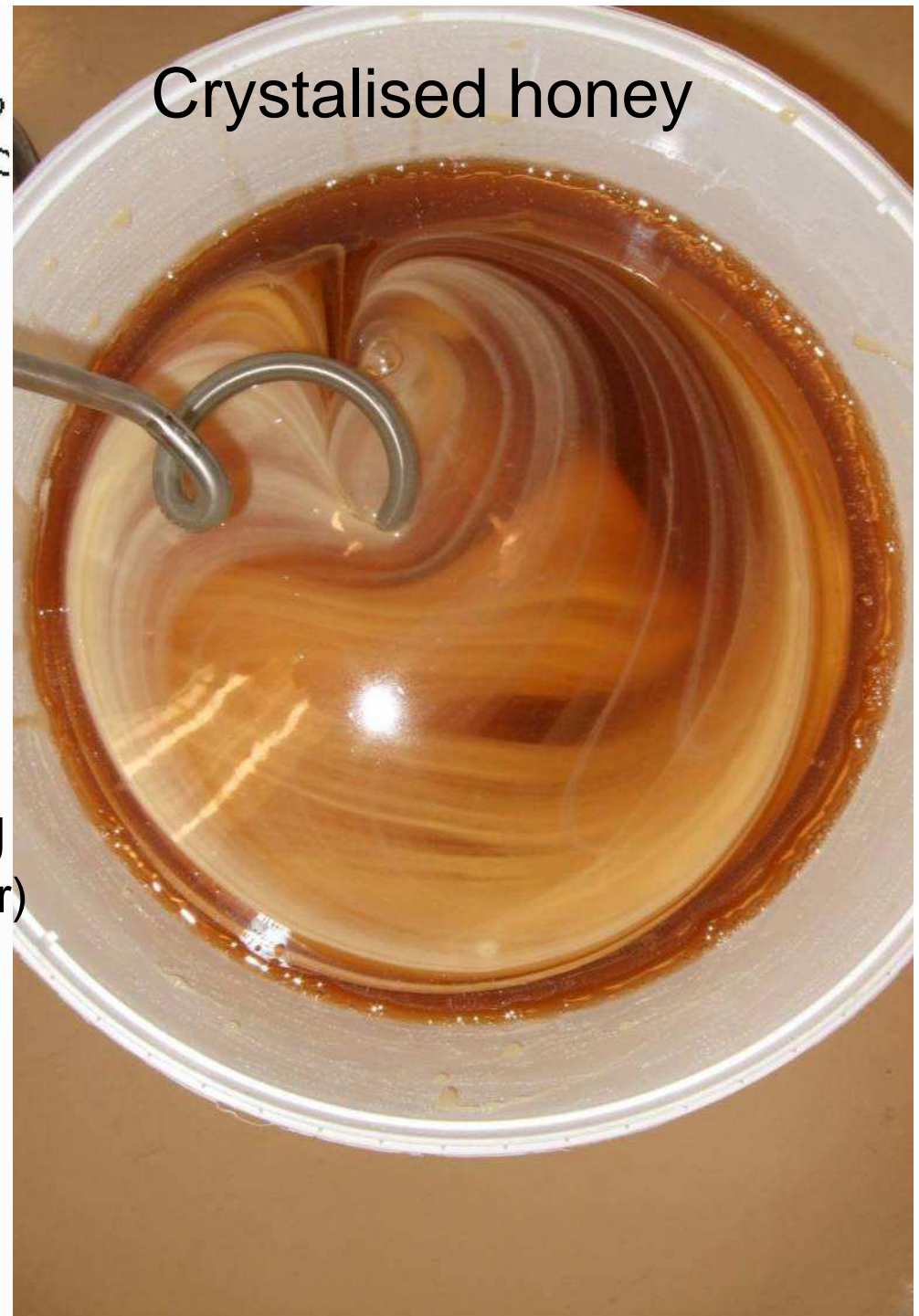


No veterenerian drugs!
Only organic acids and biotechnical
methods to fight diseases.



1 hive: 0-100 kg
Average: 40-60 kg
(professional beekeeper)

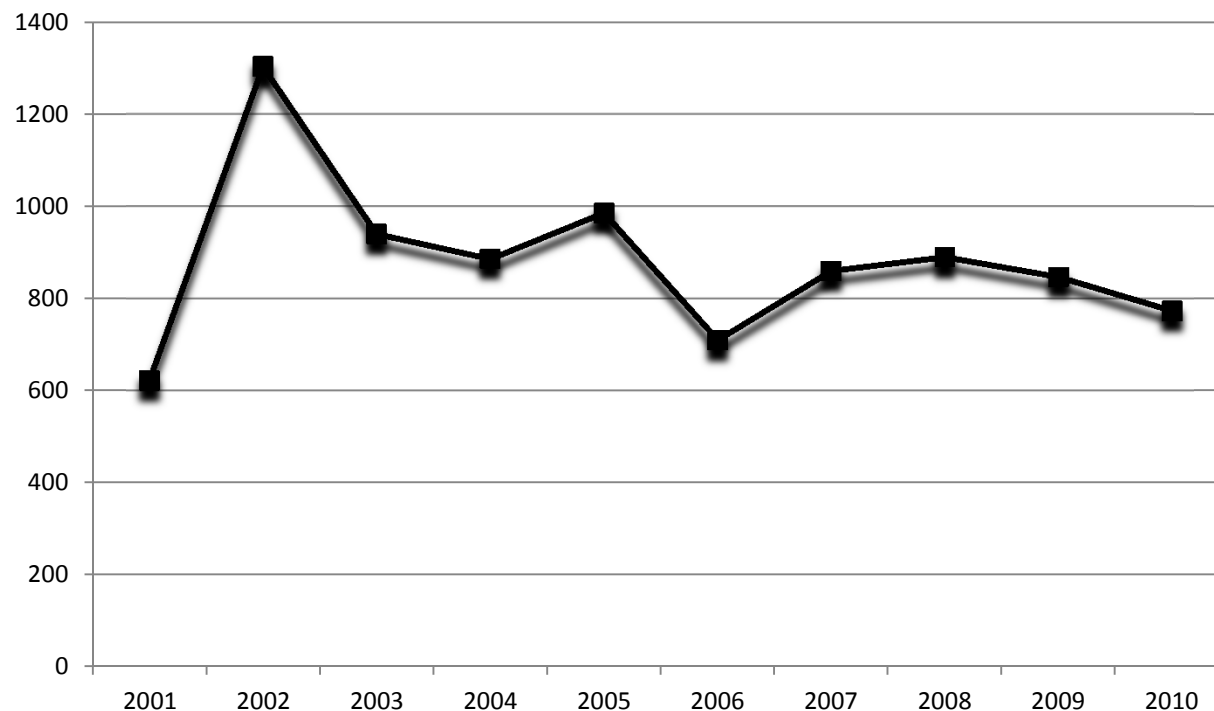
Other products: no!





Honningcentralen

(honey cooperation)



Average sale:
1100 tons

Average import:
220 tons

Export: 0

Tonns of honey pr year delivered to
Honningcentralen.
Average: 862 tonns pr year.



National queen breeding program

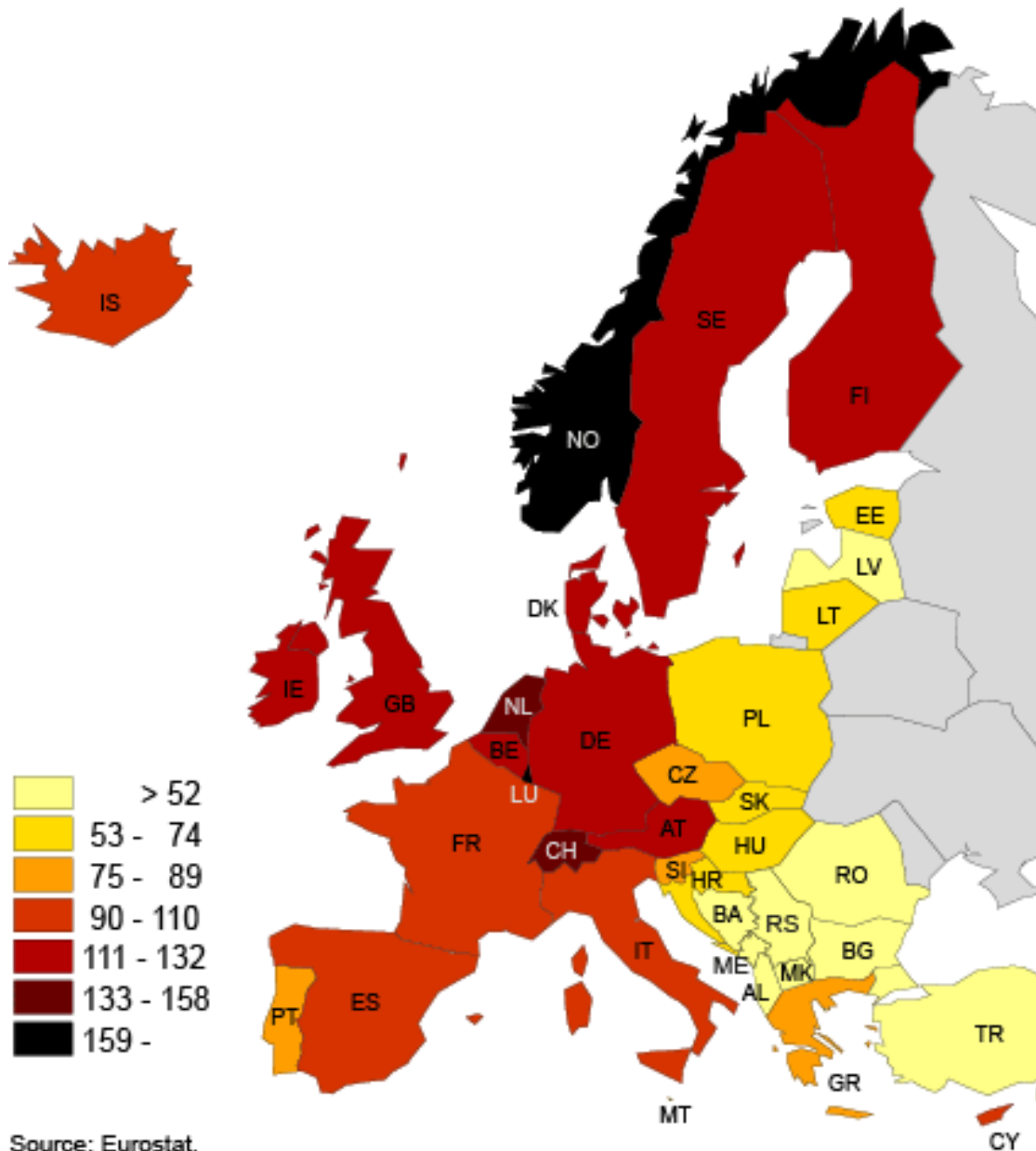


Agricultural support:
€ 39/ \$ 53/ NOK 300
Pr hive pr year



Import tax

Volume indices for GDP per capita, price level adjusted.
Preliminary estimates 2010. EU27=100



Source: Eurostat.

Map data: Norwegian Mapping and Cadastre Authority

Main challenge



The Future?

