

# Traditional low producing dairy breeds used as suckler cows, a threat or a future oriented solution?



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# Suckler cow production is increasing in Norway

- > General trend, last decade:
  - > Total dairy cow population is slightly decreasing (- 10 %)
  - > Total suckler cow population is increasing (+ 152 %)  
(imported beef breeds and cross breeds)
- > “Traditional low producing” dairy breeds:
  - > Small populations (less than 1000)
  - > 30-80 % are in suckler cow production



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# Traditional dairy breeds

- > Native

- > Endangered

- > National conservation programmes

  - > Main goal: Increase population sizes

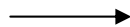


1000 cows

Sided Trønder  
and Nordland



Telemark

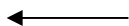


650 cows

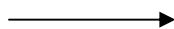


200 cows

Døla



Western Red  
Polled

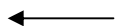


200 cows

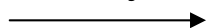


170 cows

Eastern Red  
Polled



Western Fjord



850 cows



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# Norwegian Red (NRF)

> 98 % of all dairy cows in the national dairy recording scheme in Norway are NRF

= 233 000 NRF  
COWS





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# Differences in breeding goals

## *The six endangered breeds*      *NRF*

- >Milk production
- >Avoidance of inbreeding
- >Breed type
- >Pure breeding

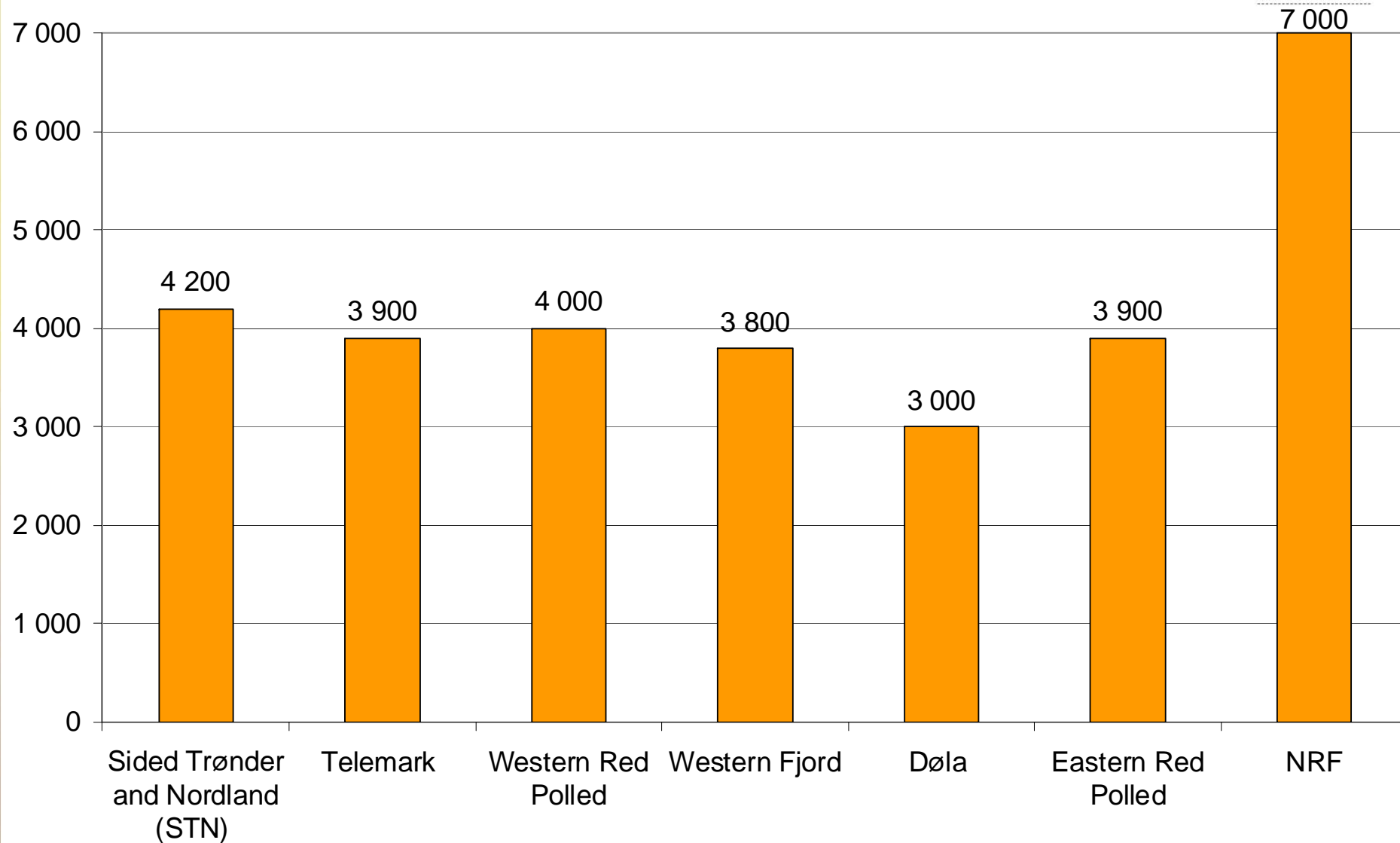
- >Dual purpose breed
- >Broad breeding goal
- >Both production and health traits included
- >Included progeny testing of 250 daughters
- >Relationship index in addition to breeding index
- >Ne = 173 (2008)



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# Annual milk yield, Norwegian cattle breeds

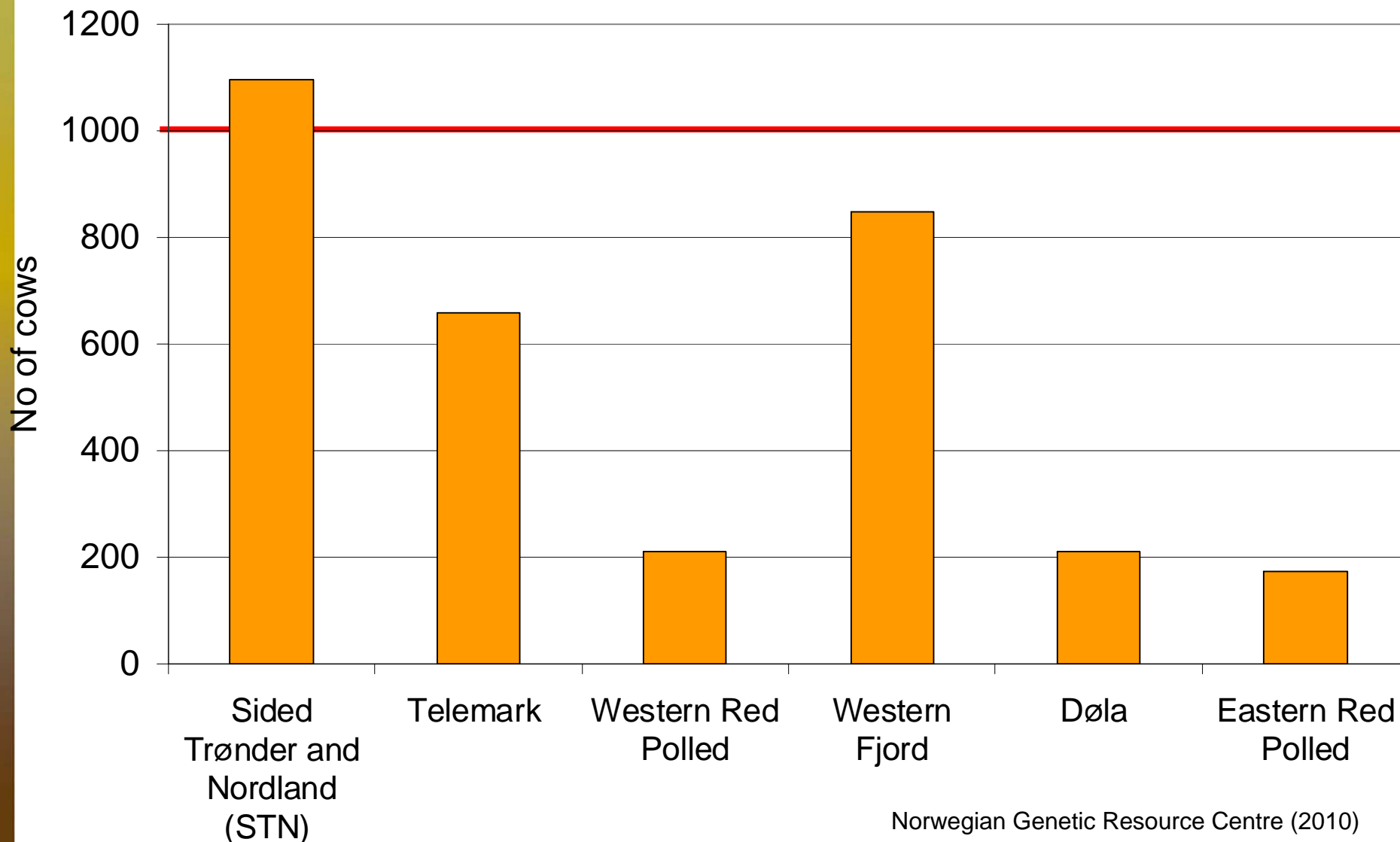




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# Population sizes of the endangered breeds



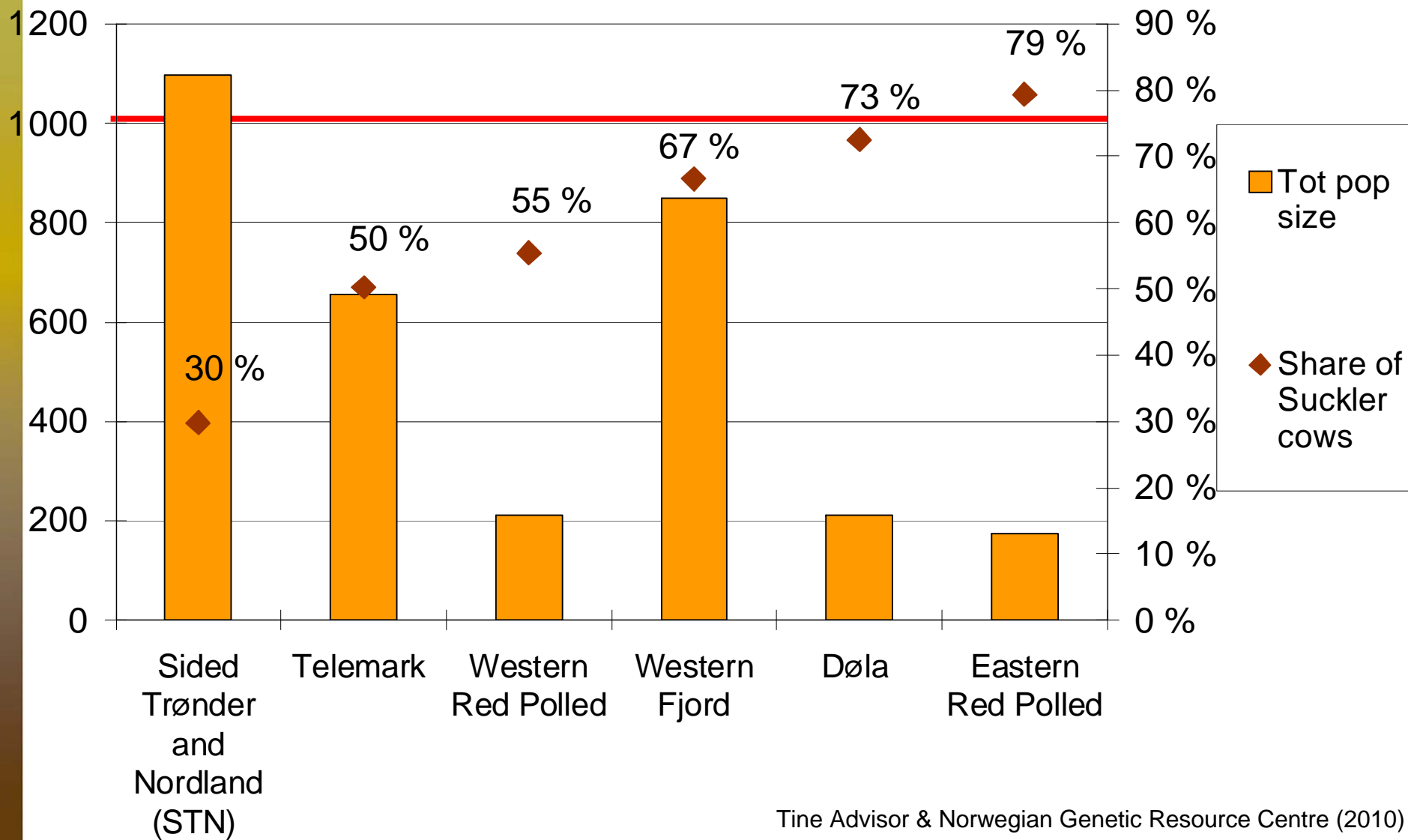




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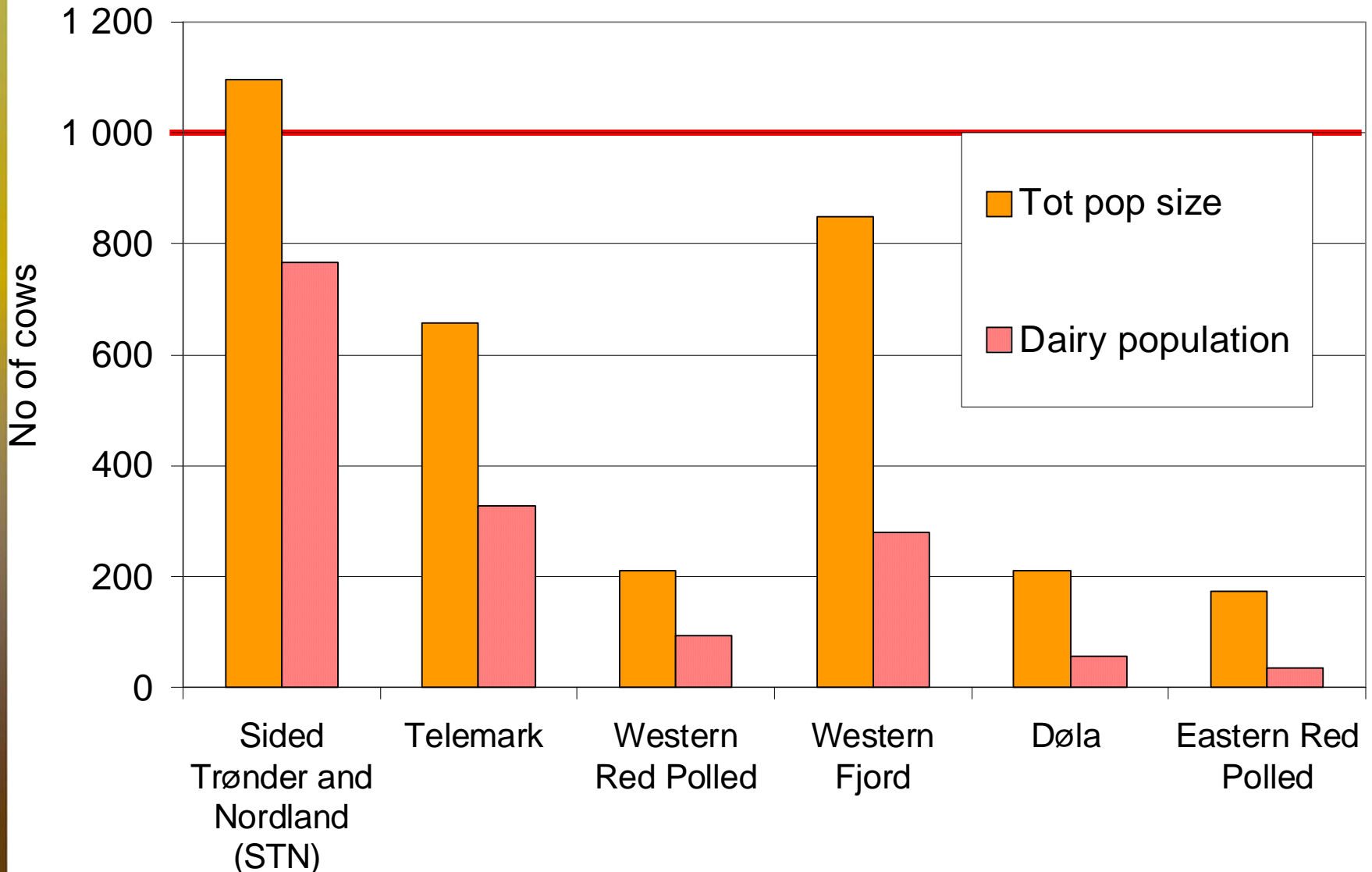
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# Population sizes and share of suckler cows





# Population sizes without suckler cows...



# Stated concerns from breeders

## *Against suckler cow production*

- > Impossible to record milk yield
- > Udder traits are destroyed
- > Heifers nursed as suckler calves too wild to be milked
- > Traditional knowledge is lost

## *Pro suckler cow production*

- > Modern times – modern usage
- > Grazing animals needed
- > Less labour demanding
- > The breed is being utilized, not going extinct



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## Case study: the STN breed

- > 1000 cows
- > Annual milk yield:  
4 200 kg
- > No progeny testing
- > Avoidance of  
inbreeding
- > 70 % of the  
population are used  
as dairy cows

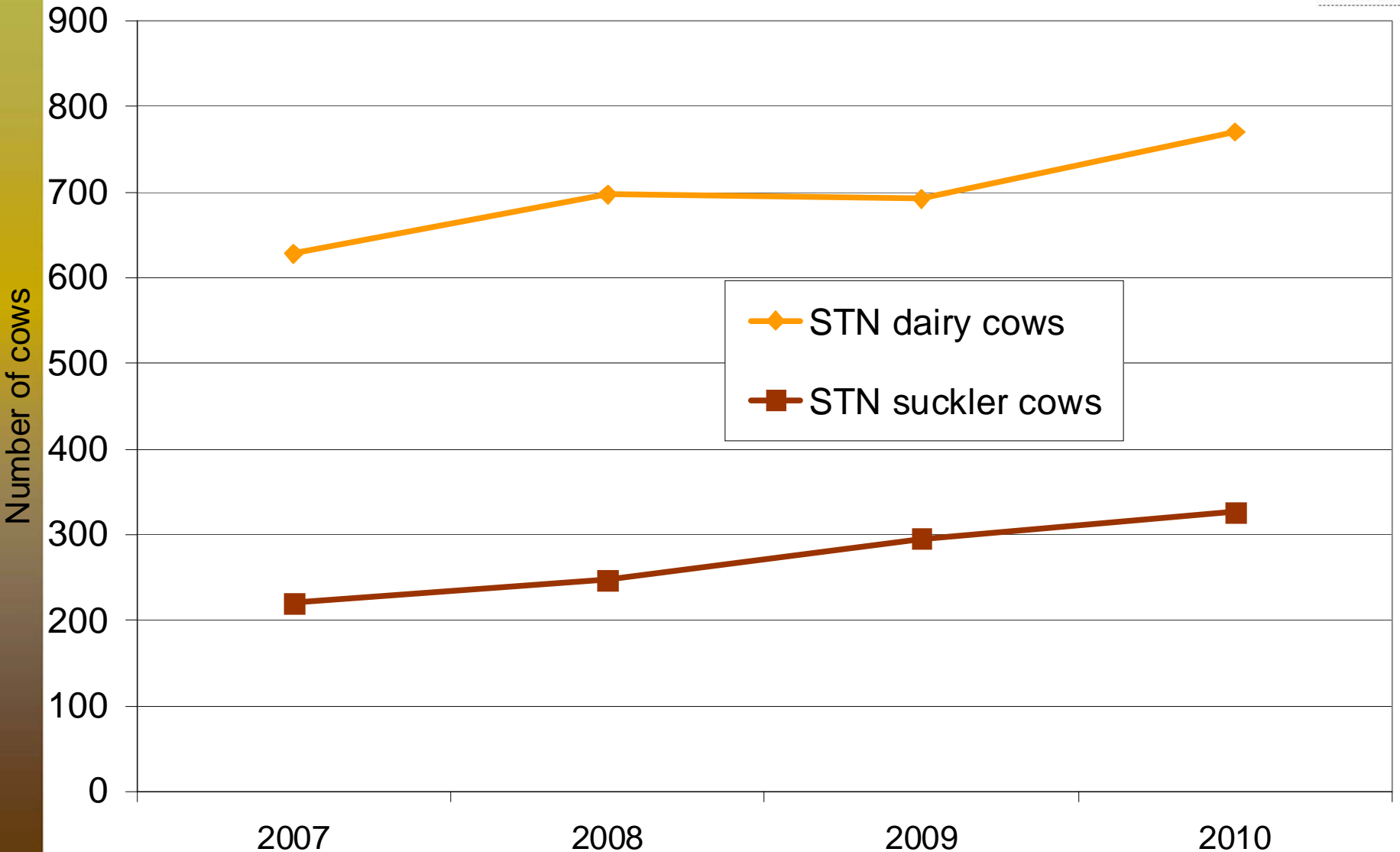


# Number of dairy and suckler cows, STN 2007-2010



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# Case study: STN breeding association



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- > Several initiatives to reduce the share of suckler cows in the population
  - > Up to 2009: Requesting the agricultural authorities to differentiate the subsidies to endangered cattle breeds

# *Evaluation of the subsidies to the native endangered cattle breeds* (Norwegian Agricultural Authorities, 2010)



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## Stating:

- > All populations have increased since conservation programs and subsidy system started
- > Important to stimulate the three smallest breeds
- > Uncertainty about the effect of differentiating the subsidies between suckler and dairy cows

## Conclusion:

- > “Differentiation not recommendable”

# Case study: STN breeding association



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- > Several initiatives to reduce the share of suckler cows in the population
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## Case study: STN breeding association

- > Several initiatives to reduce the share of suckler cows in the population
  - > Up to 2009: Requesting the agricultural authorities to differentiate the subsidies to endangered cattle breeds
  - > August 2010: Breeding bulls from suckler cows are excluded from the herd book

# Case study STN:

## Expected effects of excluding suckler bulls from herd book



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- > “Securing the breed’s dairy traits”
- > Excluding “pure bred” animals from herd book
- > Splitting an already small population
- > Sustainable?



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## Concluding remarks

- > Substantial parts of the endangered breeds are in suckler cow production
- > Excluding suckler cow production from conservation programs will decrease the total population sizes of the endangered breeds
- > Establish conservation herd books for pure bred animals that are excluded from traditional herd book!



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# Threat or opportunity?

The main goal in the conservation programme:

- > “Increase the population size!”
- > Suckler production is contributing to the increase in population sizes of endangered populations
- > Suckler cow production is not a threat to the traditional low producing dairy breeds.



**Thank you!**