

From conservation to consumption

Rare Breeds and the Genebank for Farm Animals in Austria

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Content

- In situ and ex situ in Austria
- Use of the Genebank - examples
 - 4 cattle breeds
 - 2 goat breeds
- Semen used
- Development of the populations
- Development of inbreeding
- Marketing of breeds
- Conclusions

Endangered breeds

In situ

- Since 1982 cattle
- Since 1995
 - Cattle
 - Goats
 - Sheep
- Since 2002
 - Cattle
 - Goat
 - Sheep
 - Horse
 - Pig

Ex situ / Genebank

- Since 1997
- Sampled from start
 - Cattle
 - Goat
 - Sheep
 - Horse
 - Pig
- Use in conservation breeding
 - Cattle
 - Goat
 - (pig, horse)

Cattle breeds

Murboden (MBR)

Styria

Suckler cows

Lower Alpine regions



Tux-Zillertal (TUX)

Tyrol

Milk/suckler cows

High Alps, steep slopes



Cattle breeds

Waldviertel Blond (WBV)

Lower Austria

Suckler cows

Poor pastures, harsh climate



Ennstaler Bergscheck (EBR)

Styria

Milk/suckler cows

High Alps, poor pastures



Goat breeds

Tauernschecken (TSZ)

Salzburg

(milk), landscaping, hides,
horns

High Alps, very steep slopes



Steirische Schecken (SSZ)

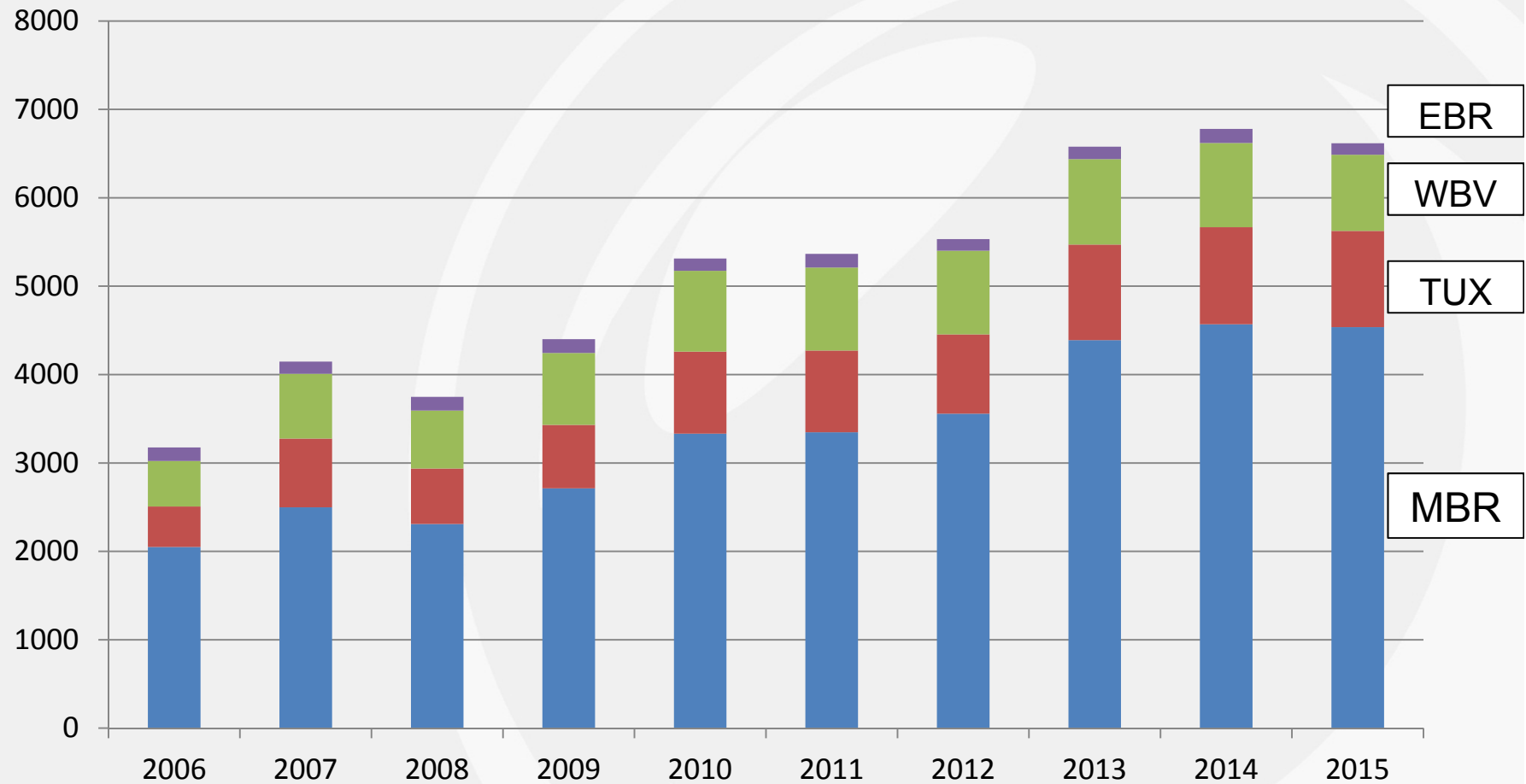
Southern Styria

Milk, landscaping

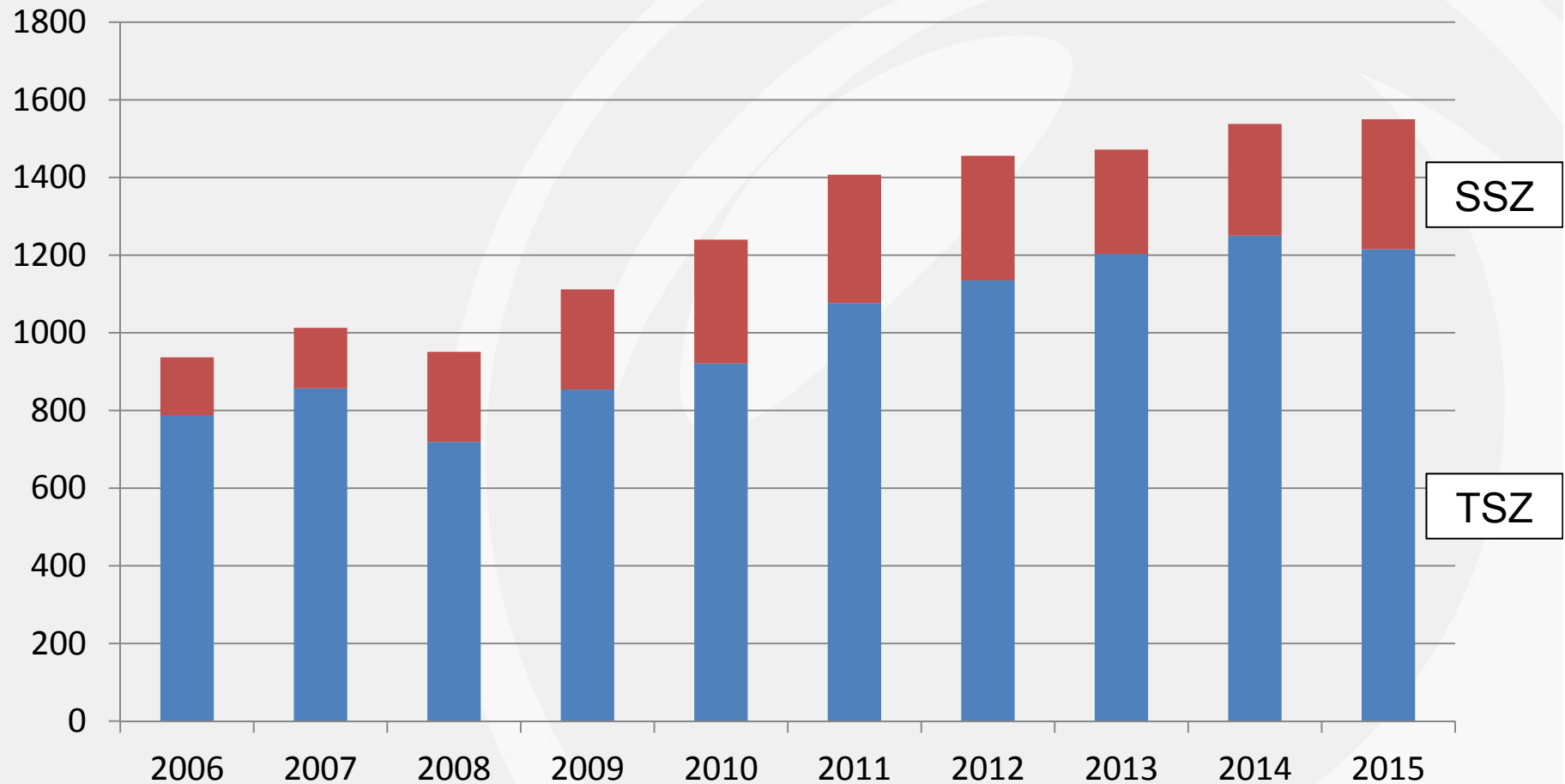
Hilly, dry climate



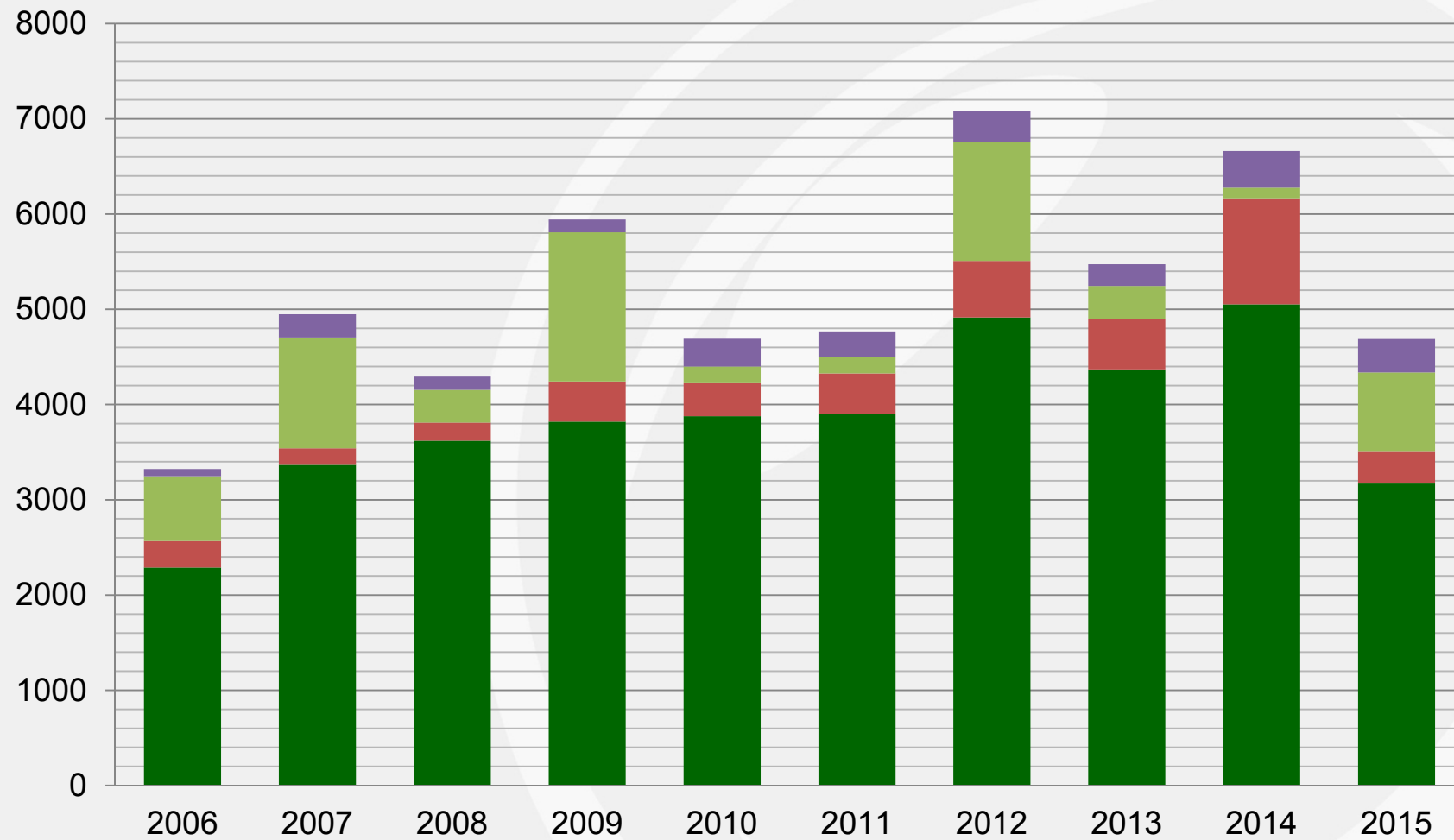
Population development cattle – females in herdbook



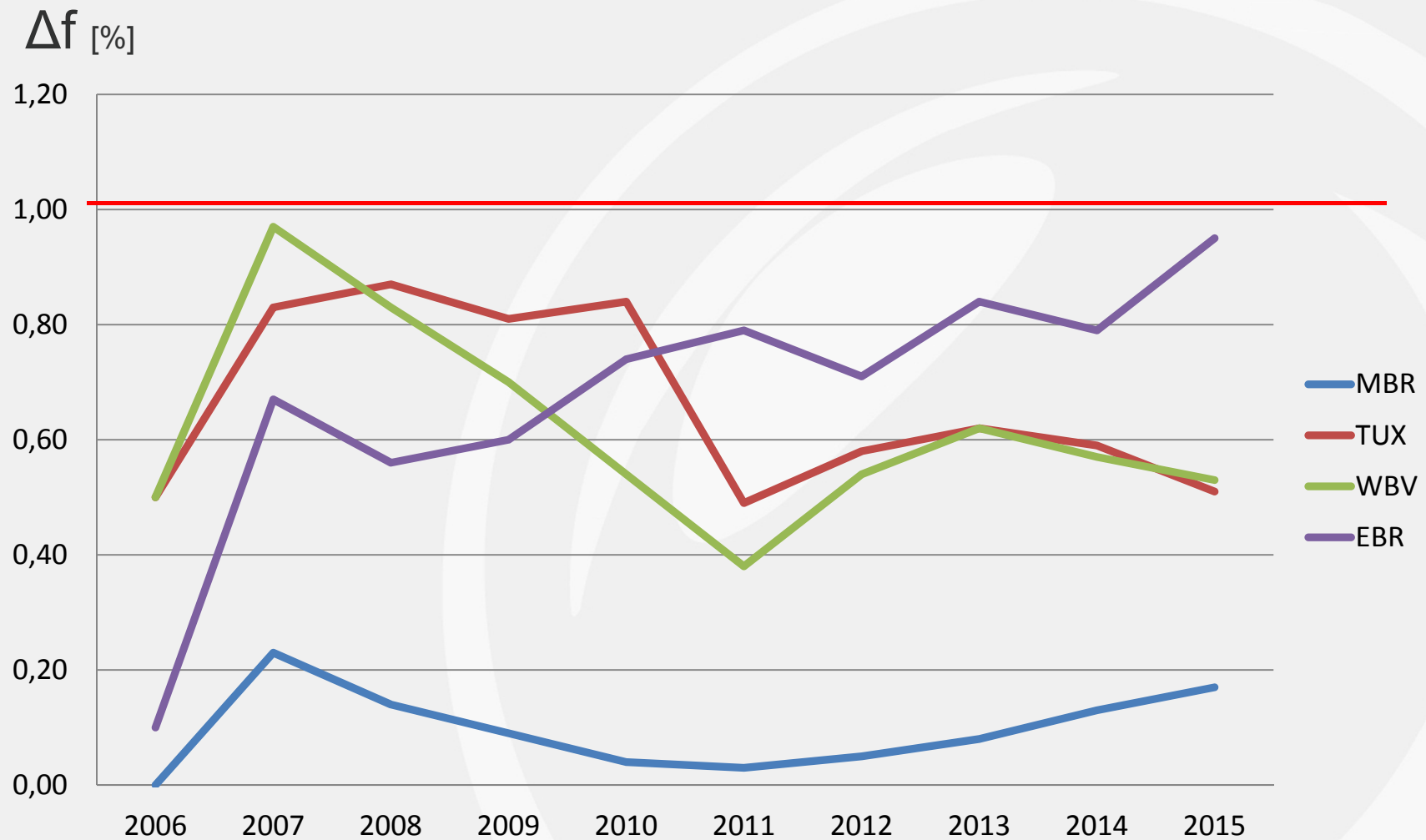
Population development goats – females in herdbook



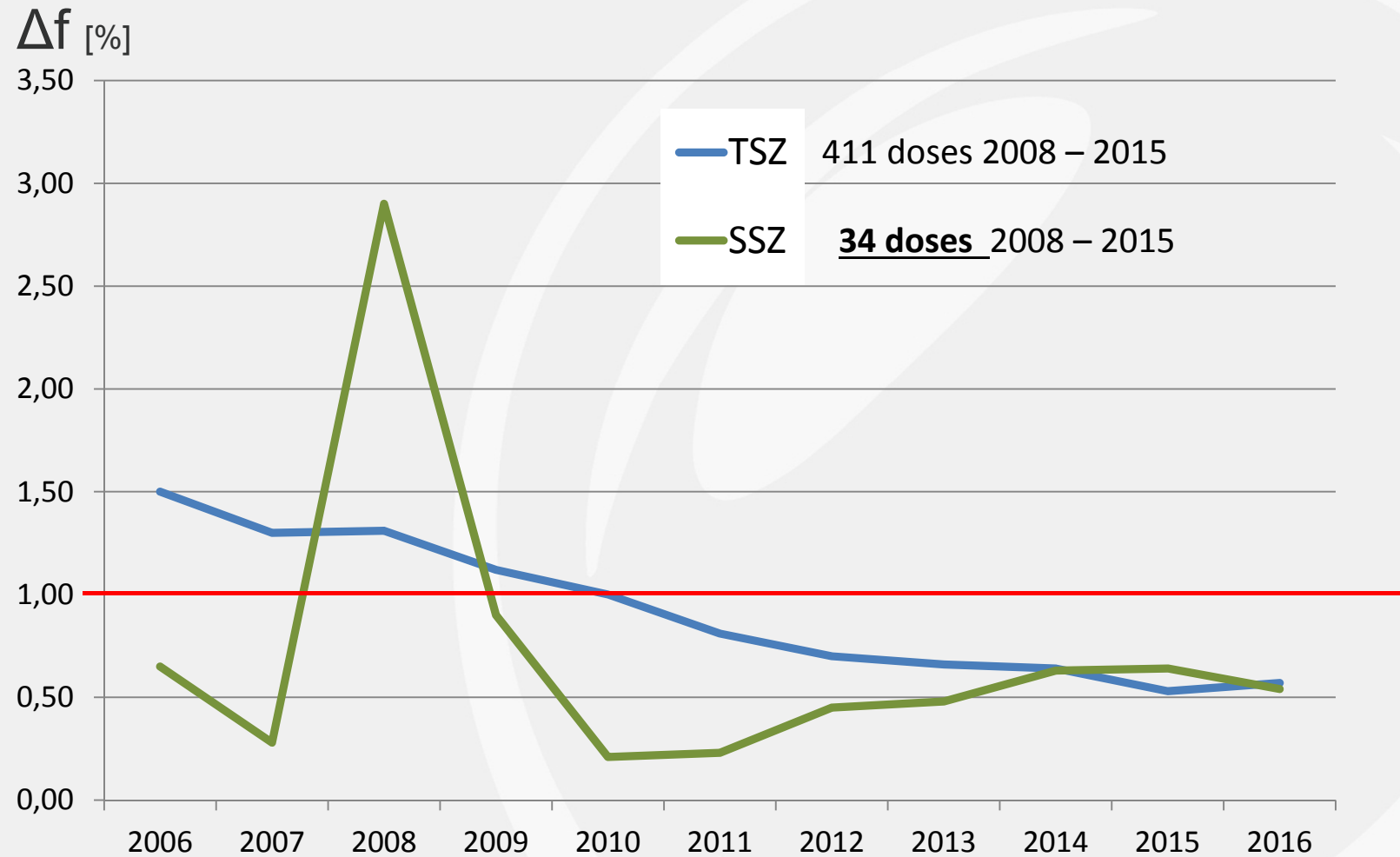
Semen doses cattle



Increase of inbreeding (Δf) cattle



Semen doses and Δf goats



Marketing programs

Cattle

Quality beef programs

MBR – oxen, heifers

SPAR/TANN

TUX – oxen, yearlings

„Tiroler Jahrling“

WBV – organic label

„Porcella“, slow food

EBR – local initiatives

Goats

SSZ – organic milk
production, landscaping

TSZ – landscaping,
fanciers

Conclusions

- Use of genebank material delays increase of inbreeding effectively despite re-building of populations
- Continuous supply of sires to the genebank more effective than „circular“ approach
- Marketing programs crucial to increase populations
- Further genetic characterization necessary in very small populations (SNP-technology)