



BALTIC COMPASS

Baltic Sea Agriculture as a Pilot of Sustainability

Lessons on the identification of best practices in BSR

Ola Palm

JTI – Swedish Institute of Agricultural and Environmental
Engineering



Best Practices in the Baltic Sea Region

What we mean with Best Practices:

- Well known and documented measures
- Used today
- Proven to have an effect
- Of interest and possible to implement for most BSR-farmers
- Including management measures and not only technologies



Observation

- A lot of well known measures are not fully implemented
- Large variations what is used between countries and within countries
- Large variation in agricultural structure in the BSR
- Large differences in farmers incomes between countries and within countries

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We are thinking and practicing in many different ways – we want to catch this!

Priority measures (1)

- 1. Promoting long-term grass cultivation of arable land**
- 2. Vegetative cover in autumn and winter of arable land**
- 3. Soil tillage management**
 - 3.1. Reducing soil tillage
 - 3.2 Time-of the year effects
- 4. Fertilisation management**
 - 4.1. Adapting amounts applied for both chemical fertilizer and manure
 - 4.2. Calculating nutrient balances on farm- and/or field level
 - 4.3. Avoiding the spreading of chemical fertilizers and manure during high-risk periods
 - 4.4. No or reduced P-fertiliser for high soil P fields or part of fields
- 5. Improved spreading technology of manure and chemical fertiliser**
 - 5.1 Site-specific dosage
 - 5.2 Combined drilling
 - 5.3 Incorporation
 - 5.4 Liquid manure
 - 5.5 Solid manure
 - 5.6 Manure spreading and NH₃ emissions – general measures

Priority measures (2)

6. Avoiding the application of chemical fertilisers and manure to high-risk areas

7. Measures to optimize soil pH and improve soil structure

8. Adapted feeding

8.1 Adopting phase feeding of livestock

8.2 Reducing dietary nitrogen and phosphorus intakes

8.3 Phytase supplementation

8.4 Wet feed and fermentation

9. Reducing ammonia losses in stable

10. Storage of manures

11. Constructed wetlands for nutrient reduction/retention

11.1 Sedimentation ponds

11.2 Constructed wetlands

12. Buffer-zones along water areas and erosion sensitive field areas



Country reports

- How the selected measures (25 measures) are implemented in 7 countries – 7 country reports (background material)
- Summary of the 7 country reports with conclusions and also remarks regarding biosecurity for most measures

The Top-list in BSR

Legislation

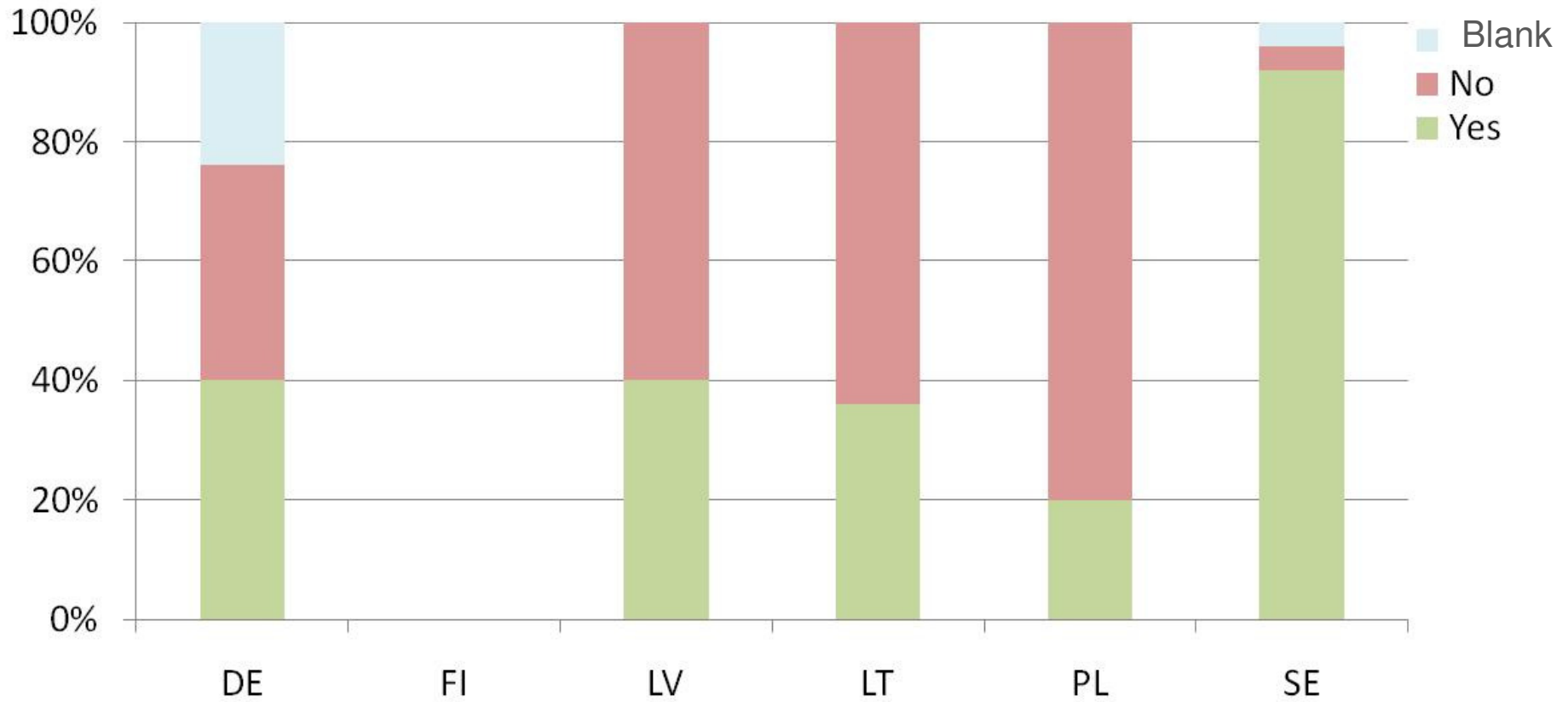
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Economic Subsidy

2. Vegetative cover in autumn and winter of arable land
- 4.1. Adapting amounts applied for both chemical fertilizer and manure
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12. Buffer-zones along water areas and erosion sensitive field areas

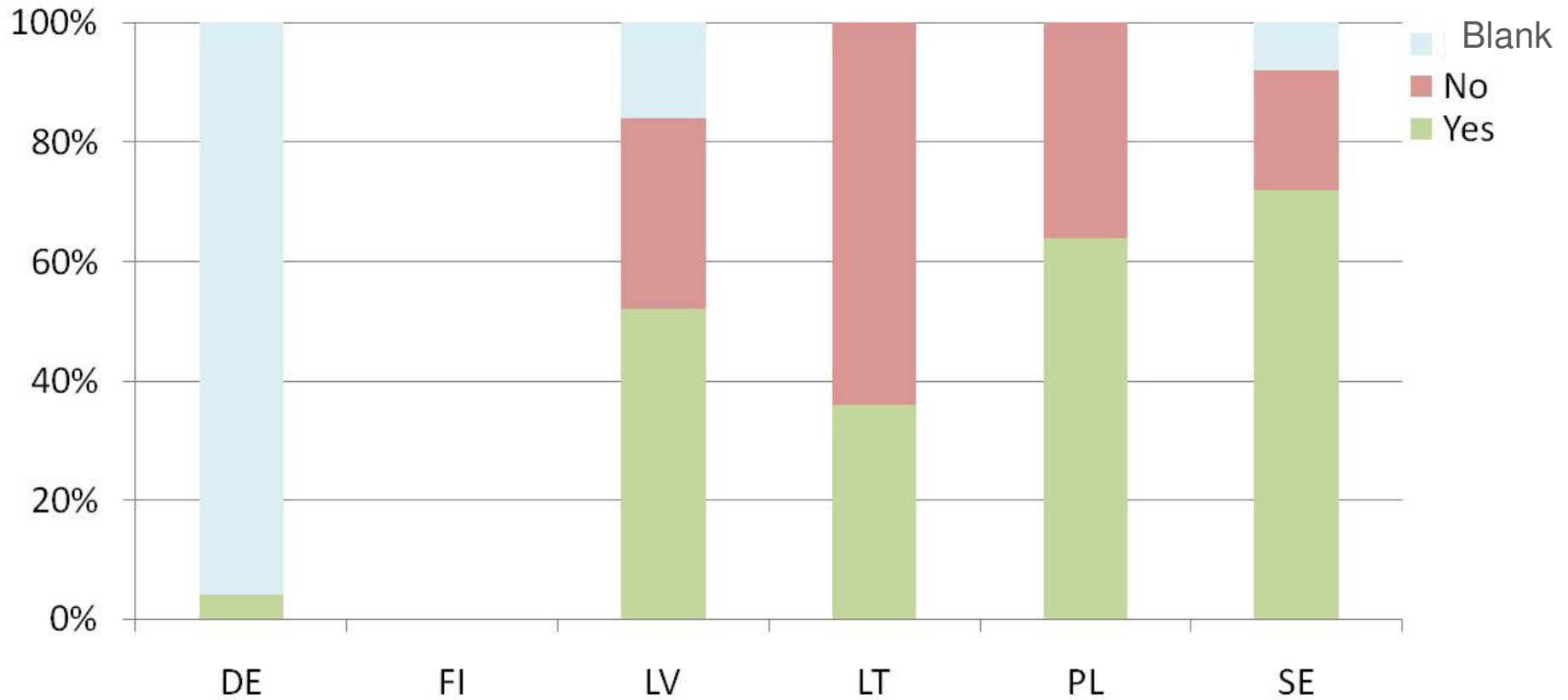


Applicable measures





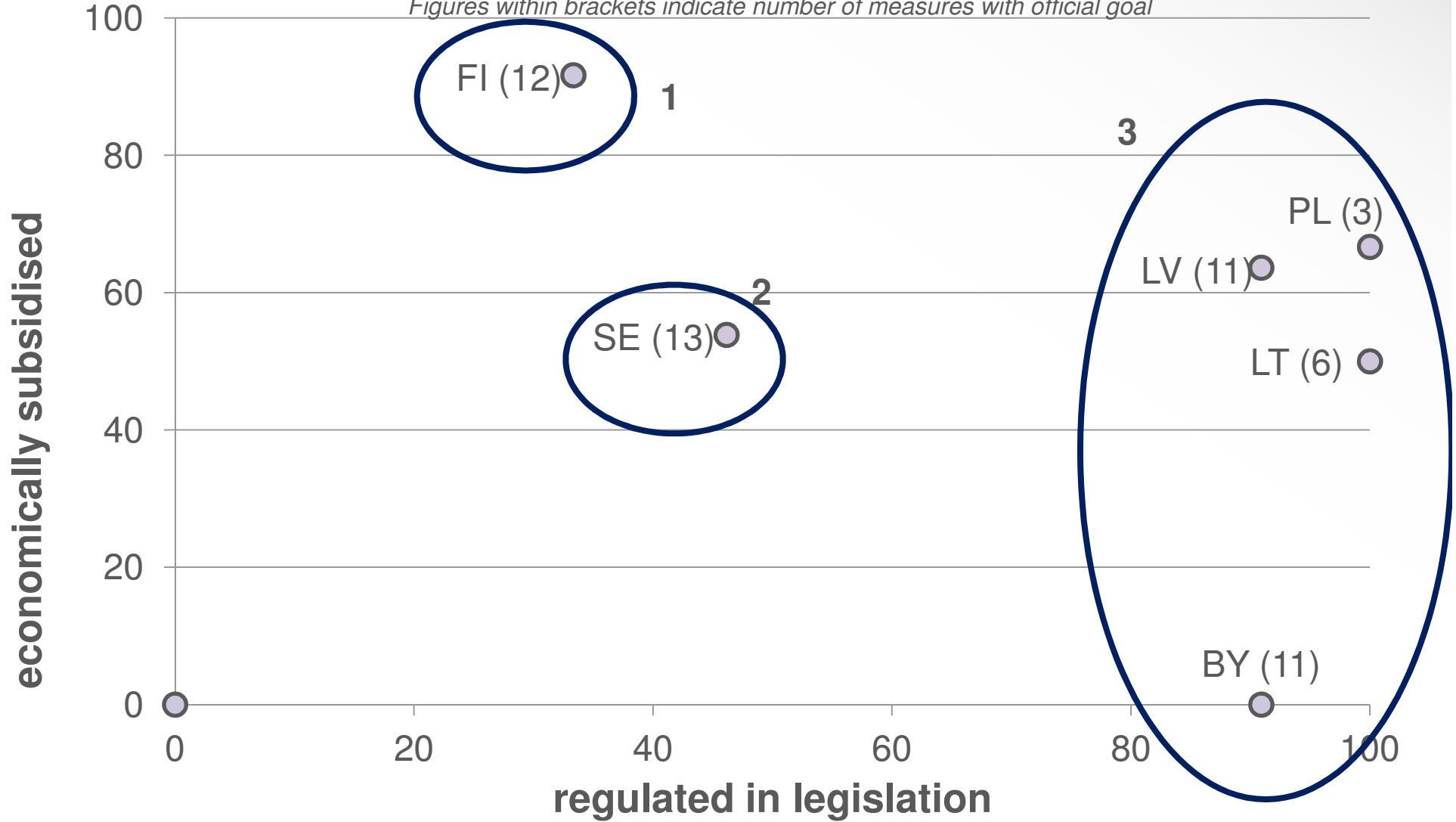
Important measures





Percentage of measures with official goal that are regulated in legislation (x-axis) and economically subsidised (y-axis)

Figures within brackets indicate number of measures with official goal



Lessens (1)

- Different approaches in BSR-countries - legislation (e.g. PL, LV, LT, BY) or subsidy (e.g. FI)
- Not all countries have legislation that require balance between the foreseeable nutrient requirements of the crops and the nutrient supply to the crops from the soil with a view to minimize eutrophication (requirement according to HELCOM Annex III)
- Swedish model for plant nutrient recommendations: based on economical output (low fertiliser price = higher recommendation!) – this model is not following HELCOM and gives no signal to farmer about nutrient leaching from fertilisation!!!
- Decisions taken in e.g. HELCOM is not always followed up in national legislation

Lessens (2)

- Adapted feeding – used but not regarded as a measure in many countries!
- A measure demanded according to legislation and for cross compliancy – some countries does not regard this as a measure since it has to be done!
- Measures will give more or less effect depending on situation – buffer-zones important when steep slops but less effect in other areas (good for biodiversity!)

WE HAVE DIFFERENT CONDITIONS , CHOSEN
DIFFERENT PATHS AND CAN THUS LEARN A LOT
FROM EACH OTHER