



# BALTIC COMPASS

Baltic Sea Agriculture as a Pilot of Sustainability

## Lessons on the identification of best practices in BSR

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# 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 NH<sub>3</sub> 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

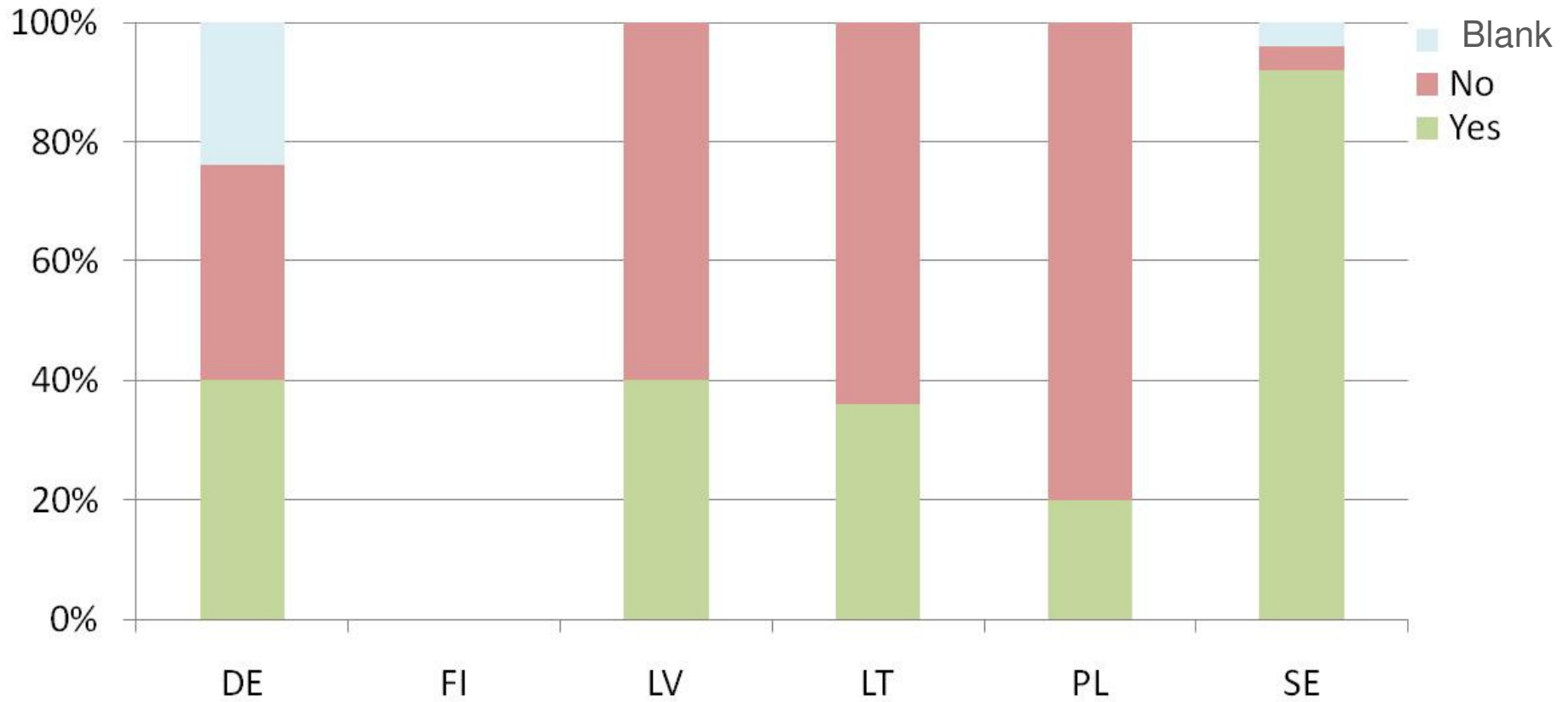
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## Economic Subsidy

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- 5.4 Liquid manure
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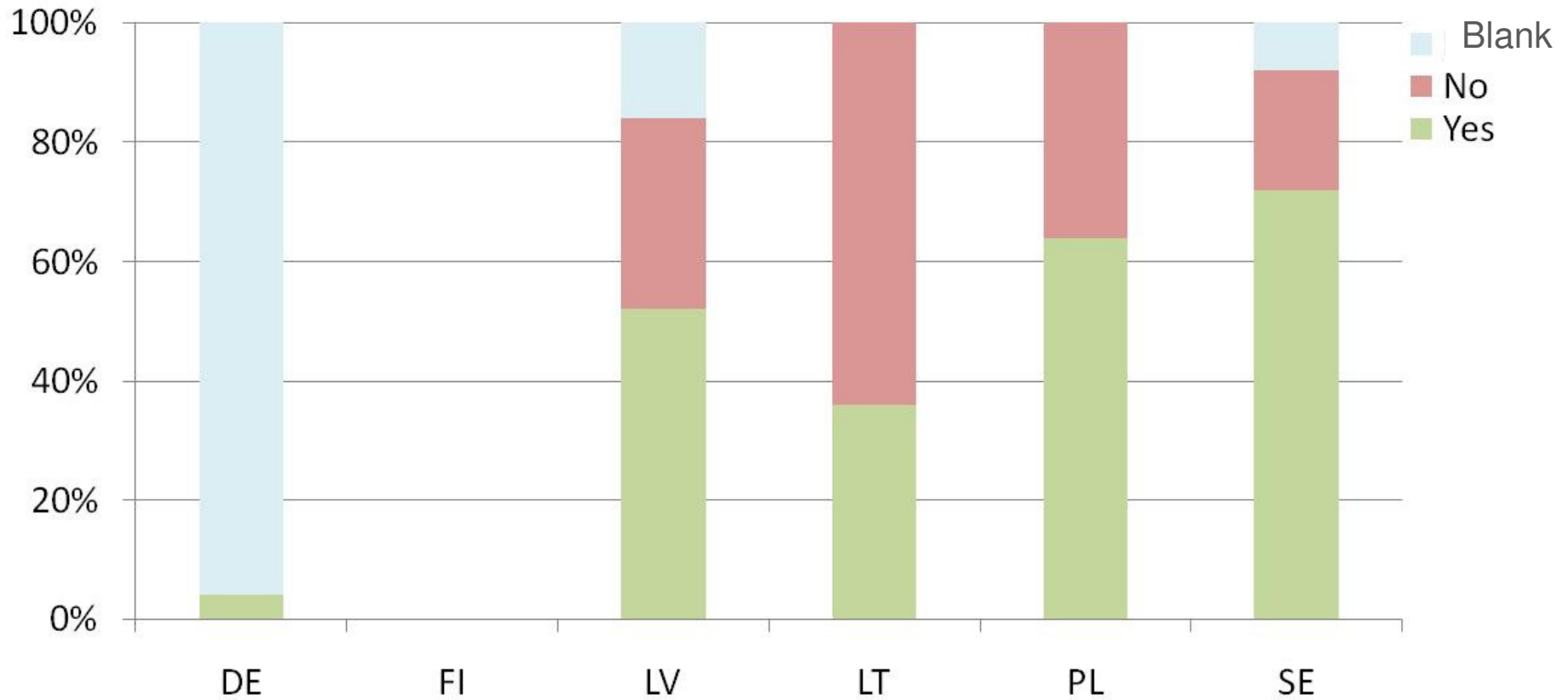
## Applicable measures







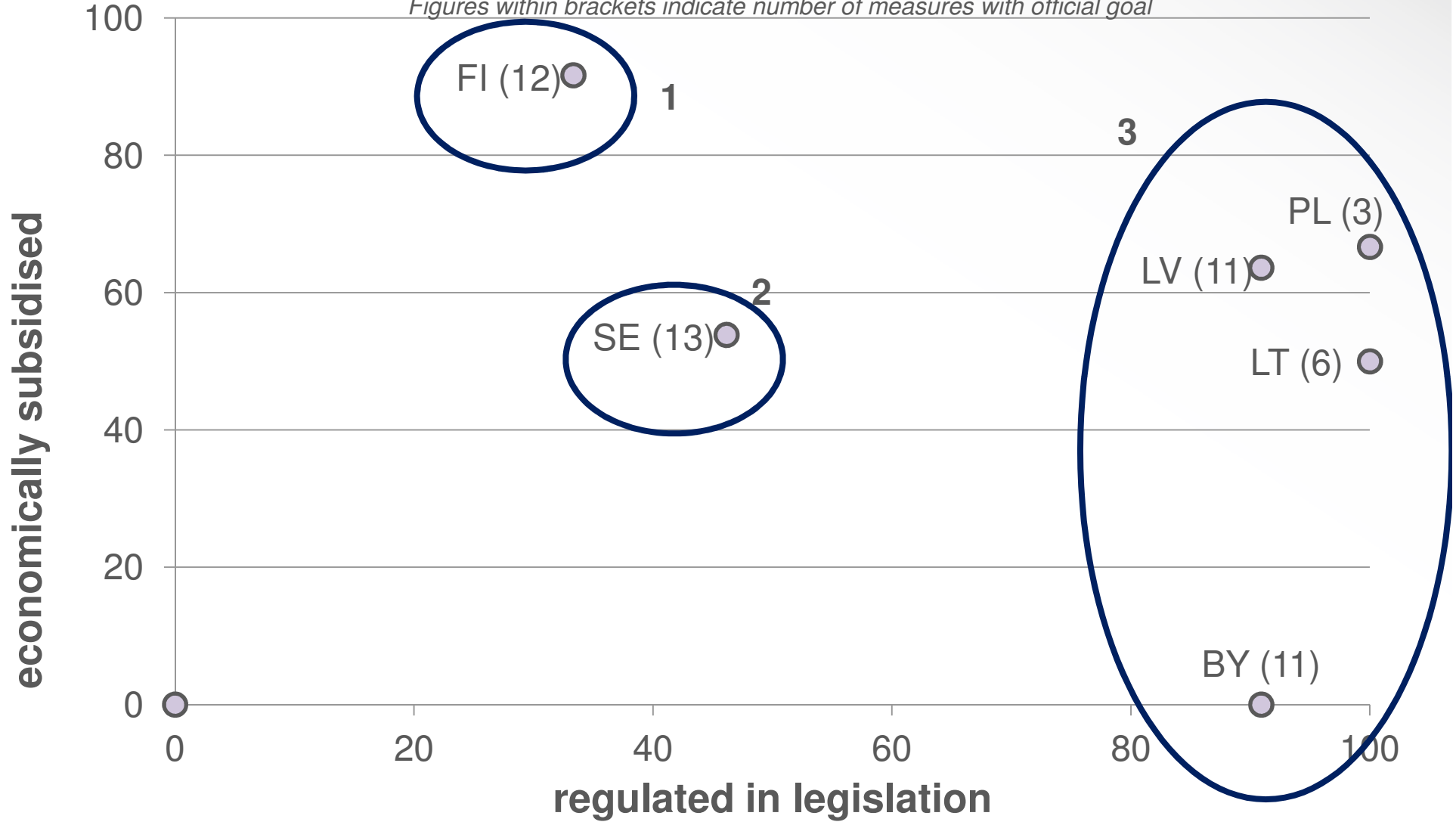
## Important measures





# 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