

Workshop

Transborder climate risk– Agriculture in
Klepp municipality



Arbeidsverkstad | Teams | 31.05.2021 | Carlo Aall og Tara B. Holm

VESTLANDSFORSKING

TARA HOLM

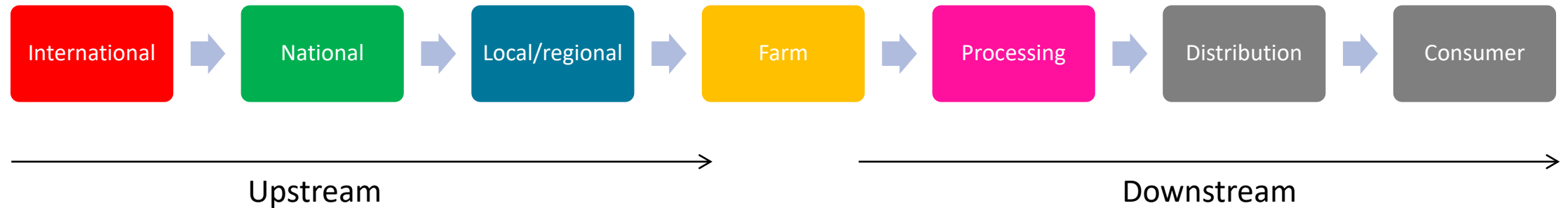
Introduction

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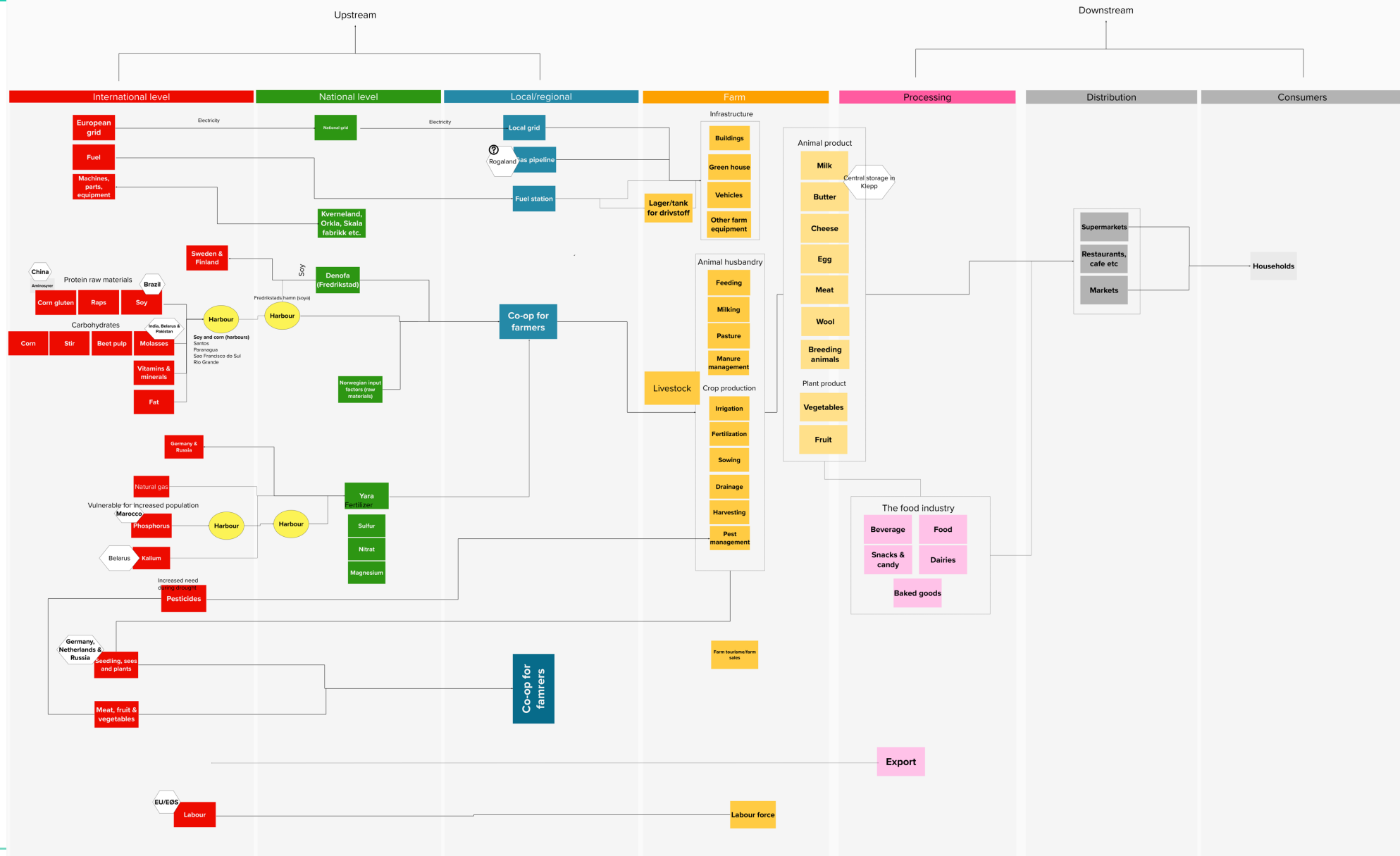


Value chain

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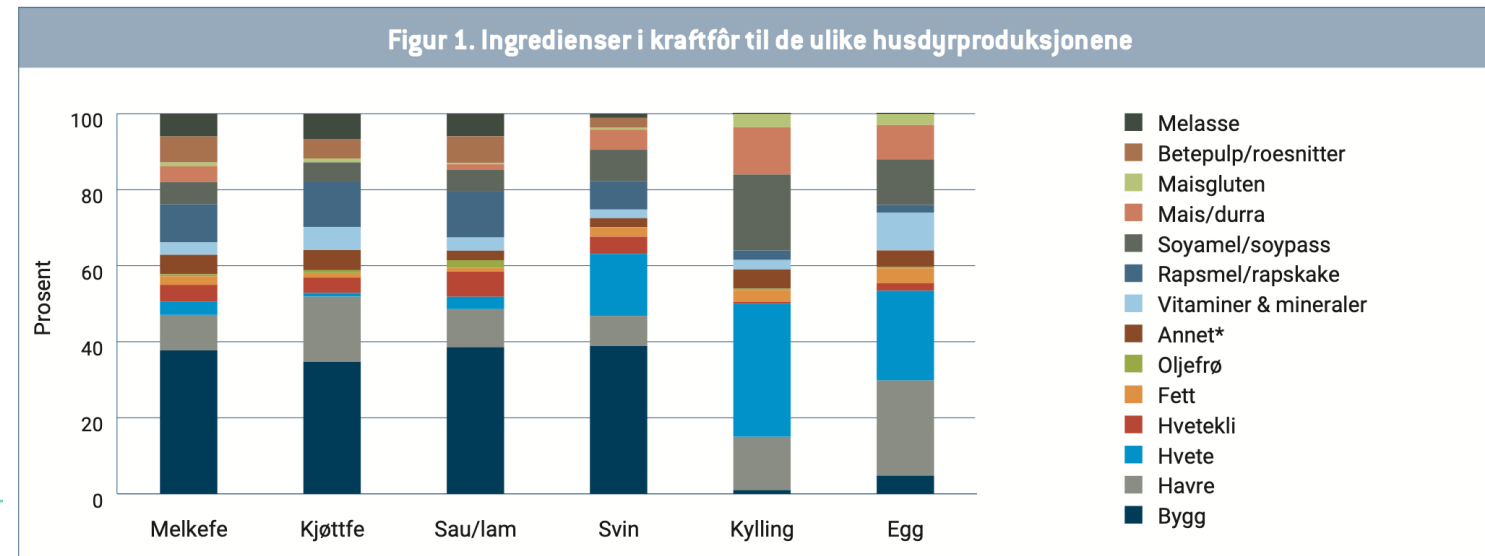
Supply chain - upstream and downstream



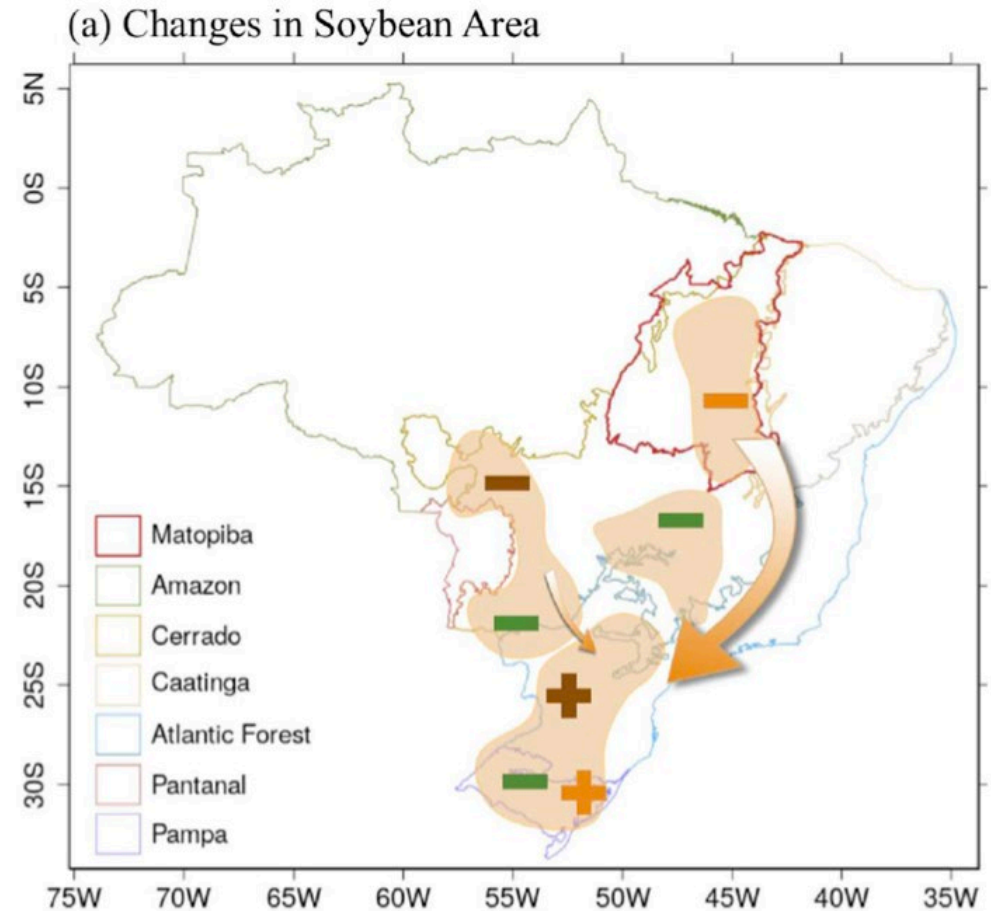
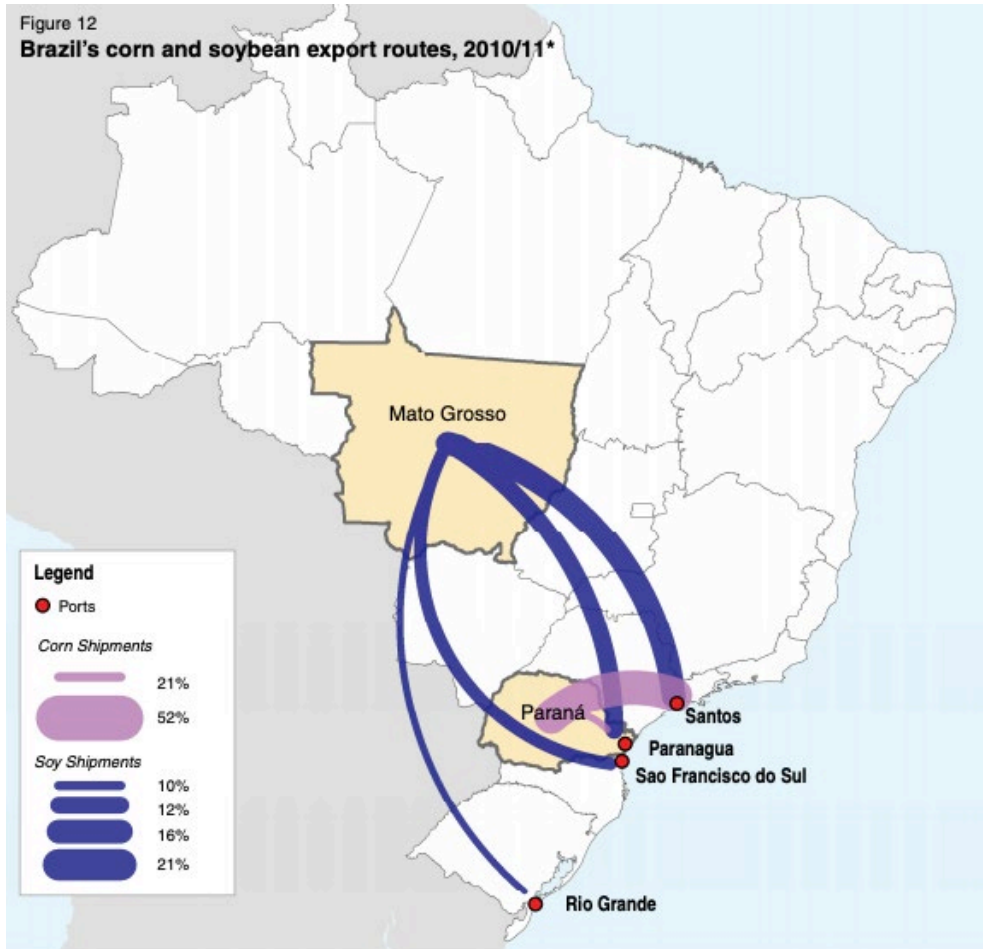
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1. Soy
 2. Other input factors?
 3. Domestic – climate risk in domestic transportation/storage
 4. Disregard this time: Local production conditions affected by climate (treated in the first workshop – the municipality will look further into local climate risk)
 5. Downstream – climate risk connected to distribution?
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Soy

- Soy – according to literature more exposed to climate change then other input factors
- Status:
 - Brazil
 - Norway import about 0,2% of the the worlds total production
 - Norway request Non-GMO and environmentally certified soy
 - imports then account for 10-20% of production
 - 30% goes to livestock feed

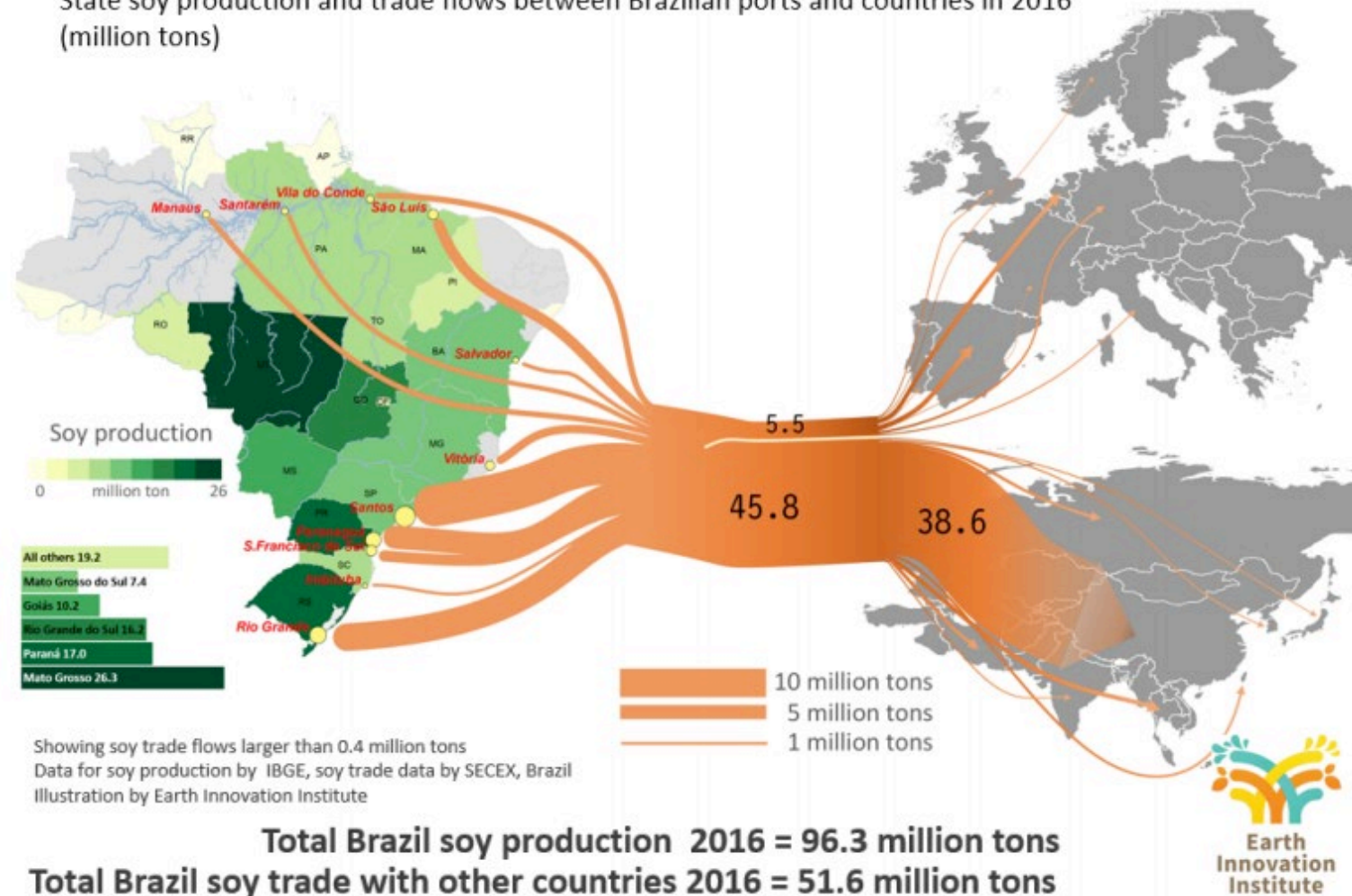


Soy



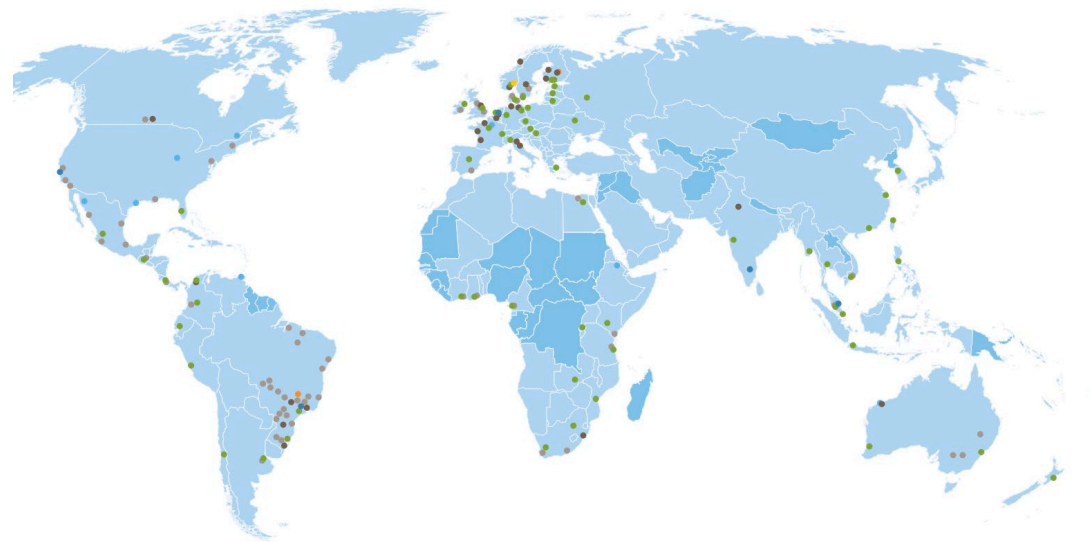
Brazilian Soy Exports, 2016

State soy production and trade flows between Brazilian ports and countries in 2016
(million tons)



Yara - fertilization

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■ Countries with sales ¹⁾ ● Yara Plants ● Phosphate mines ● Sales offices, R&D sites
● Head office ● Smaller sites ²⁾ ● Joint ventures ● Digital Hub

1) More than 10,800 Yara-branded retail outlets around the world
2) Yara operated terminals and logistical production sites

Cicero – Shades of green

- Transition risk – carbon taxes (natural gas in ammonia production) and technology
- Local climate risk– rising sea levels, extrem precipitation, flooding, drought and so on
 - Yara’s production facilities
 - Indirect climate risk (farmers)

Ma Tine: Full
Jæren på
11.300
Det er full stans
veier.

La
Publi
De t
lørd
mell
Tine
gård

Her tømmer han 2400 liter melk rett i kloakken

2400 liter melk forsvant ned i sluken i fjøsen til melkebonden Ole Andreas Aarsland lørdag formiddag.



er mjølk

Merete Lillesvangstu
sving
alist

S
ert 30. des. 2012 kl. 14:58
atert 30. des. 2012 kl. 17:45

!
rtikkelen er
flere år
gammel.

Questions to discuss further

Short group discussion

Questions:

1. Is there anything significant that is missing in the value chain?
2. What are the parts of the value chain that it is necessary to discuss further (only soy imports, other input factors, domestic value chain - to the municipal border, downstream value chain)
3. How will climate change affect the input factors?
4. How to reduce the climate risk for the value chain (s) we have selected?

Example for import of soy:

- a) Imports from countries other than Brazil?
- b) Fodder with only Norwegian raw materials
- c) Convert to organic farming
- d) Switch from animal husbandry to plant production

Takk for oss!



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