

RESPONSEABLE



about eutrophication:

spotlighting the agricultural value chain
for closing gaps in current communication

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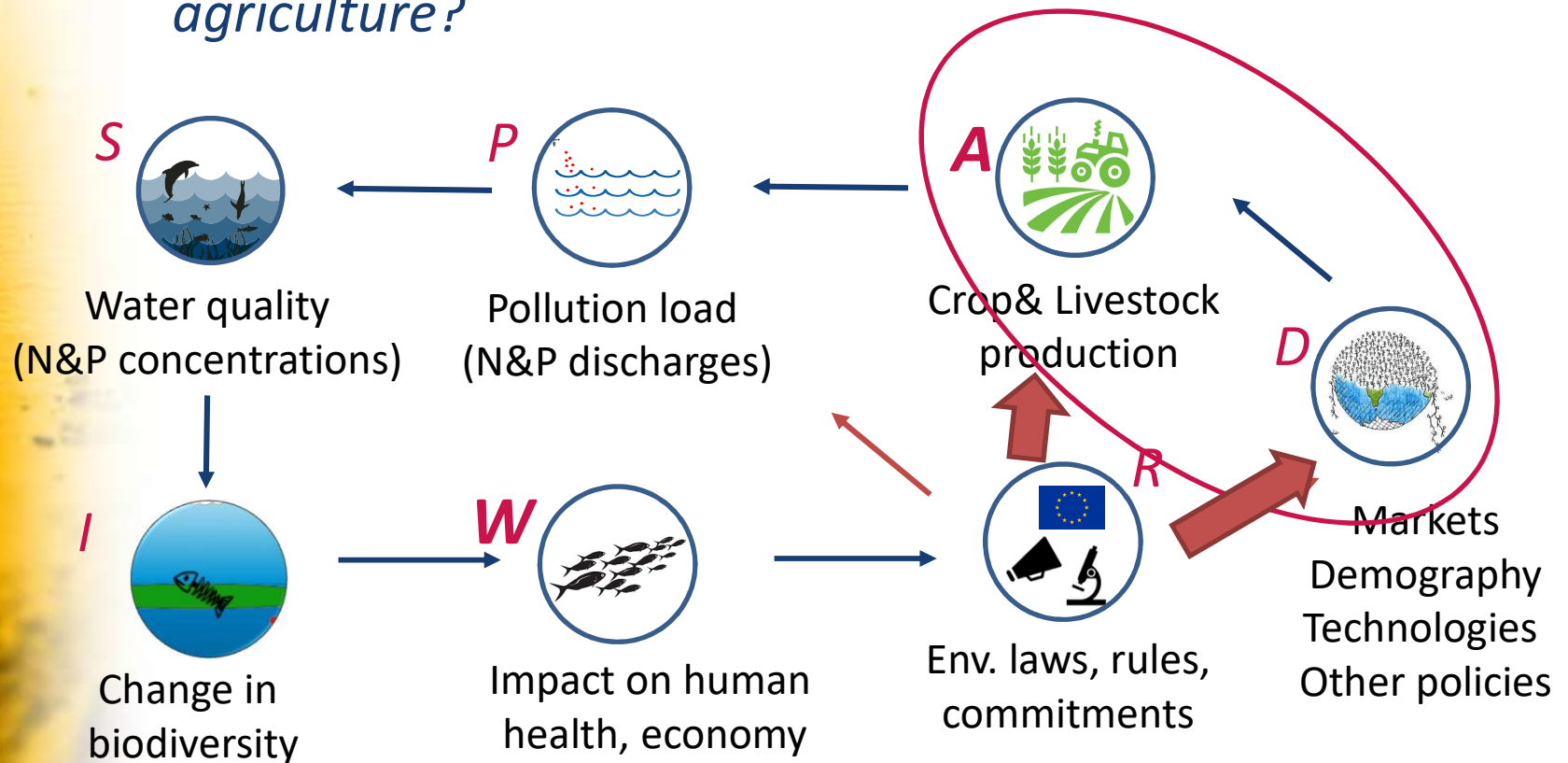


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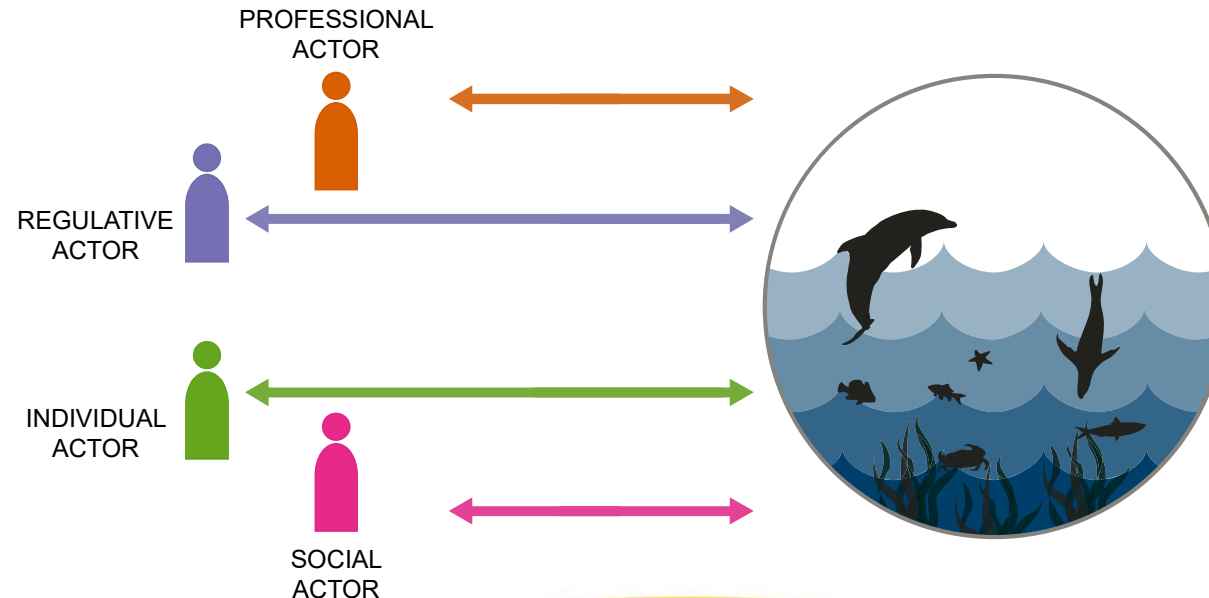
Eutrophication and agriculture:

- What is the knowledge base on DAPSIWR components and causal-effect relationships on eutrophication and agriculture?*



Eutrophication and agriculture:

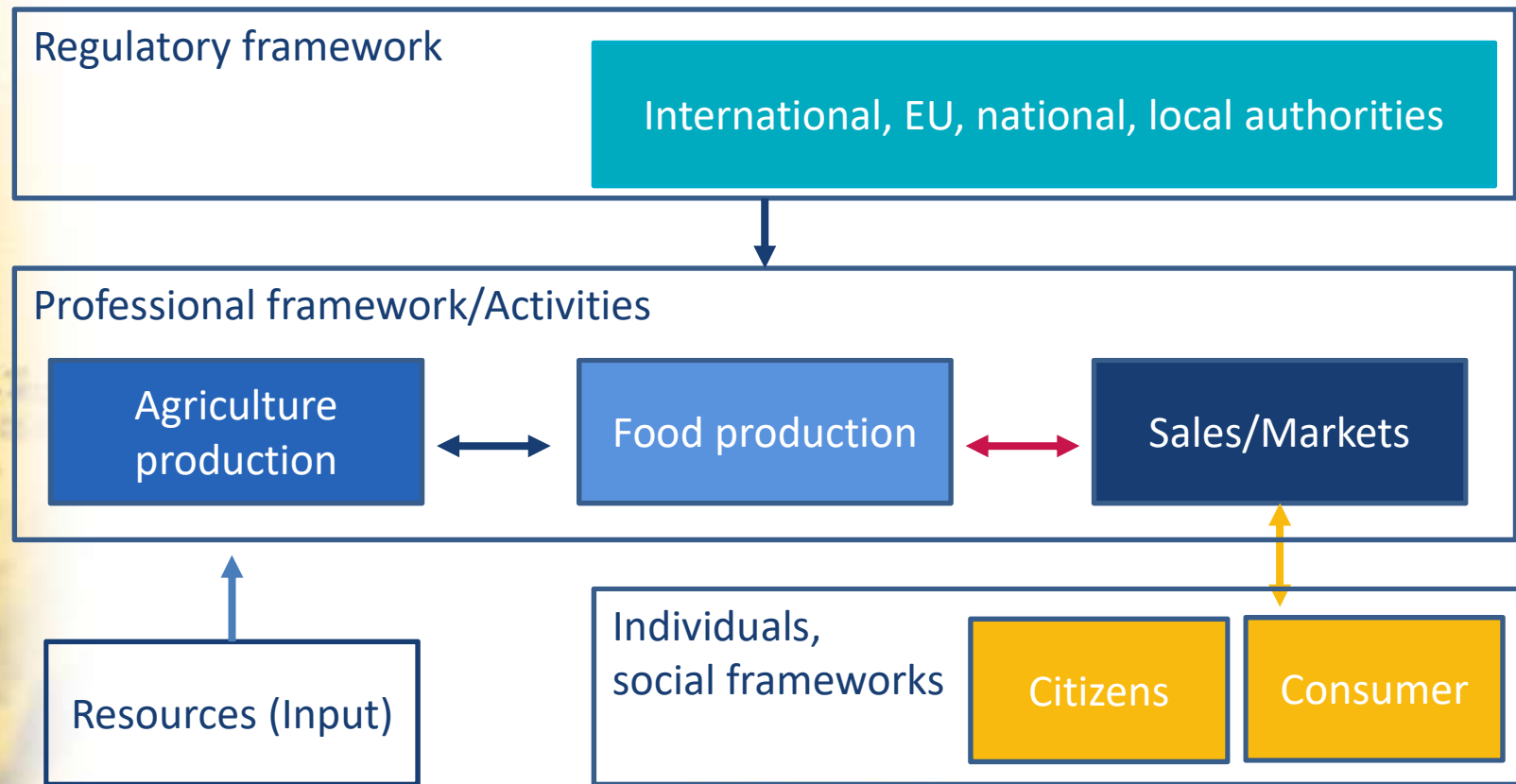
- *Who are actors in the agricultural value chain?*
 - All people and people groups involved in implementing activities or being part of its socio-economic and regulatory context.

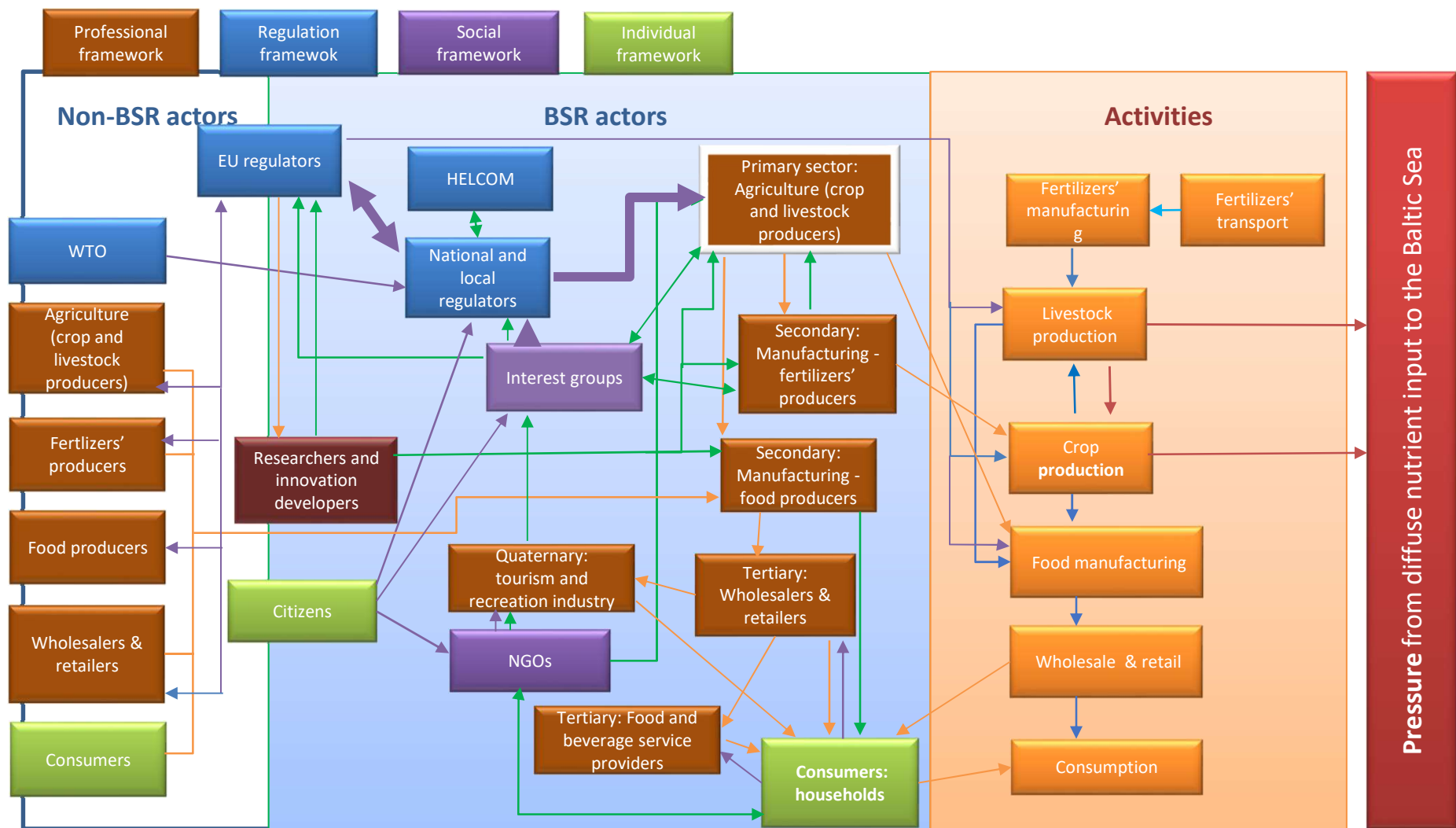




Agricultural value chain:

- the set of actors and activities that bring a basic agricultural product from production in the field to final consumption*





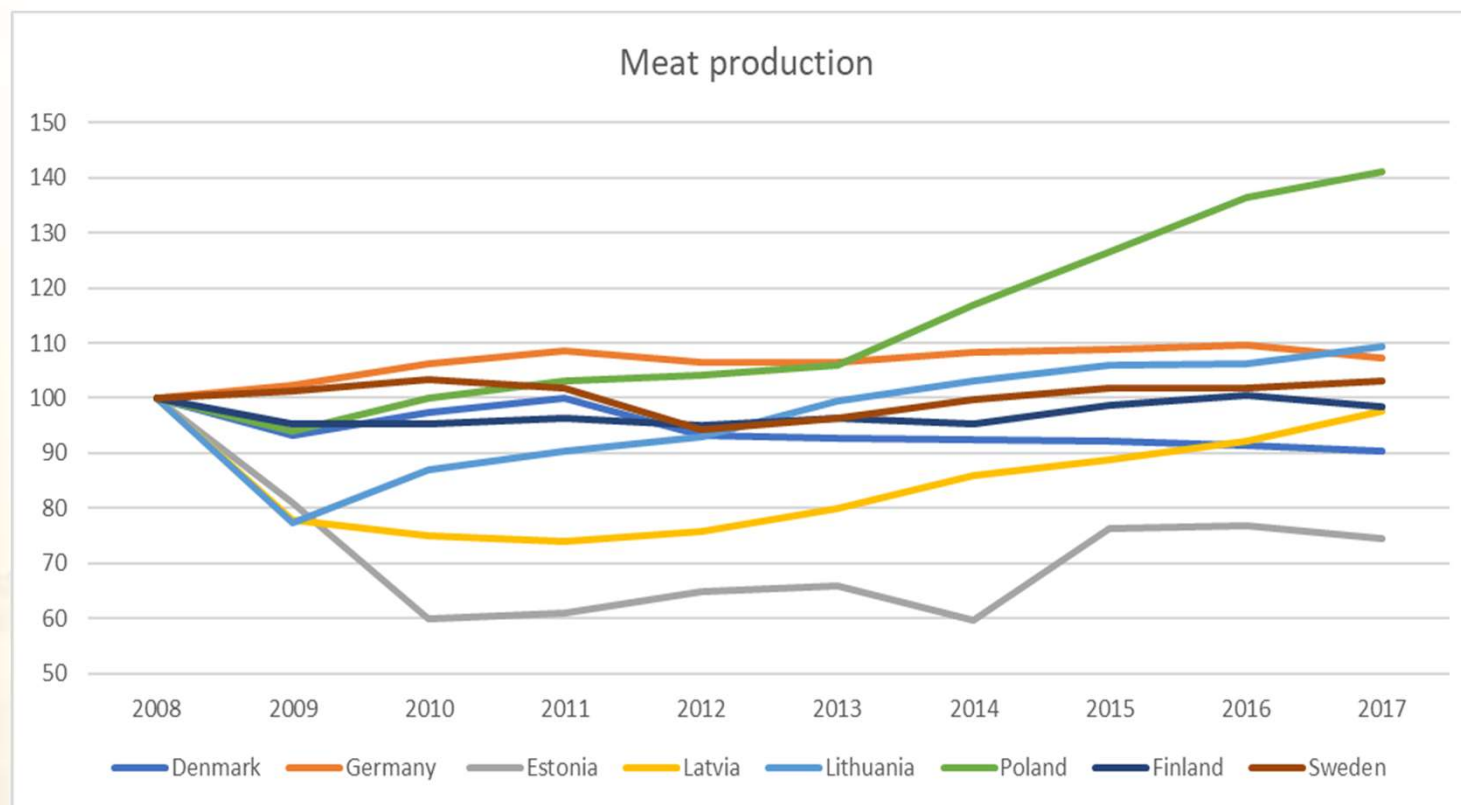
Agricultural value chain: Baltic Sea Region



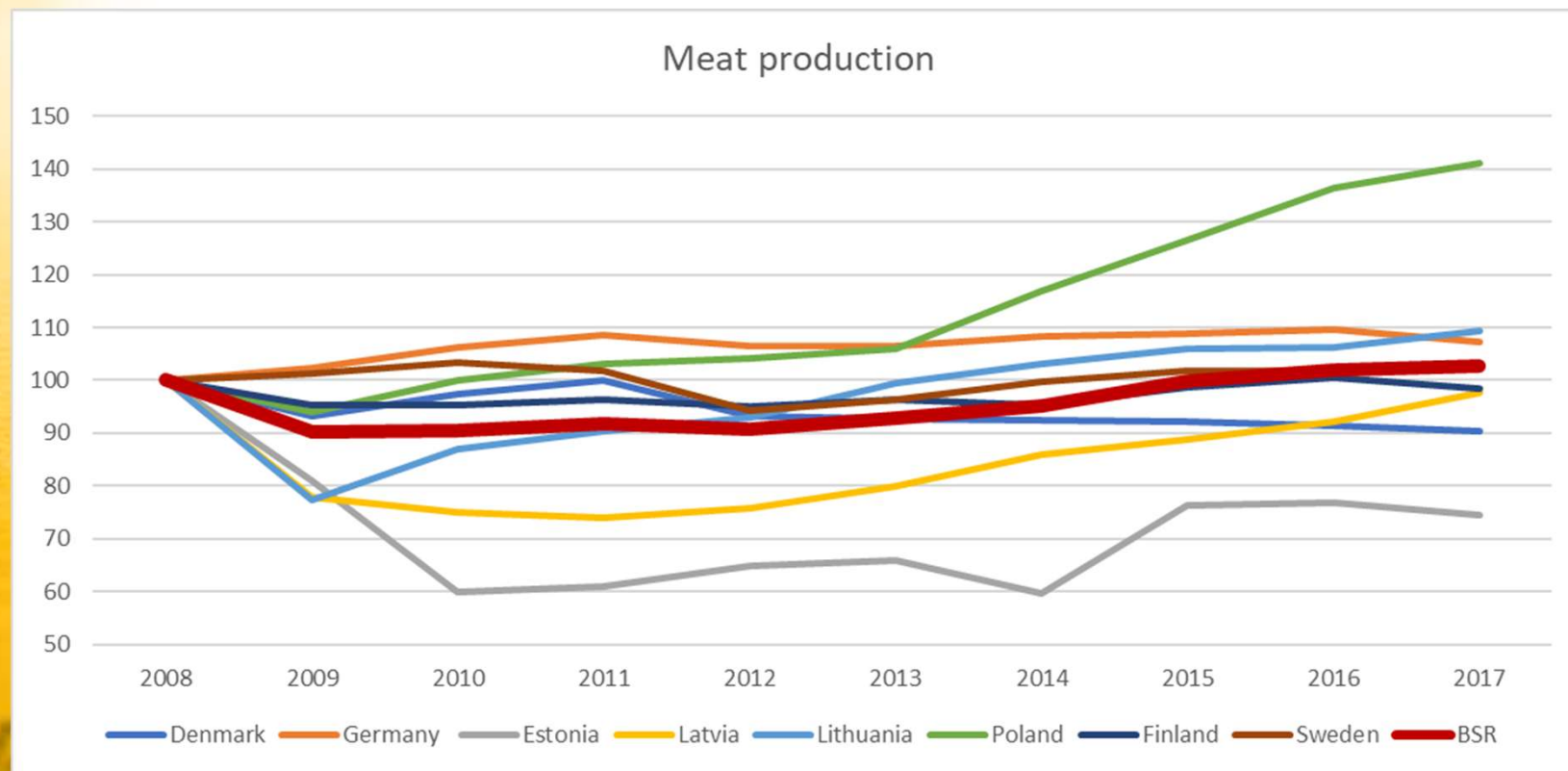
Meat production&consumption – causing high environmental impacts (EEA)

2013	SE	PL	LT	LV	DE	FI	EE	DK	BSR
consumption kg per capita	84	82	82	68	96	79	58	90	80
food supply (consumption) Kt	802	3 111	245	138	7 696	429	76	503	13 000
Production Kt	558	41 77	244	93	9653	406	71	2123	17329
import (needed, if negative), Kt	-244	1066	1	-42	1957	-23	-5	1620	4328

Agricultural value chain: Baltic Sea Region



Source: Eurostat



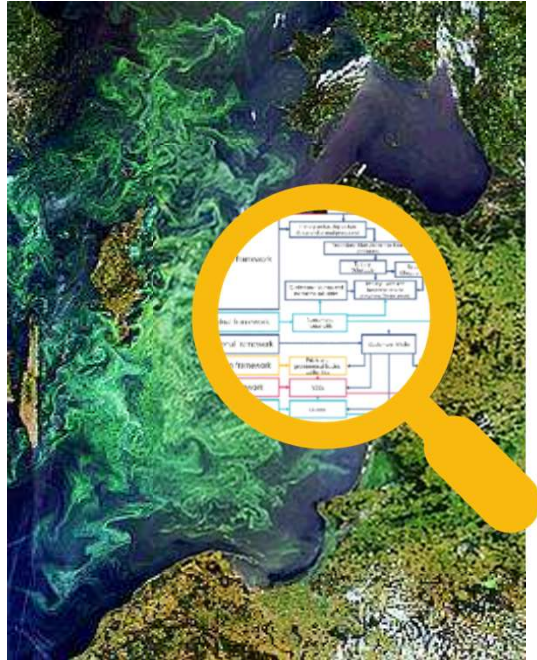


Figure: Algal bloom, Baltic Sea
(source: WWF, Germany)

HOW is the story about eutrophication currently told?

HOW is this story perceived?

HOW can we communicate differently?

- Who transfers knowledge to whom?
- Which information content is communicated?



Figure: map Baltic Sea
(source: EUSBSR)

Media analysis

- 7 countries of the Baltic Sea Region
- Identification of key actors
- google advanced search, facebook, youtube
- total: 766 sources, 1326 receivers



Who transfers knowledge to whom?

Receivers:

- Individual actors
- Crop and animal producers

Senders targeting individual actors:

- Knowledge sector
- Institutionalized sector (NGOs)

Senders targeting farmers:

- Institutionalized sector (NGOs)
- Manufacturers
- Regulators

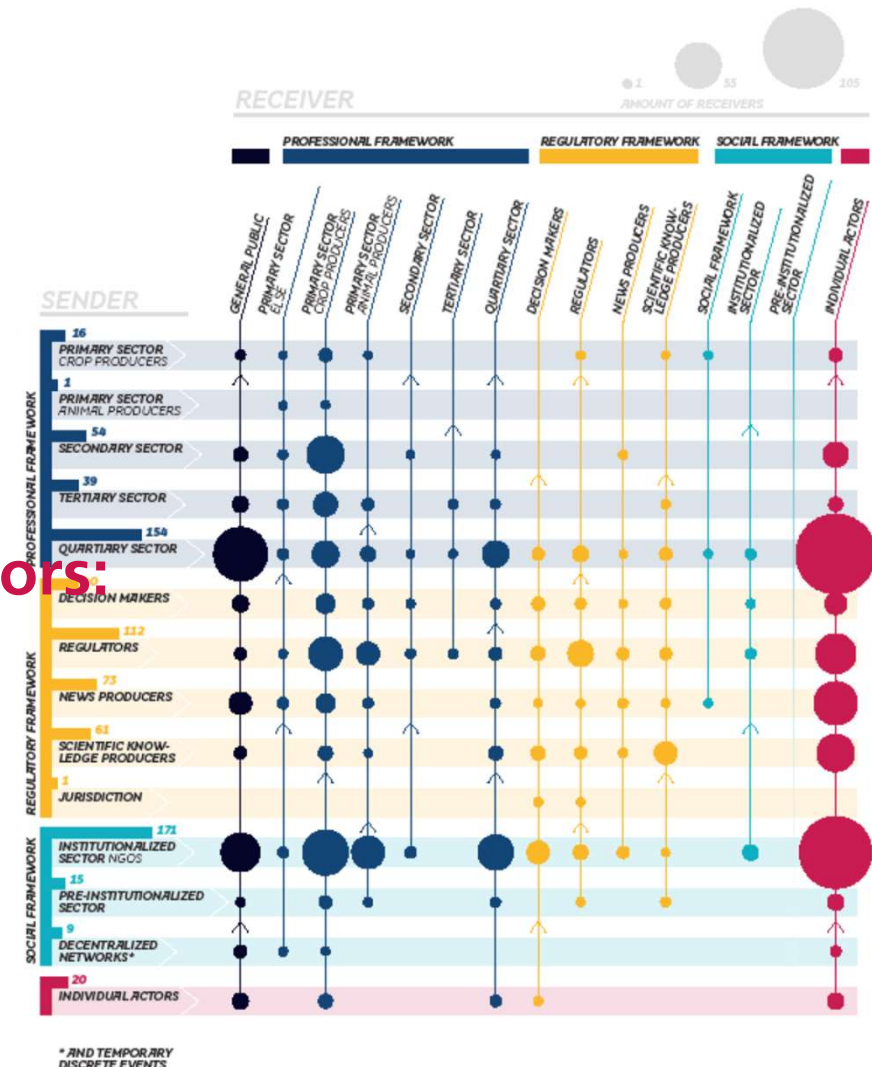
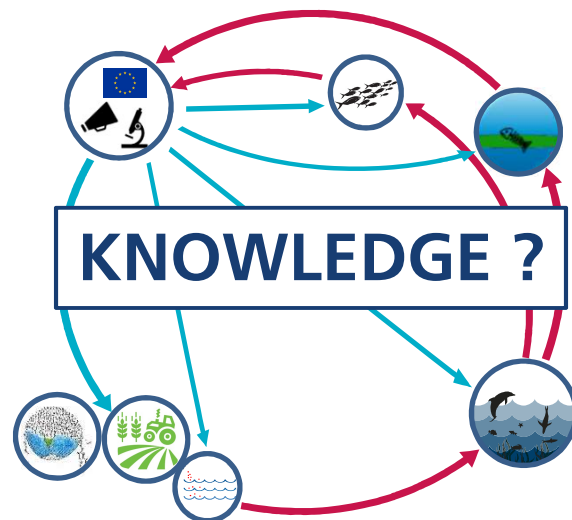


Figure: Knowledge transfer from all 7 investigated countries

(source: key story Eutrophication, ResponSEABLE)

Which information content is communicated?



DRIVER
ACTIVITY
PRESSURE
STATE/STATE CHANGE
WELFARE
RESPONSES

?



Figure: Media example; article about eutrophication (source: FAZ, Germany)



Which information content is communicated?

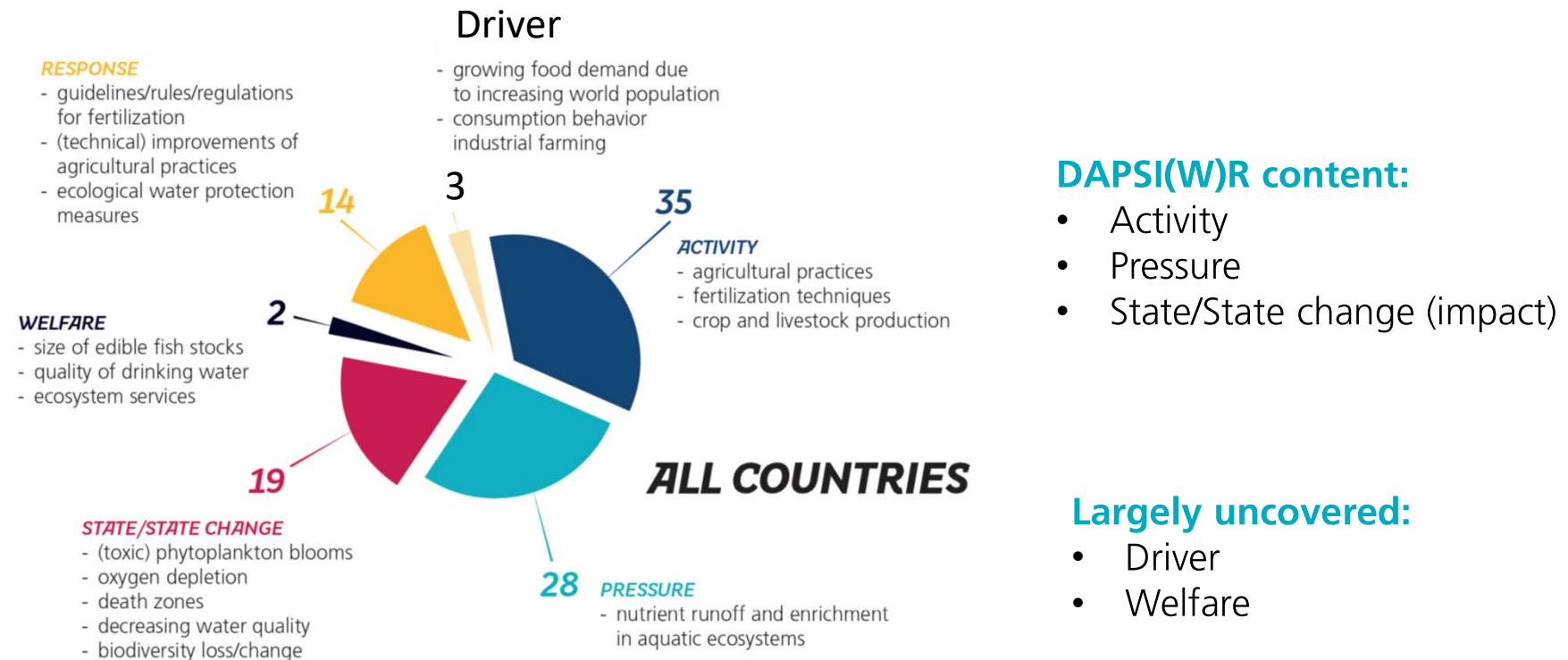
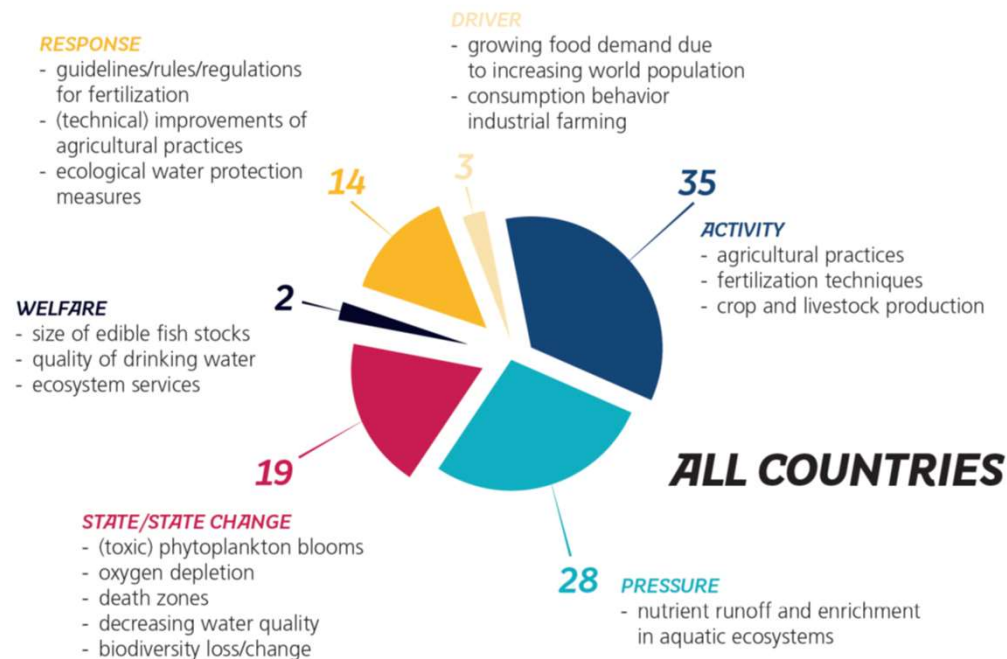


Figure: Communicated DAPSI(W)R content, all countries (source: key story Eutrophication, ResponSEAbLe)

Are messages target group specific?



Farmers and individual actors received (mainly) the same messages

Figure: Communicated DAPSI(W)R content, all countries (source: key story Eutrophication, ResponSEABle)



Perceptions of current knowledge system

Interviews:

decision maker
farmers
retailers/wholesalers

- How are you connected to value chain?
- Who has potential for change?

- all understood own role in value chain
- farmers are very critical towards retail/wholesale/food manufacturing
- decision maker: application of fertilizer needs a stricter control
- all: farmers have biggest potential but society is the key for initiating change



What did we learn?

Main targeted groups:
farmers & individual actors

Least targeted groups:
wholesalers/retailers, food
manufacturers



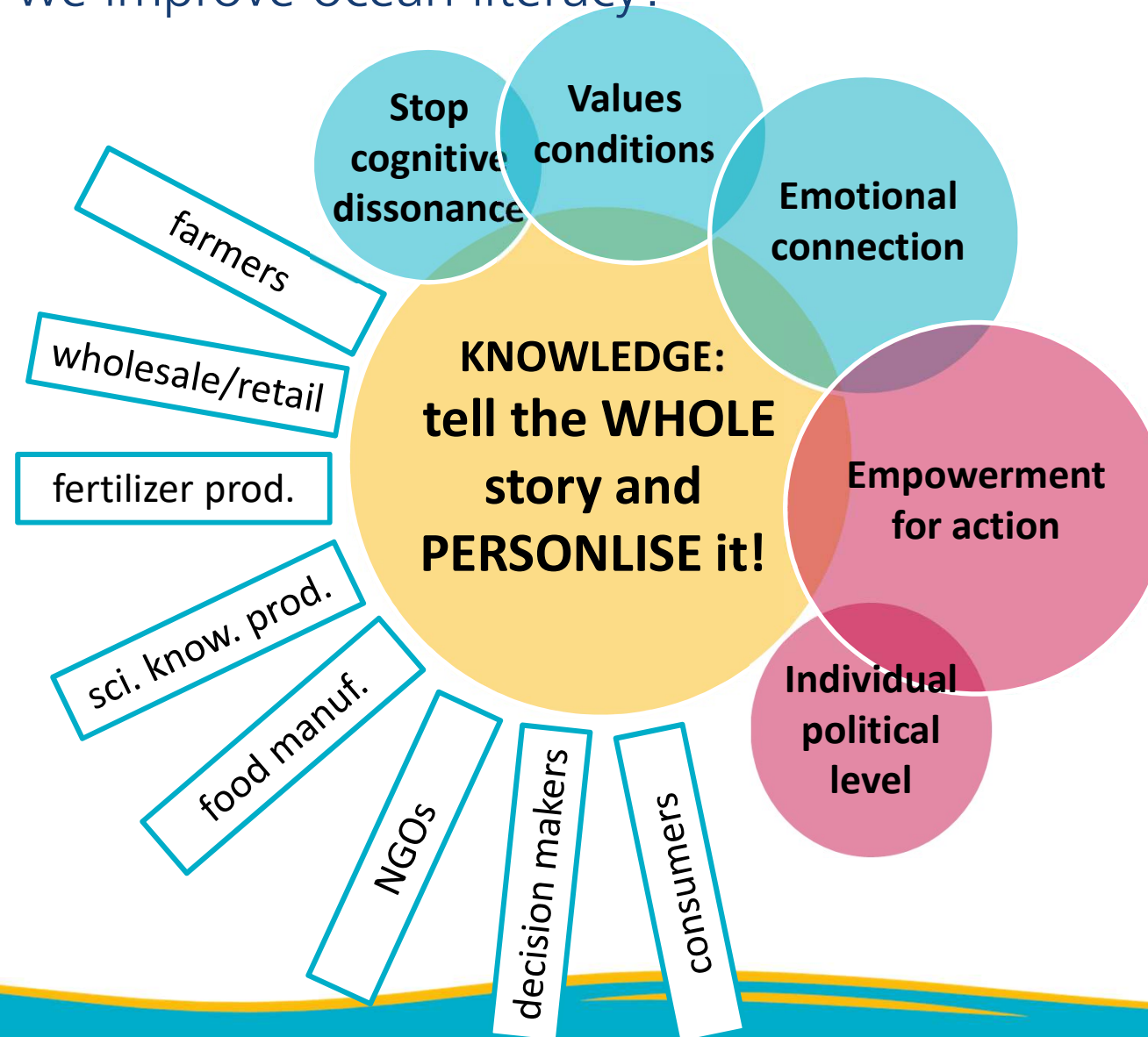
Content:
not target group specific
activity – pressure – state (- response); response: damage
control

Perception:
All actors feel being a part of the agricultural value chain
Actors connect mainly the activity of farmers to
eutrophication

Individual own potentials seem not powerful enough

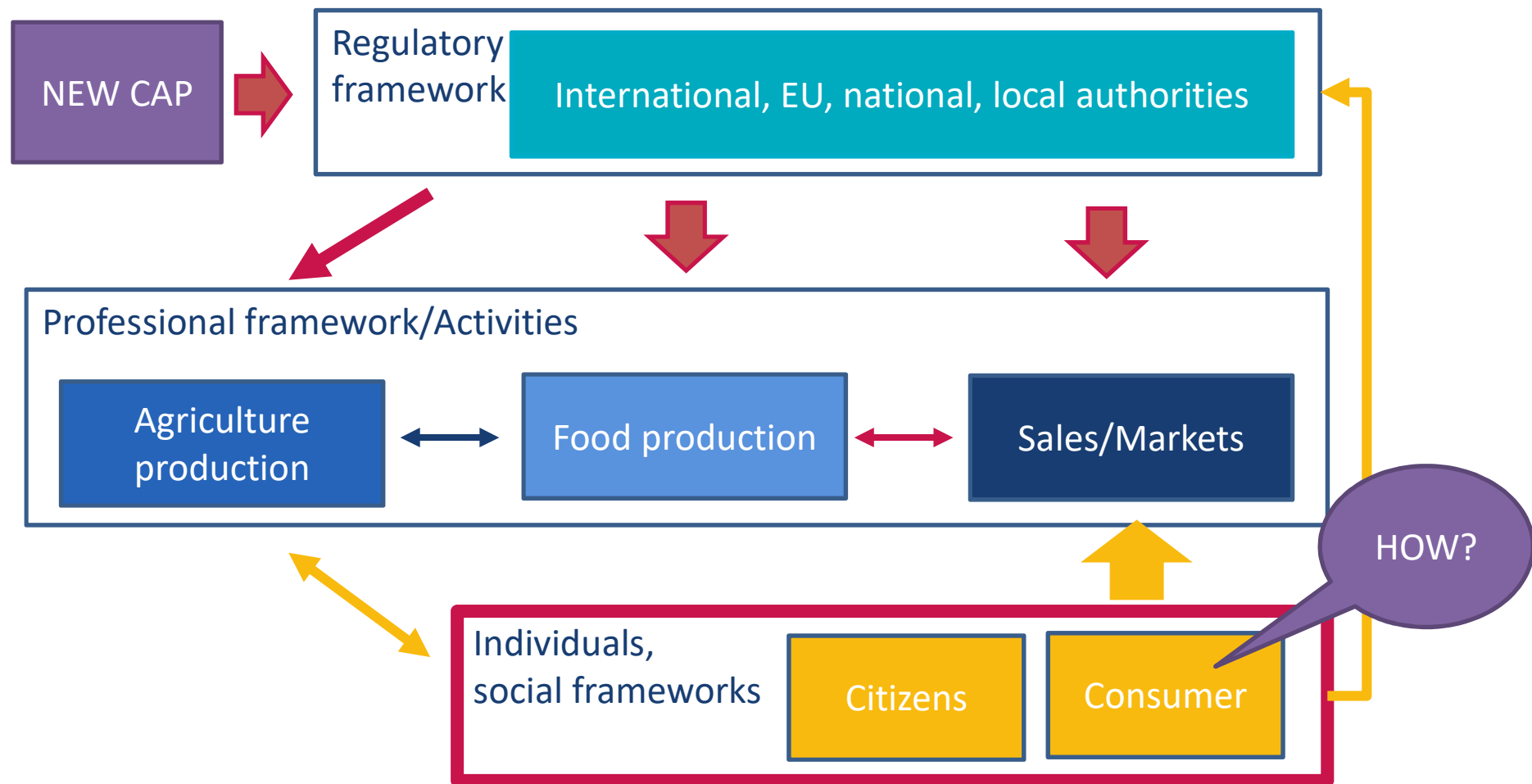


How can we improve ocean literacy?





Agricultural value chain and related responses





Contents were similarly distributed in the 7 countries!

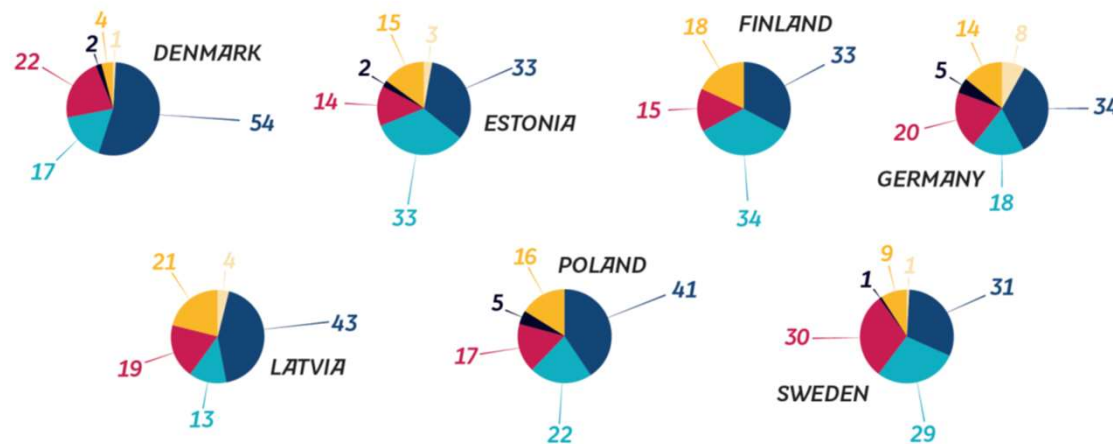


Figure: Communicated DAPSI(W)R content, all countries
(source: key story Eutrophication, ResponSEable)

DRIVER

- growing food demand due to increasing world population
- consumption behavior
- industrial farming

ACTIVITY

- agricultural practices
- fertilization techniques
- crop and livestock production

PRESSURE

- nutrient runoff and enrichment in aquatic ecosystems

STATE/STATE CHANGE

- (toxic) phytoplankton blooms
- oxygen depletion
- death zones
- decreasing water quality
- biodiversity loss/change

WELFARE

- size of edible fish stocks
- quality of drinking water
- ecosystem services

RESPONSE

- guidelines/rules/regulations for fertilization
- (technical) improvements of agricultural practices
- ecological water protection measures

Thank you!



Eutrophication in light of ResponSEAble

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RESPONSEABLE

Eutrophication beyond 2020: Rewriting the old fairy tale –new pathways to a happy ending

4th June, Tallinn, Estonia

Tallink Spa & Conference Hotel

Introduction by Heidrun Fammler, BEF Group



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Background idea of the workshop

- In the current EUSBSR eutrophication has been looked at from a bio-physical context:
 - farming causing nutrient pressure, nitrogen and phosphorus load, waste water treatment and innovative technologies for resource use etc.
- But a view on the socio-economic drivers around farming, on human welfare and a critical analysis of the policy responses is mostly missing.
- We do not deny that technological developments for more effective use of resources are important but are these enough?

Objectives of the workshop

- “ResponSEABLe” wants to contribute to the debate with some aspects that the EUSBSR 2020+ could more focus on:
 - Shared responsibilities
 - Complexity of the issues
 - Role of the value chain
 - Relationship of man and sea
 - We all have room for action
- At this workshop we want
 - To discuss with you what is NOT common knowledge,
 - To break people’s preconceived views and set a different picture on eutrophication,
 - To contribute to making ocean literacy an important corner stone of the forthcoming EUSBSR.

Our agenda

- 13:30 – 13:45 Welcome & Introduction (Heidrun Fammner, BEF)
- 13:45 – 14:45 ResponSEABLE about eutrophication: spotlighting the agricultural value chain for closing gaps in current communication (K.Veidemane, H.Weber, BEF)
- 14:45 - 15:00 Example of a communication incentive: Farmer of the Year Award (E.Kolate, Pasaules Dabas Fonds Latvija)
- 15:00 – 15:20 **coffee break**
- 15:20 - 15:30 Policy drivers of agricultural eutrophication (A.Lotman, Estonian Fund for Nature)
- 15:30 – 15:45 HELCOM reply: new policy developments concerning agriculture (S.Kaasinen; HELCOM)
- 15:45 – 16:00 Tour de table: What policy do we need?
- 16:00 - 16:15 30 years of communication and campaigning addressing farmers and policy makers – What is next? (M.Durkin, Coalition Clean Baltic)
- 16:15 – 17:00 Round table: discussing the “NEXT” – new tools for ocean literacy to engage stakeholders and citizens in change of behaviour.
Building the story map of eutrophication.
- 17:00 – 17:30 **Summary & coffee**



A discourse to the ResponSEABle Approach

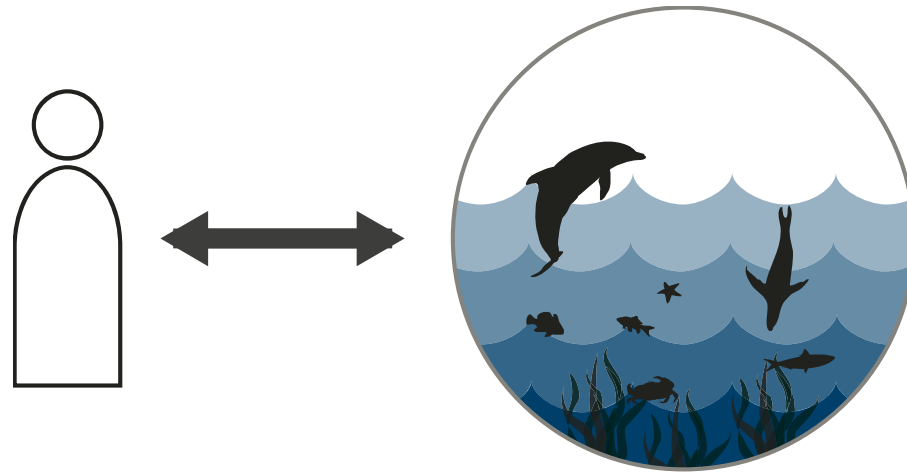
Tamer Fawzy & Heidrun Fammler, BEF Germany



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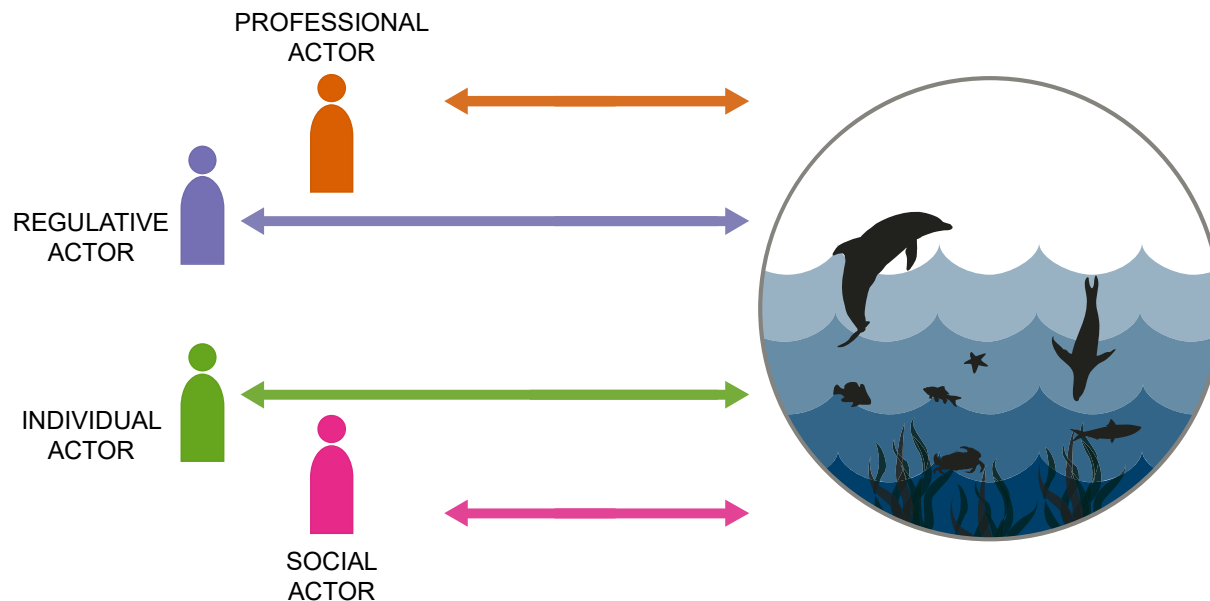
WHAT DOES IT MEAN TO BE OCEAN LITERATE?



#1

To understand your influence on the ocean and the ocean's influence on you.

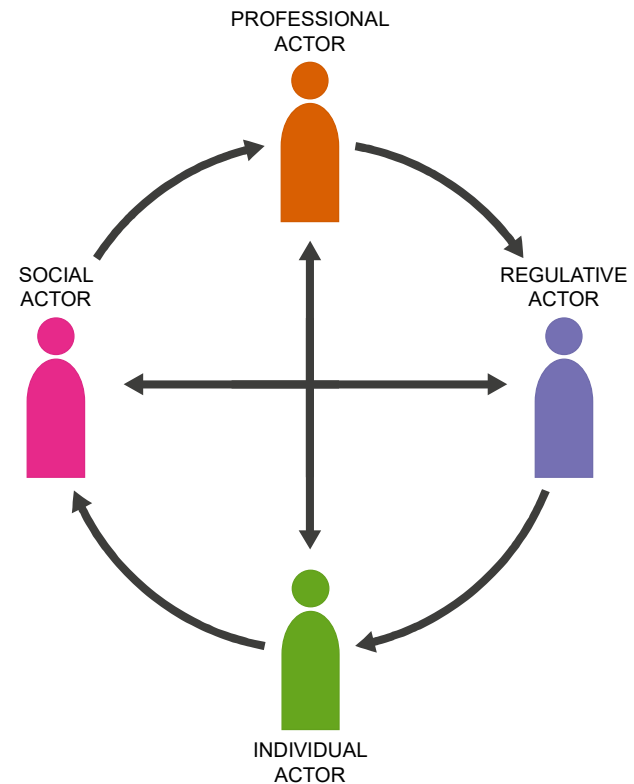
WHAT DOES IT MEAN TO BE OCEAN LITERATE?



#2

To understand your influence as an individual, professional and social being.

WHAT DOES IT MEAN TO BE OCEAN LITERATE?



#3

To be able to communicate responsibilities for the ocean to others.

WHAT DOES IT TAKE TO BE OCEAN LITERATE?

#1

SPECIFIC KNOWLEDGE ON THE
ENVIRONMENT AND HUMAN INTERACTIONS

#2

KNOWLEDGE ON THE SPECIFIC ACTORS AND
THEIR INTERRELATIONSHIPS

#3

THE ABILITY TO COMMUNICATE WITHIN AND
BETWEEN ACTOR GROUPS

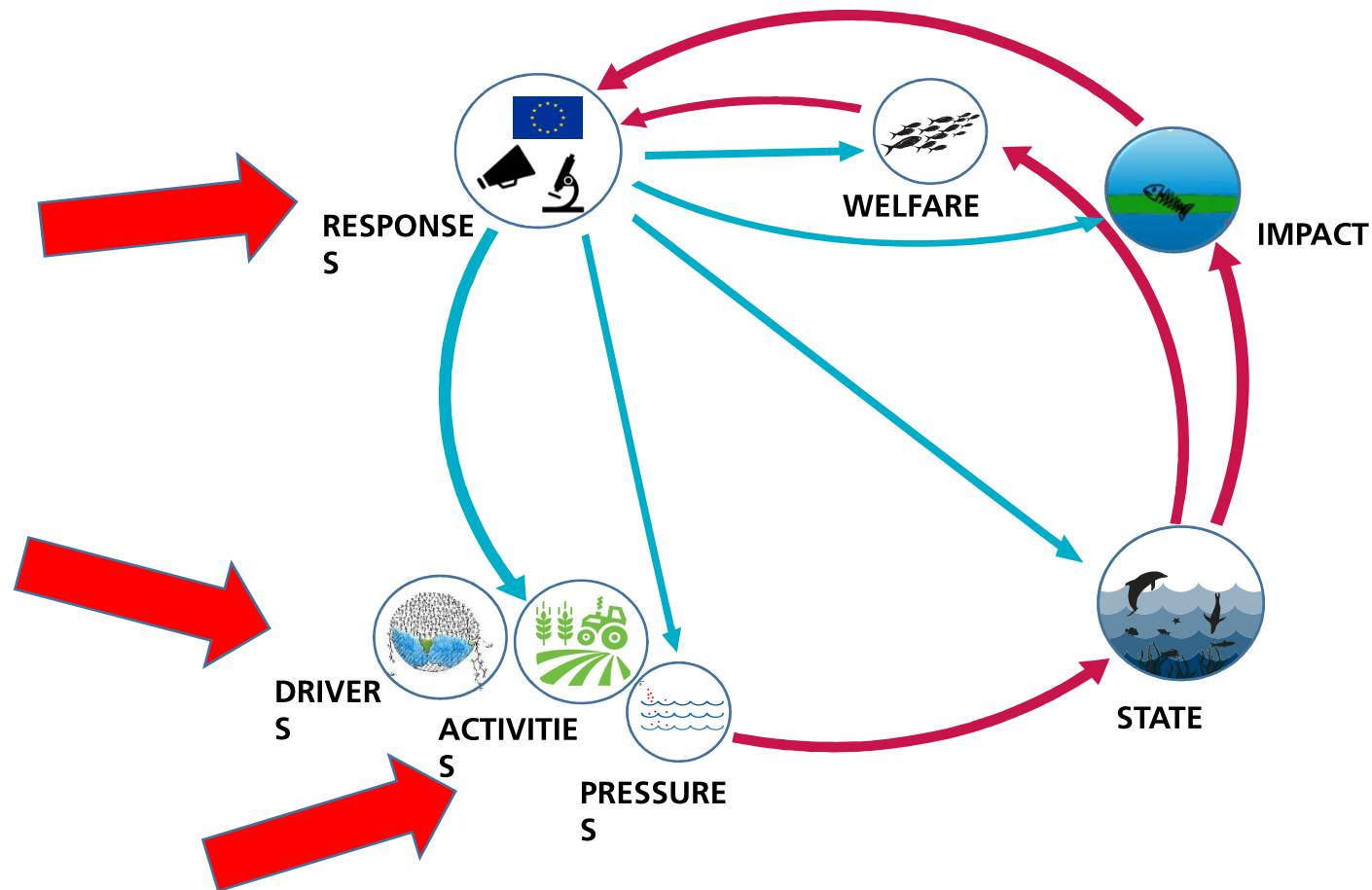
KNOWLEDGE ON THE ENVIRONMENT AND HUMAN INTERACTIONS



We identified six challenging environmental pressures for the ocean and the causing activities

What did we do in ResponSEAbLe?

- We set up a system to structure knowledge on our KS



What did we do in ResponSEABLE? (2)

-
- We searched for the «nexus of influence» or «key actors» that would reduce the impact on the marine environment by changing behavior;
- We visualized the Knowledge System on the Key Stories as pathways of information between actors;
- We analysed the content of communications as focusses on different aspects of the Key Stories;
- We interviewed actors on where they get their information and how they perceive it.



Eutrophication in light of ResponSEABLE

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