

# Launch of the Baltic Sustainable Aquaculture Working Group (Fish & Shrimp)

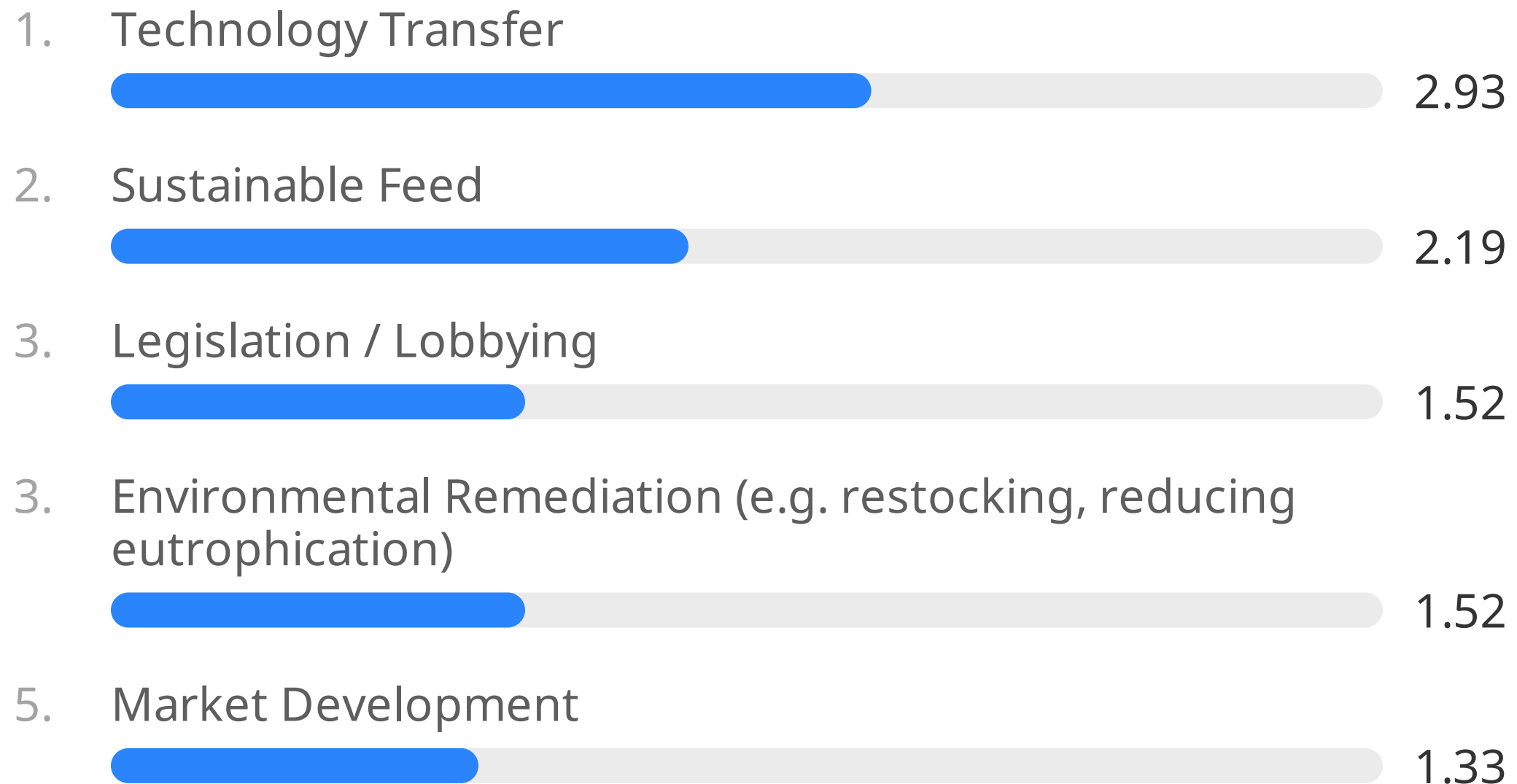
15 - 31 Mar 2021

Poll results

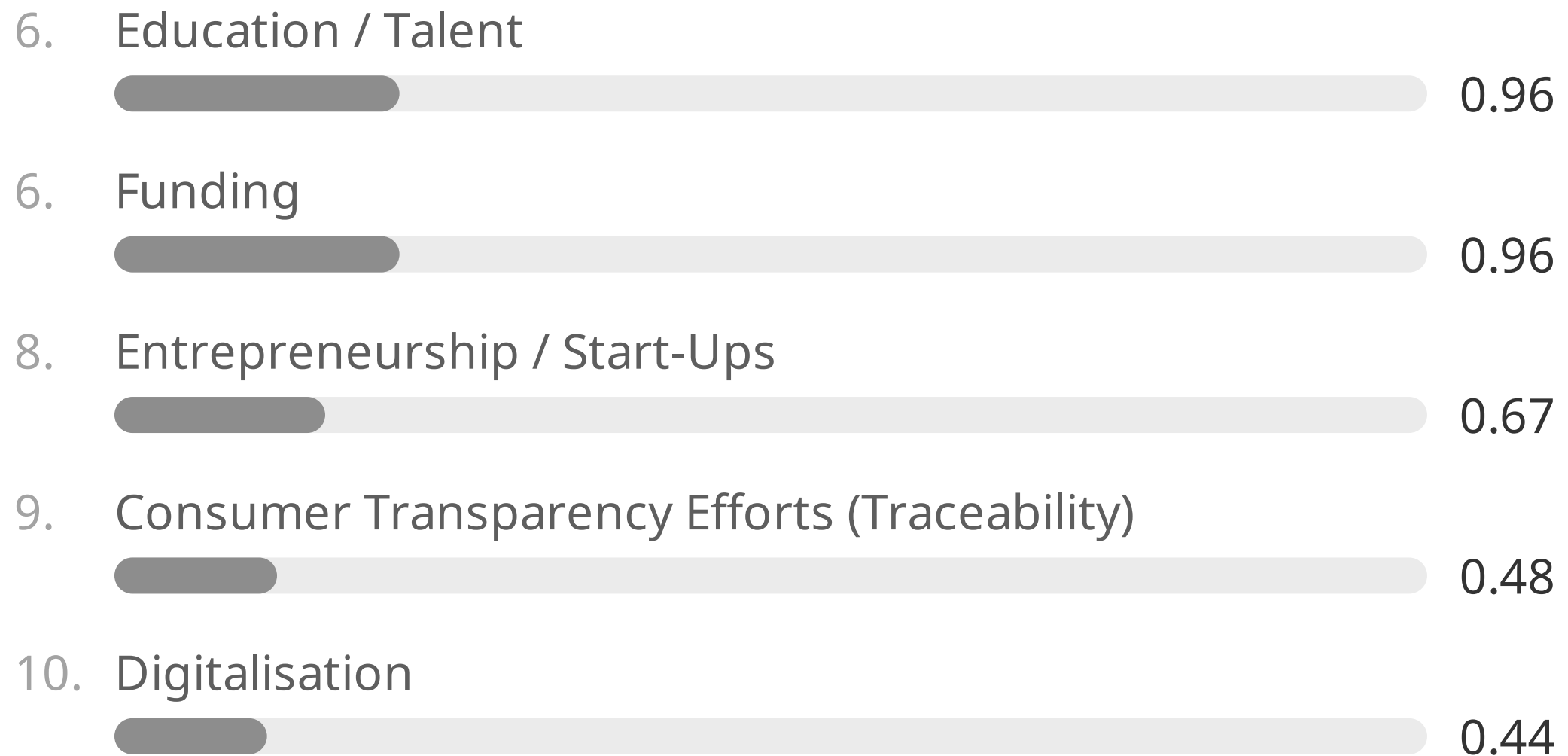
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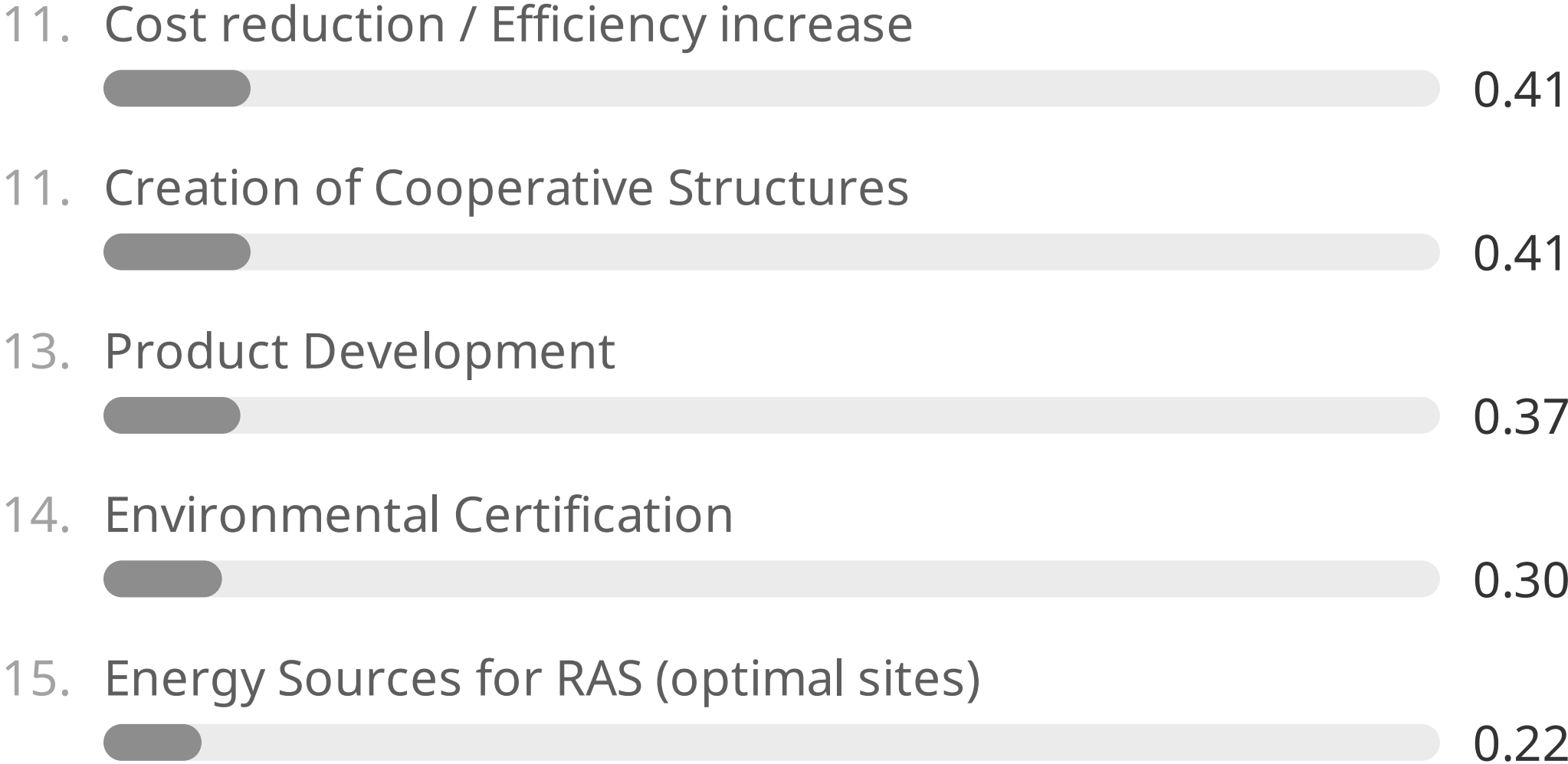
**Which 5 topics do you feel are the most important for Baltic countries to cooperate on?**  
(1/4)



**Which 5 topics do you feel are the most important for Baltic countries to cooperate on?**  
(2/4)



**Which 5 topics do you feel are the most important for Baltic countries to cooperate on?**  
(3/4)

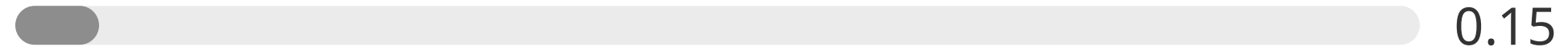


Baltic Aquaculture Working Group (1/17)

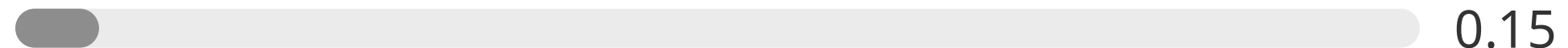
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**Which 5 topics do you feel are the most important for Baltic countries to cooperate on?**  
(4/4)

16. Joint Monitoring Systems



16. Joint Data Collection and Exchange



**What do you envisage the scope of the working group to include? Please select from the following list.**

IMTA



RAS



Offshore Finfish Aquaculture



Aquaponics



Sustainable Feed



Baltic Aquaculture Working Group (3/17)

0 2 1

## Which Baltic states should be represented in the Working Group? (1/2)

Denmark

19 %

Estonia

14 %

Finland

19 %

Germany

14 %

Latvia

14 %



Baltic Aquaculture Working Group (3/17)

0 2 1

## Which Baltic states should be represented in the Working Group? (2/2)

Lithuania

14 %

Poland

14 %

Russian Federation

10 %

Sweden

19 %

All of the above

90 %

## How should the working group focus its efforts?

1 focus area (e.g. feed), forever!

0 %

Alternating focus areas (e.g. 1 per quarter/year)

52 %

No specific focus area

48 %

Baltic Aquaculture Working Group (5/17)

0 2 3

**Should the working group be divided into sub-groups with focus on specific areas (e.g. Baltic shrimp)?**

Yes



No



Baltic Aquaculture Working Group (6/17)

0 2 5

## How regularly should the Working Group meet?

Every month



Every two months



Quarterly (3 months)



Baltic Aquaculture Working Group (7/17)

0 2 1

**Would you consider working towards ASC certification with your company/partners?**

Yes



No



Baltic Aquaculture Working Group (8/17)

0 2 6

**Do you see an EATIP Mirror Platform as a beneficial structure for aquaculture in the Baltic Region (incl. bivalves/macroalgae/BlueBioTech)?**

Yes



No



Not sure



Baltic Aquaculture Working Group (9/17)

0 2 2

**Do you agree with the following name for the working group? "SUBMARINER Fish and Shrimp Aquaculture Working Group"**

Yes



No



Baltic Aquaculture Working Group (10/17)

0 1 7

## Would you like your organisation to be featured in our Baltic Catalogue?

Yes



No





Baltic Aquaculture Working Group (11/17)

0 2 4

**Would you like to be a formal member of the  
SUBMARINER Aquaculture Working Group?**

Yes



No



## What benefits/incentives would you hope to gain from a transnational working group on shrimp & fish aquaculture?

(1/4)

- Networking
- Access to markets Tech providers  
Startup support Funding  
Customers
- I hope that joint projects will be initiated, which will then hopefully also be promoted. More international visibility of our work and the Institute.
- - Improved communication & networking between like-minded people - Sharing ideas & stimulate each others creativity
  - Learn about funding possibilities
  - Team up with new contacts for joint proposals & projects - Promote a development towards a sustainable future (emphasis on Aquaponics)
- Greater communication, collaboration and identification of synergies. Sharing of knowledge and expertise. Improved networking.

## What benefits/incentives would you hope to gain from a transnational working group on shrimp & fish aquaculture?

(2/4)

- Increased representational impact. Funding / research / project opportunities. Division of labour between participants.
- Know-how, cooperation, new initiatives, joint forum/ promotion/ lobbying
- Better networking and information exchange.
- New Cooperations and projects
- new projects
- stronger industry for production independence
- Strong representation in the EU politics regarding management of the Baltic Sea Area; exchange of members regarding problems, offer a forum; communicate the chances and risks connected with aquaculture in the Baltic Sea area
- Develop and communicate of the potential for RAS and offshore fishfarms,

## What benefits/incentives would you hope to gain from a transnational working group on shrimp & fish aquaculture?

(3/4)

including use of local food, in order to improve social acceptance

- Knowledge transfer  
Lobbyism/education
- Knowledge and experiences in a Baltic sea perspective
- Knowledge transfer - both on the scientific / technology level but also on

the consumer market level.

Relation-building for project ideas and partner profiles. Inspiration!

- A transnational group based on geography (for example around the Baltic) instead of political boundaries is preferable. We gain insights to how others tackle similar problems while faced

Baltic Aquaculture Working Group (12/17)

0 1 6

**What benefits/incentives would you hope to gain from a transnational working group on shrimp & fish aquaculture?**

(4/4)

with the same issues. It minimises "us" and "them" issues and can result in a healthier co-operation for a more sustainable aquaculture industry in the Baltic region.

## Where do you see gaps in representation of sustainable Baltic aquaculture? e.g. funding, education, legislation

(1/4)

- Environmental authorities (regional, national). Maybe a common understanding of possibilities and challenges of the business sector is lacking.
- Education Legislation Startups
- cross-border funding
- When it comes to the development of aquaponics in, for instance, Nordic countries, I like to mention 4 core aspects that are key to improve the public awareness on the advantages of this alternative food production method: -  
Communication - Organization - Research - Education  
Communication already led to an improved organization (e.g., SUBMARINER Aquaculture Working Group & the initiation

## Where do you see gaps in representation of sustainable Baltic aquaculture? e.g. funding, education, legislation

(2/4)

of the Finnish Aquaponics Society) but to raise funding is not always an easy task & essential to carry out research, which leads to knowledge to transfer to stakeholders and the next generation and thus, education.

- Gaps will most likely be driven by practical issues e.g. through resources available, the knowledge and expertise

of those engaging in the group. Where there is no representation, there will be gaps...

- Legislation and education
- Education legislation
- There's a lack of harmonized legal standards.
- Russian with Kaliningrad region is missing
- no
- funding access, VC education in

## Where do you see gaps in representation of sustainable Baltic aquaculture? e.g. funding, education, legislation

(3/4)

- AG tech, EU funding Horizon access
  - Legislation is definitely a problem. For example using Baltic Sea Water in Germany for RAS with good end-of-pipe-treatment; funding could also be enhanced, especially improving the process and making it easier to receive funding
  - Education Legislation
  - all the mentioned :)
  - "Sustainable" Baltic Aquaculture (fish and shrimp) - is one big gap? Have I misunderstood the question?
  - I believe there is a gap in what the public (and indeed many politicians) see as aquaculture, and what it is in reality. So better marketing and public awareness incentives might be required to lift sustainable aquaculture.
- Funding



Baltic Aquaculture Working Group (13/17)

0 1 6

## **Where do you see gaps in representation of sustainable Baltic aquaculture? e.g. funding, education, legislation**

(4/4)

has been a problem for mussel farming in the Baltic especially here in Sweden where we have no problem to grow mussels as an environmental mitigation but then have no market for the product. Here we are talking about fish/shrimp but perhaps the establishment of IMTA with fish farms in the Baltic might have the added benefit of providing a circular sustainability with

mussels used in feed for fish and/or livestock feeds. I think in terms of legislation there is a bigger problem with how the regulation is interpreted differently in different Baltic countries. This may restrict development in some countries while allowing it in other countries. This is occurring even though we are under the legislation.

## Where do you see potential for transnational collaboration? e.g. consultancy, regulation, marketing

(1/3)

- - in regulations
- - Share knowledge & experience also in the form of consultancy - When it comes to sea-based aquaculture, regulations should be general and followed by all participating countries - Organic certification can gain people's trust in, e.g., aquaponically produced products, so legislation (food policy etc.) is important but not always meaningful. If not existing, legislation on this kind of products should be developed and, for example, the EU organic certification should be rechecked.
- - Writing proposals for larger projects for funding from suitable EU funds
- Adopting a basin approach to common issues

## Where do you see potential for transnational collaboration? e.g. consultancy, regulation, marketing

(2/3)

- including MSP, IMTA, research, projects, knowledge transfer and joint working on common issues - e.g. environmental impacts, RBMP etc.
- Marketing and lobbying/ consultancy
- Cooperation in different ways
- Joint efforts to harmonize regulations and widen market access.
- Technology and Research, Marketing
- Regulation
- consultancy, funding, regulation
- merger
- making a lobby for aquaculture in the Baltic Sea area; exchange of information and establishing an educational platform, e.g. offer a platform for internships for different topics.
- Denmark and Finland is in front in relation to

## Where do you see potential for transnational collaboration? e.g. consultancy, regulation, marketing

(3/3)

- Offshore fishfarms, Danmark is a strong player in relation to RAS technology. These strong positions should be used to support development in other Baltic areas
- Joint markets
- projects, consultancy and social accept
- all of these plus consumer awareness, image-building, product development
- In my opinion a collaboration through marketing might be the most beneficial. We sometimes forget that most people outside aquaculture have no idea that there even is an industry in Europe. Public awareness leads to political change in a "bottom up" fashion.

Baltic Aquaculture Working Group (15/17)

0 1 6

## **In which direction do you think Baltic aquaculture should go? e.g. inland, feed, high-value species, compensation schemes, de-/centralised production**

(1/5)

- A very broad question. One solution does not fit all. The sector should develop both traditional and new advanced technologies. Decentralized production unfortunately typically has high costs, which have to be covered somehow.
- Centralised feed production
- This is a difficult issue and should be taken individually for each country. However, in order to protect the Baltic Sea, for fish, I would consider inland aquaculture to be more promising for the future, as you can work very well in the aquaponic sector here. Moreover, attention should be paid to sustainability and

Baltic Aquaculture Working Group (15/17)

0 1 6

**In which direction do you think Baltic aquaculture should go? e.g. inland, feed, high-value species, compensation schemes, de-/centralised production**  
(2/5)

animal welfare. Uniform standards of husbandry (which feed, husbandry conditions are good for the animal in terms of product quality but also the health of the animal) should be strived for. In addition to biological studies, digitalisation should also be promoted (behavioural changes in fish --> sick, unwell.....).

- Definitely towards land-based, recirculating, multi-trophy = multi-product, artificial chemical-free approaches, such as, Aquaponics & RAS. Solving our own problems: Supporting and using renewable

Baltic Aquaculture Working Group (15/17)

0 1 6

**In which direction do you think Baltic aquaculture should go? e.g. inland, feed, high-value species, compensation schemes, de-/centralised production**

(3/5)

sources of energy (e.g., solar panes) & efficient use of the own waste stream (key words: bio-remediation of own waste water, vermiponics, biogas).

- A collaborative, regional approach will be beneficial. In terms of the industry development of aquaculture for

human food consumption, consideration should be given to the market led / product led discussion. Marine and FW priorities (and challenges) will differ. The

## **In which direction do you think Baltic aquaculture should go? e.g. inland, feed, high-value species, compensation schemes, de-/centralised production**

(4/5)

application of technology and innovation across the sector value chain should be prioritised.

Reputation and excellence within the Baltic aquaculture sector should be prioritised.

- All above plus demo/ education option
- Environmentally friendly, inland, compensation schemes.
- Inland RAS

- Reach and maintain a higher level of production standards compared to imports into EU (sustainability, fish welfare, social standards, ...) - this will allow a better access to EU retailers.

- Feed, decentralised production
- Near-Shore aquaculture with high-value species and mussel-/algae-farms
- RAS may be the technology that



Baltic Aquaculture Working Group (15/17)

0 1 6

**In which direction do you think Baltic aquaculture should go? e.g. inland, feed, high-value species, compensation schemes, de-/centralised production**

(5/5)

will dominate the Baltic production in 10 y time. Training and education is key for this development

- Close land-based systems with connection to coastal waters
- holistic production-protection scopes
- Decentralised production - different profiles - RAS for new

species, IMTA/holistic regenerative offshore cage-fish farming (protection and production)

- I would not want to limit myself to any of these. I understand the need to focus but I also believe we can be effective in all of these areas.

## Where do you see potential synergies between the aqua- and agriculture sectors? e.g. water treatment, fertilisers

(1/4)

- Ecological compensation, exchanging nutrient quotas, feed sources
  - Feed Fertiliser
  - yes. besides water treatment, also directly aquaponic
  - - Aquaponics (AP), since it is combining aqua- & agriculture. - Potential downstream products of an AP facility
- are liquid and solid (bacterial & algal biomass) fertilizers. These are even organic & would facilitate the waste water treatment. - Both sectors should work together for a more sustainable

## Where do you see potential synergies between the aqua- and agriculture sectors? e.g. water treatment, fertilisers

(2/4)

future: Traditional farmers that are interested in alternative solutions could also become operators of alternative food production systems. Also the fact that the meat consumption (at least in some countries) is declining could motivate meat producers to re-think & farm fish and other aquatic food sources instead of pigs and cows. Their existing facilities could even

be re-designed and used for indoor fish farming instead of using resources to build everything from scratch (key words: local & fresh produce, local job opportunities, and related benefits for environment & society).

- Food production, environmental considerations and shared water resources are the most striking. In policy

## Where do you see potential synergies between the aqua- and agriculture sectors? e.g. water treatment, fertilisers

(3/4)

- terms - EU Green Deal, Farm2Fork Strategy, Rural Development Strategies / socio-economics, & circular economy.
- Existing agriculture facilities can be used for a different purpose like inland aquaculture
  - Nutrient recovery
  - Use of urine/ excrements to produce algae for fish feed production.
  - Aquaponics
  - fertilisers
  - merger and skills exchange
  - Waste can be used for biogas plants or also as fertiliser (if salt is not playing a role)
  - There is focus on development of the local feed production, and reduce import soya.  
Furthermore, fish production in farm buildings not in use may be a new strategy for a production with a low footprint

## Where do you see potential synergies between the aqua- and agriculture sectors? e.g. water treatment, fertilisers

(4/4)

- Aquaponics farming
- feed production, RAS in farm buildings
- All over the place! Feed, water management, fertilisers, heat management, circular bioeconomy, protein production, food processing, marketing, transport...
- We're seeing integration in Sweden with land-based recirculation systems in symbiosis with the agriculture sector in a form of "large-scale aquaponics" with existing agriculture farms. I believe this has a lot of potential in Sweden and in other areas where agriculture is well-established but where smaller farmers have problems competing with large agro-companies.

## Further comments, suggestions or ideas?

(1/2)

- I think that was a lot already ;) & I'm looking forward to contribute to the activities of the SUBMARINER Aquaculture Working Group.
- Consideration should be given to making the formal structuring of the group as broad as possible - i.e. to ensure that no one area is excluded. Even if activities / thematic areas considered remain quite specific it is often better to leave other areas unreferenced rather than excluded (even if inadvertently / unintentionally). Similarly, focus areas and operational methodology can be decided on a flexible basis as the working group grows, evolves, and priorities change.
- I like the name "Baltic Fish and Shrimp Aquaculture Working Group by SUBMARINER"
- Kaliningrad would like to join Submariner

**Further comments, suggestions or ideas?**  
(2/2)

- at some seminars it could be relevant to have ie. Species specific break outs