

The state of

UK AQUACULTURE

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& the role of **KNOWLEDGE EXCHANGE** in advancing sustainable socio-economic development and internationalisation

Effective knowledge exchange strategy:

- Connect the UK Aquaculture sector
- Determine R&I capabilities and international connections + Identify strategic priorities
- Provide a platform & tools to support new opportunities for collaboration
- Disseminate research outcomes
- Improve public understanding of aquaculture



• HOW RELEVANT IS UK AQUACULTURE?

Structure of the UK aquaculture sector: 2008-2014				Economic performance of the Structure of the aquaculture sector:			
Variable	2014	Change 2008-2014	% of total sector	Variable	2014	Change 2008-2014	% of total sector
Structures (number)	551	+18	+3%	Revenue (billion £)	992.4	+99%	+11%
Full-time employees	484	+5	+1%	Turnover	14.4	+3%	+28%
Part-time employees	52	+6	+11%	Other income	1.4	+1%	+28%
Subtotal	536	+24	+4%	Subsidies	5.4	+2%	+20%
Employment (number)	538	+24	+4%	Total income	1077.4	+100%	+12%
Total employees	3,310	+76	+2%	Performance indicators (billion £)			
Part-time employees	2,809	+38	+1%	Gross Value Added	341.0	+14%	+2%
Female employees	482	+23%	+5%	Operating cash flow	244.2	+14%	+8%
FT/PT	2,761	+38	+1%	Earnings before interest and tax	206.1	+20%	+5%
Male FT/PT	2,489	+26	+1%	Net profit	191.1	+19%	+4%
Female FT/PT	281	+18%	+7%	Operational profit (NI)	15.0	+2%	+8%
Indicators				Return on investment (ROI)	33.4	+4%	+6%
FT/PT ratio	3.0	+0.2	+7%	Future Expectation Indicator (FEI)	5.5	+4%	+2%
Average wage (thousand £)	35.2	+0.6	+2%				
Labour productivity (thousand £)	123.5	+2%	+2%				

adapted from STECF 2013

• WHAT IS PRODUCED?



• WHICH FUNDING EXISTS?

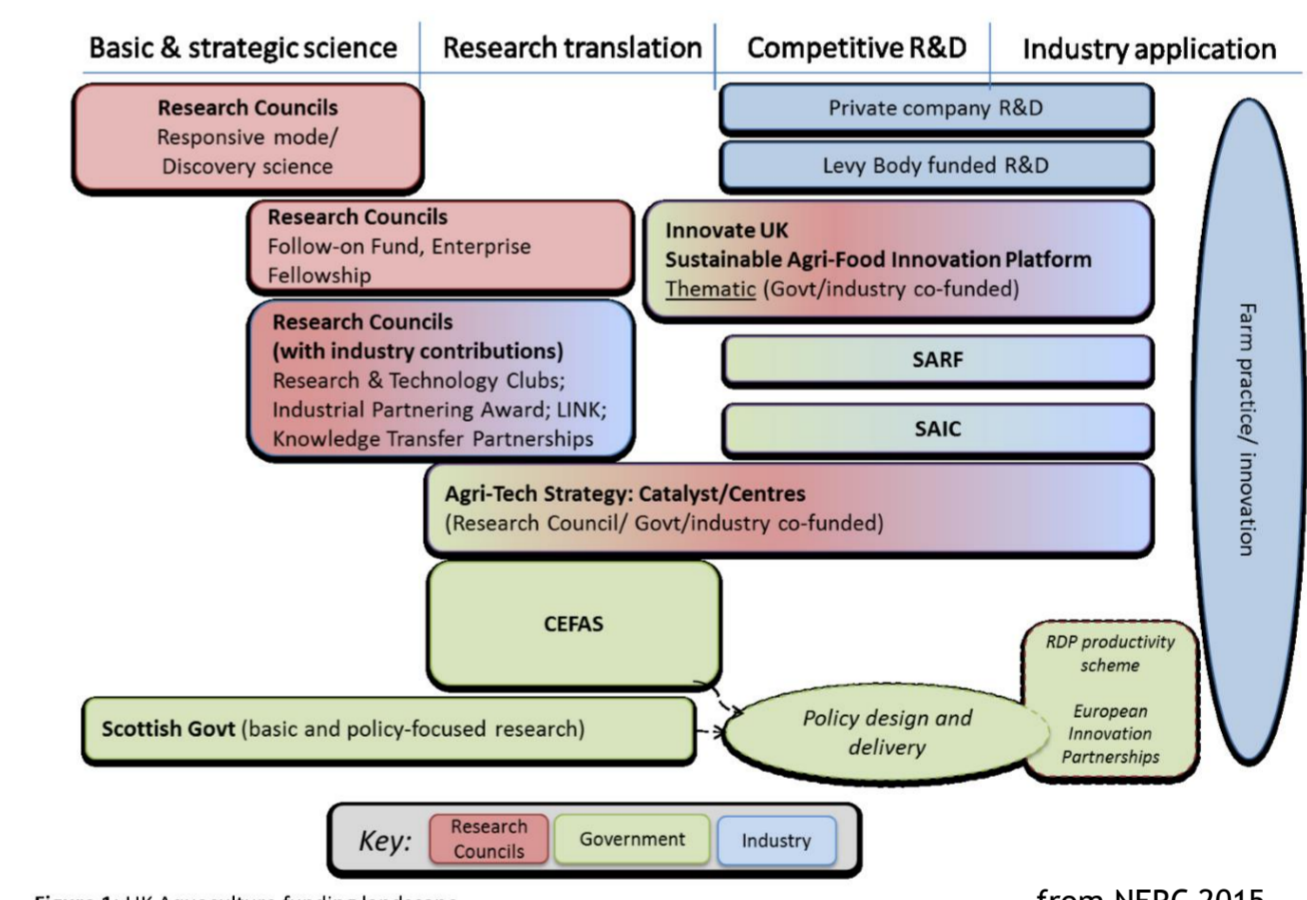
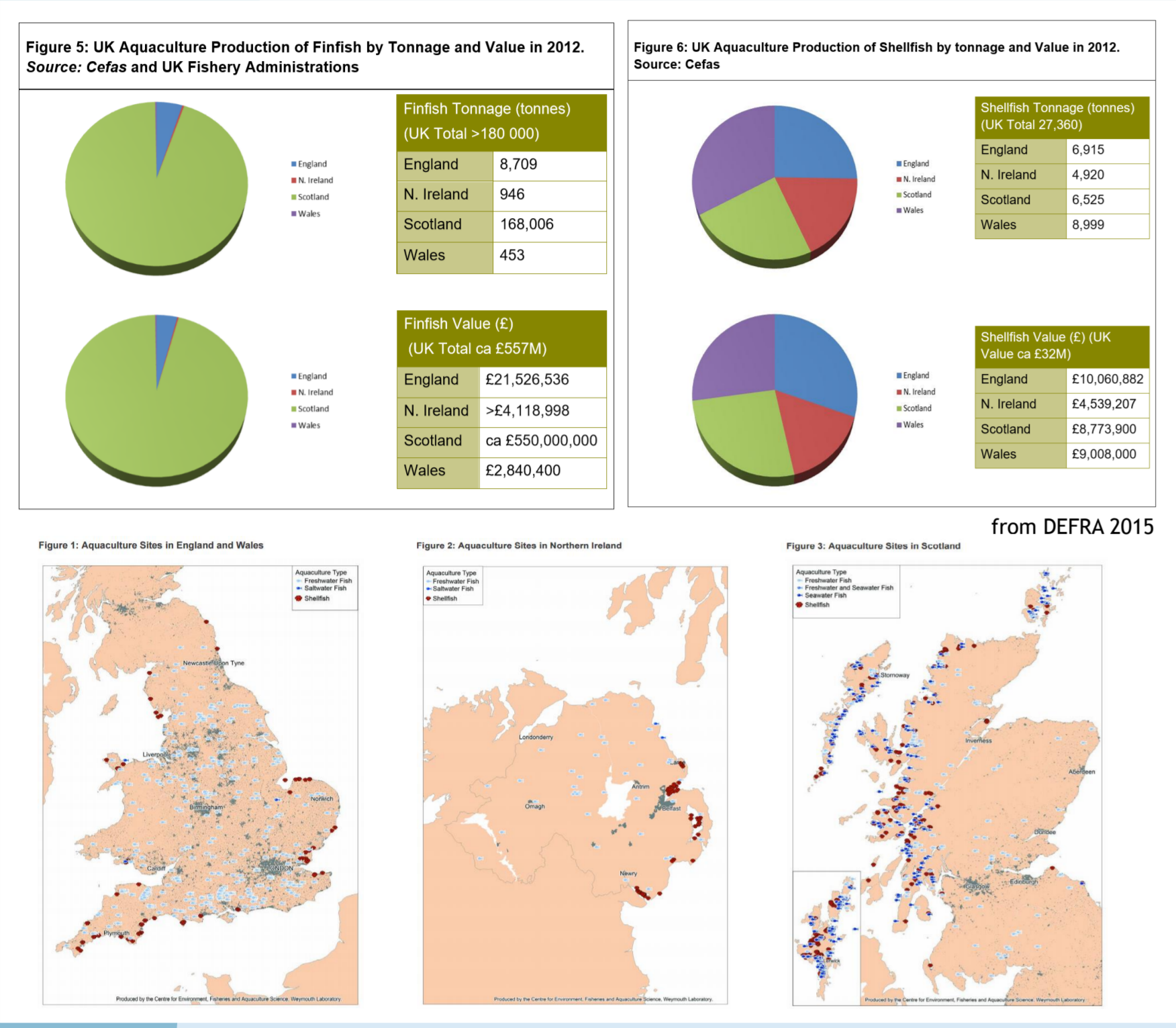


Figure 1: UK Aquaculture funding landscape from NERC 2015

How can knowledge exchange HELP ?

- Develop user-friendly visual databases that map UK stakeholders and international links.
- Expand the reach of academia/businesses, by showcasing research capabilities and company profiles, both within the UK and overseas.
- Disseminate current research and match research offer to research needs, through networking events, social media or online tools.
- Support links through existing networks, inform policy and facilitate collaborations.
- Inform future R&I funding, from stakeholder defined funding priorities.
- Inform the public, engage with schools and involve stakeholders in outreach activities.

Facts & Figures



- UK is the largest EU producer by value.
- **Scotland:** Most production and R&D, with solid business-academia relations.
- Priorities/investment vary with countries
- Large sector but limited R&I investment; focus on narrow topics and specific areas.

Who are the main **STAKEHOLDERS** and how do they collaborate?



Which are the top companies?

- Majority of sector are SMEs
- Associations & trade bodies: BAQUA, Scottish Salmon, Shetland Aquaculture, etc.

Which are the top research institutions?

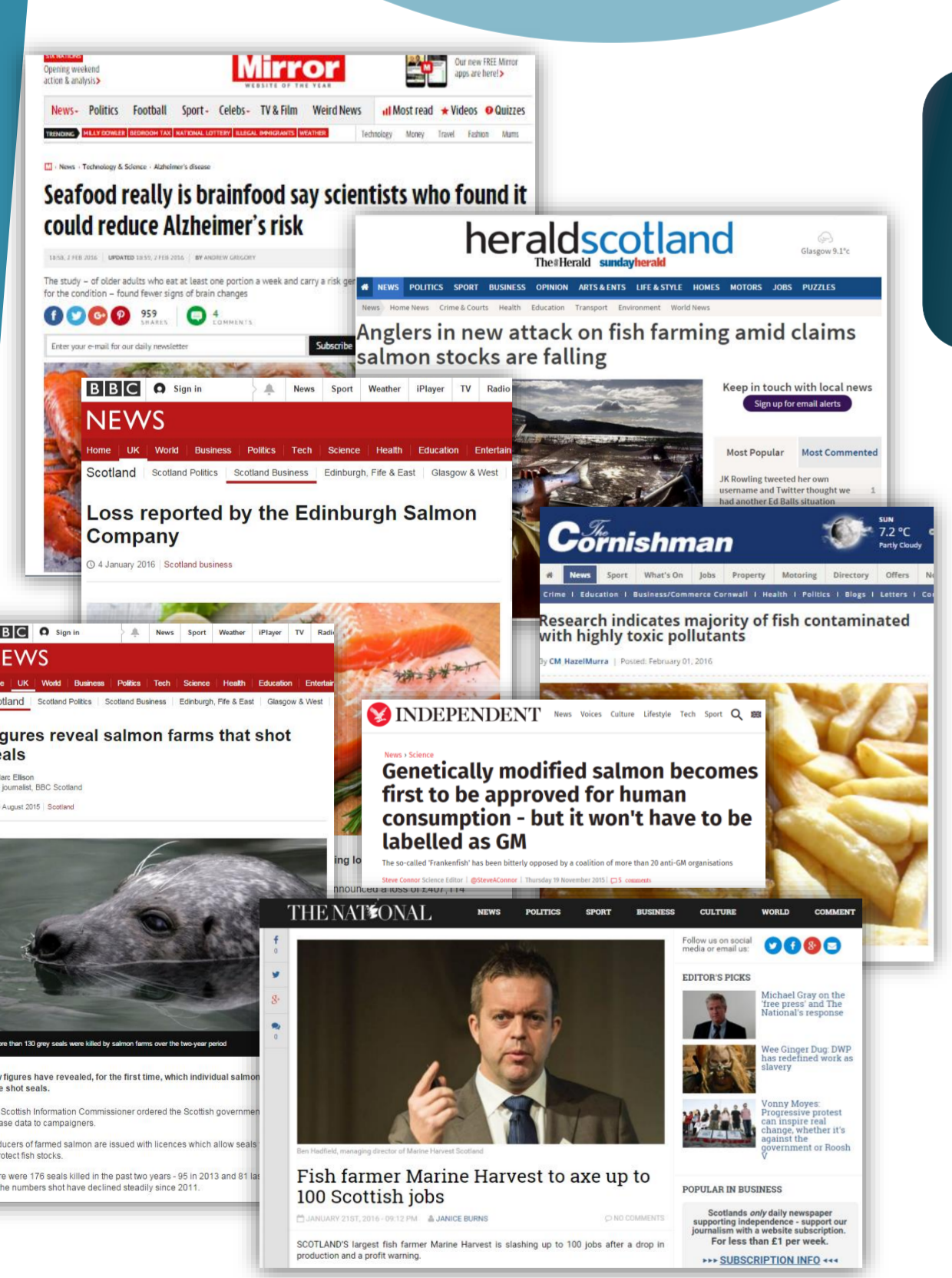
- Institute of Aquaculture, Stirling University
- Scottish Association of Marine Science
- Plymouth Marine Laboratory
- University of Aberdeen
- University of St. Andrews
- University of Swansea

What are the **knowledge exchange CHALLENGES ?** according to stakeholders

- Lack of communication and insufficient knowledge exchange between UK industry and academia.
- Excessive bureaucracy and mismatch of priorities.
- Funding does not support the wider sector's needs, inclusion of SMEs and internationalisation.
- Basic and applied research are often decoupled and there is lack of funding for research translation.
- Research is locked-away and is hard to know "who-is-who?" and be aware of actual research capabilities.

What about public perception?

- There is a concern from businesses on public perception of aquaculture
- Is necessary to understand public perception and attitude formation:
 - Is the public ambivalent? Informed? With a negative attitude towards aquaculture?
 - Is essential to engage better with the public and press



Acknowledgments
This Knowledge Exchange Fellowship (NE/P005349/1) is funded as part of BBSRC-NERC UK Aquaculture Initiative

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