



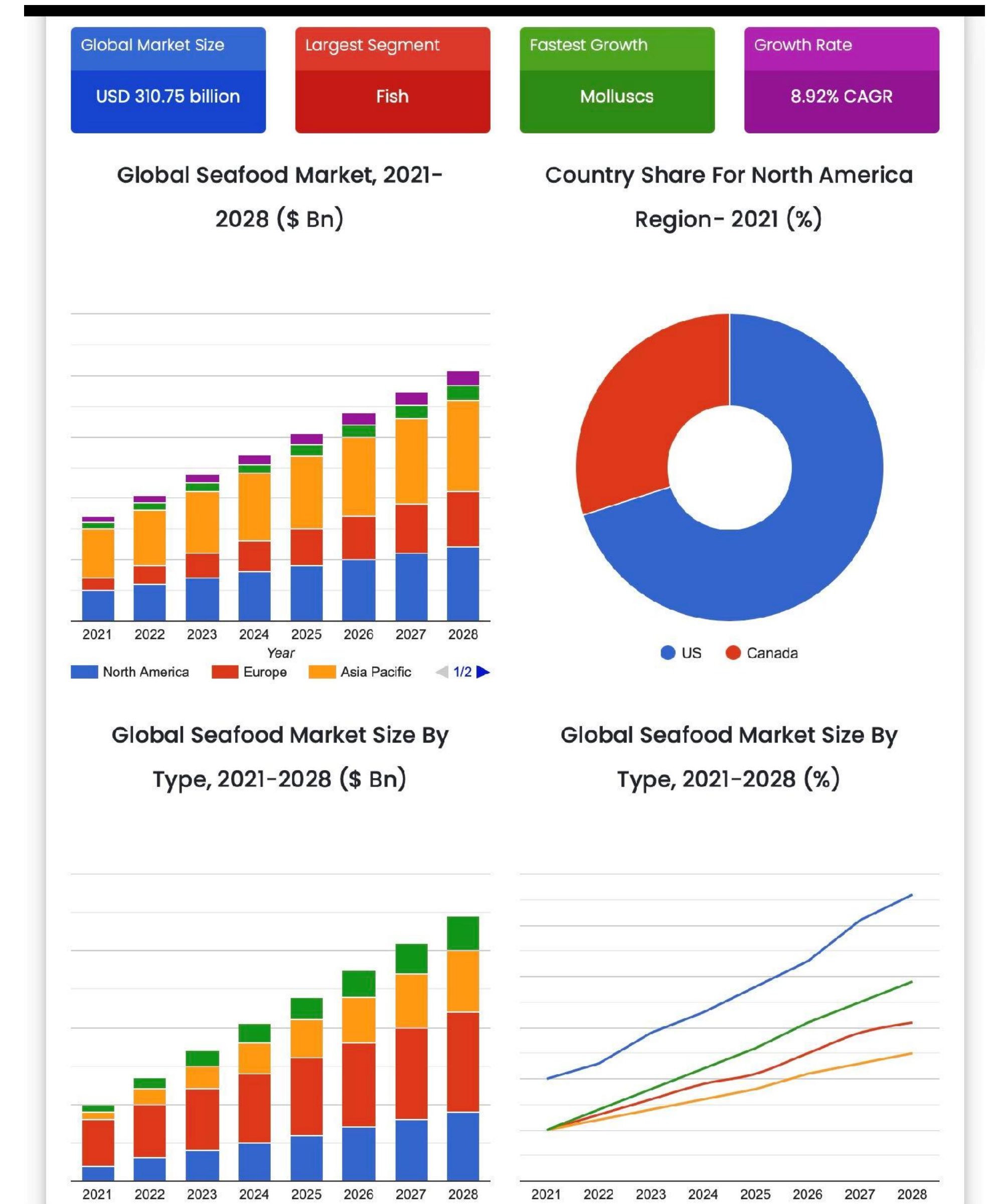
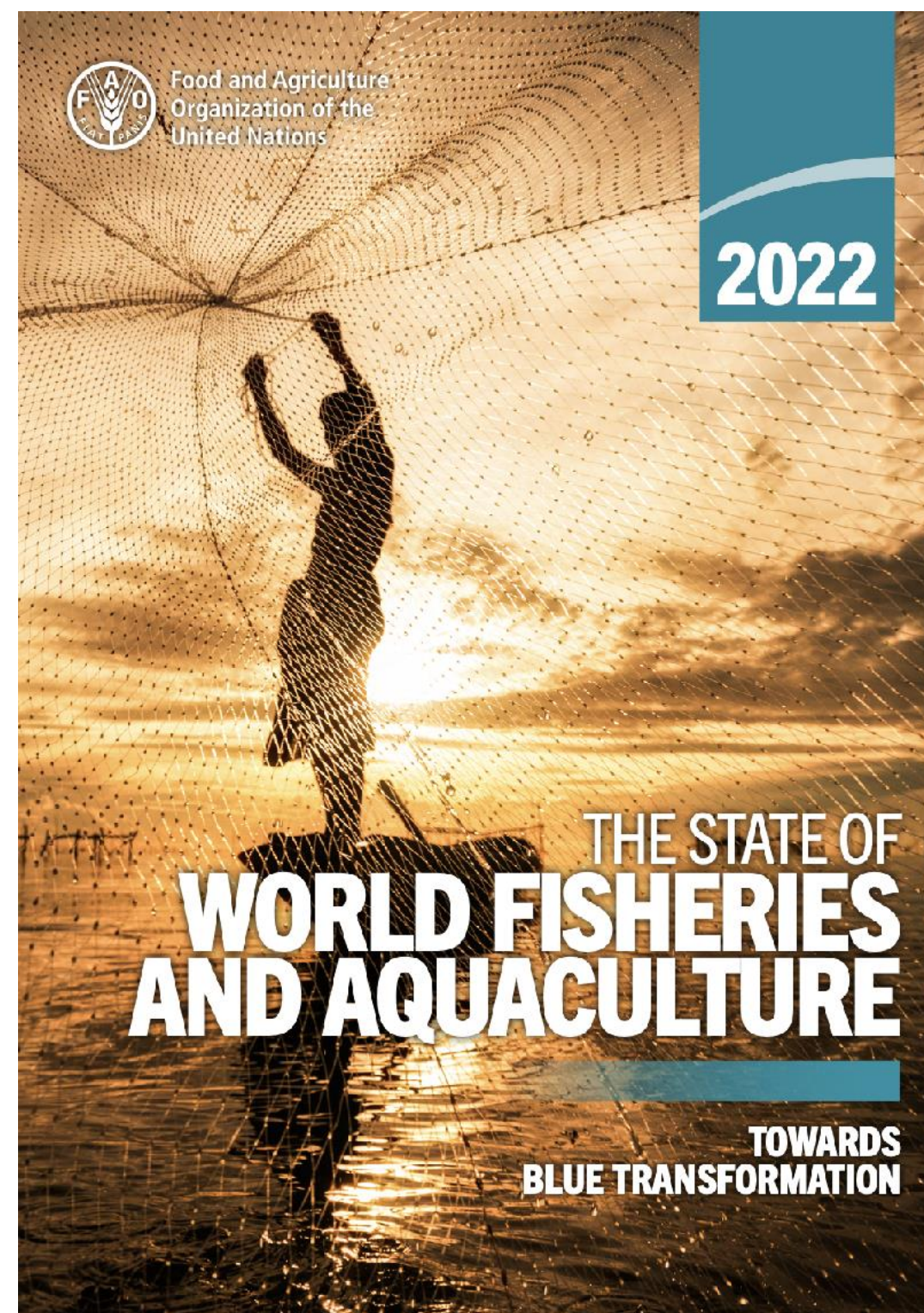
Recirculating Aquaculture Systems - RAS ACIG

**What's driving more and more land based RAS and
Flowthrough Aquaculture projects globally?
What's changed to facilitate these ?
What funding and grants are available?
Case study Flo-Gro Systems
Case study Aquacultured Seafood**

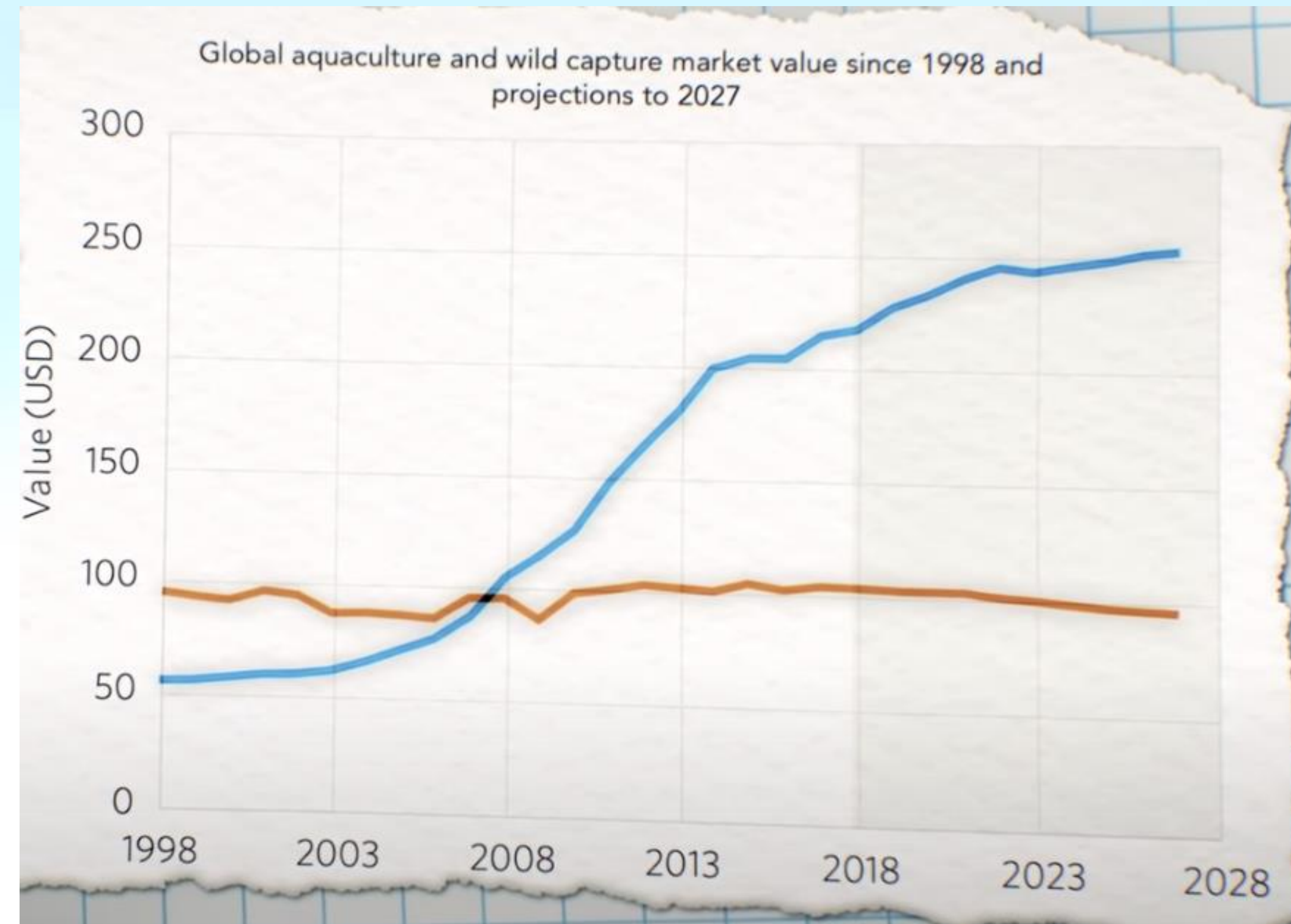
The predicted incredible increase in consumption...in part driven by population growth

“Aquaculture production is expected to increase to 106 million tonnes in 2030, with an overall growth of 22 percent or nearly 19 million tonnes compared with 2020. The share of farmed species in global fisheries and aquaculture production (for food and non-food uses) is projected to grow from 49 percent in 2020 to 53 percent in 2030”

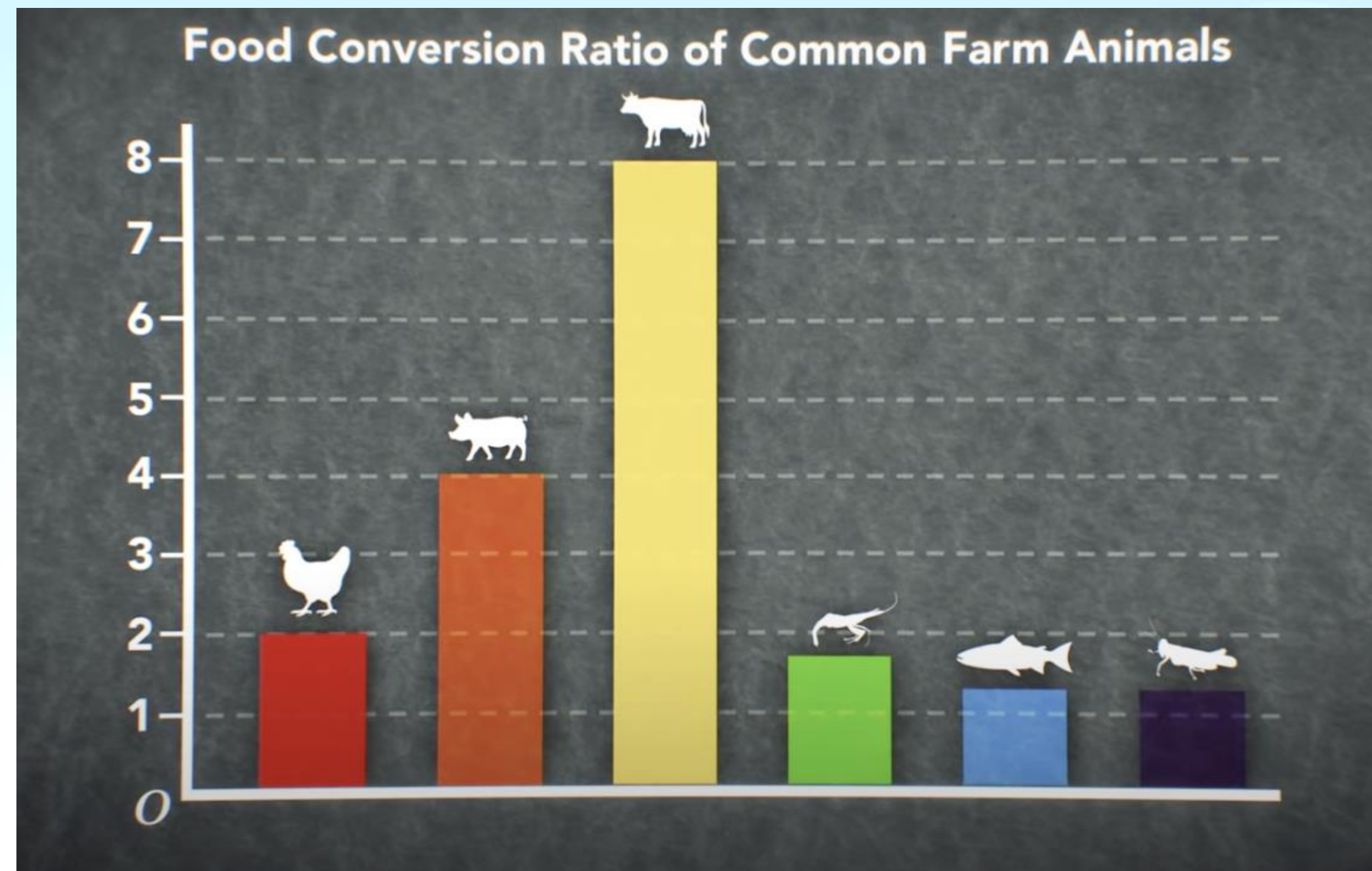
<https://www.fao.org/3/cc0461en/cc0461en.pdf>



The value proposition



The 'ergoeconomics' proposition



Snapshot

The RAS model will continue to expand in order to meet growing population expectations.

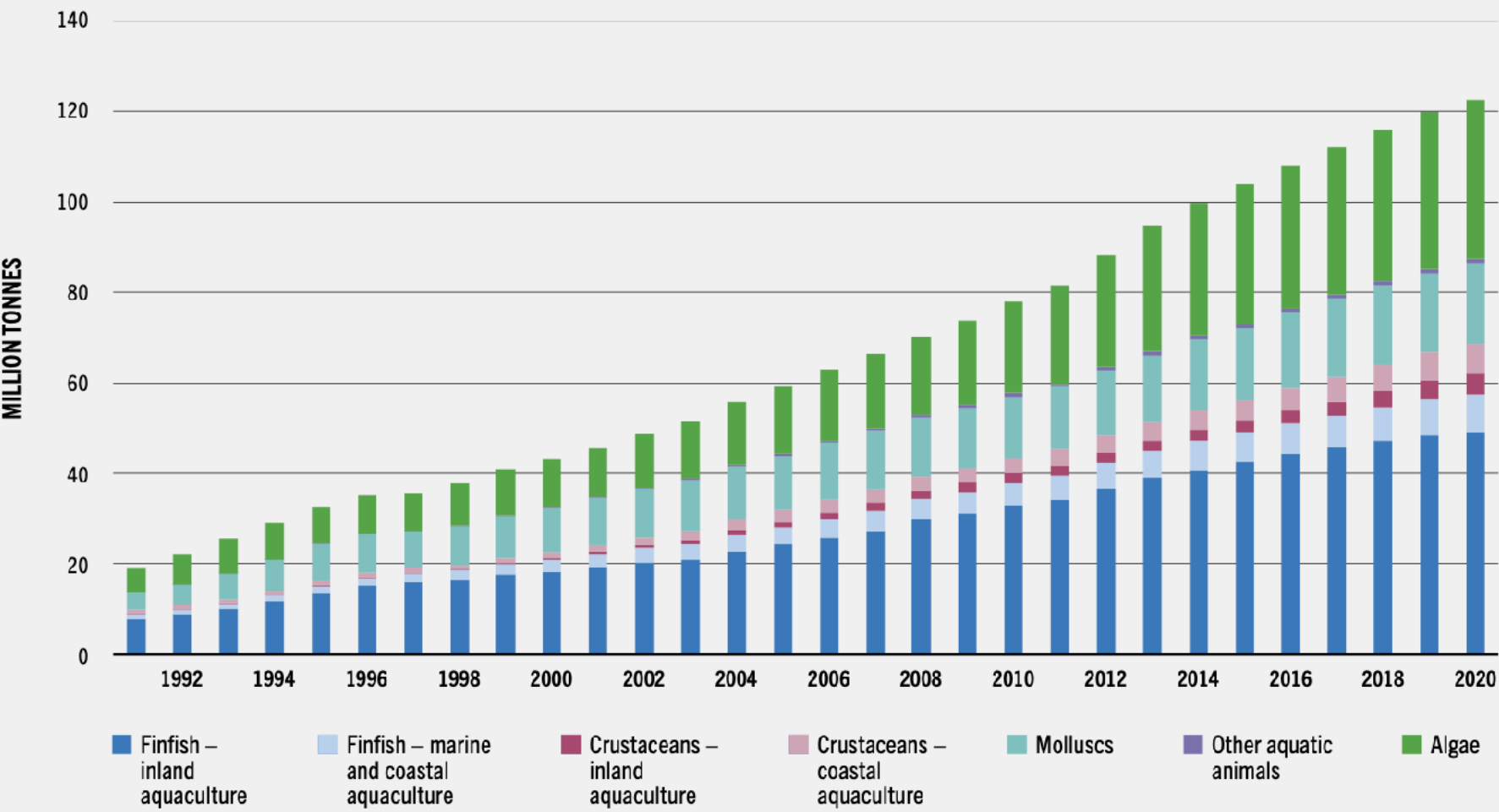
The UN has stated that Aquaculture provides the most economical use of land, water and feed

Technology is producing a ‘Moore’s Law’ in aquaculture and this is bringing RAS into a more affordable and resilient tech based growth arena

Some RAS systems are now more economical than some ‘open net pen’ farms disease, parasites and escapees all adding to ONP costs

Whilst Green-energy, Local carbon footprint and minimal packaging costs can help reduce costs of RAS

FIGURE 13 WORLD AQUACULTURE PRODUCTION, 1991–2020



NOTES: Data exclude shells and pearls. Data expressed in live weight equivalent.
SOURCE: FAO.

TABLE 7 WORLD AQUACULTURE PRODUCTION BY REGION AND SELECTED MAJOR PRODUCERS

Regions and selected countries	2010			2020		
	Animals	Algae	All species	Animals	Algae	All species
	(thousand tonnes, live weight)					
Africa	1 286.1	138.3	1 424.4	2 250.2	104.1	2 354.3
	(2.23)	(0.69)	(1.83)	(2.57)	(0.30)	(1.92)
Egypt	919.6		919.6	1 591.9		1 591.9
	(71.50)		(64.56)	(70.74)		(67.62)
Northern Africa, excluding Egypt	10.1		10.1	40.1	0.3	40.4
	(0.78)		(0.71)	(1.78)	(0.27)	(1.72)
Nigeria	200.5		200.5	261.7		261.7
	(15.59)		(14.08)	(11.63)		(11.12)
Sub-Saharan Africa, excluding Nigeria	155.9	138.3	294.2	356.5	103.8	460.3
	(12.12)	(100.00)	(20.66)	(15.84)	(99.73)	(19.55)
Americas	2 514.6	12.9	2 527.6	4 375.2	25.3	4 400.5
	(4.35)	(0.06)	(3.24)	(5.00)	(0.07)	(3.59)
Chile	701.1	12.2	713.2	1 485.9	19.6	1 505.5
	(27.88)	(94.17)	(28.22)	(33.96)	(77.39)	(34.21)
Rest of Latin America and the Caribbean	1 154.5	0.8	1 155.3	2 270.1	5.4	2 275.5
	(45.91)	(5.83)	(45.71)	(51.89)	(21.43)	(51.71)
North America	659.0		659.0	619.2	0.3	619.5
	(26.21)		(26.07)	(14.15)	(1.19)	(14.08)
Asia (excluding Cyprus)	51 228.8	20 008.2	71 237.0	77 377.0	34 916.3	112 293.3
	(88.70)	(99.18)	(91.41)	(88.43)	(99.54)	(91.61)
China (mainland)	35 513.4	12 273.3	47 786.7	49 620.1	20 862.9	70 483.1
	(69.32)	(61.34)	(67.08)	(64.13)	(59.75)	(62.77)
India	3 785.8	4.2	3 790.0	8 636.0	5.3	8 641.3
	(7.39)	(0.02)	(5.32)	(11.16)	(0.02)	(7.70)
Indonesia	2 304.8	3 915.0	6 219.8	5 226.6	9 618.4	14 845.0
	(4.50)	(19.57)	(8.73)	(6.75)	(27.55)	(13.22)
Viet Nam	2 683.1	18.2	2 701.3	4 600.8	13.9	4 614.7
	(5.24)	(0.09)	(3.79)	(5.95)	(0.04)	(4.11)
Bangladesh	1 308.5		1 308.5	2 583.9		2 583.9
	(2.55)		(1.84)	(3.34)		(2.30)
Rest of Asia	5 633.1	3 797.4	9 430.5	6 709.6	4 415.8	11 125.4
	(11.00)	(18.98)	(13.24)	(8.67)	(12.65)	(9.91)
Europe (including Cyprus)	2 537.3	2.1	2 539.4	3 270.0	21.8	3 291.7
	(4.39)	(0.01)	(3.26)	(3.74)	(0.06)	(2.69)
Norway	1 019.8		1 019.8	1 490.1	0.3	1 490.4
	(40.19)		(40.16)	(45.57)	(1.54)	(45.28)
European Union (27)	1 072.1	1.4	1 073.5	1 093.8	0.5	1 094.3
	(42.25)	(70.17)	(42.27)	(33.45)	(2.38)	(33.24)
Rest of Europe	445.5	0.6	446.1	686.1	20.9	707.0
	(17.56)	(29.83)	(17.57)	(20.98)	(96.08)	(21.48)
Oceania	189.7	12.8	202.5	228.5	10.1	238.6
	(0.33)	(0.06)	(0.26)	(0.26)	(0.03)	(0.19)
WORLD	57 756.4	20 174.3	77 930.7	87 500.9	35 077.6	122 578.5

TABLE 6 WORLD AQUACULTURE PRODUCTION AND GROWTH

	1990–2020	1990–2000	2000–2010	2010–2020	2015–2020
All aquaculture					
A. Starting annual output (million tonnes)	17.3	17.3	43.0	77.9	104.0
B. Ending year's annual output (million tonnes)	122.6	43.0	77.9	122.6	122.6
C. Accumulated increase in annual output (million tonnes)	105.3	25.7	34.9	44.6	18.6
D. Overall increase	609%	149%	81%	57%	18%
E. Average annual growth rate	6.7%	9.5%	6.1%	4.6%	3.3%
Aquatic animals					
A. Starting annual output (million tonnes)	13.1	13.1	32.4	57.8	72.9
B. Ending year's annual output (million tonnes)	87.5	32.4	57.8	87.5	87.5
C. Accumulated increase in annual output (million tonnes)	74.4	19.3	25.3	29.7	14.6
D. Overall increase	569%	148%	78%	51%	20%
E. Average annual growth rate	6.5%	9.5%	5.9%	4.2%	3.7%
Algae					
A. Starting annual output (million tonnes)	4.2	4.2	10.6	20.2	31.1
B. Ending year's annual output (million tonnes)	35.1	10.6	20.2	35.1	35.1
C. Accumulated increase in annual output (million tonnes)	30.9	6.4	9.6	14.9	4.0
D. Overall increase	736%	153%	90%	74%	13%
E. Average annual growth rate	7.3%	9.7%	6.7%	5.7%	2.5%

SOURCE: FAO.

The RAS plan

What are the essential needs for RAS to succeed

- A market requirement
- An ideal RAS Project team and their ‘providers’
- An ideal site location
- A Council which really understands the ‘why’
- A Council with a top flight team who understand the ‘what’
- Planning team that understand the ‘when’
- Talented local People
- Water sometimes both Fresh *and* Saline
- Green Energy
- Local infrastructure which can support the proposal
- United Nations SDG’s integrated into business model
- Fully third party accredited Farm, Hatchery and Processing plant e.g. BAP



Greater Lincolnshire

THE SEAFOOD PROCESSING & AQUACULTURE INVESTMENT OPPORTUNITY

SEAFOOD PROCESSING INVESTMENT OPPORTUNITY (KEY BENEFITS)

<p>OPPORTUNITY Food Industry 4.0</p> <p>The University of Lincoln's excellence in AI, Big Data, Robotics & Automation, and Internet of Things can enable business digitalisation, to boost productivity and sustainability.</p>	<p>OPPORTUNITY Value from Waste</p> <p>The cluster's large-scale output of seafood coproducts can support circular economy investments targeting 100% fish utilisation, for products including fish oil supplements.</p>
<p>OPPORTUNITY Carbon Reduction</p> <p>The cluster's location on the Humber 'Energy Estuary' creates opportunities to access renewable energy, including from offshore wind farms, to achieve business decarbonisation goals.</p>	<p>OPPORTUNITY Vertical Integration</p> <p>At present 90% of the fish processed by the cluster is imported, presenting opportunities for investment in local aquaculture and its vertical integration with processing operations.</p>
<p>CAPABILITY Advanced Technologies</p> <p>Businesses within the cluster, including D3 Smith and Ultimate Group, enable competitive edge through process automation and innovative, sustainable packaging.</p>	<p>CAPABILITY Education & Skills</p> <p>Institutions including the University of Lincoln, NCFM and Grimsby Institute partner with industry to deliver education and training from apprenticeships to degrees and PhDs.</p>
<p>CAPABILITY Knowledge</p> <p>Organisations in the cluster specialising in food research, safety, laboratory testing, industry regulation and representation, including Eurofins, FRPERC and Seafish.</p>	<p>CAPABILITY Cold Chain</p> <p>Grimsby's 230,000 tonnes of cold storage capacity includes one of Europe's largest facilities, operated by Lineage Logistics. Leading cold chain transport providers include DFDS.</p>
<p>CAPABILITY Freight Connectivity</p> <p>Adjacency to the UK's largest port by tonnage (Grimsby and Immingham) provides global sea freight connectivity and extensive expertise in fresh and frozen food logistics.</p>	<p>INVESTABILITY Track Record</p> <p>Leading global businesses including Sealaska (USA), Sofina (Canada), Nissai (Japan), and Iceland Seafood International (Iceland) have recently invested in the cluster.</p>

www.ukfoodvalley.co.uk | 5

Other statutory departments involved in signing off RAS systems

Defra
Environment Agency
Cefas
Veterinary Medicines Directorate
Plus processing plant requirements

2019

- # 2023

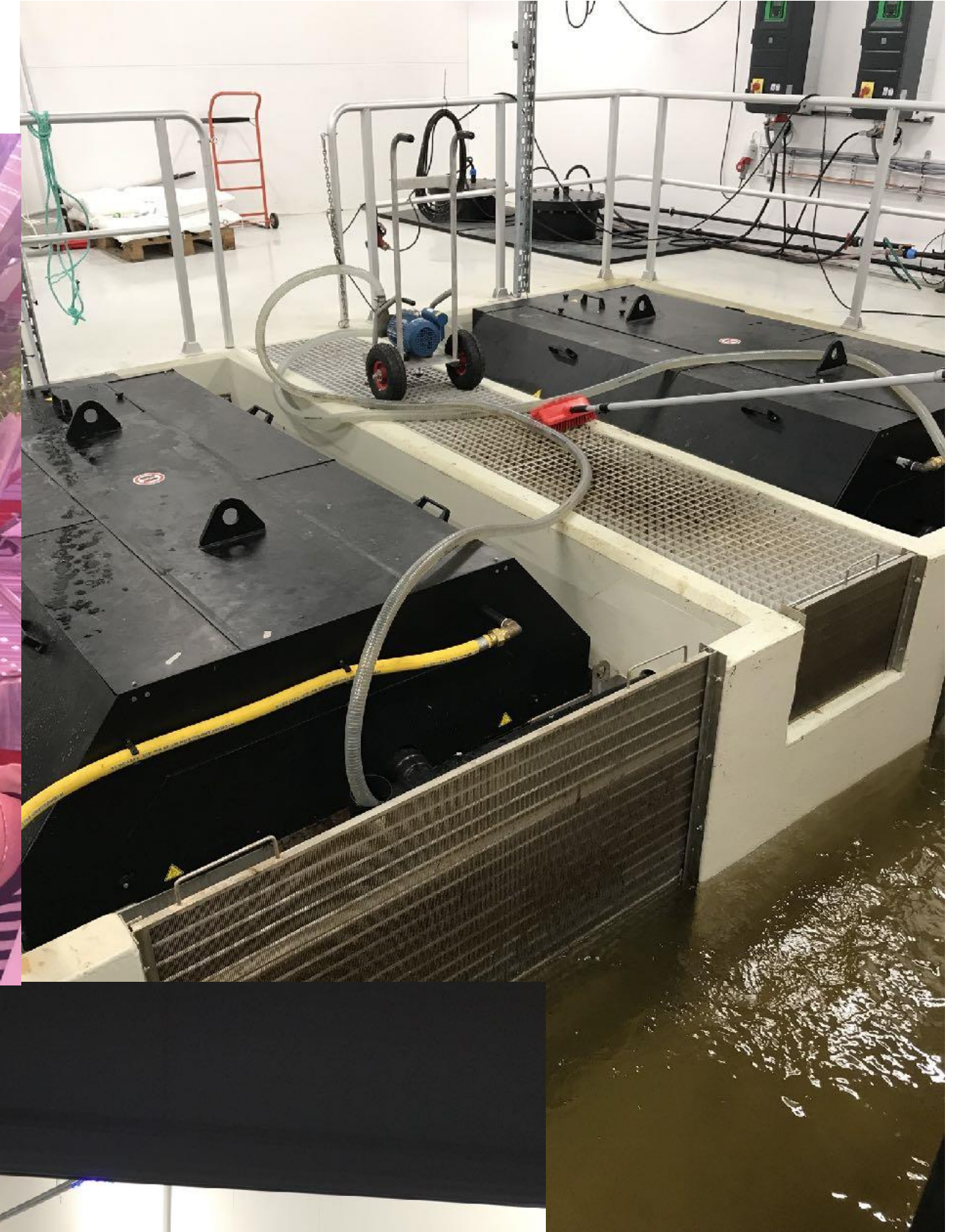
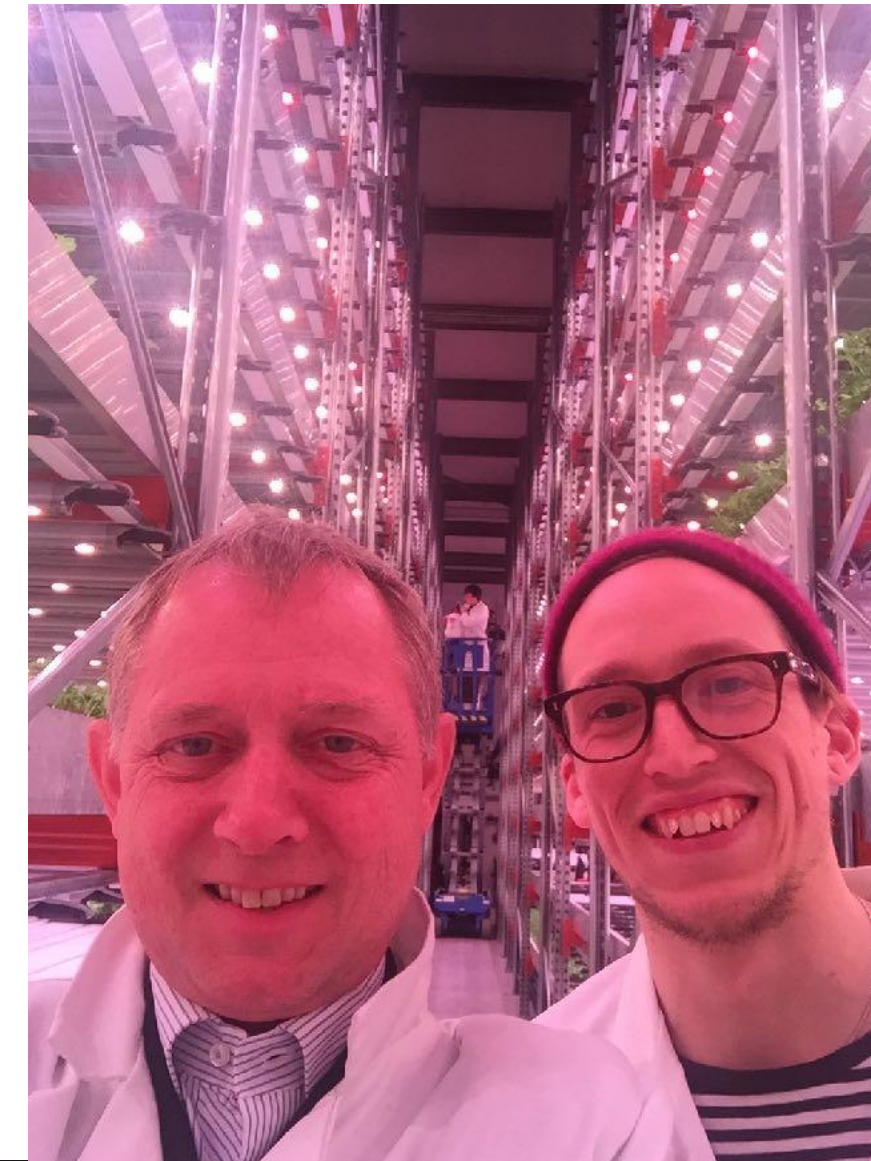
- If half of these get off the ground (and there will be many more to follow)
They will all need funding both Equity and Debt***

Spreadsheet is 'WIP'

Latest news!

RAS projects globally

- German company Oceanloop aim to raise \$163m to build a mega 2000mt indoor shrimp farm
- South Korea plan a \$30m Olive Flounder RAS farm
- Marubeni, Nissui RAS Danish Salmon farm turns positive after a five year journey
- Saudi Arabia agree \$500m investment in Pure Salmon RAS project
- 5 RAS/Flowthrough projects in Iceland announced
- FloGro Systems achieve planning for a 3000mt Shrimp farm on the outskirts of Peterborough
- Aquacultured Seafood submits planning for a 5000mt RAS Salmon Farm in Great Grimsby
- Proximar's 5000mt Atlantic Salmon Farm in Japan goes live





Intrafish Article regarding a new RAS Salmon farm in UAE CEO Jawad Jamil

"The Ocean Harvest team is excited by the immense potential RAS technology holds to enable in-land fish farming and to combat global availability, affordability and food safety challenges for fish protein," said Jamil. (Copyright)

Land based salmon firms' share prices and market caps Year to Date

(Share prices in NOK unless otherwise stated)

Company	Share Price End 2022	Share Price Aug 1 2023	% Change	Market Cap (NOK)
Atlantic Sapphire (NOK)	7.43	6.02	-19%	1.68 billion
Andfjord Salmon (NOK)	38	36	-5.3%	2.05 billion
Proximar Seafood (NOK)	3.82	5	30.9%	295.3 million
Salmon Evolution (NOK)	8.27	6.87	-16.9%	2.84 billion
Nordic Aqua Partners (NOK)	59.2	80.5	36%	1,12 billion
Aqua Bounty (\$)	0.76	0.36	-53,3%	25.7 million
Gigante Salmon (NOK)	8.1	11.5	42%	1.12 billion

Source: Euronext/Marketwatch • Chart created by John Evans

IntraFish

A Flourish table



Japanese giant Mitsui invests further \$55 million into land-based farmer

Mitsui now holds a 50.4 percent stake in the producer, which is planning to build a 3,500 metric ton commercial-scale plant.

31 July 2023 10:50 GMT UPDATED 31 July 2023 13:41 GMT


By Dominic Welling

Japanese giant Mitsui is investing a further JPY 7.85 billion (€50 million/\$55.2 million) into land-based rainbow trout producer FRD Japan as part of a JPY 21 billion (€133.7 million/\$147.5 million) capital increase.

This is just one example of projects - some in operation - live projects from one tech provider Aquamaof



Featured projects




Poland

Salmon **Operational**

Salmon R&D Center
AquaMaof co-owns a RAS R&D and training facility near Warsaw, Poland, with 8F Asset Management. The facility, which utilizes AquaMaof's integrated RAS technology, produces hundreds of tons annually of smolt and market-size Atlantic salmon, from egg stag...

[MORE INFO](#)




Israel

Shrimp **Operational**

Shrimp R&D Center
AquaMaof's Research and Development center is located in the southern part of Israel, in the desert. At this facility, we have been conducting technology and engineering trials on new aquaculture technology developments and a variety of fish species, including...

[MORE INFO](#)




Slovakia

Catfish **Operational**

Catfish Production Facility
Operational since 2015, this facility in Slovakia produces 1000 tons of catfish annually, reaching fish density of up to 400kg per m². Completed in only one year, this project is part of an agricultural complex which includes a fish processing plant and vegetable...

[MORE INFO](#)




Russia

Trout **Operational**

Trout Production Facility
Operational since 2014, F-Trout is a 4000m2 facility in Russia, producing 500 tons of rainbow trout annually using AquaMaof's integrated RAS-based technology. Strategically located near main markets, the facility produces 400g-trout fish in just eight months.

[MORE INFO](#)




Far East

Grouper **Operational**

Grouper Production Facility
Recently completed, this facility in the Far East grows 1000 tons of grouper fish annually. Integrating the most advanced AquaMaof RAS-based technology, this facility was completed in only 18 months and is currently in start-up phase.

[MORE INFO](#)




Russia

Salmon **Construction**

Salmon Production Facility
AquaMaof has entered the first stages in the construction of a 2,500-ton Atlantic salmon RAS facility in the Vologda region of Russia. The facility will include a hatchery, nursery, and full grow-out areas, as well as management and operational zones, and will...

[MORE INFO](#)

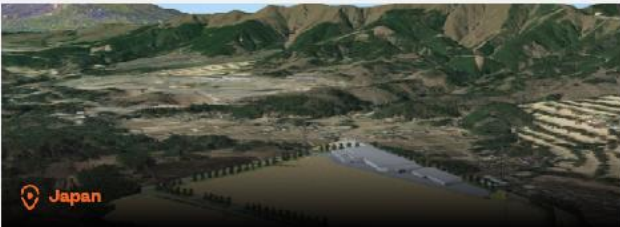


Sweden

Salmon **In Design**

Salmon Production Facility
A new salmon production RAS facility is to be built in cooperation with Smegeflax Aquaculture AB, as part of a circular economy Industrial park, Renahav, in Kungshamn/Smögen on the West Coast of Sweden. The design stage is currently underway. In the first...

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Japan

Salmon **Construction**

Salmon Production Facility
Located close to the iconic Mount Fuji, less than two hours' trucking distance from the two largest cities in Japan, Tokyo and Yokohama, Proximar is a fully-integrated indoor salmon farm that will include a hatchery, nursery, grow-out and processing facilities...

[MORE INFO](#)




Canada

Salmon **Operational**

Smolt Hatchery & Nursery
AquaMaof subsidiary, AMG Norway, was appointed by Grieg NL, one of the world's leading fish farming companies specializing in Atlantic salmon, to build one of the world's largest indoor salmon aquaculture facilities. Located in Newfoundland, Canada, the stat...

[MORE INFO](#)



Chile

Yellowtail kingfish **DESIGN**

International providers of RAS technology

Company	Country (HQ)	Technology	Reference species	Reference locations
AKVA Group Land Based	Norway	Turn-key RAS solutions	15 different species (e.g. Atlantic salmon,	"Delivers systems globally". Offices and facilities in Norway, Chile, Denmark, Scotland, Iceland, Spain, Greece, Turkey, Iran, Canada and Australia.
AquaBiotech Group	Malta	Turn-key RAS solution AquaCirc	A large variety of species (e.g. barramundi, tilapia, sturgeon & sterlet, catfish, pike perch, salmon and trout)	N/A
AquaMaof	Israel	Turn-key RAS solutions	Several species (e.g. Atlantic salmon, whiteleg shrimp, African catfish, rainbow trout, grouper, barramundi, seabream, and seabass, sturgeon and yellowfin kingfish)	AquaMaof technology installed at facilities around the world (e.g. Poland, Slovakia, Israel, Russia, 'Far East', Japan and Canada)
Artec Aqua	Norway	Turn-key RAS solutions	Salmon, trout, cleaner fish	Norway
Billund Aquaculture	Denmark	Turn-key RAS solutions	More than 20 different marine and freshwater species (e.g. salmon, trout, eel, cod, sturgeon, crustaceans, seabass & seabream, yellowtail Kingfish and grouper)	Present in more than 20 countries with over 130 successfully executed projects. Offices in Denmark, Chile, Norway, Australia and United States.
BioFichency	Israel	RAS - All-in-one water treatment	White shrimp, vannamei shrimp, ornamental koi, Chinese perch, seabass, catfish, tilapia, African catfish, barramundi	Israel, China, Nigeria, India, Bangladesh, Palestine, Taiwan, Indonesia, Congo,
Hesy	Netherlands	Turn-key RAS solutions	A variety of species (e.g. catfish, eel, sturgeon, tilapia, seabass, seabream, Atlantic salmon and pike perch)	Nearly 200 aquaculture systems in 31 different countries (e.g. South Korea, Russia, Azerbaijan, Benin, Canada, Cuba, Chile, Bulgaria, Netherlands, Croatia, Austria, Finland, Australia and New Zealand)
Krüger KaldnesAS / Krüger A/S / Veolia group (France)	Krüger Kaldnes (Norway) Krüger A/S (Denmark)	Turn-key RAS solutions: Kaldnes RAS (smolt) RAS2020 (on-growing)	Wide variety of species - cold water, tropical, fresh water and marine (e.g. salmon, trout, kingfish, sea bass and pike perch)	Known reference projects in Norway, Switzerland, Denmark
MAT RAS	Turkey	Turn-key RAS solutions with a combination of own equipment and equipment from other vendors	Seabass, seabream, meagre, umbra,	Turkey
Nofitech	Norway	Turn-key RAS solution ModulRAS	Atlantic salmon, rainbow trout	Norway and Japan
Nordic AquaFarms	Norway	Salmon producer, self-sufficient on RAS design and delivery	Atlantic salmon, yellowfin kingfish	Norway and Denmark
PE Bjørdal	Norway	Turn-key RAS solutions for smolt	Atlantic salmon (smolt)	Norway
RAS CON	Denmark	Turn-key RAS solutions	Salmon, coho, trout and Arctic char	Tasmania, Chile, Norway, United Kingdom, Faroe Islands and Denmark
ScaleAQ	Norway	Turn-key RAS solution OptiFarm as well as singular elements: (e.g. OptiTrap, OptiFlow og OptiTank)	Several species (e.g. eel, sturgeon, barramundi, salmon, shrimp, trout, tilapia, seabass and seabream)	ScaleAQ's technology installed in more than 35 countries around the world (e.g. Russia, Portugal and Indonesia). Offices in 11 countries (e.g. Norway, Australia, Chile, Canada, United Kingdom, Vietnam, Spain and Turkey)
UFT Aquaculture Engineering	Germany	Turn-key RAS solutions	Several species (e.g. Arapaima gigas, Eel, Barramundi, Seabass, Perch, Trout, Grouper, Salmon-Trout, Tilapia, Seabream, Sturgeon, Hybrid Striped Bass)	Inter alia: Angola, Armenia, Belarus, Belize, Germany, England, Iran, Kazakhstan, Kuwait, Lebanon, Malaysia, Mongolia, Qatar, Romania, Russia, Saudi Arabia, Spain, Switzerland, Turkmenistan, United Arab Emirates, USA
Alpha Aqua	Denmark	Turn-key RAS solutions	Several species	N/A

Building an RAS Farm

<https://www.proximarseafood.com/farm-construction>

[esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiq68O86aSBAxU-XEEAHXL0B2AQtwJ6BAgQEAI&url=https://www.youtube.com/watch?v=SN2G5EURpnl&usg=AOvVaw](https://www.youtube.com/watch?v=SN2G5EURpnl&usg=AOvVaw)
















<https://www.google.com/search?client=safari&rls=en&q=youtube+proximar&ie=UTF-8&oe=UTF-8#ip=1>

Species

TABLE 10 (Continued)

	2000	2005	2010	2015	2020	Percentage of total, 2020
(thousand tonnes, live weight)						
Subtotal other species	652.1	820.0	1 155.5	1 522.5	1 922.4	23
Total	2 648.7	3 753.9	4 725.4	6 559.2	8 340.6	100
Crustaceans						
Whiteleg shrimp, <i>Penaeus vannamei</i>	154.5	1 678.4	2 648.5	3 803.6	5 812.2	51.7
Red swamp crawfish, <i>Procambarus clarkii</i>	9.9	114.3	599.3	723.1	2 469.0	22
Chinese mitten crab, <i>Eriocheir sinensis</i>	202.5	378.4	572.4	747.4	775.9	6.9
Giant tiger prawn, <i>Penaeus monodon</i>	631.0	665.5	562.9	735.2	717.1	6.4
Giant river prawn, <i>Macrobrachium rosenbergii</i>	130.7	195.9	193.1	202.5	294.0	2.6
Indo-Pacific swamp crab, <i>Scylla serrata</i>	10.7	11.7	37.0	83.6	248.8	2.2
Oriental river prawn, <i>Macrobrachium nipponense</i>	87.1	177.3	217.7	240.6	228.8	2
Green mud crab, <i>Scylla paramamosain</i>	0.0	97.5	112.4	135.1	159.4	1.4
Subtotal of 8 major species	1 226.5	3 319.0	4 943.3	6 671.0	10 705.3	95.3
Subtotal other species	467.0	462.1	538.5	447.9	531.8	4.7
Total	1 693.4	3 781.0	5 481.8	7 118.9	11 237.0	100
Molluscs						
Cupped oysters, <i>Crassostrea</i> spp.	2 922.6	3 377.5	3 570.7	4 408.3	5 450.3	30.7
Japanese carpet shell, <i>Ruditapes philippinarum</i>	1 504.3	2 590.8	3 500.2	3 880.2	4 266.2	24
Scallops nei, Pectinidae	811.5	906.3	1 366.6	1 710.1	1 746.4	9.8
Sea mussels, Mytilidae	719.8	834.1	871.4	1 055.8	1 108.3	6.2
Constricted tagelus, <i>Sinonovacula constricta</i>	487.7	624.4	693.3	760.2	860.3	4.8
Pacific cupped oyster, <i>Magallana gigas</i>	617.7	686.7	640.7	576.5	610.3	3.4
Blood cockle, <i>Anadara granosa</i>	286.6	385.3	456.7	425.9	457.9	2.6
Chilean mussel, <i>Mytilus chilensis</i>	23.5	87.7	221.5	208.7	399.1	2.2
Subtotal of 8 major species	7 373.6	9 492.7	11 321.2	13 025.8	14 898.6	84
Subtotal other species	2 384.8	2 639.8	2 470.4	2 863.1	2 843.6	16
Total	9 758.4	12 132.5	13 791.5	15 888.9	17 742.2	100
Other aquatic animals						
Chinese softshell turtle, <i>Trionyx sinensis</i>	85.0	163.3	261.1	313.7	334.3	31.5
Japanese sea cucumber, <i>Apostichopus japonicus</i>	0.0	57.2	126.6	198.0	201.5	19
Frogs, <i>Rana</i> spp.	0.1	71.2	79.6	82.1	147.8	13.9
Edible red jellyfish, <i>Rhopilema esculentum</i>	0.0	48.2	57.9	75.3	90.4	8.5
River and lake turtles, <i>Testudinata</i>	0.0	11.6	25.3	41.0	49.3	4.6
Subtotal of 5 major species	85.0	351.5	550.4	710.1	823.3	77.5
Subtotal other species	70.8	76.8	243.3	140.8	239.0	22.5
Total	155.9	428.3	793.6	850.9	1 062.3	100

»

<div>Atlantic Salmon</div> <div>Salmo salar</div> <div></div>		<div>Barramundi</div> <div>Lates calcarifer</div> <div></div>	
<div>Rainbow Trout</div> <div>Oncorhynchus mykiss</div> <div></div>	<div>Grouper</div> <div>Epinephelus aeneus & lanceolatus</div> <div></div>		<div>Red Tilapia</div> <div>Oreochromis aureus</div> <div></div>
<div>Whiteleg Shrimp</div> <div>Litopenaeus vannamei</div> <div></div>		<div>Gilthead Seabream</div> <div>Sparus Aurata</div> <div></div>	
<div>Sturgeon</div> <div>Acipenseridae</div> <div></div>	<div>African Catfish</div> <div>Clarias gariepinus</div> <div></div>		<div>Basa Fish</div> <div>Pangasius</div> <div></div>
<div>Striped Bass</div> <div>Morone saxatilis</div> <div></div>		<div>Zander, Pike Perch</div> <div>Sander LucioPerca</div> <div></div>	
<div>Red Drum</div> <div>Sciaenops ocellatus</div> <div></div>	<div>Yellow Perch</div> <div>Perca flavescens</div> <div></div>		<div>Yellowtail Kingfish</div> <div>Seriola lalandi</div> <div></div>

Latest news!

RAS Funding

- **UK Seafood Fund**

Find out about the aims of the UK Seafood Fund, what funding is available, and how to apply for it.

The UK Seafood Fund was a £100 million fund set up to support the long term future and sustainability of the UK fisheries and seafood sector.

- **Infrastructure**

At least £65 million in grant funding was available through the infrastructure scheme. The scheme funds projects that build capacity across the UK fishing sector supply chain. It invests in:

- improved capability at ports, harbours, processing, and aquaculture facilities
- the social and economic welfare of coastal communities
- fleet modernisation
- recreational sea fishing

- **The Biotechnology and Biological Sciences Research Council - BBSRC**

- Looking to bring Academia and Industry together to support the sustainable growth of Aquaculture

- <https://www.ukri.org/councils/bbsrc/>



Next round 2025?

Round opened
Sept 11th



Biotechnology and Biological Sciences Research Council (BBSRC)



BBSRC invests to push back the
frontiers of biology and deliver a
healthy, prosperous and sustainable
future.

Is this page useful?

BBSRC announces funding call for sustainable development of UK aquaculture 21 August 2023, at 12:00pm

Pre-announcement: Sustainable Aquaculture Partnerships for Innovation

Opportunity status: Upcoming Funders: [Biotechnology and Biological Sciences Research Council \(BBSRC\)](#) Funding type:
Grant Total fund: £3,000,000 Award range: £200,000 - £750,000 Publication date: 21 August 2023 Opening date: 11
September 2023 9:00am UK time Closing date: To be confirmed

Apply for funding to bring academia and industry together to co-develop solutions to key innovation challenges impacting
upon the sustainable growth of UK aquaculture.

You must be based at a UK research organisation eligible for BBSRC funding.

All projects must have at least one project partner from industry. Project partners must contribute a cumulative minimum of
10% cash or in-kind to the full economic cost (FEC) of the project.

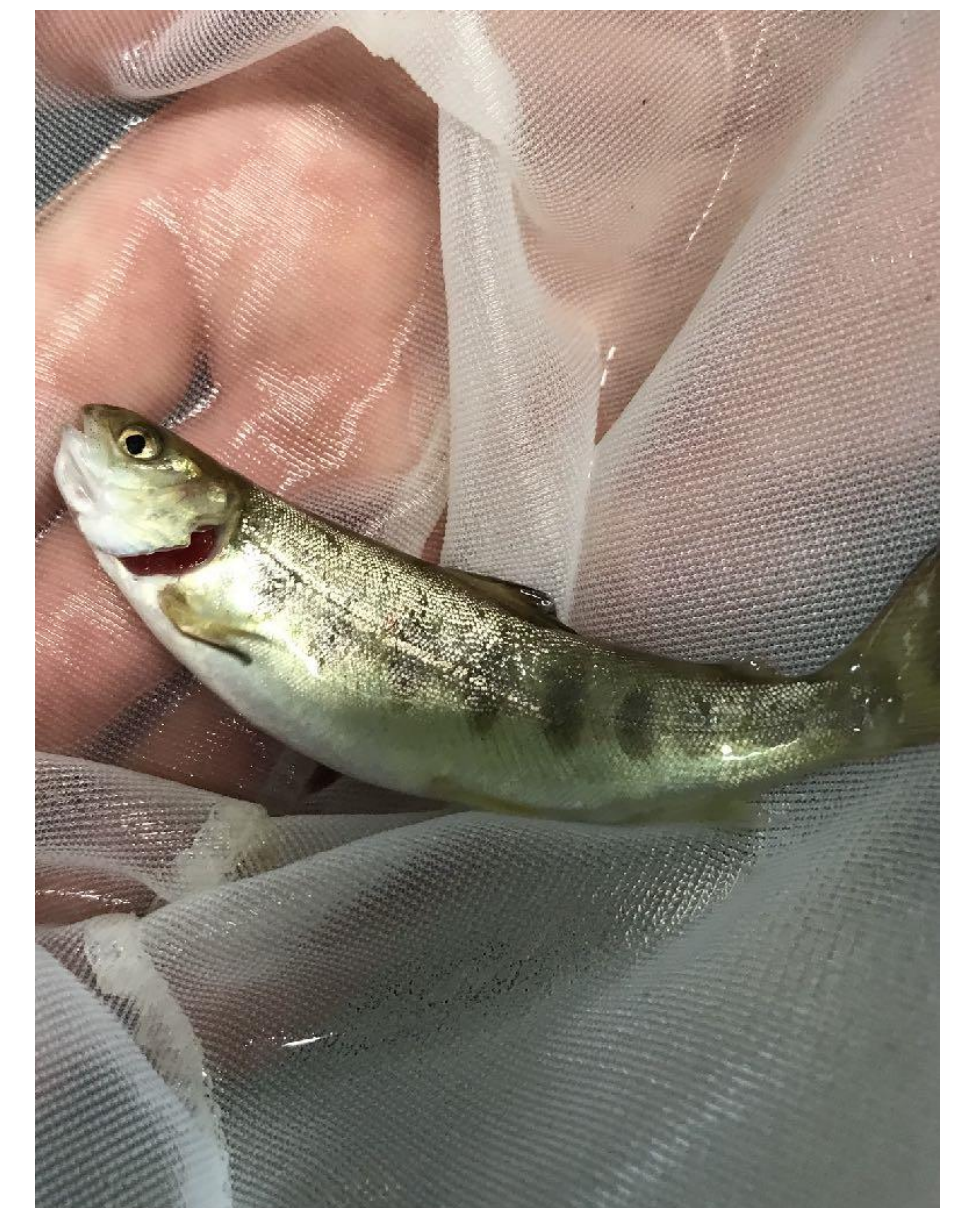
The FEC of your project can be up to £750,000. We will fund 80% of the FEC.

Projects may be up to 24 months duration.

This is a pre-announcement, and the information may change.

The funding opportunity will open on 11 September 2023. More information will be available on this page then.

A funding opportunity launch workshop with facilitated networking between academia and industry will be held on 28
September. To register, please see additional info.



What next in the UK...



The banner features a background image of a large industrial facility, likely a prawn farm, with green plastic sheeting covering equipment and large white pipes. The text is overlaid on the left side of the image.

 FloGro Fresh

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COMING SOON...

Fresh British Prawns.

Sustainably produced in Lincolnshire.

We know many of our customers have been waiting patiently for our fabulous FloGro Fresh King Prawns to become available again, so we are excited to share our plans for the future.

More Information >

What next in the UK...



AQUACULTURED
SEAFOOD LTD

In summary...

...between a degree of uncertainty in the Seafood Industry regarding RAS and its ability to become a *profitable solution* to growing nutritious products

This has resulted in funding from the incumbent players, investors, institutions and government not being fully deployed

This is changing rapidly....

The challenge for the Aquaculture industry is to ensure a more focused flow of knowledge and information to those parties including government, which can then act as the enabler for better understanding of the rewards and benefits of a secure, healthy Land Based Aquaculture industry here in the UK

THANK YOU