



#### What we do

- Expose irresponsible corporate practices
- Goal: drive change towards a more sustainable economy
- Sectors: pharmaceuticals, fisheries, textiles, resource efficiency & circular economy, nutrition...
- Partnerships and coalitions with other NGOs, researchers, investors etc.

#### Context



Era of unprecedented threats to ocean ecosystems



12 years to limit global warming to 1.5°C



3-25%: projected decrease in fish biomass by the end of the century



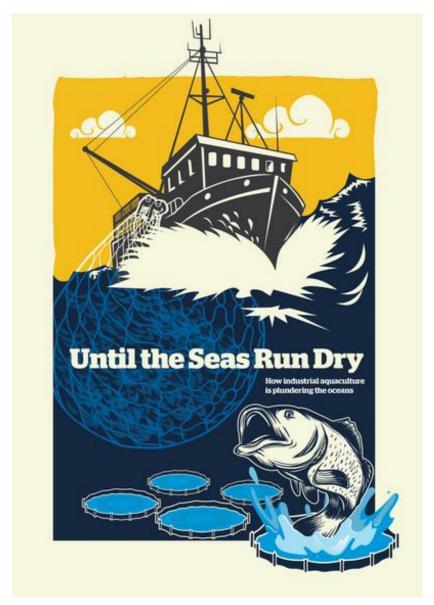
66% of marine environments "severely altered" to date by human actions



More than a third of all marine mammals are under threat

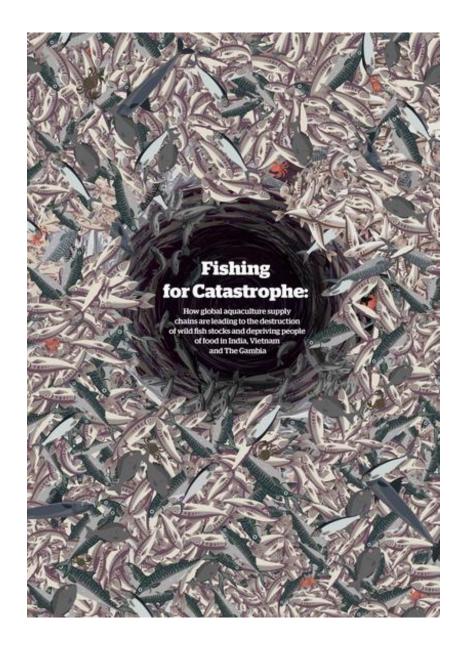


Up to 33% of world's reported fish catch is illegal, unreported or unregulated (IUU)







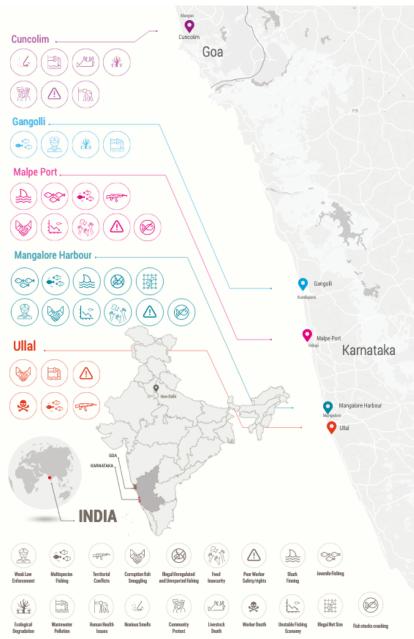




## **Key findings from India, Vietnam and The Gambia**

















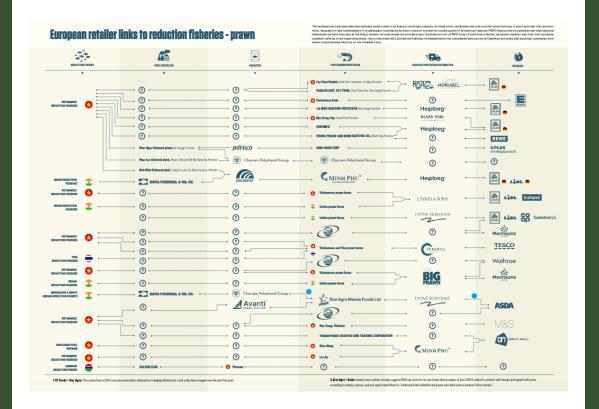


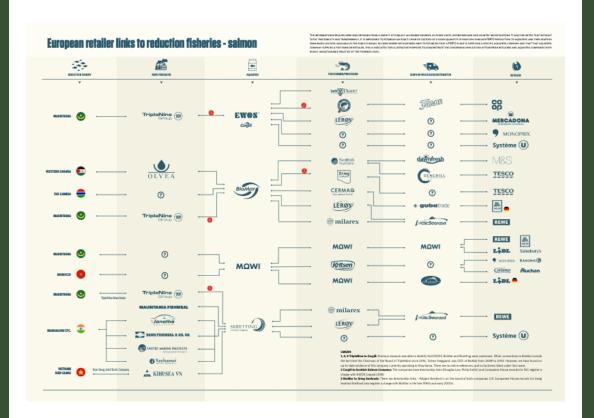












# Risks for companies

- Disruption of supply
- Rising costs of raw materials
- Reputational damage
- Competitive risk

## Is projected growth of aquaculture production sustainable under BAU?



Huge growth over coming decades: doubling of production by 2050?



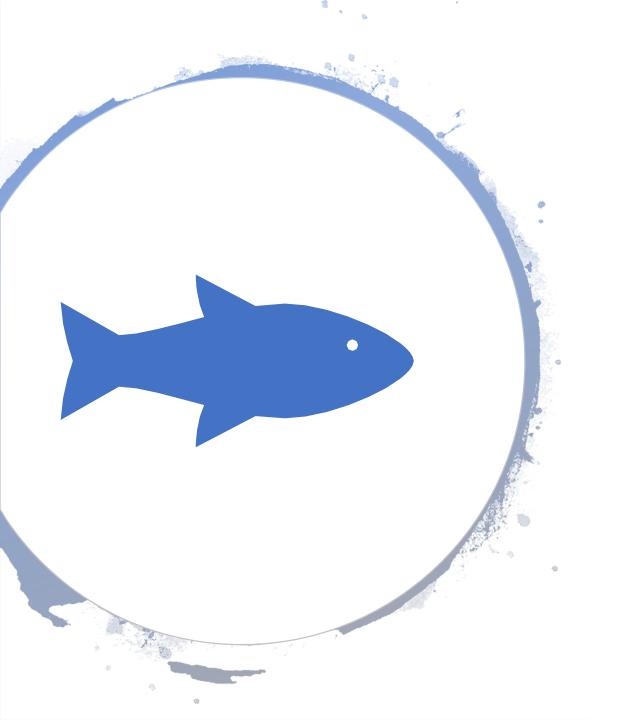
Aquaculture industry still heavily reliant on wildcaught fish for feed



Major aquafeed producers sourcing from problematic regions



Some companies actively pursuing new sources in the ocean, fishing further down the food chain as fish stocks become depleted.

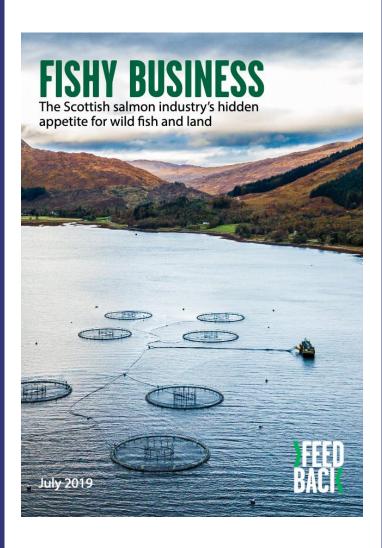


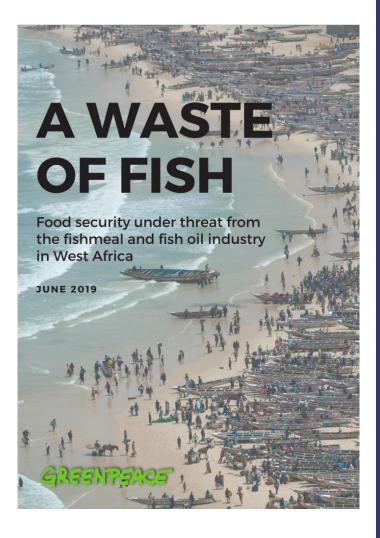
"The global limit of wild-caught fish, the rapidly increasing production of fed aquaculture and international advice to increase fish consumption for human health and nutrition will create a tipping point of feasible seafood supply."

(Froehlich et al 2018)











Fishmeal and fish oil production uses nearly

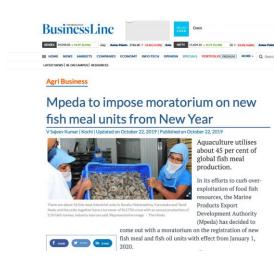
**20**%

of the global catch – and prices may rise by up to 90% over 2010-2030



Salmon and shrimp are carnivorous fish that require other fish in their diets, however demand is set to outstrip supply – the UN FAO warns that low supply will constrain the sector's future growth. Carnivorous fish feed typically contains fishmeal and fish oil, which are made from wild-caught juvenile fish. In 2016, around a fifth of the world's commercially caught fish was used for fishmeal and fish oil production. This makes the industry highly dependent on wild stocks of certain fish for future growth. Aquaculture is not a full solution to depleting fish stocks until this dependence is severely reduced. Prices of fishmeal and fish oil are set to rise by 90% and 70% respectively over 2010-2030. Feed is already the most cost-intensive part of fish production, accounting for 30-70% of production costs. Rising marine ingredient prices will put additional pressure on producers' margins.



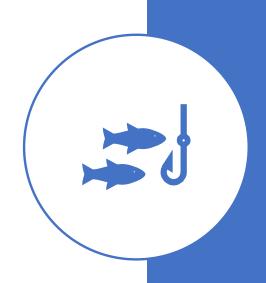






### Conclusions

- Marine resources are finite
- Aquaculture's continued reliance on wildcaught fish is a major threat to marine ecosystems and food security
- Industry must move away from use of whole wild-caught fish to feed farmed fish
- Transparency is key (in addition to traceability)





## Thank you



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