The Story of SeaBOS

Importance of Private Sector Engagement for the 2030 Agenda

The 2030 Agenda for Sustainable Development, adopted by 194 countries in 2015, contains 17 aspirational Sustainable Development Goals (SDGs) promoting global efforts, including to eradicate poverty and hunger, protect and restore natural systems while growing economies, and reducing inequality. In order to achieve the SDGs set out by the Agenda, the United Nations General Assembly recognized the crucial role the private sector has to play in developing successful strategies and solutions. Creating new, systematic and efficient ways of collaboration that help to both achieve the SDGs and promote sustainable growth within the private sector has since become a priority for many initiatives around the world (e.g. EAT Forum).

Keystone Actors: Critical Catalysts for Change

The concept of keystone actors was inspired by the 'keystone species' term in ecology, which was developed by Professor Robert T. Paine to describe species that play a disproportionate role in the functioning of an ecosystem. Österblom et al. (2015) use the concept to illustrate that the largest companies in a given industry can operate similarly to keystone species in ecological communities, meaning that they can have a disproportionate effect on the structure and function of the system in which they operate. The researchers ascribed the following characteristics to those keystone actors:

a) They dominate global production revenues and volumes within a particular sector;

b) They control globally relevant segments of production;

c) They connect ecosystems globally through subsidiaries;

d) They influence global governance processes and institutions.

The fact that individual actors can have a disproportionate impact on the environment is well known (Jacquet et al. 2013). This can be seen, for instance, in the levels of greenhouse gas emissions of individual nation states. There are high potential gains of engaging with these individual actors to promote the sustainable management of natural resources, the environment and supply chains but these have not been sufficiently highlighted.

In this blog post, we discuss why the concept of keystone actors is a useful tool to develop modes of collaboration between science and industry for the achievement of the SDGs, and how the SeaBOS initiative uses the concept to contribute to Goal 14.

Leading a Global Transformation towards Sustainable Seafood Production and a Healthy Ocean
The Seafood Business for Ocean Stewardship (SeaBOS) initiative is an ambitious effort that aims to contribute to Goal 14, i.e. *'Conserve and sustainably use the oceans, seas and marine resources'.* It provides a platform for some of the world's largest seafood businesses to come together to chart a new course for their sector. The scope of the undertaking is clear from the language used by the member companies:

> *We operate on every continent and in all segments of seafood production. We are the global industry leaders in fisheries and aquaculture. […] Together, we represent a global force, with a unique ability to inspire business actors along the entire seafood value chain and support governments in achieving the SDGs. We are committed to use our combined power to lead by example, and to use our united voice to argue for change.* (Read full statement by SeaBOS members)

The SeaBOS initiative is built on the supposition that through engagement with keystone actors, it is simultaneously possible to both raise the bar for global companies that have significant influence within their industries, as well as provide incentives for smaller companies to catch up with their peers. More concisely: it is possible to change the trajectory of an entire industry.

Science plays a key role in giving SeaBOS members such a clear understanding of their capacity to – literally – change the world. The initiative had its scientific starting point in the 2015 paper from a group of researchers led by Henrik Österblom.

From Science to Action: The Case of SeaBOS
In the seafood industry (encompassing both wild capture and aquaculture production), the research by Österblom et al. found that thirteen corporations control 11-16% of the global marine catch and 19-40% of the largest and most valuable stocks. Additionally, these companies run their operations through a global network of subsidiaries and are extensively involved in fisheries and aquaculture decision-making bodies, such as regional fisheries management organizations.

Developed from a series of keystone dialogues aimed at connecting science and business for change, the SeaBOS initiative kicked off in November 2016, and currently involves ten of the seafood industry's keystone actors, including the two largest companies by revenues (Maruha Nichiro Corporation and Nippon Suisan Kaisha, Ltd). In an initial step, these ten companies issued a public statement announcing their intention to work together with scientists to identify problems and solutions to achieve a healthy ocean and sustainable seafood. They pledged to: tackle Illegal, Unreported and Unregulated (IUU) fishing; work towards full traceability and transparency throughout their supply chains; make efficient use of aquaculture feeds and use fish feed resources from sustainably harvested stocks; apply existing certification standards; eradicate labour abuses and human rights violations from their supply chains; reduce the use of plastics in seafood operations; work towards reducing the use of antibiotics in aquaculture; and prevent harmful

discharges and habitat destruction. They also pledged to work together with governments to improve existing regulations concerning aquaculture and fisheries (see also Österblom et al. 2017).

Keystone Actors and the SDGs: Raising the Floor *and* the Bar

Engaging keystone actors to advance the SDGs has an obvious importance due to these actors' global relevance, influence and impact within specific industries. Within the SeaBOS initiative, member companies have a profound influence over a number of target species, and by extension, over entire marine ecosystems. Moreover, by bringing together many of the world's largest seafood companies, it allows them to engage in friendly competition and share best practices. This helps to accelerate change within companies that are moving more slowly towards achieving certain standards.

If the largest players in an industry can deliver on clear goals grounded in good science, this can send an important signal to other companies operating within the same sector, regardless of their size, and provide an inspiration to other industries. Proactive and meaningful goal setting by industry leaders demonstrates to other companies that transitioning towards sustainable practices is not only a necessity, but also an economically sensible undertaking. Within the SeaBOS initiative, for example, the ten member companies have explicitly called upon the whole seafood industry to follow in their footsteps and implement the suite of targets to which they have committed. However, it needs to be noted that the SeaBOS initiative is an on-going experiment that is being closely monitored to understand the significance of the changes overtime.

Beyond Endorsements: Integrating the SDGs into Business Strategies

The companies in the SeaBOS initiative found a way to not only endorse and support the UN SDGs, but to integrate them actively into their business strategies. Additionally, by working collectively towards these goals, they eliminated some of the risk of solo action – if the industry's largest companies are all moving towards more sustainable and equitable practices, industry norms will change and a failure to engage with the SDGs could become a liability. The collaborative nature of the SeaBOS project also helps companies tackle barriers such as a lack of information and lack of systematic public-private sector cooperation. Companies have recognized this opportunity for collaboration and the platform provided by the SeaBOS initiative has helped to build trust and common purpose. A crucial component of the equation from the very beginning, however, has been the role of scientists acting as neutral knowledge providers framing the possibilities and urgency of cooperation.

Science and Business: Key Ingredients for Transformative Stewardship

The SeaBOS initiative is operating within a rich landscape of initiatives and projects aiming towards creating a brighter future for the seafood industry and the world's oceans, and there is much room for synergy. Index Initiative[1], for instance, is providing another important piece of the puzzle. Following an initial scoping study that identified 15 industries best positioned to contribute to the UN SDGs, it began work to develop a benchmark for the seafood industry. The resulting Seafood Stewardship Index will be an exciting

[1] Index Initiative is one of the founding partners of the consultation phase of the World Benchmarking Alliance.

new tool for gauging company performance in line with the SDGs as well as the impact of efforts like the SeaBOS initiative.

What these initiatives collectively show is that companies have an important role to play in the transition to a more sustainable future. However, we need to be aware that there are challenges associated with engaging the private sector. Especially when working with the largest industry actors, we need to continuously monitor the process and understand the potential repercussions of letting a handful of big companies co-determine the industry's agenda (e.g. avoid 'greenwashing' practices). Keystone actors certainly have a powerful potential to change their own practices and by extension push for changes within their respective sectors, but we need to place initiatives engaging with these actors in their larger context: as a complementary approach to existing processes, such as government regulations. However, providing a collaborative space for keystone actors to integrate relevant SDGs into their businesses while ensuring the process and targets are scientifically valid, meaningful and credible is an important step towards creating systemic change.

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