Mangrove-friendly aquaculture production



CHALLENGE QUESTION

How can we develop, implement and establish a reliable and transparent certificate for aquaculture products from proven mangrove-friendly production?

WHICH REGION, FEDERAL CONSTITUENCY OR COUNTRY IS AFFECTED BY THE CHALLENGE?

Name your region, federal constituency or country. Regions are understood as regions, provinces, districts, metropolitan areas, inter-municipal cooperations or any administrative, cultural or geographical entity above municipal level

A major first interest seems to exist in Indonesia (and other Southeast Asian coastal countries), but a solution could be developed and implemented elsewhere – which means that any solution should have the potential for being easily and readily transferred into other regions.

WHAT ARE THE ROOT CAUSES FOR THE CHALLENGE OR THE MAIN OBSTACLES TO SOLVING IT?

Land-based aquaculture in tropical coastal regions still poses serious threats on coastal ecosystems through the requirement for space. In most cases, mangrove forests are clear-cut for the sake of giving space to aquaculture ponds. Because of decreasing productivity and increasing disease risks, such ponds are usually abandoned after 5-10 years, and new mangrove areas are being clear-cut, while the abandoned aquaculture ponds cannot easily be re-colonized naturally or reverted into mangroves. Hence, the production of seafood in aquaculture ponds counteracts the provisioning of many ecosystem services of mangroves to local communities – numerous stakeholders would benefit from mangrove-friendly aquaculture through the multiple co-benefits of protecting, managing and sustainably using mangroves.

HOW DOES THE CHALLENGE AFFECT YOUR REGION, FEDERAL CONSTITUENCY OR COUNTRY? WHO IS AFFECTED?

Describe the effects that the unsolved challenge is causing

There is common perception that the highest economic gain is ensured by "pure aquaculture", and aquaculture pond owners and farmers are reluctant to give space to mangrove development. The development of a certificate for mangrove-friendly aquaculture would open the rapidly growing German and European market of eco-/bio- and organic products to local producers, through this compensating for any potential reduction in productivity (if any!).

IN HOW FAR IS THIS A DECENTRALISED DEVELOPMENT CHALLENGE? Does it touch upon the responsibilities or competencies of a federal constituency, a province, a district, a metropolitan area, an inter-municipal cooperation or any other administrative, cultural or geographical entity above municipal level?

There is urgent need for local and regional work to convince aquaculture pond owners and farmers of the economic and socio-ecological benefit from developing integrated mangrove aquaculture.

IN HOW FAR IS THIS ALSO A CHALLENGE FOR OTHER REGIONS, FEDERAL CONSTITUENCIES OR COUNTRIES?

Do you know of other regions, federal constituencies or countries with a similar challenge?

Aquaculture in mangrove areas is common practice in most tropical coastal countries. Any concept developed in one of them would benefit other countries (as well as the German and European market), if the concept was transferrable.