

Aquaculture sustainability: Multidisciplinary perspectives and adaptable models for seafood security

ABSTRACT

Contribution of aquaculture to global food security has increased significantly, especially after the realization that the capture fisheries have approached their maximum take and the land-based farming systems are facing serious constraints. Aquaculture should pursue the sustainable development goals to be able to deliver the expected supplies. It can do so by bringing about transformations consistent with the principles of sustainable development. Aquaculture influences the oceans and their ecosystem services negatively as well as positively, depending on the pathways of its development. It is pertinent to highlight the implications of both these impacts and present specific case scenarios that provide evidence of how the ecological aquaculture can benefit the environment, society and economy. Success of such aquaculture models can be measured through sustainability indicators. This paper elaborates these issues while providing an account of the role of aquaculture in food security.