Characterization of risks and risk management strategies in the kenyan seaweed farming value chain

OKoth Winnie

Marine Biology Research Group (Ecology and Biodiversity), Vrije Universiteit Brussel
E-mail: Winnie.Okoth@vub.be

Seaweed farming has received significant attention globally due to its capacity to contribute to several Sustainable Development Goals such as '1. No Poverty', '5. Gender Equality', '12. Responsible Production and Consumption', '13. Climate Action' and '14. Life Below Water'. Whereas the governments of Western Indian Ocean (WIO) countries such as Kenya continue to believe in its merits, the full potential of the seaweed industry remains underutilized. This is explained by factors like unreliable international markets, lack of processing technologies, and underdeveloped regulatory frameworks. While such risks in mariculture are evident, their study has often been overlooked. These risks also require case-specific investigations due to the heterogeneity of species (such as seaweeds) involved in mariculture activities. Recent studies on the Kenyan seaweed industry show that its full productive capacity is yet to be realised. To potentially disclose answers on what and where interventions needs to be directed to upscale the competitiveness of the sub-sector, a closer determination of the risks and uncertainties hindering its progress is required.

Thus, this study's overall objective is to characterise risks and risks management strategies in the seaweed farming value chain of Kenya based on stakeholders' perceptions. Specifically, the following questions are addressed: What are the risks in the different segments of the value chain as perceived by farmers and buyers? What are the impacts of the risks on seaweed farming operations? What measures are in place to manage the risks and uncertainties? What opinions do experts have on the risks related to seaweed farming and the strategies necessary for promotion of the industry? To explore the perception of the stakeholders, focus group discussions were conducted with seaweed farmers in the three coastal villages: Kibuyuni, Mkwiro and Mwazaro in the south coast Kenya. Additionally, key informant interviews were administered to the seaweed buyers and domain experts. Undertaking this study can form an indispensable basis for formulating targeted policies aimed at improving the Kenyan seaweed sub-sector while also aligning with the shared goal of enhancing viability of seaweed faming as a secure and sustainable livelihood for coastal communities in the WIO region and beyond.

Keywords
Seaweed farming; Risks; Risk management strategies; Characterization; Stakeholder perceptions