
Fisheries Value Network Analysis: Exploring the Relationships and Intangibles

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The fisheries sector is significant in the socio-economic context of Sri Lanka. However, the social dimensions of the fishery industry are not adequately addressed when formulating the policies. This study aims to explore the relationships and interactions among value chain actors; to study the network intangibles such as trustworthiness, information flow and credit flow. These networks were explored based on three value chains that comprised nine categories of economic agents. A minimum of five agents were sampled in each category giving a total of 134 individuals and five exporting companies. Fishers and exporting companies were selected using stratified purposive sampling, and other stakeholders were selected by snowball sampling. Data were collected using semi-structured questionnaires and statistically analysed using the UCINET 6 software. NetDraw software was utilized to illustrate and estimate the network parameters. Size, cohesiveness and centrality measures were used to describe the structural properties of the value networks. The comparison of the node level properties revealed that in-harbour wholesalers are the key intermediaries of the credit sharing network. Suppliers are the key intermediaries of the other two networks. Suppliers purchase fish from fishers or in-harbour wholesalers and distribute to the companies or other regional markets. Based on the degree centrality, it was apparent that the suppliers have the comparatively highest social capital. Many credit relationships in the industry are informal and non-monetary. The relationships between fishers and in-harbour wholesalers for credit is influential. The comparison of network level properties shows that information and credit-sharing network structures are comparatively less-cohesive. The major obstacle to information flow is the unwillingness to share information along the vertical value chains. It is vital to address these social dimensions and market failures carefully to implement efficient industry policies.

Keywords: Economic agents, Fisheries, Intangibles, Social dimensions, Value network