

# Innovation trends in the fisheries subsector, 2019-2021



The fisheries subsector has historically made a modest contribution to the South African economy, estimated to be 0,029% of GDP and employing almost 30,000 people in the commercial sector. Through fostered innovation, sustainable management practices and investment in infrastructure and processing facilities, fisheries have the potential to grow and make a more significant contribution to the South African economy.<sup>1</sup>

During 2019-2021, almost three-quarters of businesses in the fisheries subsector engaged in innovation.

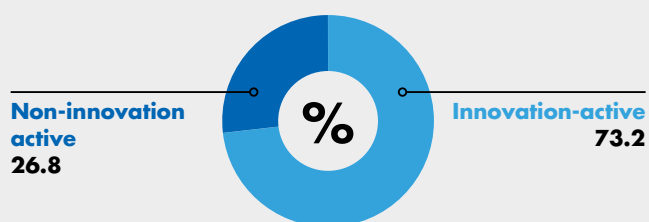


Figure 1: Innovation activity by businesses in the fisheries subsector

Businesses in the subsector were more likely to implement process innovations and a relatively lower proportion implemented product innovations.

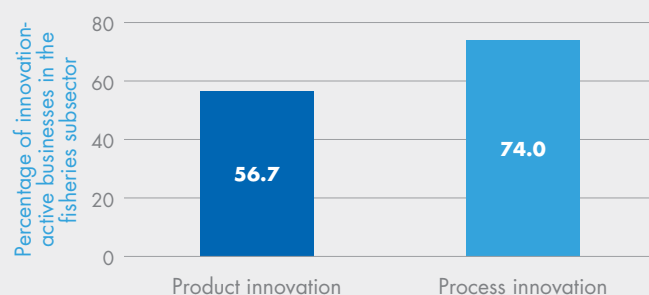


Figure 2: Innovation-active businesses in the fisheries subsector by innovation type

## What types of innovation activities were businesses in the fisheries subsector engaged in during 2019-2021?

The most common innovation activity for businesses in the fisheries subsector was **training**, with almost half (38.3%) engaged in training activities.

The next most common innovation activities were the **acquisition of computer hardware** (26.6%) and **computer software** (25.7%).

Fisheries businesses engaged widely in training for their innovation activities.

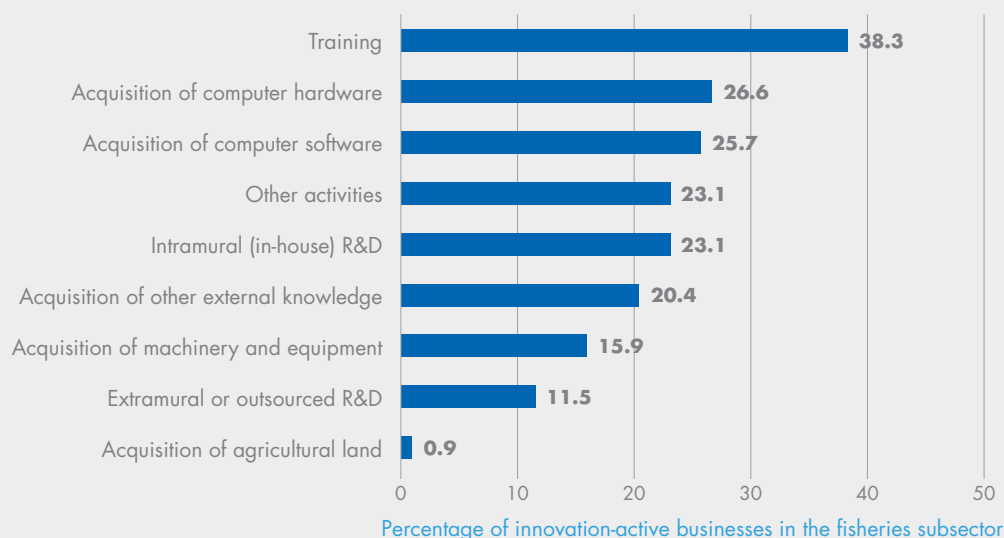


Figure 3: Innovation activities by businesses in the fisheries subsector

<sup>1</sup> Department of Agriculture, Land Reform and Rural Development. 2023. *Quarterly Economic Review: Agriculture Sector*. 21(2). Available at: <https://www.dalrrd.gov.za/images/Branches/Economica%20Development%20Trade%20and%20Marketing/Statistic%20and%20Economic%20Analysis/economic-analysis/quarterly-economic-overview-of-the-agriculture-sector-volume-21-number-2-second-quarter-2023.pdf>

*What types of advanced ICTs did businesses in the fisheries subsector adopt during 2019-2021?*

Businesses in the fisheries subsector were more likely to adopt **air and soil sensors** and **smart breeding technologies**.

However, they had a low uptake of **AI technologies**.

**Advanced technologies are crucial for modernisation in the overall agricultural sector. However, businesses in the fisheries subsector had a low uptake of advanced technologies.**

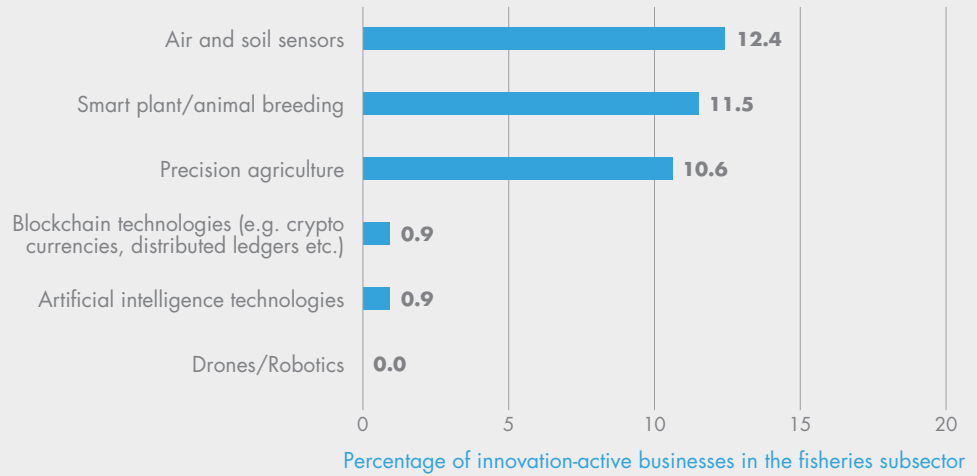


Figure 4: Adoption of advanced ICTs by innovation-active businesses in the fisheries subsector

*What did innovation-active businesses in the fisheries subsector perceive to be the most important outcomes of their innovation(s) during 2019-2021?*

Financial outcomes were the most important for businesses in the fisheries subsector.

**Reduced costs** followed by **increased revenue** were the most reported. Additionally, strategic outcomes such as **developing new IP** and **reaching new markets** were also reported as highly important outcomes of innovation. **Increased water** was the least reported highly important outcome for fisheries businesses.

**As a result of engaging in innovation activity, businesses in the fisheries subsector were likely to experience reduced costs. However, there were only minimal improvements in water preservation.**

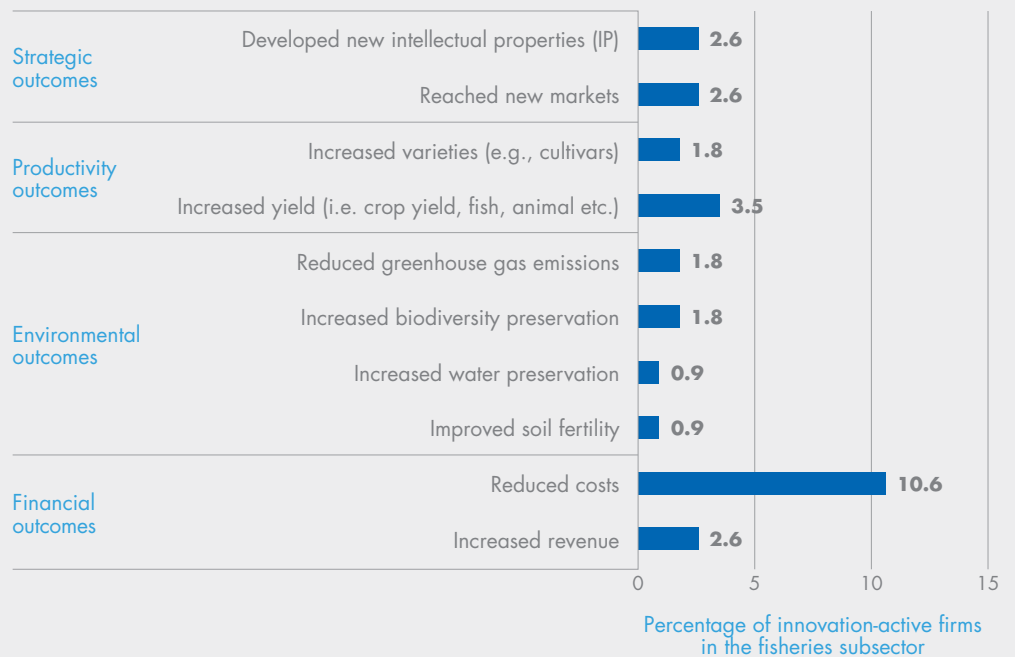


Figure 5: Innovation-active fisheries businesses that rated outcomes as highly important

*What were the most important barriers to innovation that fisheries businesses faced during 2019-2021?*

Over a quarter of businesses (26.7%) in the subsector reported that **access to finance** was the most important barrier to innovation. **Lack of access to markets** (20.4%) followed as an important barrier to innovation for businesses in the fisheries subsector.

**Climate change** was regarded as a less important barrier, despite it affecting the agricultural sector globally. None of the businesses regarded **competition from other farmers, lack of labour** and **access to ICTs** as highly important barriers to innovation.

**Many businesses in the fisheries subsector reported financial constraints as a highly important barrier to their innovation activities.**

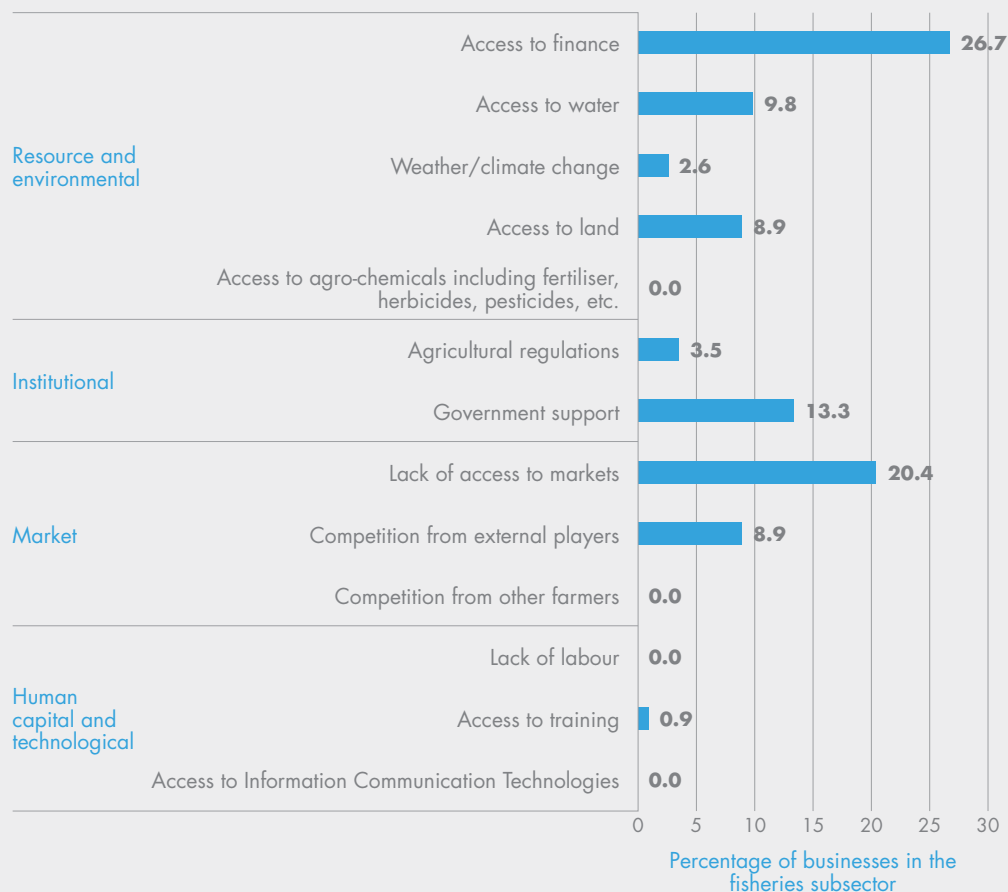


Figure 6: Barriers to innovation identified by businesses in the fisheries subsector

**About this brief**

This brief is one of three sector-specific analyses drawn from the Agricultural Business Innovation Survey 2019-2021. It provides insight into innovation trends in the **fisheries subsector** so that businesses can compare and benchmark their innovation activities. Industry associations and policymakers can use the data to support innovation activities across the fisheries subsector.

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