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THE DEVELOPMENT OF LARGE SCALE AQUACULTURE PRODUCTION: A COMPARISON OF THE SUPPLY CHAINS FOR CHICKEN AND SALMON

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Abstract: The supply chain for salmon is, in many respects, the world's most efficient seafood supply chain. Adopting new technologies and expanding the scale of production have improved competitiveness leading to increased production and industry growth. The transfer of knowledge and processes from other food producing industries has facilitated growth in salmon aquaculture in particular, and in aquaculture in general. As such, the maturity of the salmon industry relative to other food producing industries can provide indications of further growth potential. We argue that the salmon industry still has much to learn from similar processes in other food-growing industries. Notably, the production and processing of poultry has experienced significant increases since the 1940s, becoming the fastest growing and most rapidly changing highly-intensive livestock farming segment, with often fullyautomated processing environments. Although farmed salmon has a production history closely following that of poultry, it remains semi-automated with less control over production processes and a more limited product specter than poultry. While this gives important avenues of growth for salmon, it holds even more potential for other aquaculture species with even less control over the production processes and supply chain.

STATEMENT OF RELEVANCE

Innovations leading to productivity growth and improved competitiveness throughout the supply chain have been key to the development of successful aquaculture industries. To a large extent, innovations have built on knowledge from the agrosciences. In this paper we compare the development of salmon aquaculture, one of the most sophisticated aquaculture industries with chicken, one of the most sophisticated terrestrial animal production industries. This sheds new light on the development of salmon aquaculture and it show that there is s large knowledge potential still to be tapped form chicken production, giving substantial promise of further development.

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