The EU Urchin project; utilizing the Arctic sea urchin resource - progress and pitfalls

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Introduction & Aim: In northern Europe, Nofima is leading the three year Urchin project funded by the Northern Periphery and Arctic Program (NPA). The project aims to utilize the sea urchin resource present in the northern arctic regions and develop both the sea urchin fishery and roe enhancement in Norway, Greenland, Ireland and Iceland. Each of these countries has quite specific challenges regarding sea urchin fisheries. Therefore, the project is diverse and addresses the challenges of harvesting sea urchins, sustainable and responsible use of stocks, legislation and supply chains for sea urchin products from isolated and environmentally harsh and challenging areas in the Northern and Arctic region.

Methodology & Results: The methodology and results from a number of research areas will be presented, including: Live transport of sea urchins to European and Asian markets - Given the substantial distances between the areas where sea urchins are harvested and markets suitable methods of transporting sea urchins are essential. Research has focused on both land and air transport techniques. Enabling the transfer of sea urchins to domestic markets, seafood hubs and airports as well as suitable conditions for air travel to market. All of the participating NPA countries can use this information; sustainable and responsible use of stocks - in Iceland, there has been significant progress in the measurement and monitoring of sea urchins stocks. In addition, the development of suitable legislation to protect the rights of existing fishers as well as sea urchin stocks is being developed in conjunction with fishers, research institutes and Government departments; reseeding in Ireland - in Ireland, there have been considerable effort to reseed overfished populations of sea urchins found in tidal rock pools along the west coast. The juvenile sea urchins have been hatchery reared and seeded into carefully selected sites. Their growth and survival has been monitored and the preliminary results of these trials will be presented; roe enhancement of sea urchins and the Urchinomics concept - in Norway, roe enhancement technology has been developed over the past two decades. As part of the Urchin project, commercial trials have been undertaken in Norway and Ireland. A synergistic project run by Urchinomics (a private investment company) in Norway is developing a business model which allows companies to capture and enhance the roe of wild urchins utilizing feed and holding systems developed in Norway. A series of commercial sea urchin roe enhancement trials have been run in Japan, Australia, North and South America and the NPA countries Norway, Ireland and Iceland. These results from these trials will be discussed as well as the potential for this concept is to be introduced and developed into Europe.

Discussion: Finally, the Urchin project has identified a number of pitfalls that may hinder further development of such an industry in countries such as Greenland and other NPA countries. How the project is attempting to overcome these pitfalls and the potential for future development of the sea urchins industry in the north of Europe will be discussed.

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