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Fish-Farming.Doc

Aquaculture: The Future of Fish Farming

Fish Farming on the Rise

When we think of farming, we usually think of land, machinery and crops. But there's another kind of farming that's just as popular all over the world. It is called Aquaculture and it involves water, boats and crops-of fish, shellfish and even seaweed.

Fish farming is the world's fastest-growing sector of agricultural business. Consumer demand for fish products is increasing. At the same time, wild fish stocks are rapidly declining, mainly because of over-fishing. Aquaculture contributes more than 16 million tones of fish and shellfish annually to the world food supply.

Although Aquaculture is quite common in some European, Asian and North American countries, it is just beginning to gain popularity in some developing countries. That's largely due to the know-how and technology that is required for the development of modern Fish Farming.

Trout and other cold water fish are most commonly farmed in cold weather countries and in Israel but the Israeli warmer climate zone has enabled the Kav-Systems experts to develop efficient warm waters Aquaculture as well. That’s enables efficient production of Carp, Catfish and Tilapia in addition to Green Ailing and Sea Brian that are being cultivated along the seashores.

Bringing Biotechnology to Aquaculture

Biotechnology is also applied to research new feed sources and to improve the composition of the feed. This is where much of the Kav Group Aquaculture experienced team is focused.

Other ways in which biotechnology is applied to Aquaculture include improvement of growth rates and control of reproductive cycles through hormone therapy, production of new vaccines and development of disease resistance in fish.

Transgenic Fish

By using different transgenic techniques, our experts are seeking to improve the genetic traits of the fish used in Aquaculture. Our fish farming experts are trying to develop fish which are: larger and grow faster, more efficient in converting their feed into muscle, resistant to disease, tolerant of low oxygen levels in the water, and tolerant to freezing temperatures.

There has been some success in this area. For example, a researcher at the Shan Regional Enterprises fish laboratories has developed a Tilapia fish that grows twice as fast and up to five times as large as wild strains. The scientist introduced an extra copy of the growth hormone gene into fish embryos at a very early stage, resulting in the unique growth characteristics.

Better Fish Feed

Biotechnology is also helping to answer some of the technical and environmental concerns of fish farming. Many of these centers around what the fish eat.

Right now the most common protein source for many fish diets is fishmeal. Fishmeal, a byproduct of fish processing, is used because of its high quality and high protein content.

Due to high costs of fishmeal and instability of supply, our fish feed meal experts are focusing at each of our projects on the investigation of local crops as new sources for fish feed protein. Some of our projects are utilizing fish meal replacements that were found more feasible locally.

Installation of feasible feed meal plants is another expertise that are acquired by our firm in long fruitful partnership with the well known Israeli researchers that enable development of the most feasible intensive Israeli Fish Farming.

Fish Processing

Being involved in post harvest production facilities for many years, the Kav team of food technologies is dedicated to the processing of fish into most feasible fish products.

Our processing plants and machinery are built for higher yield and are designed to meet all international hygiene and quality standards as-like the USDA and EEC regulations.

Fish Futures

With the worldwide growth in Aquaculture, there is an increasing interest in Israeli technologies concerning agriculture and fish farming. There is likely to be considerable demand for the know-how and on-site consulting services of the Kav Systems Aquaculture experts team that has assembled the unique Israeli know-how with the local experience in many countries around the globe

New plant-based protein sources and feed enzymes will help to make Aquaculture an environmentally sound and sustainable farming operation also in new developing countries for the benefit of the local population.

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