

THE INNOVATIVE AND SUSTAINABLE FISH FEEDING WITH AN ADVANCED CATCHING SYSTEM



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The presented innovation shows the advanced system on how to use the available resources of nature for cultivation and selective fish capturing, in a technologically acceptable and sustainable way.

For example, fjords and bays can be used with the use of an innovative barrier, which would provide a natural habitat for fish breeding. The tide would provide the flow of nutrients from the open sea. Marine currents would partly enable the cleaning of the bay from the natural waste generated by the fish breeding. In the so-formed natural habitat, innovative feeding units would be used to allow intermittent feeding and independent fishing without the harm to the seabed and overfishing. Ships that use the current way of catching fish with nets would become unprofitable and obsolete as their fishing way is harmful to the ecosystem of the sea comparing to the innovative patented technology. The applied innovation of the fish cultivation in an ecological way, can be used to harvest and catch fish at the sea, ocean, lake or river.

Instead of the current fish catching nets, innovative traps with feeders for the selective fishing would be used. Applied technology would catch bigger fish, while smaller fish would pass through passages in a perforated canvas or net. In a way where the fish itself would be calibrated when caught by the size of the holes in the net, or by the size of the fish itself. With the use of innovative technology, the current, not selective catch of fish would diminish.

Today, the fish is protected only by law, but not by the technological process of harvesting, considering that 90% of a global fish population is in the red alert.

The application of this innovation solves the disadvantages of the current fishing in the open waters which is not sustainable, and cannot and should not be carried on in such a way!

The current technology of fish farming is mainly based on pond technology or the use of cages for growing fish in an open habitat. The current technology for fish breeding has not solved enough how to feed the fish effectively. These disadvantages are entirely resolved with the application of our innovative feeding technology. Current fishponds on the mainland would get an innovative feeding platform that would provide the regular feed for the fish. In a way, that fish would self-serve at the time when needed, and the food would be consumed at a 100% rate. When a fish has a regular diet and eats as needed, it does not produce excessive fatty deposits.

Unlike today's intense fish breeding, where food consumption is also increasing, which also produces excess fat in the body of the fish. Current feeders generally throw granules into the water, food ends up partly unused on the bottom or remains trapped in a sludge.

In smaller ponds, the feeders would serve for feeding, and as a place where fish would be caught when it is needed, quickly and efficiently. Today's method of catching fish in the pond is mainly based on the net, which is towed. Working with today's technology is demanding, and it does not give the best economic results. By pulling the net along the bottom of the fish pond, the fish is unloaded and buried in sludge. Therefore, the fish catch is not efficient, and it is limited and expensive.

The innovative method uses rational and smart technical solutions, not a hard job. This way fish can grow in a fishpond or open water and can be easily caught at the right size and ages. When the fish is hungry, it comes to an innovative feeder located beneath the surface of the water, which has an additional purpose and becomes bait for catching fish. There are three basic types of innovative feeders, which also serve the fish catch.

In open water, fish are now grown in cages, this is an expensive and limited space for fish farming, where large amounts of material are consumed per kilogram of fish. Innovation foresees partly the use of an open sea or a natural swimming pool with water, use of fjord or bay, an artificial lake that is an integral part of the existing hydroelectric power plant. In other words, an open water surface where there is water flow, tidal flow, or enough flowing water in the river. Use of existing places where functional perforated canvases or nets would be installed, as a barrier required for the acquisition of large fish farms.

Thus, the fish would be grown in large quantities, fed through ecosystems and additionally fed with innovative feeds. The innovative feeder would be periodically supplied with food. The supply of the feeding plant would be with the help of a boat or a ship, depending on the size and type of fishing grounds. Feeders would be large or small size, different types of production with foreseen basic innovative solutions for the necessary fishing ponds.

With larger feeders the flocks of fish would enter the feeders and eat, giving them freedom and less stress. With such a feeding habit, fish would not lose weight, and meat quality would be similar to fish caught in natural habitats. An additional solution for the setting of an innovative canvas or netting is a barrier that would serve against a shark passage in a protected zone, and larger jellyfish and other dangerous marine animals on the beach area with swimmers. Installed perforated canvases would form a protective belt along the seashore or the ocean.

Today, fishes are mostly caught with the fishing nets in open waters with the help of ships. Usually used surface and depth nets. With its pulling, the depth fishing nets are destroying the seabed and the ecosystem. Nets, when broken, mostly remain on the seabed. Where millions of already thrown nets pose a danger to fish and other animals, which are subsequently and continuously trapped in them, where they later die.

The current way of catching would be replaced by selective and humanitarian way of fishing with the help of an innovative platform.

Such platforms would reduce the use of fishing boats, rationalize the economic and technical ways of catching fish.

This would create conditions for the ecosystem to recover and allow the young fish to grow to full maturity.

Innovation provides the possibility that fish catching has the same capacity, compared to the use of current methods. With a tendency to increase catch, not decay, as the fish will be further fed and looked after.

This prevents excessive costs, where innovation develops and improves the ecosystem of the sea and ocean, including the local ecosystems. Unlike today's intense fish breeding, where food consumption is also increasing, which also produces excess fat in the body of the fish. Current feeders generally throw granules into the water, food ends up partly unused on the bottom or remains trapped in a sludge.

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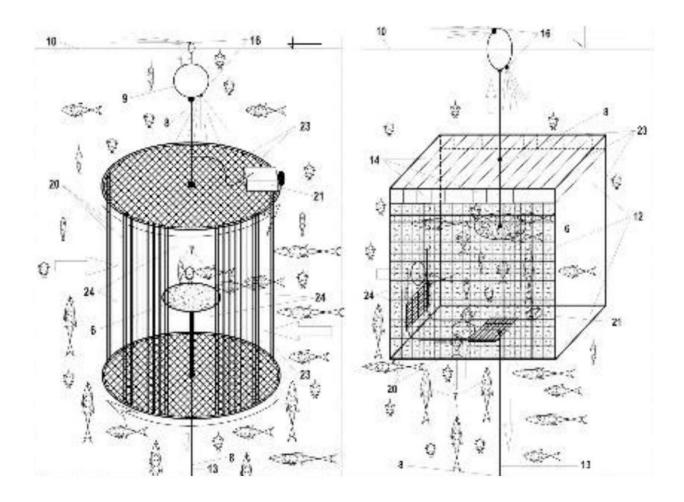
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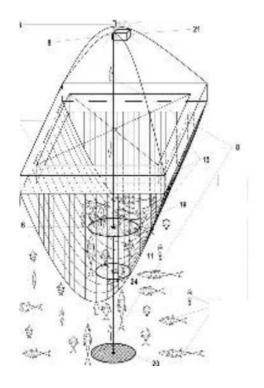
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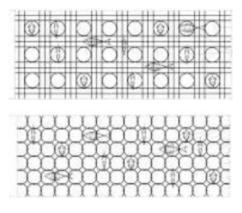
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This prevents excessive costs, where innovation develops and improves the ecosystem of the sea and ocean, including the local ecosystems. Remains of agricultural production and unused foodstuff are used for feeding the fish, which is by using the innovative methods regularly self-serving and naturally feeding. Food consumption is 100% by fish in all conditions, and in a fish ponds with a flowing water.







Innovation develops the concept, how to use the available natural resources for cultivation and selective fish (7) catching, in technically feasible and technologically acceptable way. For example, bays (5) can be used using an innovative barrier, which would provide a natural place for fish breeding (7). In such formed natural habitat (2), which could be additionally positioned along the shores of the lake or river, innovative feeders would be installed (6). Innovative feeders (6) would allow for constant feeding of fish (7). Where the fish (7) would be grown in the open waters, while self-serving in the feeders, at a time when it fits them the most. Innovative technology for selective fish capturing has been developed (7). In such a way that the fish (7) calibrates itself in size when catching with a platform, basket, cage, cylinder-shaped rotating catcher, and other forms of application of innovative technology. Thus, ecology is not disturbed, no excessive material resources are spent, otherwise now required for the sailing of excessive and unprofitable fishing vessels (4). Instead of the current fish catching nets (7), feeding traps (6) would catch the big fish (7), while the tiny fish (7) would pass through passages in the perforated canvas or net, construction. Fish capturing constructions (7) have the possibility of automatic or semiautomatic workflow management. Work processes are connected to shore and ship via the signal.



 $Email: \underline{info@trueteslatechnologies.com}$

 $\underline{www.truetes latechnologies.com}$

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