

One Field Visit on Ornamental Fish Farm at Bandhab Aqua, Bunorhat



Introduction of Bandhab Aqua

- This farm is owned by **Israfil Mondal**. In this farm he breeds the ornamental fishes, sells the seeds.
- Where he cultured ornamental fishes such as **Gold Fish, Cichlid, Arowana, Red carp, Koi carp, Neon tetra**, etc. and fresh water fishes such as *Ompok bimaculatus*, *Heteropneustes fossilis* etc. in modern techniques and as well as traditional methods. He has also invented his own breeding technique which is less costly.
- He chose this profession by his passion, and also his father was the former owner of the farm.
- When his father was alive, then his father cultured only the freshwater fishes. Now he has expanded the culture to ornamental fishes.
- After choosing ornamental fish farming as his profession, he set up a modern farm, where he set up **Chinese Hatchery, Bio-floc, some ponds** etc.
- In bio-floc, he successfully breeds some catfish species, such as *Heteropneustes fossilis*. Which gives him a successful result.
- Israfil Mondal was also a gardener. There are many foreign fruit plants (mango, apple, etc.), and some highly profitable fruit trees.

Introduction of Ornamental Fishes Farming

- Ornamental fish farming involves the breeding and rearing of various species of fish for decorative purposes, such as for display in aquariums or as pets. The industry has grown significantly in recent years, with a diverse range of species being cultivated for the global market.
- The process of ornamental fish farming typically involves selecting healthy breeding stock, providing optimal conditions for reproduction and egg incubation, and raising the fry until they are large enough for sale. This often requires specialized equipment and knowledge of fish behavior, nutrition, and water quality management.
- Fish farms may use various systems for rearing fish, such as indoor tanks, outdoor ponds, or recirculating systems. Depending on the species, some farms may also require specific water conditions, such as warm water temperatures or specific pH levels.

- In addition to being a lucrative industry, ornamental fish farming can also have environmental benefits. Fish farms can help alleviate pressure on wild populations by providing a sustainable source of fish for the pet trade. However, the industry also faces challenges such as disease outbreaks, environmental pollution, and ethical concerns regarding animal welfare.
- Overall, ornamental fish farming is an interesting and complex industry with a diverse range of species and farming practices. A visit to a fish farm could provide valuable insight into the processes involved in raising and caring for these fascinating creatures.

Overview of Some Ornamental Fishes

Red Cap Oranda (*Carassius auratus auratus*) –

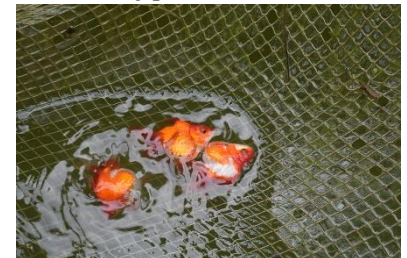
Red cap orandas are round-bodied fancy goldfish. The red cap oranda's body is covered with large, round, pure white scales that can be either matte or metallic, and these fish have a long, split caudal fin that flows into a beautiful fan shape as they hang in the water. Thanks to the tail, these orandas are aptly nicknamed “flowers of the water”. The fish's other fins, except the dorsal, are paired and symmetrical.



The red cap orandas typically grow to between six to seven inches long while fully down. However, some individuals will grow much larger, depending on the fish's genetic makeup, diet, and general care. Red cap orandas can get quite large, so the recommendation size of the tank is **20-30 gallon**. Red cap orandas are cold-water fish that need to swim to live in waters from **20-28°C**. The pH level should be between **6.0 – 8.0** with a water hardness of **5 – 19 dGH**.

Gold fish (*Carassius auratus*) –

The goldfish is a freshwater fish in the family Cyprinidae or order Cypriniformes. It is commonly kept as a pet in indoor aquarium, and it is the most popular aquarium fish. Native to China, the goldfish is a relatively small member of the carp family. It was first selectively bred for colour in imperial China more than **1000** years ago.



Goldfish tend to stay about **1 inch to 2 inches** long. But they usually do not grow longer than 6 inches in small aquarium. In outdoor ponds, and in the wild, goldfish can grow to about 14 inches. In aquarium the optimum temperature for goldfish is between **20 – 22 °C** and the pH level should maintain **6.0 – 8.0**.

Cichlid (*Herotilapia multispinosa*) –

Cichlid, any of more than **1,300** species of fishes of the family Cichlidae (order Perciformes), many of which are popular aquarium fishes. Cichlids are primarily freshwater fishes and are found in tropical America, mainland Africa and Madagascar, and southern Asia. The majority of species are African, appearing in great diversity in the major African lakes.



Cichlids are rather deep-bodied and have one nostril on each side of the head. The lateral line is discontinuous, and there are three or more anal spines. They generally have rounded tails and, though sizable for aquarium fishes, usually do not grow longer than about **30 cm (12 inches)**. In certain species, however, known as **mouthbreeders**.

Koi carp (*Cyprinus rubrofuscus*) –

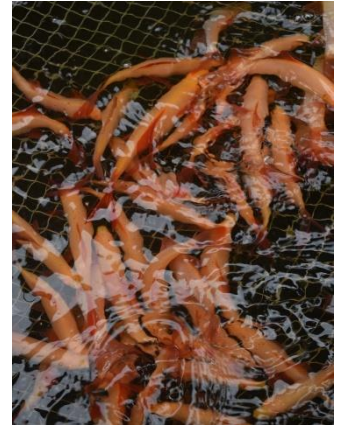
Koi, or more specifically nishikigoi, are colored varieties of the Amur carp (*Cyprinus rubrofuscus*) that are kept for decorative purposes in outdoor koi ponds or water gardens. Koi is an informal name for the colored variants of *C. rubrofuscus* kept for ornamental purposes.

The Amur carp is a hardy fish, and koi retain that durability. Koi are coldwater fish, but benefit from being kept in the **15–25 °C (59–77 °F)** range, and do not react well to long, cold, winter temperatures; their immune systems are very weak below **10 °C**. Koi ponds usually have a metre or more of depth in areas of the world that become warm during the summer, whereas in areas that have harsher winters, ponds generally have a minimum of **1.5 m (5 ft)**.

Arowana (*Osteoglossum bicirrhosum*) –

Arowanas are freshwater bony fish of the subfamily Osteoglossinae, also known as bony tongues. In this family of fish, the head is bony and the elongated body is covered by large, heavy scales, with a mosaic pattern of canals. The dorsal and anal fins have soft rays and are long based, while the pectoral and ventral fins are small.


Depending on the classification system used, there are 10 types of arowana commonly kept as pets; 4 from Asia, 3 from South America, 2 from Australia and 1 from Africa. Asian arowana is an endangered species and banned in the United States. It is a status symbol among wealthy Asian men. An albino arowana sold for a record price of \$300,000 in 2009.[8] Most pet arowana are farmed behind high-security fences.

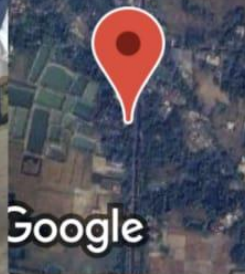


Some Geo tagged Photographs





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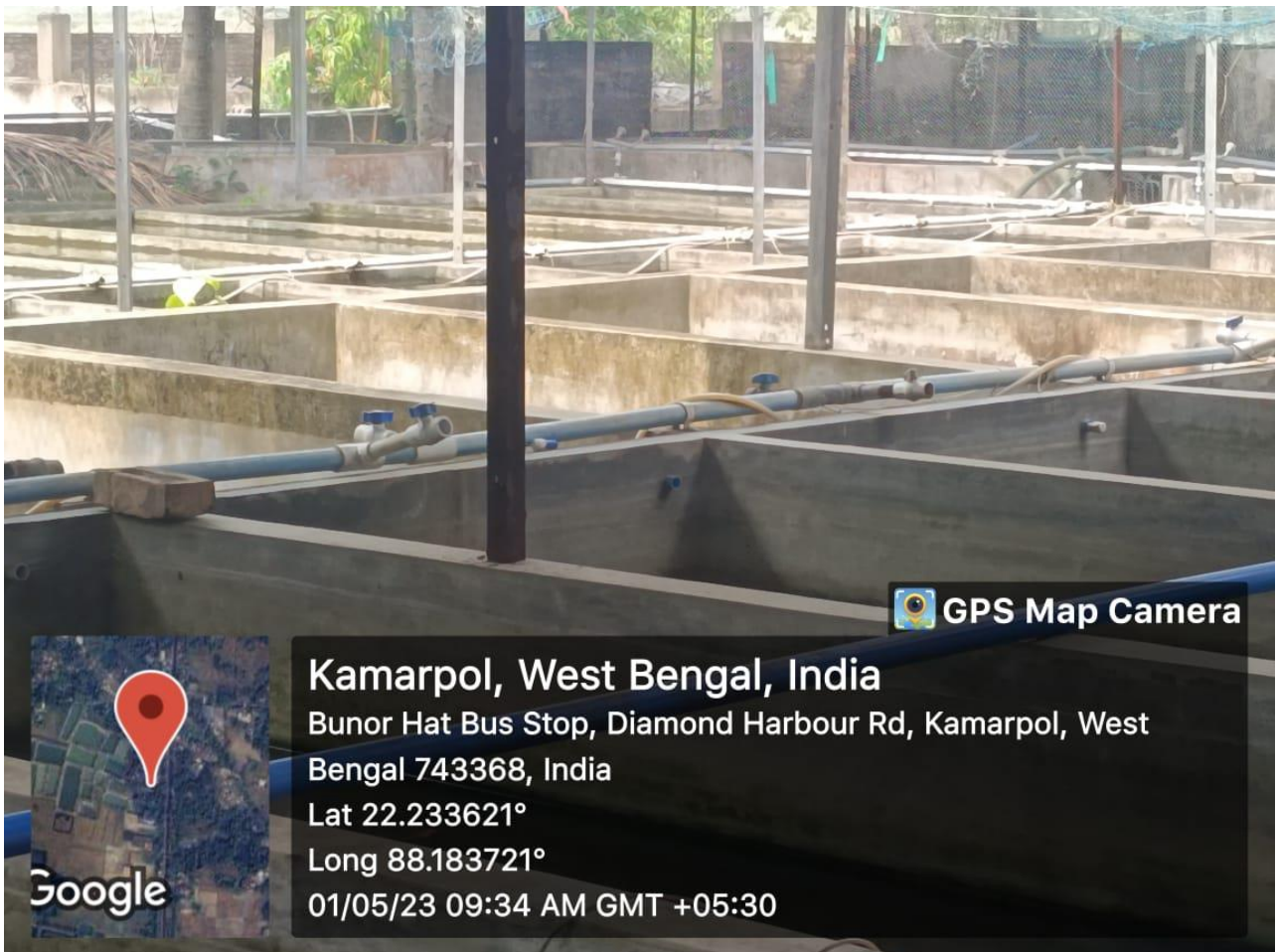
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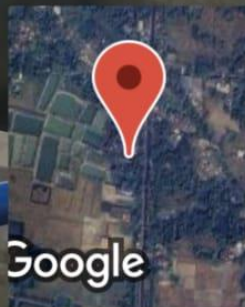
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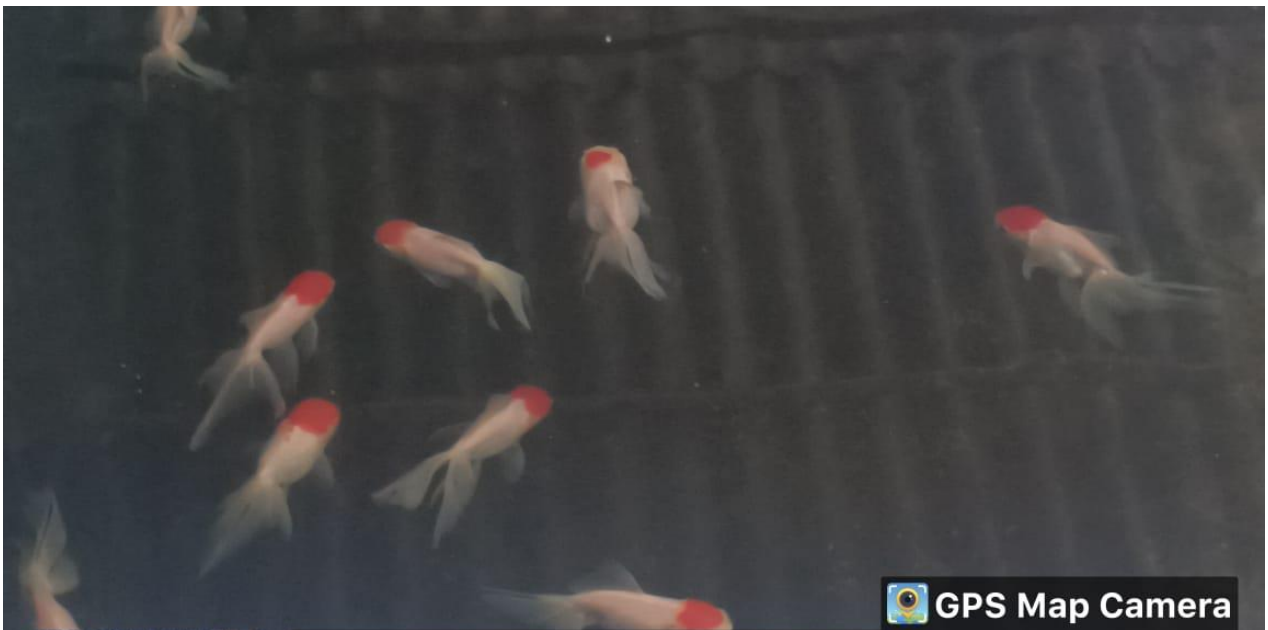
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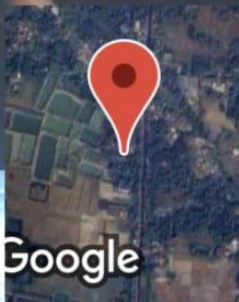
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