## **Sustainable Fish Farming**

Have you ever thought of alternative uses of a cattle pond? This idea of farming fishing using a pond is an ancient practice that was developed by early farmers as one of many primary production systems to stabilize food supplies. The earliest known references date back to the Chinese culture, some 4,000 years ago, and from the Mesopotamian, about 3,500 years ago. In my community there are several cattle ponds that are underutilized. Using our cattle ponds in other ways than what they are customarily used for- hydrating cattle - will bring lot of benefits to our community. The introduction of aquaculture is one of the techniques that can be employed to cogenerate along with the cattle. This system of farming is an integrated system of production without the use of soil. Therefore, if I were to invest \$100,000.00 into promoting aquaculture mechanisms, I would use the cattle ponds for a dual purpose – cattle hydration and fish farming. The benefits that come with farming our own fish would benefit the community in a great way and increase sustainability efforts. The first benefit of using the community cattle pond for sustainable fish farming is that its healthier for you and that people in your community because the fish is being raised in a fresh controlled source. Another benefit is that it can become an additional source of income for the community. The last benefit of using the community cattle pond in a new way is that it would make your community come together and get closer as a family.

Investing \$100,000.00 will provide a new source of income for the community and ensures that there is sustainability "Sustainable fishing guarantees there will be populations of ocean and freshwater wildlife for the future". This is a verification that fish will always be there for residents to consume or to benefit from financially. Additionally,

according to the article, "Sustainable fishing," fishers remove more than 77 billion kilograms (170 billion pounds) of the fish from the sea yearly (Newsela, 2019) and at this rate of removal, very soon demand will exceed supply and undoubtedly, this is a cause for concern. "New research shows that aquaculture production will need to more than double again between now and 2050 to meet the demands of a growing population" (Waite, Phillips & Brummett, 2014). As a result, this void can be filled with the cultivation of a fish farm which will benefit us in multiple ways.

Evidently, there exists a high demand for seafood which means that there must be some form of sustainable practice to reverse or fix this problem. For example, in the 1990s, seabass became extremely popular in restaurants which caused an increase in demand. This type of fish is home to the Atlantic Ocean and requires international fishing which is often met with many stipulations, as a result fishers tend to fish them illegally and healthy replenishment became problematic. Hence, the reason why a cattle pond used to cultivate "low-trophic" fish such as catfish that feed low on the food chain will be an answer to the cry. The fish will be raised in a controlled environment - not the 'whims and fancies' of the outer world- but, sustainable measures would be utilized to prevent overfishing. This is such an excellent way to produce a protein product which will help to reverse some of the major health problems and the nutritional needs in our community. In places like the Philippines, for example, some cultures have employed fishing practices that maintain fish populations, some of which are still used today. Some of the practices include: (1) fishing for specific species only during certain times of the year, (2) allowing fish stocks to replenish themselves, (3) designating certain areas as forbidden spots for fishing, (4) using hook-and-line methods (Newsela, 2019).

As can be seen, these practices would allow for years of sustainability and the community would be able to feed itself. Accordingly, what results is a continuous supply of fresh, organic food utilizing an existing space. The article, "Virginia fam raises crops through aquaponics" quotes Lisa T. Perry, director of economic development, in stating that, aquaculture "is another form of agri-business, and it shows exactly how things are changing, in that field". Given these points, this investment will do well in improving the healthy lifestyle of our residents.

Many restaurants can utilize our fish farming enterprise to replenish their supply. Though this will procure years or financial benefits for us as a tribe. We must be cautious to maintain sustainable practices and only supply when it possible to do so. This means that there must be a schedule for raising, harvesting, and selling using controlled measures and conservation efforts. In doing so, it will be possible to regenerate without overfishing. Raising a vast amount of fish would bring lots of financial gains. The community and money, we can put right back into the utility of larger or more ponds in order to increase our supply. Having this source of money would be good for the community because we can put together an events where our focus would be on Sustainable Fish Farming efforts so that we can raise awareness. Having this events would bring populations of people to the community, so that they can understand what we do as a people.

The last benefit of using the community cattle pond in a new way is that it would make your community come together and get closer as a family. According to the article, "Small pond make a big difference", it states, "working together to plan and restore our ponds has brought our community closer together," said the author Dol Hun,

Chief of the School Association. Having a community pond would be great for the community because it would be another way for people to meet up and work together to conduct efficient and effective practices to ensure that all works well. Furthermore, the fish farming cattle pond will be also a new way for the kids in my community to make friends and parents to come together as they collaborate with each other.

Moreover, due to the nature of the nascent nature of the aquaculture industry, about \$10,000.00 will be invested initially to determine what is needed for this type of innovation. A clear understanding of the breeding technology, disease control, feeds and nutrition is important knowledge to acquire. Therefore, some training must be done to ensure that sustainable aquaculture practices are employed.

Clearly, it is widely known that fish is considered to be a major source of protein for many people, therefore growing aquaculture to meet the food and nutritional needs of our people will be essential. Moreover, with the increase in the human population, it is no doubt that aquaculture is here to stay and will contribute to a sustainable food future.

## References

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