

**BROADENING THE HORIZONS OF INLAND FISH-FARMING IN THE AFRICAN ECONOMY**

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**ABSTRACT**

Inland fish farming is still a mystery for the economic development of Africa. Many African countries especially in the south of the Sahara do not largely practice inland fish farming for commercial purposes. This is because many Africans still believe in their economic redemption through crop production, grants and or loans from the developed world. They are yet to discover the economic value of this practice despite the high economic and nutritive demand of these aquatic products.

**Keywords** commercialization aquaculture products economic development

**INTRODUCTION**

Over half a century ago, European colonies in Africa were introduced to cash crop production by their master for economic development. This was as a means to produce raw materials to feed their industries that were in dire need of these materials back home. These African nations could benefit through this policy of 'la mise en valeur' on a minimal scale. It was through this background that these countries started laying a foundation of their economy after independence in the 1960s though with strings attached to it.

Today these African countries cannot transform these raw materials for their own local markets because they lack the appropriate technology. Worst of all the prices of these produce are dictated by the buyers at the detriment of the producers despite the level.

Since then, these African nations have narrowed their minds and the economies only through this means of income generation – food and cash crop production -. Another syndrome that just came up of recent was to appeal and rely on grants and borrowing from the West. This has smoldered the notion that self-reliance, and sustainability in Africa is a mystery and that there is no way of their economic revival and or development. Consequently, this has been the genesis of poverty, hunger and under development in Africa.

It is through this that I have researched and found that at this era of globalization, the alternative way to spur, awaken the African economy from hibernation and put it on the rail is to broaden the horizons of inland fish farming in these African countries.

**THE CONCEPT OF AQUACULTURE AS A NEW FARMING METHOD**

Inland fish farming is not a new concept. It has been practiced for many years in most of Asia. But it is quite new in Africa, especially South of the Sahara. Out of the total production of inland fisheries, Asia provides 77.5% and Africa 10.4%. (I)

This new concept is one of the best options for sustainable development in the African economy. Introducing this concept in the African economy is best when it is done in an integrated approach. That is small scale integrated agriculture, aquaculture and livestock. The diversification that comes from this imparts stability in production, efficiency in resource use and conservation of the environment. Integrating aquaculture with agriculture offers advantages in the economic development of a nation. Fish are efficient converters of low-grade feed and wastes into high-value protein. If this concept is well harnessed in African, fish are going to be the greatest source of animal protein in Africa, the greatest sources of income in rural household, eradicate hunger and expand greatly the economy of African countries. It will also reduce pressure from wild fisheries, on land cultivation and pouching which are the greatest environmental hazards in Africa today.

## **REASONS FOR THIS LACK OF INTEREST**

Many factors have contributed for the lack of interest in practice of this for the empowerment of the African economy.

### **Ignorance:**

Few African farmers, who practice aquaculture, merely do it for pleasure and or to beautify their yards and not for economic purposes. They do not know the importance of it for their livelihood. Most of them do not see it beyond its subsistent use. If most African farmers were informed of the importance of fish cultivation in societies, it is going to boost their economy greatly thereby graduating them from the economic quagmire.

### **Absence of Appropriate Technology**

The adage “give a man a fish and you feed him for a day, teach him how to fish and you feed him for a lifetime” no longer holds. With the diminishing returns of agricultural production in Africa due to the wanton and indiscriminate exploitation of its resources, aquaculture can alternatively be well and wisely managed for its economic advancement and food security.

Though most African are not aware of this concept, they most of all lack the appropriate technology to harness this new concept. Most of these farmers might have had the will to engage themselves into this new income generating activity, but the way is not there.

If stakeholders can move giant strides towards inculcating the technological know-how of this new agriculture into Africans, it is going to move them out of the doldrums of economic stagnation and food insecurity.

### **Lack of Experience**

Unlike other farming activities that Africans have acquired through the hard way, fish farming cannot be acquired in that way. Right from choosing a place for the ponds, constructing them to breeding the fish is not easy. It requires community education at the local and national levels. It also requires a higher level of farming management

and professionalism. All of these require governments and stakeholders in this sector to be serious and imaginative about fish farming and rural development. Thus more emphasis should be placed on training and building the capacity of Africans toward this new horizon.

### **Unavailability of Resources**

The resources I mean here is financial and material resources. Even if all other gaps are filled to harness the production of aquatic resources with this, it will be unyielding. If you teach a person how to fish and do not give him a tackle, it will be a waste of time and resources. Consequently, stakeholders in this sector should make provision for seed capital and other material resources to Africans to lay the economic foundation of their communities through inland fish farming. If these people are trained and given basic financial and material resources Tazoacha (2003), they will trickle up sustainable development and economic rejuvenation in Africa.

With regard to inland fish farming, we need to wage a modernization crusade through the provision of input as well as a demand-driven extension service delivery system.

### **Lack of capacity building**

One of the main things that could be done to broaden the horizon of inland fish farming in Africa and strive for sustainable development is to build their capacity. That is to intensively and extensively trains aquaculture technicians for Africa since it is a new concept to them. They could be trained towards the new socio-economic landscape. Most educated people in our society and administrators are not technicians to marshal the economy of their countries forward. It is not because they do not want it, but because they cannot afford for this training. Knowing what to do and not knowing how to do it has been the main shackle holding fish farming development in African backward.

If the international communities and stakeholders (I mean you sitting here today) could invest more in training technicians for Africa in aquaculture, they will help wake the economy of their societies from economic retrogression. This mighty gesture will go to confirm a Chinese proverb, which says, “teach a man how to fish and not to give him fish.”

## **THE PROSPECTS OF AQUACULTURE IN THE DEVELOPMENT OF AFRICAN ECONOMY**

Africans have still of today not realized that fish farming in particular and integrated fish farming in general could be the backbone of their economy. This is if it is well managed as it is done in Asia. The potentials of this agricultural option can be realized in the African economy in that:

### **It can be a good means of poverty alleviation**

Despite the development efforts of the last half-century, the global dimension of poverty continues to present a grim picture (IFAD 1999 Annual Report) 1999. In fact, the World Bank estimates that 1.3 billion people – more than 1/5 of the world’s population live in

abject poverty. The impact on sustainable economic development in Africa is devastating. With the low agricultural production, inland fish farming poses now as the only alternative for the revitalization of the African economy. The expansion and intensification of aquaculture production in Africa will expand the economy of African countries thus help to eradicate poverty which is the order of the day in Africa.

### **Hunger Eradication**

Fish are an important source of protein, especially in the Developing World. Fish account for 25% of animal-derived protein in low-income food deficit countries, compared with 13% in the industrialized world (Christopher L. Delgado et al) 2003.

But aquatic products are rarely included in food supply calculations and are frequently overlooked in food security discussions at the national and global level (James 1994). Cereals dominate most calculations of per capita supply and food security, all foods and economic activities, including production of aquatic products, will be needed (Meryl William 1996).

In the first half of the 1990s, people in the developed countries directly consumed 18kg of meat and 22kg of fish per capita as food. The corresponding figures in Sub-Saharan African were 9kg of meat and 8kg of fish per capita (FAOSTAT 1997). Thus much still has to be done to raise the production of aquatic production.

The propagation and the cultivation of integrated inland fish farming are going to increase the consumption of food products of animal origin. Therefore, hands have to be put on deck for the intensive and extensive production of this food product. It is going to eradicate hunger and increases the macro economic base of the continent; thus instill sustainable development.

### **Environmental Management**

Existing patterns of agricultural production and consumption are placing enormous strains on the ecosystems in the African countries. The diversification from agricultural production, poaching into aquaculture will play a great role in the conservation of fauna and flora.

The seemingly inexhaustible oceans have proved to be finite after all. Landings of wild fish have leveled off since the mid 80s and many stocks of fish are fished so heavily that their future is threatened.

With mild fish production stagnating, growth in overall fish production has come almost entirely from Asian Developing Countries, especially from China. And yet the world's appetite for fish has continued to increase, particularly as urban populations and incomes grow in developing countries. Aquaculture-fish farming-has arrived to meet this increased demand. Production of fish from aquaculture has exploded in the past 20 years and continues to expand around the world. Yet it has remained a mystery in Africa especially in the South of the Sahara.

If Africans are sensitized on this new agricultural concept, it is going to reduce pressure on land, wild fishing, poaching and on other environmental setbacks. With the high demand, it is going to create a big market for the African farming thus stabilizing their economy and guaranteeing food security.

### **Creating productive employment opportunities for the rural poor**

Poverty is multidimensional; therefore, poverty reduction efforts have to be multi-targeted and are expected to show wide and diverse dimensions. The underlying fact that rural poverty reduction generally benefits from labour-intensive approaches.

Inland fish farming has a very little labour-intensive approach unlike other agricultural production (food crop and cash crop). It will thus employ many farmers who have been sensitized to carry out this production either in a large or small scale. For rural households, fish will be small units of cash or food, which can be harvested more or less at will without loss of weight or condition. While these systems are labour-intensive, they do save labour from fetching water, gathering wood and forage and fishing in nearby rivers and streams.

#### **Availability of market:**

The prices of many animal-origin foods have declined steeply over the past several decades because of increased production and stagnating demand in the traditional markets of the world. Real red meat prices, for instance, have declined by a stunning 50% since 1980. Today with the prevalence of many diseases in animal-origin food such as mad cow disease, the bird flu, etc, that are dangerous to human health; have scared many people from consuming these food items. Consequently, fish demand is very high in the market. Fish products are a heavily traded commodity of recent and the direction of trade is changing. Roughly 40% of global fish output by value in 1998 was traded across international borders (Christopher L. Delgado 2003). The high share of trade in fish is astounding for such a highly perishable commodity group. It reflects major changes in human diets around the world.

The enormous rise in fish production in Developing Countries especially in Asia has caused an about-face in the direction of trade in fish products since the early 1970s. By the late 1990s, more than 50% of fish exports came from Developing Countries (FAOSTAT 2002). If such initiatives could be invested in Africa like in Asia and Latin America, Africa will be one of the highest exporters of fish products. Most of the African countries will not only export these products, they will also consume it in their internal markets. Thus fish would become the greatest income earner for African countries.

#### **Good climate and abundant resources**

Poor water quality can result from feed wastage, lack of oxygen circulation and exchange of polluted water with neighbouring ponds. Minimizing water exchange through re-circulation has the dual benefit of reducing water demand and minimizing the affluent problems for both environment and surrounding farms. (Boyd and Gross 2000). Africa has a very conducive environment, abundant land and very good sources of water supply that can lead to the perfect production of these products. The relatively inexpensive exploitation of existing water resources could augment income, help increase fish availability to domestic markets, and increase the affordability of low-value food (fish) in Developing Countries (Li 1999).

## **CONCLUSION**

If people could eat international resolutions and summit agreements, Africans would be among the best-fed people in the world. With regard to aquaculture, we will wage a modernization crusade through the transfer of aqua cultural technology and other related inputs as well as a demand-driven extension service delivery system. We shall work towards the diversification of our agriculture and determined to increase our national income, food production to cater for our own needs and to export surplus to food deficit countries.

My greatest plea today is to put our contribution into concrete action and let them not remain on the lips of those who say them. Until these policies are transformed into concrete actions and realities, then can the African economy be broadened; then sustainable development in Africa demystified.

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