

Article Id  
AL04232

## CONFLICTS OVER WATER AND LAND USE IN FISHERIES- SOCIO-ECONOMIC ISSUES

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Conflict is defined as some kind of friction, conflict, or discord that arises within a group when one or more members' opinions or behaviors are rejected by or deemed undesirable by one or more members of another group. In essence, disputes are examples of the reconfiguring or reproducing of positions and rules (Ghosh and Indu 2005). Conflicts thus serve as warning signs of social divides, conflicting interests, and poor communication techniques. At the same time, social actors can use symbolic and threatening gestures to control the line dividing tension from confrontation. The moist regions offer tremendous possibilities for inland fishing. Due to their dependency and intricate interactions, the organic link between these two types of resources may become unsustainable beyond a point of technological intervention. Aquaculture is responsible for the bulk of newly created jobs in the fisheries industry (Sabir *et al.*, 2017).

As a result, personnel involved in fishing and pond excavation, renovation, and reclamation are all directly employed. There are also a tonne of opportunities for the expansion of related tertiary sector employment, including the preservation, processing, transportation, and marketing of fish products, as well as ancillary industries that can generate a sizable amount of new employment, like those that make fish feed and soil fertiliser.

Their socioeconomic status must gradually improve in order to preserve their ability to make ongoing efforts. Their distinctive traits included the ferocity of their nightly fishing attempts, their knowledge of the state of the pond or tank in which they operate, and their relative paucity in comparison to other inland fish species.

In India, interior fisheries are usually ignored, and traditional fishing towns near the coast in maritime states are frequently the only sites where fishermen may develop. A conflict over access to water resources that arises between nations, states, or other groups is referred to as a "water conflict". According to the United Nations, disputes over water occur when several water users, whether public or private, have conflicting interests. These disputes over freshwater and saltwater occur both between and inside nations. Conflicts over freshwater resources are prevalent despite their scarcity and importance. Freshwater is at the center of the water issue due to the demands for agriculture and drinking water (De Groot, R. 2006).

### **Cause**

According to the 1992 worldwide conference on water and the environment, water is crucial for human life and is closely related to human activities. The availability and quality of water are important factors in human activities. Furthermore, there is a growing consensus that future confrontations in the Middle East (between Saudi Arabia and Israel) would largely be fought over water rather than oil. Water is necessary for all life processes, including sanitization, commercial operations, and the production of goods for sale (Wolf *et al.*, 1999).

### **Economic and Trade Issues**

Some people believe that water is a resource that is as important as oil because it is used in almost every business and virtually every day. Water shortages can entirely cripple an industry, just as they can fully cripple a population, and they can affect both established and developing nations with respect to their water infrastructure. The World Trade Organisation, which has water-specific groupings like a Fisheries Centre that provides a single judicial process for commercial conflict resolution, can handle international commercial conflicts between nations (Madani *et al.*, 2016).

### **Fishing**

Fisheries, for instance, have historically been the main sources of contention as nations have expanded and claimed territory in oceans and seas for domestic commercial fishing. The conflict has historically existed in certain affluent areas, such as the Bering Sea. In 1886, disputes over seal fishing broke out between the United States and Great Britain. The Bering Sea Donut Hole, a small stretch of international water, is currently surrounded by Russia.

## **Pollution**

Water pollution provides a serious health danger, particularly in densely populated and industrialized regions like China. In the 1960s, significant fish deaths resulted from pollution in Lake Erie and, to a lesser extent, the other Great Lakes. Up until the US Congress established the Clean Water Act in 1972, the local residents suffered significantly from poor water quality.

## **Classification**

According to Aaron Wolf, et al. there were 1831 water conflicts over transboundary basins from 1950–2000. They categorized these events as following:

- No water-related events on the extremes
- Most interactions are cooperative
- Most interactions are mild
- Water acts as irritant
- Water acts as unifier
- Nations cooperate over a wide variety of issues
- Nations conflict over quantity and infrastructure

## **Socio Economic Impacts**

In classical economics, land is one of the three main components of production and a crucial component of both housing and food production. Changes in land usage are both required and crucial for social and economic advancement. The amount of land that can be used to grow food and make lumber is decreased when agriculture and woods are converted to urban development. The quality of land resources and future agricultural output are decreased by soil erosion, salinization, desertification, and other soil degradations brought on by intensive agriculture and deforestation (Madani *et al.*, 2016).

## **Classification of Conflicts**

The shrimp farms fenced their area without prior notice and did not allow the public, especially the fishermen who were using the beaches for years together because of lack of proper rights to use the common property resources.

- i. **Conflicts between Fisherman and Aqua Farms-** The accessibility of fishing locations has been a significant point of contention between shrimp producers and fishermen. The fishermen must go a longer path of 4-5 km to reach the sea since aqua farms are situated on the seafront and entry is prohibited. Larger aqua farms' access to fishing grounds is one of the main causes of conflict between aqua farmers and the local population-
- ii. **Conflicts between Aquaculture and Agriculture-** When aquaculture initially started to take off in the early 1990s, entrepreneurs bought property from farmers who were experiencing terrible losses in their agricultural businesses. Due to NGO opposition to aquaculture, conflicts arose. In order to avoid such problems, the next commercial farms were constructed on arid wastelands that weren't suited for cultivation. Critics claim that aqua farms are being established on agricultural land because these regions are classified as agricultural in the income records. The issue that has led to the biggest legal issues with coastal aquaculture is the well-known fact that aqua farms with a larger percentage of sand particles are contributing to the salinization of agricultural areas. Aquaculture activities with groundwater are a contentious topic. Because most of the farms are located on coastal plains distant from the sea (0.6–22 km), where tidal flushing is relatively minor, salinization surrounding shrimp farms is not an issue in Andhra Pradesh.
- iii. **Conflicts of interest between Aqua farmers and Fishermen-** Conflicts would arise if fisherman were allowed to migrate, which is against the laws and regulations that aqua farmers have established for their culture. They are able to offer them space on huge farms, which is not doable on small farms.

### **Status and Trends in the Use of Land and Water Resources**

The management of land and water has allowed for the satiation of the recently increased need for food and fibre. Between 2.5 and 3 times more food was produced around the world during that time than was grown on cultivated land. Irrigated regions, whose area has increased by a factor of two, contributed more than 40% of the rise in food production. Currently, agriculture uses 70% of the water drained from aquifers, streams, and lakes, and occupies 11% of the planet's land surface for agricultural cultivation. However, production successes have been linked to management strategies that have damaged the water and land systems that are essential to the production process (Sabir *et al.*, 2017).

## Conflicts Over Land Use

Indiscriminate conversion of fertile agricultural lands into aqua farms in the initial stages of aquaculture development was found to have led to many conflicts prevailing till today. Absentee landlords sold their lands to aqua enterprises for a high price. In China, rapid industrialization and urbanization have provoked intense conflict by evicting farmers with rights of use from their land (Sabir *et al.*, 2017).

In the earlier years, vast areas of mangroves were destroyed by agriculture. Another kind of conflict arises in contexts where feudalism persists. One kind of conflict over land rights arises when rural populations are marginalized and excluded from land that has been appropriated by a minority of agriculture producers that rely on salaried employees. Conflicts often occurs in valleys, irrigated perimeters and forests used for fuel wood, as well. However, land and water related conflicts might be also between village communities, ethnicities, or even between countries.

## Conflict over Water Rights; Water-Related Conflicts Vary as Well

A fight over access to water resources is referred to as a "water conflict" between nations, states, or other groups. Between and within countries, as well as over freshwater and saltwater, these conflicts occur. Conflict arising from river water that has been rerouted by extensive water engineering projects between different regions of the same country. Changes in public water policies have a direct impact on a whole class of water-related conflicts.

## Conclusion

Conflicts between aquaculture and agriculture as well as between aquaculture and other uses of the shoreline must be kept to a minimum for the prawn business to prosper. Conflicts may be averted if fishermen and migrant farm workers were encouraged to practise prawn culture. Although prawn aquaculture pollutes the environment, steps could be taken to reduce pollution.

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