Research & Reviews: Journal of Zoological Sciences

e-ISSN: 2321-6190
p-ISSN: 2347-2294

Ocean Acidification and Fisheries: Challenges and Strategies

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Short Communication

Received: 01-Jun-2023, Manuscript No. JZS-23-101814; **Editor assigned:** 05-Jun-2023, Pre QC No. JZS-23-101814 (PQ); **Reviewed:** 19-Jun-2023, QC No. JZS-23-101814; **Revised:** 26-Jun-2023, Manuscript No. JZS-23-101814 (R); **Published:** 03-Jul-2023, DOI: 10.4172/2321-6190.11.2.010

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Citation: Frost L. Ocean Acidification and Fisheries: Challenges and Strategies. J Zool Sci.2023;11:010.

DESCRIPTION

Climate change is one of the most significant issues affecting our world today. Climate change is already having an impact on the world's fisheries. These effects are causing various harmful impacts on fisheries, as listed below.

Rising ocean temperatures

As the ocean warms, fish are being forced to move to cooler waters. This can lead to overfishing in some areas, as well as the loss of fish habitat.

Ocean acidification

The ocean absorbs more carbon dioxide, due to this, it becomes more acidic. This can make it difficult for fishes to form their shells, and sometimes can also lead to the death of coral reefs, which are one of the fish habitats.

Deoxygenation

As the ocean warms, it can hold less oxygen. This can lead to the death of fish and other marine life, and can also make it difficult for fish to find food.

Challenges and strategies

These changes are having a significant impact on the world's fisheries. In some areas, catches have declined significantly. In others, the composition of fish populations has changed, with some species becoming more common and others becoming less common. The impacts of climate change on fisheries are likely to become more severe in the future.

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If greenhouse gas emissions continue to rise, the ocean will continue to warm and acidify. This will lead to further changes in fish populations, and could make it difficult to maintain sustainable fisheries.

There are a number of things that can be done to mitigate the impacts of climate change on fisheries.

Reducing greenhouse gas emissions

This is the most important step that can be taken to reduce the impacts of climate change on fisheries [1-4].

Improving fisheries management

This includes setting sustainable catch limits and protecting fish habitat.

Developing new technologies

This includes developing new ways to grow fish in aquaculture, and developing new methods for catching fish that are less harmful to the environment.

Climate change is a serious threat to fisheries. However, by taking action to reduce greenhouse gas emissions, improve fisheries management, and develop new technologies, we can help to mitigate the impacts of climate change and protect this important source of food and livelihoods.

In addition to the physical impacts of climate change, there are also a number of social and economic impacts on fisheries. These include:

Loss of jobs

As fish populations decline, fishing jobs are lost. This can have a devastating impact on coastal communities that rely on fishing for their livelihood.

Increased poverty

The loss of fishing jobs can lead to increased poverty in coastal communities. This can make it difficult for people to afford food, housing, and other basic necessities.

Conflicts over resources

As fish populations decline, there is increasing competition for fish resources. This can lead to conflict between different groups of people, such as fishers, farmers, and tourists.

The social and economic impacts of climate change on fisheries are significant. These impacts will only become more severe in the future if greenhouse gas emissions continue to rise. It is important to take action to mitigate the impacts of climate change on fisheries, both for the sake of the environment and for the people who rely on fisheries for their livelihood.

Climate change is already having a significant impact on fish populations. A study by the Food and Agriculture Organization of the United Nations (FAO) found that global fish catches have declined by 1.2% per year since 1990. This decline is largely due to overfishing, but climate change is also playing a role.

Climate change is expected to have a number of negative impacts on fish populations in the future. These include:

Shifts in fish distributions

During some conditions, as the ocean warms, the fishes migrate from one habitat to another. This continuous migration of large group of fishes leads to the overfishing as well as the loss of fish habitat [5,6]. The main disadvantage of ocean warming is less growth rate in fishes. This could lead to a decline in fish population.

Increased predation

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p-ISSN: 2347-2294

Due to the ocean warming, there is a rise in predator communities in marine eco system. The impacts of climate change on fisheries are likely to be felt disproportionately by developing countries. These countries are more reliant on fisheries for food and employment than developed countries. Climate change is a serious threat to fisheries. However, by taking action to reduce greenhouse gas emissions, improve fisheries management, and develop new technologies, we can help to mitigate the impacts of climate change and protect this important source of food and livelihoods.

REFERENCES

1. Snyder DP. Bird communities in the coniferous forest biome. The Condor. 1950;52:17-27.
2. Gaston AJ. Ecology of the common babbler *Turdoides caudatus*. Ibis. 1978;120:415-432.
3. Rotenberry JT, et al. Habitat structure, patchiness, and avian communities in north american steppe vegetation: A multivariate analysis.Ecolog. 1980;61:1228-1250.
4. Beissinger SR, et al. Effects of urbanization on avian community organization. The Condor. 1982;84:75-83.
5. Wiens JA, et al. Habitat occupancy patterns of North American shrubsteppe birds: The effects of spatial scale. Oikos. 1987;48:132-147.
6. Root T. Environmental factors associated with avian distributional boundaries. J Biogeogr. 1988;15:489-505.