# A STUDY ON THE EFFECT OF CLIMATE CHANGE IN THE FISH INDUSTRY IN KARNATAKA

<sup>1</sup>B. Sai Kartik, <sup>2</sup>Maaz Sheik

MBA (IB)

School of Business Studies and Social Sciences

*Abstract:* There are huge changes taking place in the climate in the world and India is not any different. These climate changes have had a huge impact on the fish suppliers and fish industry as a whole causing significant changes in factors like demand supply ratio, inventory management, sourcing, quality and transportation of fish as a product. As the suppliers are dependent on the fishermen, the climate change is affecting both the parties in a significant manner.

The study aims to analyse the impact of climate change on fish suppliers and industry in Karnataka and various changes that have taken place in the key supply chain operations such as sourcing, distribution, stocking and transportation through a case study method in order to get an in-depth descriptive knowledge of the scenario.

Keywords: Climate change, Fish Industry.

# 1. INTRODUCTION

Karnataka has reported the highest growth in the country's coastal States in fish production.

Karnataka reported a compounded annual growth rate of about 11.5 per cent in the last five years, according to an independent study conducted by the Associated Chambers of Commerce and Industry of India (Assocham).

It produced five lakh tons of fish last year (value-based Rs 4,000 crore) and accounted for 6% of total fish production in the country estimated at 91 lakh tons. With a coastline of 300 km and six lakh hectares of inland waters, it has tremendous potential for further growth in fishery sector investment .

Fisheries and aquaculture in many countries like India contribute largely to food, nutrition and livelihood welfare. This contributes nearly 1 per cent of India's gross domestic product. Nevertheless, the global climate change has profoundly affected both coastal and inland ecosystems as well as aquaculture. Climate change affects the fisheries and aquaculture sector directly by regulation of the patterns of ecology, behaviour, distribution and migration, reproductive capacity and mortality. It is estimated that ecosystem services on India's east coast could decrease by 25 per cent in 25 years

# **OBJECTIVES**

1.To study the ways in which climate change has affected fishing industry in Karnataka

2.To study the impact of climate change on fish suppliers

3.To study the impact of climate change on sourcing, distribution and sales of fish in Karnataka

# HYPOTHESIS

H0: Change in climate has significant impact on suppliers operations

H1:Change in climate has no significant impact on supplier operations

H2: Change in climate has a significant impact on sales, sourcing and distribution of fish

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# 2. METHODOLOGY

For this study, case study method has been used and data has been collected through qualitative interviews with 5 major suppliers of fish in Karnataka. Descriptive interviews were conducted in order to gain an in depth knowledge of the effect of climate change in the fishing industry and how it is impacting key suppliers and their sourcing activities as they carry a sentimental value with this business. The questions have been converted into statements and views of each supplier have been recorded (5 different paragraphs denoting 5 different suppliers). The sampling method used was snowball sampling in order to get in touch with major suppliers in the Karnataka fishing industry.

# 3. LITERATURE REVIEWS

#### The fishing industry and its impact on the nation's society

(Abdul, 2019) states that there is an overall positive effect on the economy, as the fishing industry directly provides employment opportunities to many people in the country, creating more livelihood and chances to grow as a community. Abdul suggests that Pakistan, is largely affected by the fishing industry, the government needs to apply strict regulations and improve technological standards to properly support the fishermen and the community to boost the growth for both the industry as well as the country. The shores and coastlines of Pakistan have been a major source of livelihood for these fishing communities; the halt of this industry greatly affects the standard of living for these families.

(Levesque, 2019) strongly writes that finishing industry managers actively need to heed the climate changes, oil spillage, and overfishing even though the progress in the United States of America could be slowed. Levesque states that the fish industry in the United States needs to grow and develop its resources to build a more environmentally-friendly approach to help the current overfished species, as well as the need for the creation of sustainable analytical applications for assessing the future implications to the ocean environment in the bigger picture.

The report (Tewabe, 2015) analyses the recent problems of overfishing, due to poor fishing management, has led to the low level of fish landing size and numbers as well as drop-in export supply due to poor material quantity. Specifically, in Bangladesh, a country which depends on fish as its prime source of food, almost 80% of the population.

The report (Tewabe, 2015) concludes that there is a great need for developing and investing in alternative strategies in the fishing industry, both in the urban and rural sectors before it is too late. Barange (2018) suggests effective effort should be implemented to the already changed system by the climate, not only for the current scenario of the fishing industry; but also the future implications, if no action is taken right now, consequences will rise to the overall system, and not just the fishing communities and the fish market.

#### Climate change and marine destruction

Climate change can no longer be viewed as a futuristic concept, but unfortunately, a reality that we are living on our own Earth (Mitra, 2019). Global climate is currently leading drastic shifts in the environment, adaptation, and extinction of certain species, ultimately the evolution of the ecosystem, indirectly affecting the human society as well (Kaeriyama, 2010).

The rising sea levels due to melting of glaciers, leading to fluctuations in the sea coasts, bays; change in the salt and nutrients level in the sea; are a direct consequence of the global climate change that is occurring at a rapid rate, having an intense impact on the supply of the fish food supply (Mitra, 2019).

The effects of climate change are seen as the disarrangement of the marine ecosystem, shifted migration and breeding lands and much more. Another aspect of climate change is the gradual increase in the temperature of the sea which has made the fish swim deeper into the sea level (Kaeriyama, 2010); the rising temperature of the sea is due to the excessive greenhouse emission by our societies (Cheung, 2018).

The main reason affecting the population of fish on the surface levels of the ocean are due to the various changes of rainfall throughout the year and the evaporation process due to the heating on the sea surface (Mitra, 2019). Changes in precipitation are going to have greater problems not just in the fishing industry, but all other industries which require an abundance of fresh water, resulting in scarcity of water as a resource (Tewabe, 2015).

These impacts would most likely be felt by the poorer regions of the community, where the need for the creation of sustained aquaculture would become critical for survival in the long term (Tewabe (2015). Due to this drastic change in

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the environment, there would be a critical impact on marine life, the stock material as well, which raises the need and demand for sustained fishing management strategies (Kaeriyama, 2010).

There has been a significant effect of climate change on the overall physical structure and the behavior of the fish stocks (Mitra, 2019). The overall effect of overfishing for decades nonstop has to lead to the lowered quantity of large-sized fish and the higher quantity of small-sized fish in the ocean (Kaeriyama, 2010).

# Cost of Overfishing

With the growing demand for seafood concerning the human population, global warming has led to a decrease in the fisheries supply quantity. Overfishing has led to the decline of many fish populations, in turn, diminishing the productivity of the fishing industry (M Free, 2019). Around two-thirds of the global commercial fishing stocks have reached their highest capacity and have continued to be overfished threatening the fish species at large (Arthur (2019).

Failure to effectively manage the fish stocks would only continue to deplete the current levels more and more, leading to a complete crash in the fish industry in the future (M Free, 2019). These kinds of changes would heavily impact the supply and production capacity of the fish industry, trying to commercially encompass the current climate changes (Mitra, 2019).

For example, a failure to reduce harvest rates in response to decreasing productivity could increase the risk of overfishing, which could subsequently reduce the resilience of stocks to climate change and result in reduced long- term yields (M Free, 2019). The human responses for feeding a country through engineering projects, causing loss of the natural habitat of the fish, resulting in lower survival of fish species, inadvertently leading to a reduced breeding rate of the required fish stocks (Tewabe, 2015).

Millions of individuals are dependent on the fish industry for their daily income. The reliance on this industry is from where families and communities are fed and survive in the world. These people are the most affected by the drastic climate changes in recent years, which directly affects their daily lives (Barange, 2018). The current subsidies in countries would only invite poor conditions to the fishermen and the laborers associated with the logistics and supply of the fishing industry (Arthur, 2019).

The damage of the coral reefs, reducing the food source for fishes; affecting the production and distribution levels of the fishing business, as much as floods and droughts (Tewabe (2015).

# **Current Fish Management Strategies**

The current fish industry is more concerned with the short-term issues about climate change, such as providing adequate quantity to the market, getting sufficient fish landing and other such worries, that thinking about long-term issues cannot be the ideal solution to supporting their own lives and society (Cubillo, 2018). If the businesses in the fishing industry continue to mine the fish stock available in the already dying environment, the chances of the fishing industry to thrive in the future become less sustainable and at a great difficulty level (Cheung, 2018).

When an aqua harvest has failed to be properly regulated, leading to the lower levels of productions, in turn, continues to overfishing to cover for the decreased supply in quantity and quality, depleting the fish stocks in the sea, in the process (M Free, 2019). The fish management techniques should primarily focus on the minimum fish landing size as well as the maturity level size of the fish, for the effective implementation of such strategies (Soykan, 2019).

The growth of Biophysical individual-based models are one of the techniques to understand the survival rate as well as the life stages of fish stocks needed to be procured. These types of models would help researchers engage in the extensive depletion rates of fish stocks and how to replenish them without harming the natural habitats of the fish stocks (Portner, 2010)

Proper implementation of fishing styles would be needed in the fishing industry to keep maintaining a regulative and systematic supply of quantity and stability of the aquatic resource (Barange, 2018). The actual benefit of fish management techniques is to help increase the fish population to breed and increase in their numbers. The specific length of landing size of a given fish species is therefore highly important for the capture of fish stock (Soykan, 2019).

Effective regulations would ultimately benefit in helping countries and societies to reduce the damage done to the ocean, in turn improving the national security of fish as a food source, fishing communities and ultimately the marine biodiversity (Wabnitz, 2019).

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# The Society at Risk

The aquatic diversity and marine ecosystem have been providing an ample source of food resources for the human community for centuries, and the recent drastic changes are already affecting the supply of this fish resource due to our human activities (Wabnitz, 2019). Through the course of history, the livelihood of fishermen and fishing communities are at risk due to the rapid change in the climatic conditions at the global scale. Extreme weather (droughts, floods, hurricanes), natural changes (rainfall level, seasonal changes) and sea-level changes are some of the ways that fishermen and fish stocks are being subjected to (Hollowed, 2013).

Most of the daily fishermen are living in the poverty lines in India, even if they earn enough to get by, access to education, health service, and other public aspects are completely limited due to their income levels (Tewabe, 2015). The livelihood of fishermen has been critically changed with the massive commercial exploitation of the fish (Mitra, 2019). There has been an alarming pressure on the livelihoods of fishing communities who thrive on the fishing business as a primary source of income (Tewabe, 2015).

Again affecting our community, beginning at the lives of fishermen and the fishing industry of countries all over the world. The commercial increase in the distribution of such a supply of fish would naturally affect the local and export markets due to insufficient quantity and quality (Mitra, 2019).

The majority of global consumers are actively receptive to their power of purchase and purchase decisions made, which would naturally affect the global marketplace, in terms of sustenance and social equity. As more and more transparency is required in businesses to gain the trust of the current generation of customers, the fish source, labor working conditions, breeding conditions, business certifications and approvals by the government and authoritative figures would help in reducing the marine destruction taking place as we speak (Wabnitz, 2019).

The fish community unions need to revise and effectively manage the system, this would initially require a lot of rethinking of the already laid out the foundation of the entire fishing industry. The main priority should be given to the monitoring, commitment to control and regulate the existing fish stock in order to protect and guard them from extensive drainage by fishing. This should be applied from the ground level, reaching the top levels as well (Cowx, 2019).

# **Supply chain Implications**

The procurement of fish material depends on the specific fish product and also the boats, labor, processing and freezing plants, and finally the fish markets as well (Arthur (2019). The fish we eat are primarily found in the upper regions of the sea, in the shallow coasts where ships venture to fish them (Mitra, 2019).

The overall fish price and the supply of fish are directly impacted by the abundance of the fish stocks in a particular region of the sea (Tewabe, 2015). Target fish segments are already being driven to the edge of their survival, perhaps even extinction of few species, due to the water pollution, overfishing, destruction of natural marine habitats, consequently destroying the natural balance of the aquatic nature (Wabnitz, 2019).

The surface of the ocean supports more fish populations than we realize, as per volume unit, in case of deeper regions of the ocean, where per volume the quantity of fish is extremely lower in comparison (Mitra, 2019). Size at maturity (defined here as the length at which 50% of a population become sexually mature for the first time, Lm) is a key population parameter that is extremely important in the fisheries management of exploited stocks (Jennings et al., 2001).

The change in the region and the landing size of the required species of fish would ultimately result in the depletion of those fish species for capture (Tewabe (2015). One of the major changes for the fisheries management system would be for the implementation of the Peer Review on the assessment of the fish stocks. The landing size of the fish supply should be strictly regulated, depending on the fish species. Also the measurement metrics for the fish stocks should be standardized for clear demarking of the landing sizes by the fishermen (Tokunagaa, 2019).

The change in the fish migration patterns would affect the supply quantity of those target fish species, causing increased competition in the market, increasing the price due to higher levels of costs for capturing the fish stocks (Tewabe, 2015).

The primary reason in the full capacity of the fish landing might be led by the direct consequence of the sea warming levels, in turn affecting the fish ecosystem and physiology of the target fish segment, as a result of the destruction of their natural habitats and their food sources for feeding and breeding (Cheung (2018), this leads to the under examination of

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the fishing pressure on the current environment, eventually leading to overutilization of the fish stocks available in the marine ecosystem (Sparholt (2019).

Improvement in fish management techniques would help in bringing in sustained yields and more income, sustained fishing strategies are the only method to maintain an optimum supply of seafood to the market place as the oceans become warmer (M Free (2019).

# The Future

We need to learn to notice and adapt to the changing environment around us before it is far too late, creating difficult challenges for the fish industry in the future. The need for immediate implementation of these sustainability plans is of the most crucial degree as they place manageable and measurable bounds on the fact to control and regulate the environment as a whole (M Free, 2019). The fish stocking systems used over the world, do not usually take into consideration the marine biodiversity changes that occur as the times change, and environmental calamities redistribute the ecological scenario of the ocean. (Sparholt, 2019)

The ways to improve these problems would be to adopt increasing breeding grounds and time frames for the fish to reproduce and grow, reaching their natural populations (Cheung, 2018).

Minimum Landing Size regulation is one of the most important and most common tools over the world in fisheries management. A crucial point of fishery management is to let the fish or other species reproduce at least once during their life (Soykan, 2019). Another way would be to genetically diversify the required fish stocks to become resilient to the chaotic climate conditions. The main way of ensuring the safety of the fish stocks could be through the saving of the natural habitats of these fish as their places of thriving and survival for the creation of larger numbers and diverse ecological systems again (Cheung, 2018).

The governments should be more conservative in their resources allocated in the coastal regions of their nations, to better regulate and enhance the fishing experience for these fishermen, as the climate changes keeping drastically variable in nature. This would help them and their families to better prepare for future risks and consequences befalling unto them in times of crisis (Hollowed, 2013).

Each country needs to assess and evaluate their environmental situation and create necessary fishery management strategies to help fishermen adapt to the rapidly changing times we are living in (M Free, 2019).

# **RESEARCH FINDINGS**

• The south side of India is entirely fish dependent compared to the north side of India. the entire Society, the fishing communities affected like right now we can't understand because it's slowly happening, in the future you will probably have to import fish. When we were almost one of the highest exporters.

• I think it's going to be like Thailand, and the local supply will deplete. Then you have to import the fish. Now we are exporting, we are one of the highest exporters, also in farm material that you'll have that supply. Total export is one of the highest in these shrimps, prawns. So that is farm material.

• Goa for example- the tourist has dropped drastically. So since the tourists stop, shacks or hotels without that they've also reduced their profits. Before, whatever rate 300-400, the fish used to go because of the tourists, supply used to go. But now it's reduced like anything. It's never like before. So the complete market is down but the spot rate is very high. Everyone is getting to the market. The market is crashing. This will become a huge crisis. It is. It is going to be a crash.

• Basically what's happening is the climate is not stable and that has been raining during December as well. You can't predict the rains this year. The rains have come late this year and this year with the timing supposed to be August to July August July. It came late August. It started October but it lasted till November. So basically what happens during that in the fishing industry those on the West Coast that have, to go to the east and east coast go to the west so that's fishing happening on both sides. Okay. So on the west coast where we live.

• Yeah these fishing communities they have to rely on this they don't have anything that they have anything else no other option. So they can't think about it legally. Labor will get affected if climate change is happening and the sea is rough, the labor cannot sit and wait for that chance of patience. Yeah. There have been situations where boats have been capsized because of the weather. There are a lot of people lost. Sea is rough. Not all people go. Some people have enough

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courage. I think they go. But usually, no one goes during their time when you've received an alert, but then since there's no material there and if I go to catch during that time I'll get a good rate.

• According to the last five years, this year has been the worst deal till now. This is the worst year, this year is the worst. Like for export, usually like there was so much material excess that we would get enough material for export. OK. So no one would buy at a higher price because they know the material is coming in. it's continuously coming in, but now since the shortage, because of the climate.

#### Depletion of fish supply due to warming temperature of the ocean

• So the weather was not good. So the boat that went to get fish couldn't make it. They couldn't get the supply. And due to all these global warming issues also. Supply and the material catch those quantities also very less quantity because of global warming, the sea level is rising to make the water surface hotter and the fish go deeper underwater.

• Also climate change, the sea temperature is rising, making the fish go deeper into the depths of the ocean, making it harder to catch them.

#### Illegal methods to survive in the market

• They used to have this light fishing in this to use the light to catch fish. So all the fish which are in the deepest of the parts would attract the light and they come out. They'll come up. So they would get it. So basically since these so many years, they've almost cleared the sea because of the light fishing which is banned.

• It's happening illegally. It is banned. But it's different this is one way to survive. Right now we're just trying to do it. Yeah, but they are getting some cash because of that. But now if they continue doing this then there's no future but there's no time for breeding the fish. Yes. So there is no fish like you get these tiny kingfish. Like just born fish, just spawned.

• The two months ban is by the government. Still, some people go into small boats and venture there. It's difficult for the people who have the boat because for them it has to work out, they have put in so much that a big boat costs at least crore So have to cover all the cost, so they can't keep quiet and they can't think about climate change they have looked for their life, their mouths to feed, their livelihood. They have to get their bread and butter for the family of course.

# The decrease in the Supply of fish quality and quantity

• Oh, I've heard they sort thought oh a landing size is small but they're catching the young fish they are getting the young fish, old fish is already cleared so they're getting the young fish also so that for future there is less scope because they're clearing the sea or overfishing for cash, and now there is less fish because they don't get to venture but now they have to survive.

• But what happens is the size of this fish also is smaller. You won't get those bigger catches. But you still get it. It's not like the size of something, but quantity is affected drastically, quality is like before only; some certain particular quality wouldn't have worked in the market. Now since there is a shortage of supply, even that quality would also work.

• The supply has affected this year's total supply.

Yes, it is affected because that's why the prices increase. There's no proper even supply, the supply quality is fine. But the thing is, supply quantity is becoming more and more inconsistent.

• So if there is less quantity coming in you know there's no report. You get this report that boats have so much fish. So you know how much fishing is on the market down here. So once what happens the fish comes to the shore there's an auction. For the fish, this is the main supply. This is the main supply where you get from the sea. So once the fish comes to the jetty or the unloading spot on the boat you know how many suppliers are going to be there. And then in Karnataka, in Malpe. There are more than 300 to 400 boats OK. If not everyone ventures, Because they don't want to get lost.

• Well whatever material is coming, it's coming to the market only, because the export rate is less; so materials come into the market, the market crashes. The market is not like before, after demonetization, the market is not strong at all. No one is ready to buy. It's not like before.

• China has a lot of landing, Africa has a lot of higher sized landing, they are getting materials from there. So they won't prefer Indian material at a higher price. So these guys who are packing materials for export, they are not getting that rate at which it would work out for what they have to buy at a higher price just for the running of the business.

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#### Increase in overall expenditure for the sales value of the material

• Somehow. They'll have to survive. Because once a boat ventures in at least five lakhs is the expense because of fuel, labor, etc. So to cover that, you need a catch worth at least five lakhs, more than five lakhs is your profit, to break even minimum you need five lakhs. OK. So they have to use light fishing otherwise they won't get so much supply. And once you get to a particular fish, it's less in quantity it's not like before that There's a lot of fish coming in.

• So how are people normal people buying and effect to them? the prices increase first of all because at the spot only the price increases, till you reach the final market- It will increase, because see during the auction That price happens, after that, you have a lot of expenses, you have transportation, you have ice, you have labor, you have to pay the driver. the driver gets it to the market. The market agent will sell it to you at the market, and charge commission. So all that cost has to include.

• So suppose there is five-ton of one particular fish in the market and the market demand is only for three tons. So what we are doing is that there is a competition so price cutting will happen. fish is perishable. I can't keep it for a long time. Two days max After that it gets spoiled. So even if I bought it at 100 I would have to sell it at 80 rupees just to finish my stock. If I still keep the stock tomorrow, it's more loss.

• So sometimes when the market is high, they push the material in the market. the market you can't predict all. Like for example, you take your kingfish, when there is a lot of kingfish in the market, The price can go up to 1000 per kg. And when there's no supply at all, double. No, it'll go up to 3000 rupees per kg, like this is about the goa market. This is about one particular fish goa market Kingfisher is like the prime fish.

• Seriously affects the whole fish chain and since they're getting less material, the laborers, who are in the boat, they're getting paid less. it on the commission basis like total how much catch you get for the value, this much percentage they get but since labor is getting less. They are moving out. They don't want to stay on the boats. They don't want to stay, trying to find some other vocation. So they are a lot of boats which didn't venture in the sea, and the labor was asked to simply wait and they were not getting paid. They have to provide for their families. So if they're not getting paid they just leave.

# The decrease in Indian Export of A-grade Fish

• Suppose mackerel would go for two dollars in export rate. So that's around 140 bucks. So here you would get it 80 bucks 100 bucks. Okay. And your labor 20 or whatever it is, things used to work out, you would get something or the other right. Right now, there's no material at all.

Minimum you'll get it at 140, that is almost the export rate. Now what businesses are doing who have plants, they just see if they're getting cheap material, they'll take anything, any type of fish even if it's not for export and what they do once the marketplaces start, push it locally. Those fish are not for export, but still, they push it locally. You won't get the price for the fresh fish but when there is less supply you will. When there is no supply, that fish will also push.

So right now, all the exporters are packing for local more than export; because export whatever their packing is not going to work for them. They're just doing it for their turnover, just to get some money. So basically this industry right now, everyone is at a loss. First of all, because of climate change, the boat owners who have to get the gas they're not getting enough gas, so it's not working out for them.

• Right now the rate in the local markets is so high that the exporting company can't afford that like if he had to purchase, he used to get at a particular rate, at which his buyers are going to buy; which is exported. But in India right now the local rate is so high because of less supply that they don't get to procure material at their rate, which is the standard state or rate which is cheaper.

They have a standard rate. "This from this" size. This much rate. So if you can afford you give to the factory or the factory person purchase for you. So our export market is heavily affected. Yes in India. But the thing is everyone who's running the export plants, are suffering a big loss because it's only India which is affected.

• Exactly. So it's just survival. Yeah. Yeah. but what is happening in India is that these guys are you know purchasing fish at a higher rate. So suppose the export rate is 2\$, 160 170. But right now they are purchasing at 75- 80 rupees. So that's a loss on the spot. Your expense is everything later. They are doing this because they have labor. It's a big plant.

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They have to run it. Yes. just for the Business to keep running, just for the turnover. But now what happens is that even the export rate is not increasing.

# Increase in Supply and Logistics Costs

• How much do you buy? A truckload. The whole quantity, one truckload, that's 200 crates some. A medium-sized truck two hundred crates into thirty, six tons goes into one truck. sometimes what, one boat will get you like 15 tons and you can spread that out by two or three trucks, sometimes what happens, One truck will get you 500 to 600 kgs. It's not even. So you have to keep your truck waiting, fill in all material and then leave, sometimes in one boat, you can fill three.

• So it's not even. So according to the supply, there is a lot of competition. It's not like I know this guy. He gives me a straight supply. there will be an auction for that supply. Every time there is an auction.

• Prices are also going up. So. There is less supply but the price is drastically High. So before like suppose, if my five truckloads would cost me around ten Lakh, now two trucks would cost me ten lakh, the rate has increased rate but the whole turnover is the same or increased, to maintain that cost the price has increased. Oh, you can see it. This has affected the fish community.

• So now since there is less supply, there are a lot of traders who purchase from a spot and then put it into a market. They have so many vehicles, many drivers, and many laborers. So since traders have so many drivers and vehicles, also to work out they need trips, they need the logistics. They need some material to keep moving. Right. So what happens is just for their turnover- Whatever rate is there, they'll just keep purchasing even at high rates. So imagine the traders purchase at 150 in the spot, so in the market, they'll go in and give it 120 to 150 that much only. Just for the recovery. If they get a good rate then it's good for them.

# **Government Regulations**

• The government has banned light fishing. But That's not making much difference because illegally that's happening. The Government has to keep monitoring. They have to make strict regulations. Otherwise, the ocean is going to deplete.

• The Indian government is giving sponsors to the boats, they get subsidies for diesel, if you're putting a plant they'll give you some subsidy. The govt is promoting more export. But right now what is happening is we are depleting so we need to conserve now, so for that, they had the ban which was there from the beginning. Now I don't think they can have any other major change which will Support us. They just have to monitor and regulate whatever is left, stricter.

• You can't stop boats from catching, How will they survive, their livelihood is at stake. Yeah. Everyone is related. Now if I stop at the beginning, everyone is going to get affected. That's you can't regulate the price also.

• There's a two-month ban by the government for breeding fish. Okay. That is due in June, July and that's when the rain happens. Oh okay. So the ban is also there and the ban is also there because the weather is very rough, you can't venture into the sea, even if you went into the sea, you won't get a catch so you can't they don't. No, not enough you aren't alone.

• During the ban, complete West Coast is shut down, boats won't venture in. Okay so the supply comes from the East Coast. It is Tamil, Andhra Pradesh, Orissa. so that side also there is an effect of climate change that's why the prices are so high. When there's no ban on the west coast That side's price won't go that high. But now since there is a ban, everyone is moving slowly to that side.

• June July ban. Yes, August again starts. So the prime time to fish is right after the ban. two months is when the factory or people and whoever wants a lot of quantity like you get a lot of quantity at a cheaper price And later eventually the quantity decreases, like December, New Year times, prices increases. And during the rains when there's no supply, that time also price increases.

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