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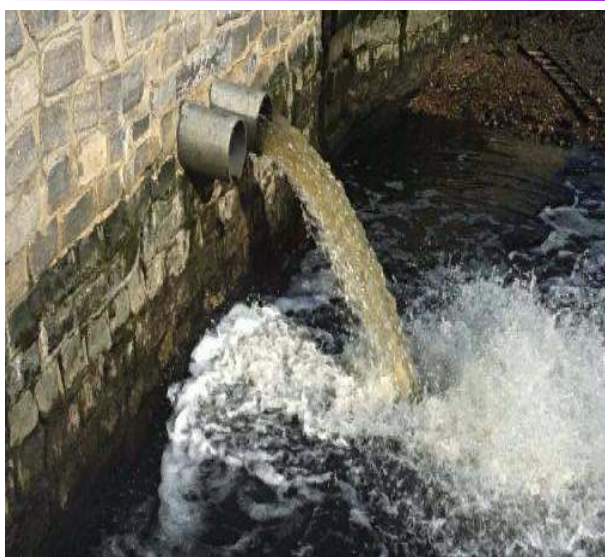
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## ERADICATION OF UNHYGIENIC AND ENVIRONMENTAL POLLUTION OF COASTAL VILLAGES IN KANAYAKUMARI DISTRICT



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### ABSTRACT

Pollutants and unhygienic conditions bring danger to the health of every citizen in our nation as well as in the entire globe. As a result, the diseases are mounted up and the lives of the human beings, flora and fauna are at risk. Therefore it is the sole responsibility of every citizen to take care of his/her environs. This paper intends to enlighten the readers and policy makers how to eradicate unhygienic conditions and environmental pollution in the life of the coastal populace. Results from 225 samples indicate that age, literacy and experience are the important factors which help the respondents to keep their households and their surroundings neat

and clean. Moreover, when the respondents are avoiding junk food and eating only healthy food, the immune system becomes strong and they are resistant to any type of environmental hazards which affect both physical and mental health. In addition to this maintaining personal and household cleanliness it also helps the respondents to free from worms and germs and protect them from all communicable and non communicable diseases. This paper too offers few suggestions to policymakers to impose certain rules and regulations on the people who pollute the sea and save all those who consume seafood.

**KEYWORDS:** *Unhygienic, Pollution, Diseases.*

### INTRODUCTION :

Green Environment, Eco-friendly and Clean India are some of the key topics which are discussed by the politicians, academicians, business tycoons and all management gurus. However, these discussion and deliberation might be materialized, only when our nation is free from pollution and poor sanitation conditions. Pollutants and unhygienic state bring danger to the health of every citizen in our nation. As a result the diseases mount up and the lives of the human beings are at risk. Therefore in 1948, Article 25 of United Nations Declaration on Human Rights states that "Everyone has the right to a standard of living adequate for the well being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in

circumstances beyond his control". This declaration makes it clear that health, hygiene and good environment are one of the basic human rights of every citizen in the world.

Unfortunately, due to the advancement of industries, modernization and ever-increasing humidity the environment is polluted. Therefore, there are enormous changes in the atmosphere which becomes a threat to the life of human beings, flora and fauna. It is sad to note that the Indian health care delivery mechanism is marked by various shortages – of personnel, infrastructure and resources. A recent World Health Organization (WHO) report points out that over 20, 00,000 children worldwide suffers from environmental hazards. Every year, about 2.2 million people die from diarrhea; 90 per cent of these deaths are among children, mostly in developing countries. A significant number of deaths are due to a single type of bacteria, Shigella, which causes dysentery or bloody diarrhea. It is readily controlled by improving hygiene, water supply and sanitation. According to United Nations Children's Fund (UNICEF), in India, only 31 per cent of population use improved sanitation. According to the Public Health Association, only 53 per cent of the population wash hands with soap after defecation, 38 per cent wash hands with soap before eating and only 30 per cent wash hands with soap before preparing food.

The fishermen community is not exempted from these phenomena. They toil night and day in the sea and due to stormy, bad weather and improper sanitation facilities they are easily susceptible to curable and incurable diseases. As a result the fishermen who are economically poor are easily affected by the diseases and approach private hospitals for treatment rather than Government hospitals. So the rewards of the hard earned labour go in vain for medical expenses and their survival becomes difficult. This is one of the major reasons for the fishermen to live in abject poverty.

### STATEMENT OF THE PROBLEM

The nature of fishing is one such hazardous occupation, which involves irregular diet, stress, alcoholism, tobacco and pernicious habits. Adding to that the fishermen have lower socio-economic status and their illiteracy adds to their poor oral hygiene, which may influence general and oral health. Fishermen have poor oral health when compared to general population. According to 2014 census, the coastal districts population has calculated as 171 million in India, which is 14.2 per cent in over-all population. Bacterial infections, Hepatitis, Conjunctivitis, Gastroenteritis, oil spill related illness are common in coastal areas. Some of those diseases are awfully common beach born infection, some of them are caused by natural sea calamity; some are caused by untidy and unhygienic environment and unhealthy diet. Absence of knowledge on hygiene and bacterial infection leads them to get diseases often. Regular medical consultations and Constant education is essential for coastal people on maintaining their hygiene and about healthy diet. Moreover 80 per cent of all marine pollution originates from land-based sources which are primarily industrial, agricultural and urban. Scientists currently maintain that the world's largest landfill isn't on land at all; it is in the Pacific Ocean. Marine pollution is also caused by oil, fertilizers, chemicals and other contaminants that have a serious effect on both marine and human health. At this juncture, few questions arise in the mind of the researcher like how this unhygienic conditions and pollution can be prevented or controlled to certain extent in the coastal villages and how the respondent's temperament and attitude with regard to health, hygiene and pollution in the study area. To fill this gap this research study was undertaken.

### OBJECTIVES

The general objective of the study is to get rid of the unhygienic and environmental pollution which affects the life of the coastal populace in the study area. The following are the specific objectives:

- To find out the demographic profile of the sample respondents.
- To discuss the measures to be taken in eradicating the unhygienic and environmental pollution in the study area. And
- To propose suitable suggestions to improve the health and hygienic conditions and also to control the coastal pollution in the sample villages.

## METHODOLOGY

There are thirteen coastal districts in Tamilnadu. The researcher has purposively selected Kanyakumari District for this study which is in the southernmost tip of Indian Peninsula and closely linked with the coastal villages of Kerala. This district is divided into four taluks namely, Agastheeswarm, Kalkulam Vilavancode and Thovalai. Among these four taluks, Agastheeswarm, Kalkulam and Vilavancode are in the coastal belt. The coastal belt of this district has a length of 71.5 Kms (India's total coast line is 8118km) with 47 coastal villages. These coastal villages have a population of 1, 48,539 fishermen (19 per cent) as against the total of 7,90,408 fishermen population in Tamil Nadu. The researcher has selected the coastal taluk where in the village which has the highest and lowest population on the basis of multi stage sampling. Further the respondents are chosen on the basis of simple random sampling basis.

Table 1.1  
Sample villages

Taluk	S. No	Name of the village	Total Population	No. of Sample
Agastheeswarm	1	Kanyakumari	7770	50
	2	Siluvaiyanager	397	25
Kalkulam	3	Colachel	9947	50
	4	Chinnavalai	1248	25
Vilavancode	5	Neerodi	7035	50
	6	Helen colony	1031	25
		<b>Total</b>	<b>27428</b>	<b>225</b>

Source: Marine Fisheries Census 2010, Part – II (4) – Tamilnadu, Government of India, Ministry of Agriculture, New Delhi, p.107.

## DATA AND DISCUSSION

### DEMOGRAPHIC COMPOSITION

Demography refers to study of human population. It is one of the important variables which decide about the nature and type of people. It encompasses number of factors like age, education, occupation, family, religion, migration, birth, time etc. Fishing in India is an age-old and caste based activity and the fishermen, who catch fishes in the sea are characterized as hard, strenuous and adventurous, but they are economically and socially backward.

Table 1.2  
Demographic profile of the sample respondents

Variables	Particulars	No of the sample respondents	Percentage
Age	Upto 25yrs	36	16.0
	26-35yrs	69	30.7
	36-45yrs	77	34.2
	Above 45 yrs	43	19.1
	Total	225	100.0
Literacy	Illiterate	21	9.3
	Primary	43	19.1
	middle school	52	23.1
	high school	34	15.1
	higher secondary	41	18.2
	Graduate	34	15.1
	Total	225	100.0
Family Size	Upto 3	35	15.6
	4-5	133	59.1
	6-7	45	20.0
	above 7	12	5.3
	Total	225	100.0
Occupation	Fishing	189	84.0
	Non-Fishing	36	16.0
	Total	225	100.0
Income	Upto Rs. 1,00,000	118	52.4
	Rs. 100001 to 200000	70	31.1
	200001 to 300000	27	12.0
	300001 to 400000	8	3.6
	Above 400000	2	.9
	Total	225	100.0

Source: Primary Data

84 per cent of the sample respondents are above the age group of more than 26 years onwards while 16 per cent of them are less than 25 years of age. It is evident that the age is one of the important factors which decide about the cleanliness of an individual, households and surroundings. Moreover under this age group, the respondents are married and shoulder the responsibilities of their families' well being as well as one's own health and happiness. 90.7 per cent of the respondents are literate while 9.3 per cent are illiterate. It is evident that education opens the minds of the respondents to become aware of the importance of health and well being. More over education plays a vital role in helping the respondents to keep their houses and surroundings to certain extent clean and orderly. 59.1 per cent of the families have 4 to 5 members and 15.6 per cent of the families have less than 3 members.

It is understood that the size of the families determines the income, expenditure, indebtedness, and hygienic conditions of the households and ultimately the economic status of the families. 84 per cent of the respondents' nature of work is fishing and 16 per cent of the respondents are non-fishing they are working in companies. It is significant that the main occupations of the fishermen are only fishing irrespective of their education. It is understood that respondents are comfortable and accustomed with the fishing and fishing related activities and they do not want to shift to other work even though they are educated. 52.4 per cent of the sample respondents yearly income is less than 1, 00,000 and 0.9 per cent of the sample respondents are earning above 4, 00,000. It is evident that the fishermen's income is less due to depletion of fish in the sea, since the marine water is polluted because

of domestic and industrial sewage and plastic litters. Moreover the sample respondents are affected due to hygienic and environment related diseases which hinders them not to go sea for fish catch on regular basis.

**MEASURES TO ERADICATE UNHYGIENIC AND ENVIRONMENTAL POLLUTION**

Experiences are the best teachers in one’s own lives. Out of experiences we desire to do something or give up something. The coastal populace too out of their experiences learn that how to get rid of unhygienic conditions and pollutions which hinders the health and coastal sea. The following table clearly indicates the variables in which the unhygienic and coastal pollution is minimized with help of Garrett’s Ranking Technique.

**Table-1.3**  
**ERADICATION OF UNHYGIENIC AND ENVIRONMENTAL POLLUTION**

S. No	Particulars	Mean Score	Rank
1	Municipality / Panchayat has to remove the garbage	47.42	VII
2	Using of green products	48.42	VI
3	Keeping the surroundings clean and tidy	55.75	III
4	Proper drainage facilities	45.99	IX
5	Personal & House hold cleanliness	59.44	II
6	Healthy food habits	60.43	I
7	Regular exercise	42.52	XI
8	Proper education	49.98	V
9	Planting trees	46.14	VIII
10	Safe drinking water	50.76	IV
11	Avoid Littering	45.84	X
12	Greening Environment	42.30	XII

Source: Primary Data

Out of twelve variables, the first rank is given to ‘Healthy food habits’ second rank to ‘Personal & House hold cleanliness ‘and third rank to ‘Keep the surrounding clean and tidy’ with its mean score of 60.43, 59.44 and 55.75 respectively. It is inferred there is an urge in each one of the respondents to live a disease free life and to have sound health of body and mind. Hence the respondents require great amount of commitment and social responsibilities to keep their house as well as public places clean which in turn enables them to control the pollution and poor sanitation.



## FINDINGS

- 84 per cent of the sample respondents belong to the age group of above 26 years while 16 per cent of them are less than 25 years of age. It is evident that the age is one of the important factors which decide about the cleanliness of an individual, households and surroundings.
- 90.7 percent of the respondents are literate while 9.3 per cent are illiterate. It is evident that education opens the minds of the respondents to become aware of the importance of health and well being.
- 59.1 per cent of the families have 4 to 5 members and 15.6 per cent of the families have less than 3 members. It is understood that the size of the families determines the income, expenditure, indebtedness, hygienic conditions of the households and ultimately the economic status of the families
- 84 per cent of the respondents' nature of work is fishing and 16 per cent of the respondents are non-fishing they are working in companies. It is significant that the main occupations of the fishermen are only fishing irrespective of their education.
- 52.4 per cent of the sample respondents yearly income is less than 1,00,000 and 0.9 per cent of the sample respondents are earning above 4,00,000. It is evident that the fishermen income is less due to depletion of fish in the sea, since the marine water is polluted because of domestic and industrial sewage and plastic litters.
- The first rank is given to 'Healthy food habits' second rank to 'Personal & House hold cleanliness 'and third rank to Keeping the surrounding clean and tidy' with its mean score of 60.43, 59.44 and 55.75 respectively. It is inferred there is a longing in each one of the respondent to live a disease free life and to have sound health of body and mind

## SUGGESTIONS

- The general public can be educated about not littering in public, using green products/services, the benefits of washing hands and the importance of yoga/exercise so as to maintain their well being and green environment.
- The local panchayat and NGOs can organize 'Street play or Role play' to promote the hygienic aspects and the danger of pollution to the general public.
- The municipal authorities can regularly collect garbage and dispose it in an appropriate place and use it for recycling purpose which might make coastal villages as 'Clean India'.
- The Government can construct pucca drainage channel to dispose the household wastages which in turn reduces the mosquitoes, flies, germs and worms.
- The Government can set up a special task force to impose certain penalties for all those who pollute the common places as well as the sea, as it is had been done by the developed countries.
- Irrespective of the subjects, the educational institution can educate the students with regard to the importance of cleanliness and hygienic aspects, so that the students who are the pillars of tomorrow's nation can become conscious of good sanitation and green environment.
- The manufacturers or producers of consumable products can avoid junk food and supply the organic foods for a reasonable price.
- The Government can open more outlets for organic products and to promote green products which lack publicity among the general public.

## CONCLUSION

It is said "charity begins at home". Similarly when persons want to enjoy happiness and well being, first and foremost they must be clean and tidy. Then their households and surrounding will be



free from unhygienic aspects. Therefore it is the sole responsibilities and duties of the fishermen community to keep their houses and surrounding free from germs and worms. Moreover they should avoid junk food and eat the food which is produced by organic farms which might help them to improve their immunity power by resisting communicable and non communicable diseases. Therefore the public need more awareness with regard to health, hygiene and environmental aspects. The Government too should take care of all the pollutants which affect the livelihood of the sample respondents by imposing heavy penalties for all those who pollute the sea water. Otherwise, all those who consume fish whether fishermen or non fishermen will be prone to all the diseases. Therefore this is the need of the hour and has to be met urgently by the policy makers.

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