

**IDENTIFICATION OF NITROGEN AND
PHOSPHOROUS SOURCES FROM
KATTANKUDY TO THE BATTICALOA
LAGOON**



By

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ABSTRACT

This project was carried out to find out the sources of nitrogen and phosphate from different areas in Kattankudy for their contribution to the Kattankudy lagoon. This project was carried out from April 2001 to July 2001. Although Kattankudy lagoon area is used for fishing, bathing and recreational activity, it was observed that large number of effluents channels drained into it, carrying a continuous flow of contaminated water. The garbage from the Kattankudy area is being dumped along the bank of the lagoon for several years and the area appears as garbage dumping ground.

The amount of nitrogen and phosphorous contributed to the lagoon from residential area of Kattankudy have been measured along with some important physical, chemical, and biological pollution parameters. The influence of these major plant nutrients (nitrogen and phosphorous) on algal blooming and eutrophication in the lagoon also identified during this study.

A considerable amount of nitrogen and phosphorous being contributed by channel C₁, C₄ and C₅. High amount of nitrogen was contributed from C₄ and C₅, phosphorous was contributed through C₁ and C₅. Nitrogen and phosphorous are the major elements nutrifying the water body and thereby leads to the eutrophication processes. Algal growth was observed during the study period along the bank of its extension about 3m towards the lagoon and the continuous input of both components will be nutrifying the whole lagoon in coming years.

CONTENTS

	Page No.
Abstract	i
Acknowledgement	ii
Contents	iii
List of figures	vi
List of tables	vii
CHAPTER I	
INTRODUCTION	1
CHAPTER II	
LITERATURE REVIEW	5
2.1. Lagoon	5
2.2. Lagoons in Sri Lanka	6
2.3. Batticaloa lagoon	6
2.4. Standards of lagoon	8
2.4.1. pH	8
2.4.2. Electrical conductivity	9
2.4.3. Temperature	9
2.4.4. Salinity	11
2.4.5. Dissolved oxygen	11
2.4.6. Biochemical oxygen demand	13
2.5. Pollution to the Batticaloa lagoon	15
2.6. Pollution at Kattankudy, of the Batticaloa lagoon	16
2.7. Different sources of nitrogen and phosphorous at Kattankudy	17
2.7.1. Nitrogen	17
2.7.2. Phosphate	19
2.8. Effects of nitrogen and phosphorous in aquatic system	21
2.8.1. Eutrophication	21
2.8.2. Methaemoglobinaemia	26
2.8.3. Effects of nitrites and nitrates	26
2.9. Control measures of water pollution in the Kattankudy area	27

2.9.1. Source reduction of nitrogen and phosphorous	27
2.9.1.1. Removal of nitrogen in wastewater	27
2.9.1.2. Removal of nitrogen at the source	28
2.9.2. Removal of phosphate	28
2.9.2.1. Removal phosphorous in wastewater	29
2.9.2.2. Removal phosphorous at the source	29
CHAPTER III	
MATERIALS AND METHODS	31
3.1. Sample collection	31
3.1.1. Selection of sampling area	31
3.1.2. Frequency of sampling	31
3.1.3. Method of sampling	31
3.1.4. Storage of samples	32
3.2. Sample analysis	32
3.2.1. Field analysis	32
3.2.2. Laboratory analysis	33
3.2.2.1. Nitrate	33
3.2.2.2. Nitrite	33
3.2.2.3. Phosphate	34
3.2.2.4. Conductivity and salinity	34
3.2.2.5. Dissolved oxygen	35
3.2.2.6. Biochemical oxygen demand	35
3.3. Data analysis	36
CHAPTER IV	
RESULTS AND DISCUSSION	37
4.1. Temperature	37
4.2. pH	38
4.3. Salinity	39
4.4. Conductivity	40
4.5. Phosphate	41
4.6. Nitrogen	42
4.7. Dissolved oxygen	44
4.8. Biochemical oxygen demand	45
4.9. Eutrophication	46

CHAPTER V

CONCLUSION AND RECOMMENDATIONS

48

5.1. Conclusion

48

5.2. Suggestions and recommendations for further study

48

Bibliography

50

Appendix