



KNM GOVT. DEGREE COLLEGE

MIRYALAGUDA

(Accredited by NAAC)

(Affiliated to Mahatma Gandhi University)



JIGNASA STUDENT STUDY PROJECT

2021-22

Prepared by

Department of Zoology

Principal
K.N.M. Govt. Degree College
MIRYALAGUDA

KNM GOVT. DEGREE COLLEGE MIRYALAGUDA

Department of Zoology

JIGNASA STUDENT STUDY PROJECT

2021-22

SUBJECT : ZOOLOGY

Name of the Mentor: Sri. J. Narender Reddy, Lecturer in Zoology

Names of the Students:

1. A NAVEEN KUMAR – BZC III YEAR - 19044018445002
2. D. AKHILA - BZC III YEAR - 19044018445011
3. P. BHARATH - BZC III YEAR - 19044018445018
4. G. VARUN KUMAR – BZC III YEAR - 20044018445008
5. Y. BRAHMAM - BZC III YEAR - 210440184451028

TITLE: SEWAGE TREATMENT OF RICE INDUSTRIES IN MIRYALAGUDA

Aim:-

To save environment around Miryalaguda Town from the effluent of Parboiled Rice Industries

Relevance of the Topic:

Miryalaguda a major town in Nalgonda District is famous for the establishment of Parboiled Rice mills having 200 rice mills. Miryalaguda is credited to be number one town having highest number of rice mills in Southern Asia. By virtue of Nagarjuna Sagar reservoir across Krishna River irrigation water is supplied to crops sufficiently. Most of the people in the town are the dependents of agriculture. Though it is a prestigious matter the excessive release of effluent from parboiled rice mills is causing major health problems to the people.

Causes identified for the damage of health :

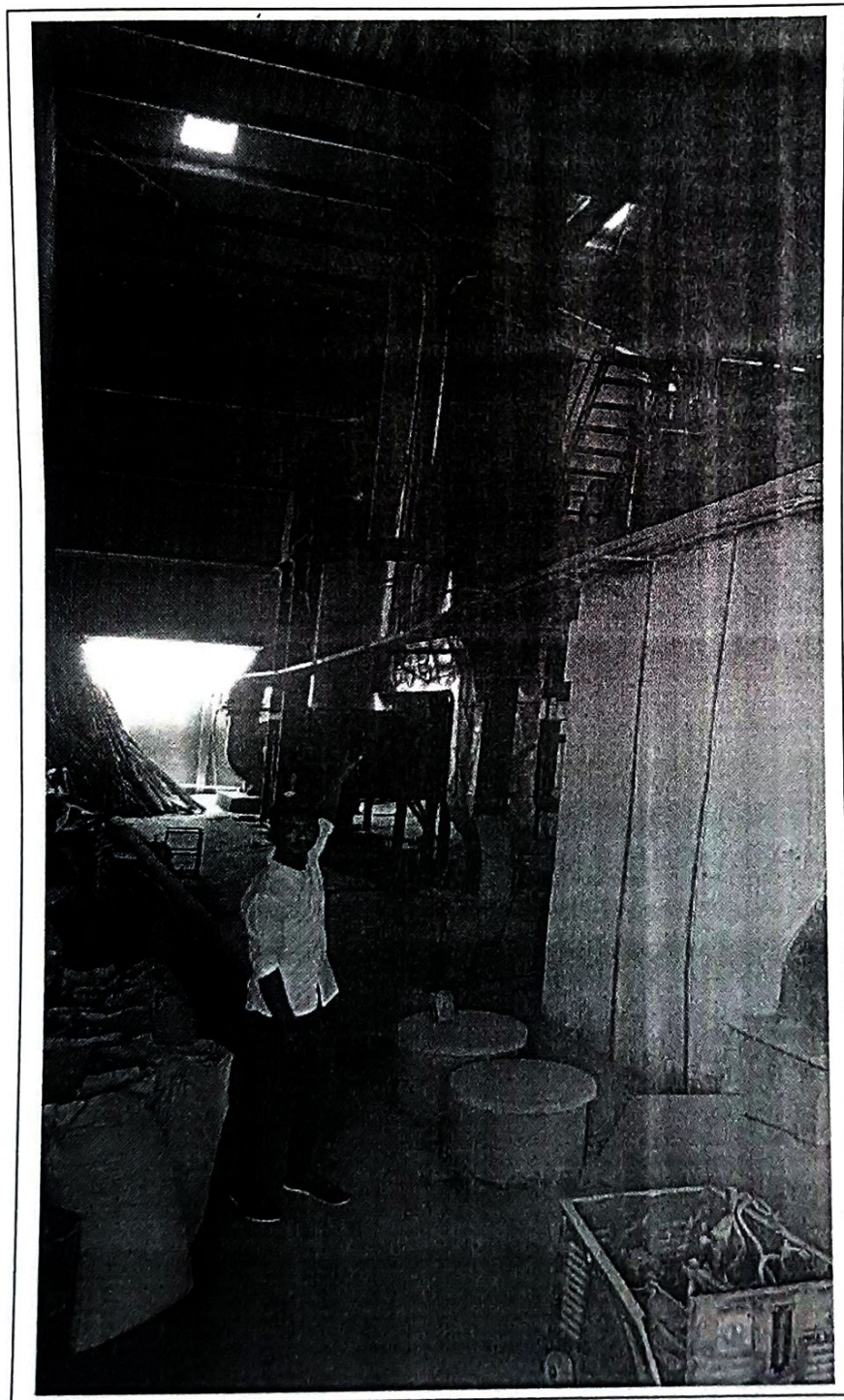
Due to the improper drainage system, drinking water in the town is polluted especially in some locations such as Hanumanpeta, Muthireddy Kunta etc., resulting the spread of Dengue and Malaria.

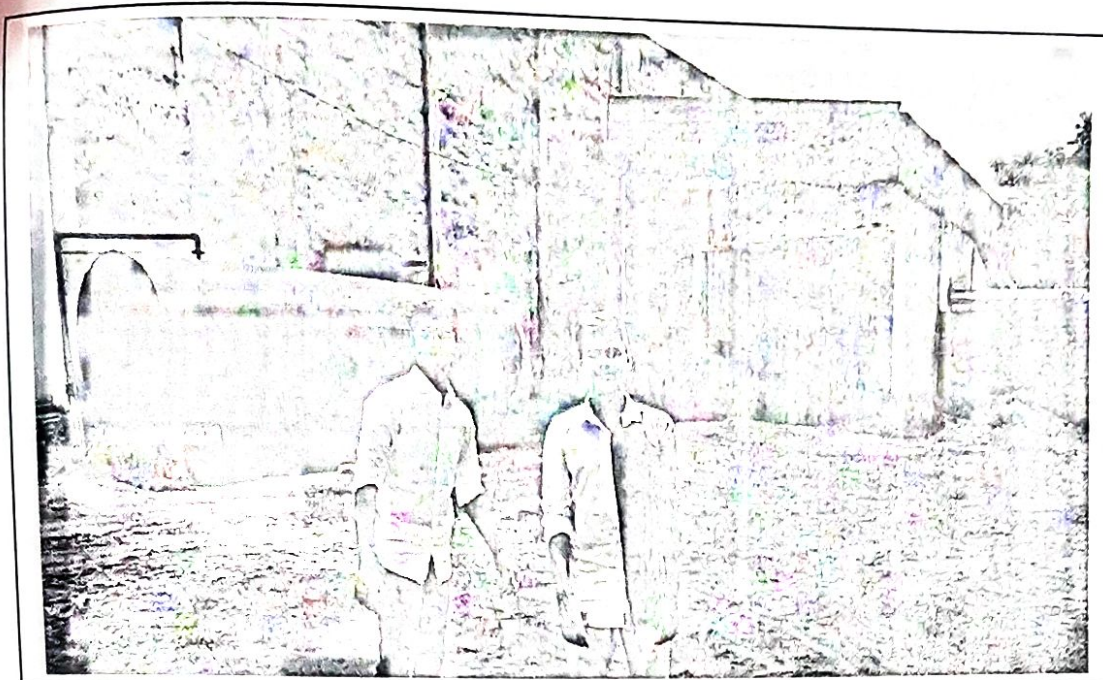
The effluent, wastage from Parboiled rice mills without purification is stored at different parts of the towns and is sinking into the ground. The same water is consumed by the people that becomes a major cause for the spread of diseases.



The effluent ponds without purification is discharged to the nearest ponds of the town that results the death of fish. When the same water is used for cultivate food products are also polluted.

The Rice Mills cause not only water pollution but also air pollution. Dust particles from the chimneys spread in different directions and spoil the eyes and breathing systems of the people. Due to air and water pollution people health is damaged heavily.

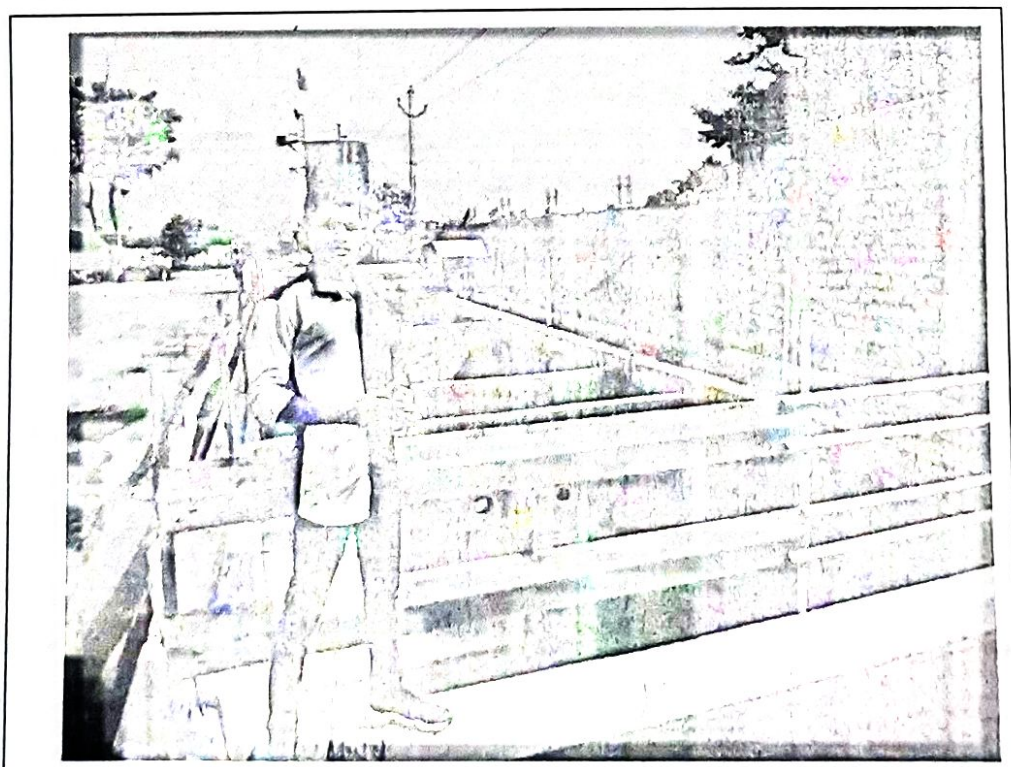




Research Methodology

We, a group of students of KNMGDC visited all the locations of Miryalaguda and enquired about the health profile of the people. We received shocking news in some areas where many ill health cases Identified who are affected to Dengue, Malaria etc.

Later we observed the drainage systems of the Rice Mills, lack of proper drainage system the effluent from the Rice mills stored at different locations of the town. The same is sinking into the bore wells.. Thus, the effluent became a cause of not only from water pollution but also air pollution.



Sewage Treatment Plant

Suggestions and Recommendations:

- Rice mills to be established 10 km away from the town.
- Rice mills to be established with modern technology.
- Drainage system should be maintained properly to discharge the waste water from Rice mills. So that water may not be contaminated.
- Though underground system was laid years ago it was not attached to the drainage system. It should be attached.
- The effluent should be purified by removing the contaminants, so that it can be used as manure.
- There are many ways to purify the industrial work.

The purification process involves 2 main stages called primary and secondary treatment.

1. Primary treatment incorporates a tertiary treatment stage with polishing process and nutrient removal.
2. Secondary treatment can reduce Organic matter from Industrial waste using aerobic or anaerobic biological process.

Conclusion:

By taking the preventive measures people's lives can be saved from health disorders. Instead of concentrating on the wealth, generated from par boiled Rice mills. We have to concentrate on the health of the people.


Principal
V.N.M. Govt. Degree College
MIRYALGUDA



Government of Telangana
Commissionerate of Collegiate Education



Certificate of Participation

This certificate is awarded to J. Narendra Reddy.
Asst/Assoc. Professor Zoology. GDC _____
Sforyalguda in recognition of his/her participation as
Teacher Mentor in Jignasa-Student Study Projects-State Level Presentation &
Selection in the subject Zoology. for the academic year 2021-22.

Surya
Academic Guidance Officer

Navin Kulkarni
Commissioner of Collegiate Education

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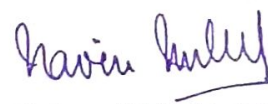


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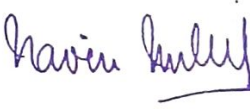
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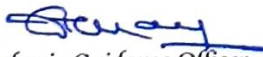


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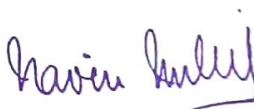
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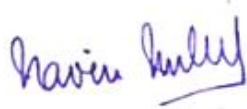
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GOVERNMENT OF TELANGANA
COMMISSIONERATE OF COLLEGIATE EDUCATION, HYDERABAD
ATTENDANCE CERTIFICATE

This is to certify that Dr./Sri./Smt. J. Narendra Reddy
Associate/Assistant Professor of KNM Zoology Government Degree
College, Miryalaguda has attended Jignasa-2021 Student
Study Projects State Level Presentations conducted by Commissionerate Collegiate
Education, Telangana, Hyderabad on 30.04.2022. Hence, his/her absence in the
college shall be treated as On Duty.


For Commissioner of Collegiate Education.

Hyderabad

Date: 30.04.2022