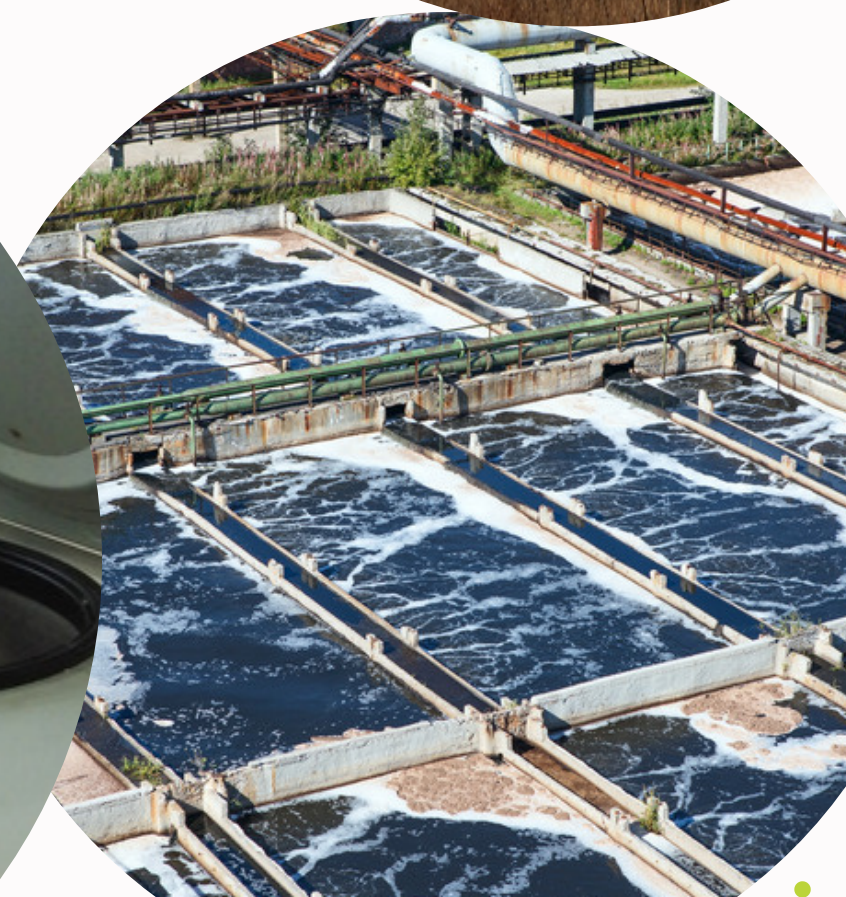




# ORGANICA BIOTECH

[www.organicabiotech.com](http://www.organicabiotech.com)





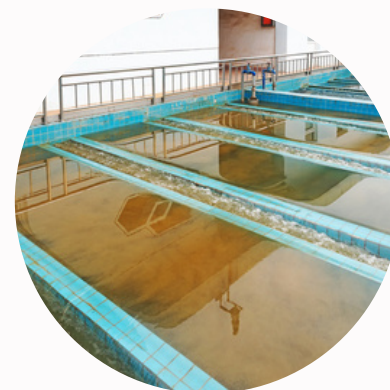
# Meet Organica Biotech



**Water Body  
Remediation**



**Sanitation &  
Hygiene Solutions**



**Industrial Effluent &  
Sewage Treatment**



**Agriculture**



**Solid Waste  
Management**



**Aquaculture**

**Top 20 Environmental Biotech** Companies in the World :  
OMICS International

**Top 100 SME's in India** : Skoch Group

Technology recommended by **Dr. Mashelkar Committee**  
from Ministry of Drinking Water and Sanitation, **Govt of  
India**

**Best Sustainability Technology Development Provider '22**  
Green Society India

**Best Wastewater Treatment Technology '22**  
Economic Times Ascent

**ISO 9001:2015 and ISO 14001:2015 certified company**





# Our Expertise & 23+ Year Impact



## Research & Development

With a library of more than **3000+ strains**, our scientists have developed revolutionary products for each sector.

R&D Facility, certified by DSIR a Govt. of INDIA



### Helped Behrampur remain Open Defecation Free

*Successfully treated over 150 septic tanks In collaboration with the Svadha Foundation.*



### 40 Biotoilets installed in houses (slums of Mumbai)

*| Collaboration with Keto |*



Helped over **20,000+ farmers** grow cleaner, better food globally



Prevented over **20,000 tonnes** of waste from going to landfills



Treated over **150+ Lakes & ponds** across Asia, Europe and UAE



# Our Expertise

## Hygiene Solutions

Professional Cleaning  
Institutional Cleaning

## Aquaculture

Aquatic Probiotics  
Microbial Soil and Water Conditioners

## Agriculture

Microbiome Replenishment  
Nutrient Bioassimilation  
Biopesticide Technology

## Bioremediation

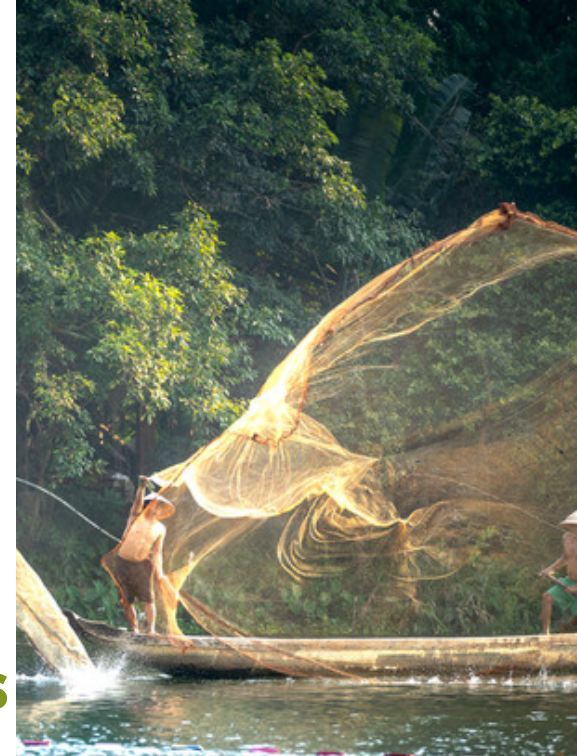
Industrial Wastewater Treatment  
Sewage Treatment Plant  
Water Body Remediation  
Soil oilspill remediation

## Solid Waste Management

Composting Solutions

## Sanitation

Septic Tank Solutions





# Our 360° Economical Wastewater Solution





# EMPOWERING CHANGE, CREATING A GLOBAL IMPACT

## Cleanmaxx



Cleanmaxx range of products is being used in **48+ countries** across the world



Cleanmaxx has helped industries in **Europe save upto 20%** in operating costs



Aided wastewater plants in reducing their energy consumption and also **reducing the sludge generation by around 22%**.



Achieved remarkable results of **COD reduction upto 96 %** within 10 days of commissioning



# System Specific



Advanced Aerobic Effluent Treatment Solution



Advanced Sewage Treatment Solution



Advanced Anaerobic Effluent Treatment Solution



# Industry Specific



Advanced Textile Effluent Treatment Solution



Pulp & Paper Effluent Treatment Solution



Advanced Dairy Effluent Treatment Solution



# About *Cleanmaxx*

It is a diverse blend of potent and robust & biological ingredients that target pollutants & toxins, effectively improving water quality.

- All microbes used are natural and genetically unaltered.
- Only GRAS status ( Generally Recognized as Safe ) microorganisms are used in our product
- It is an eco-friendly solution and poses no environmental hazard





# Our 360° Economical Wastewater Solution



# Industrial Wastewater Treatment

# Sewage Treatment



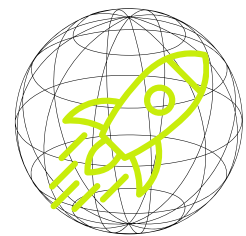
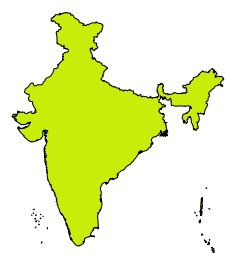
Colour & odour  
in outlet water  
Unsafe for reuse

**Biological  
tank  
optimisation**



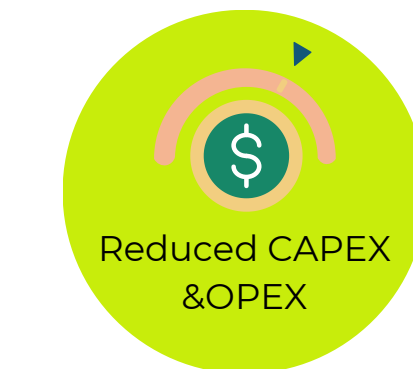
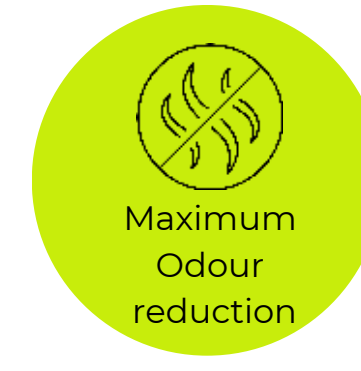
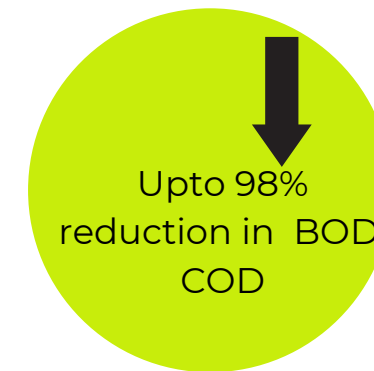
Clear, Clean,  
Odour free water for  
gardening & flushing reuse

## Major Manufacturing Units :



**48+ countries :**  
Asia, Europe, Africa

## TECHNOLOGY BENEFITS







# Industrial Wastewater Treatment



# Case Study :

## Effective Control on Foam & COD using Cleanmaxx Aero

### Analysis Performed

Organica Biotech performed a bacteriological study called **Biocheck** to understand the existing biology in the aeration tank.

### Result of Analysis

- Helped to understand and determine the **health of the biological unit.**
- The dense presence of filamentous organisms affected the settling characteristics which could have been the cause of the distressed biological unit (sludge bulking).

### The Economic Biotech Solution

- Based on the BioCheck report and an influent parameter analysis a treatment of **60 days** was recommended.
- A customized dosing and preassimilation program was designed using our product '**Cleanmaxx AERO**'.
- Log Sheet was prepared to analyze and maintain the optimum balance of **F/M ratio.**



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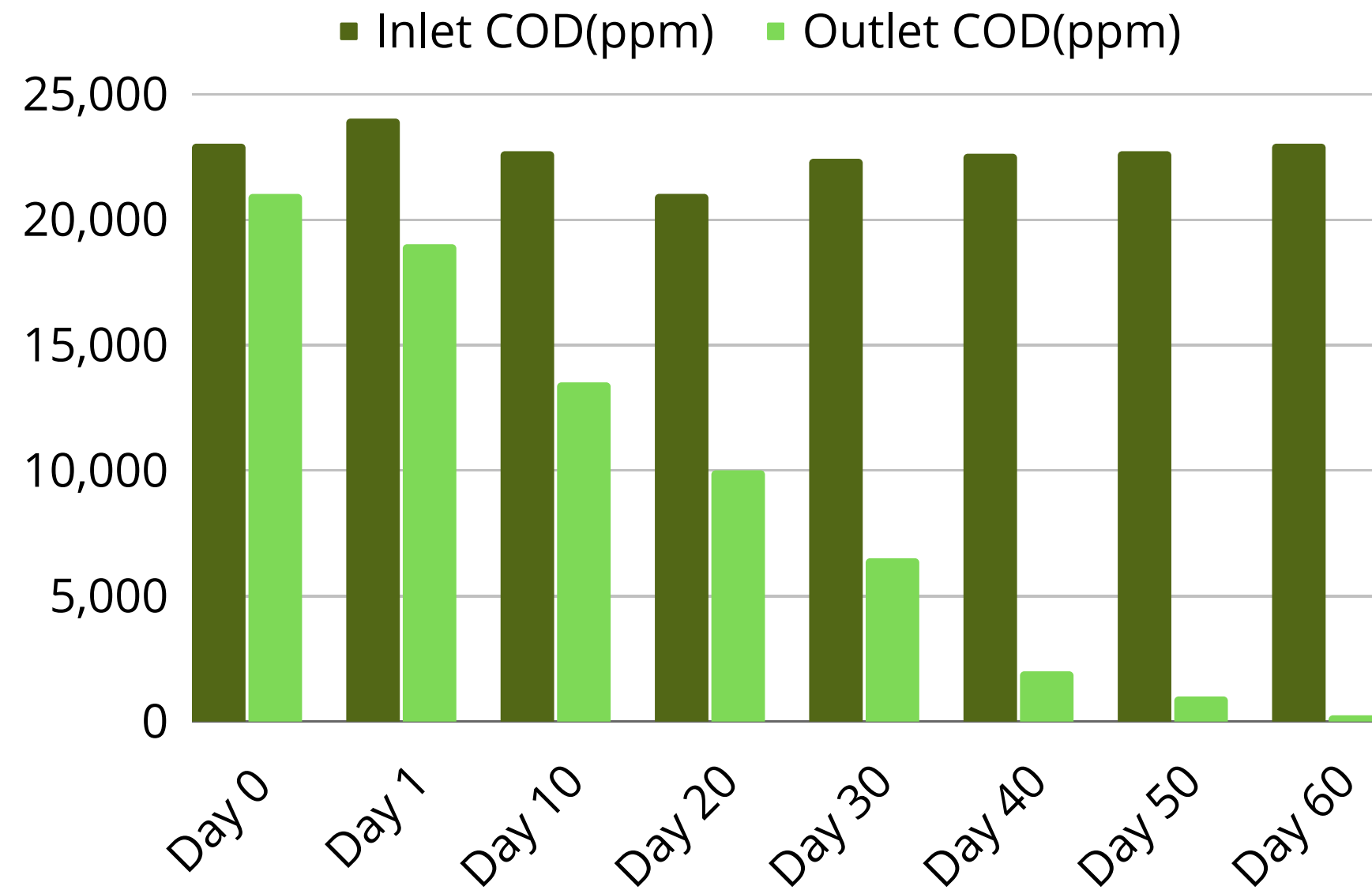
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# Case Study :

## Effective Control on Foam & COD using Cleanmaxx Aero

### Final Results



- An average of **95-97%** reduction in level of COD was observed.
- MLSS of **2500-3000** mg/l was developed under strict observations of Organica Biotech's representatives.
- Control of excessive foaming.
- Maximum **color reduction** and **clarity** in the output effluent.
- Plant operating at full efficiency with **stabilized conditions.**





# Sewage Treatment



# Case Study :

## Optimizing treatment efficiency of a 140 KLD STP

### Case Overview

An Indian MNC in Maharashtra's Chakan MIDC has a **140 KLD Sewage Treatment Plant** . It receives wastewater from the facility's canteen (dishwashing water) and washrooms, with a daily **average flow of 120 KLD**. On-site workers complained of odour issues from the toilets and around the STP site.

**Foaming** was observed in the aeration tank by the operators.

### Challenges Faced



Yellowish orange tint in flush water



Excessive Foaming in Aeration tank



Odour emanating from treated sewage water



# Case Study :

## Optimizing treatment efficiency of a 140 KLD STP

### Analysis Performed

Organica Biotech performed a site inspection of the STP and a report of the outlet parameters was analysed.

### Result of Analysis

- **White Foam** was observed at the collection and aeration tank due to excessive usage of detergents and improper biology.
- Excessive odour from the treated effluent was observed in the final tank and from the washrooms
- Outlet parameter report indicated that BOD levels were not being met.

### The Economic Biotech Solution

- Based on the site & report analysis a detailed dosing plan was recommended with addition of **Cleanmaxx STP**
- Dosage program was planned for simply addition & hassle free application.
- Routine checkup of the aerators was recommended to maintain DO levels.

# Case Study :

Optimizing treatment efficiency of a 140 KLD STP

## Final Results



Before  
Treatment

After  
Treatment

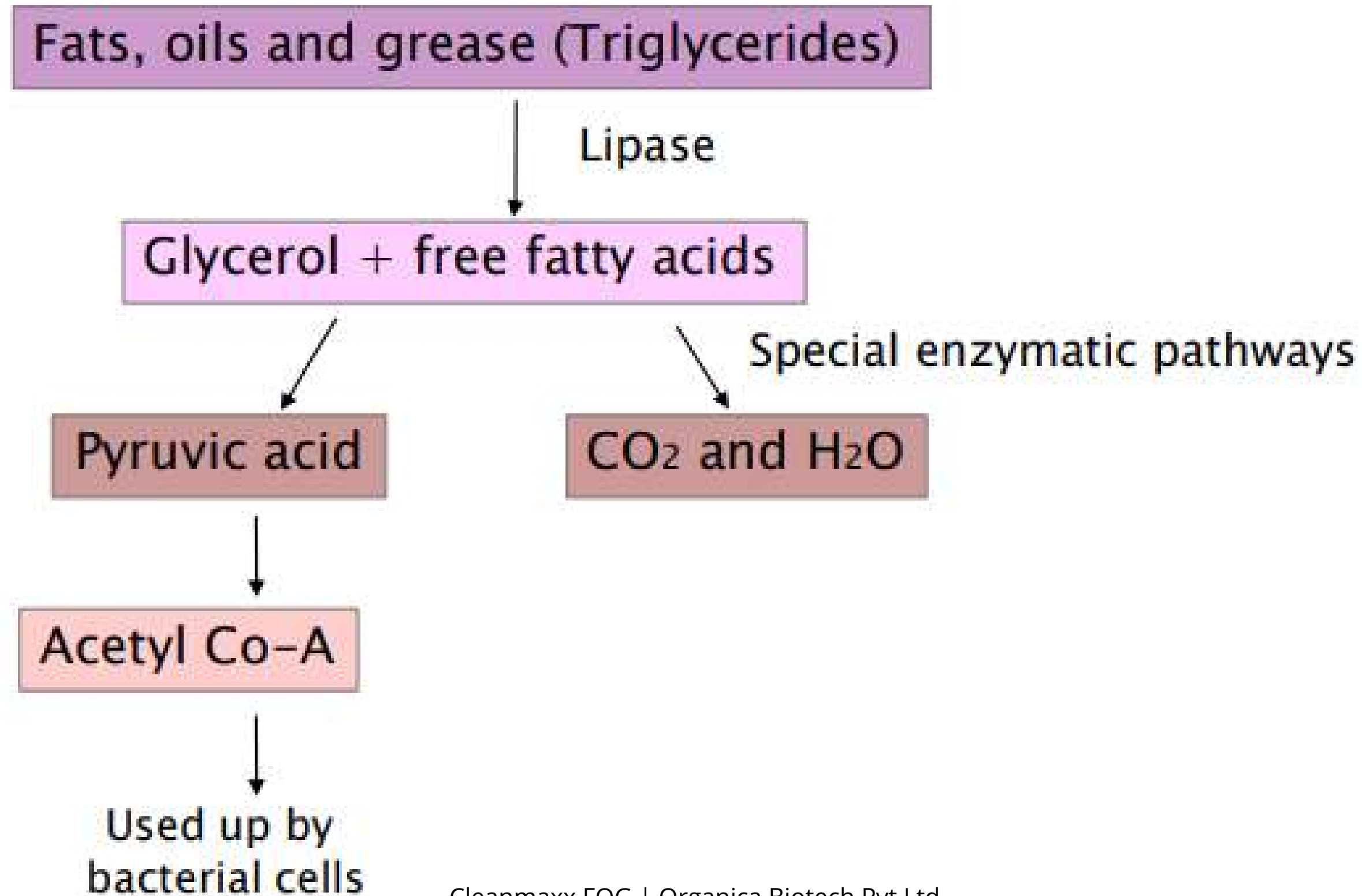
- An average of **97%** reduction in level of BOD was observed.
- Control of Excessive Foaming.
- Maximum **Color reduction** and **Clarity** in the outlet treated was observed in 2 weeks
- Complete elimination of fecal coliform was observed in the treated water





# FOG Treatment

# Technology Mechanism





# Case Study :

## Fish Processing unit in South India

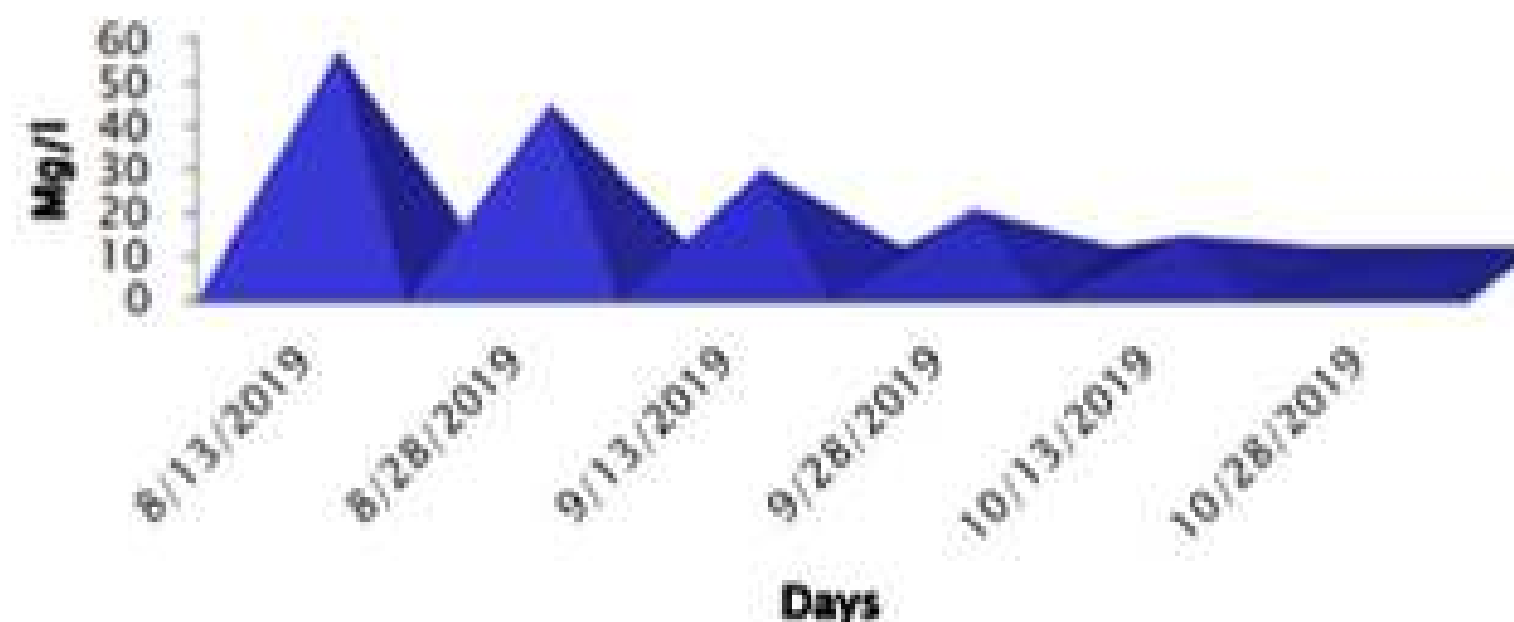
### Major concerns:

- Elevated levels of fats, oils & greases.
- Poor MLSS development.
- High BOD levels

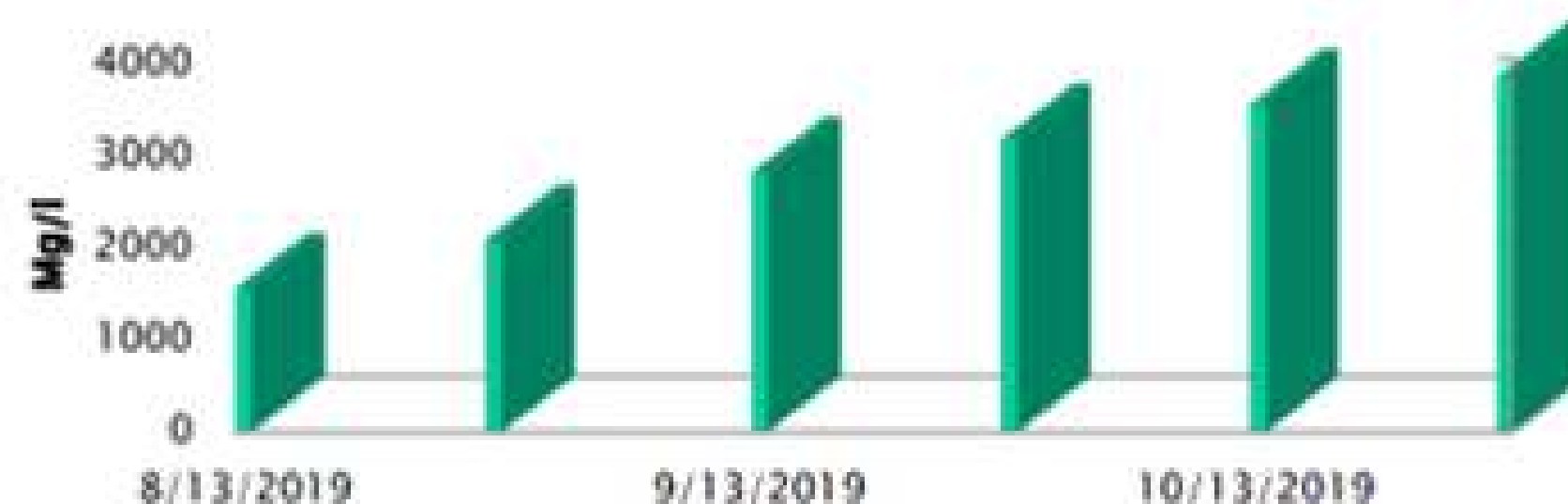
### After addition of CleanMaxx FOG for 2 months following Results were observed:

- 96% reduction in oil & greases was observed.
- MLVSS/MLSS ratio of 0.7 was attained, Desired MLSS in the range of 3500/4000 mg/lit was achieved.
- 89% of COD reduction was achieved in 40 days.
- Overall plant stabilization was achieved.

### Oil & grease reduction



### MLSS development





# Sludge Treatment





# Sludge degradation

- Reduces the environmental impact of wastewater treatment plants
- Reduction of volume and elimination of odour.
- Break down of organic matter and pathogens, makes the sludge safer for disposal or reuse.
- Promotes circular economy



# Sludge Degradation

## Anaerobic Digestion

- Decomposition in the absence of oxygen.
- Microbial breakdown of organic matter generates biogas (mainly methane).

## Aerobic Digestion

- Digestion occurs in where oxygen is present
- Microbes utilize oxygen to oxidize hydrocarbons completely to carbon dioxide (CO<sub>2</sub>) and water (H<sub>2</sub>O)

## Composting

- Controlled decomposition
- Produces a stable, nutrient-rich compost suitable for land application.







# Anaerobic Digestion



# Anaerobic degradation mechanism using Bioclean ANB

## 1. Hydrolysis

- Complex organics & hydrocarbons are broken down into simpler substances.
- Enzymes catalyze the conversion of complex molecules.

## 2. Fermentation or acidogenesis

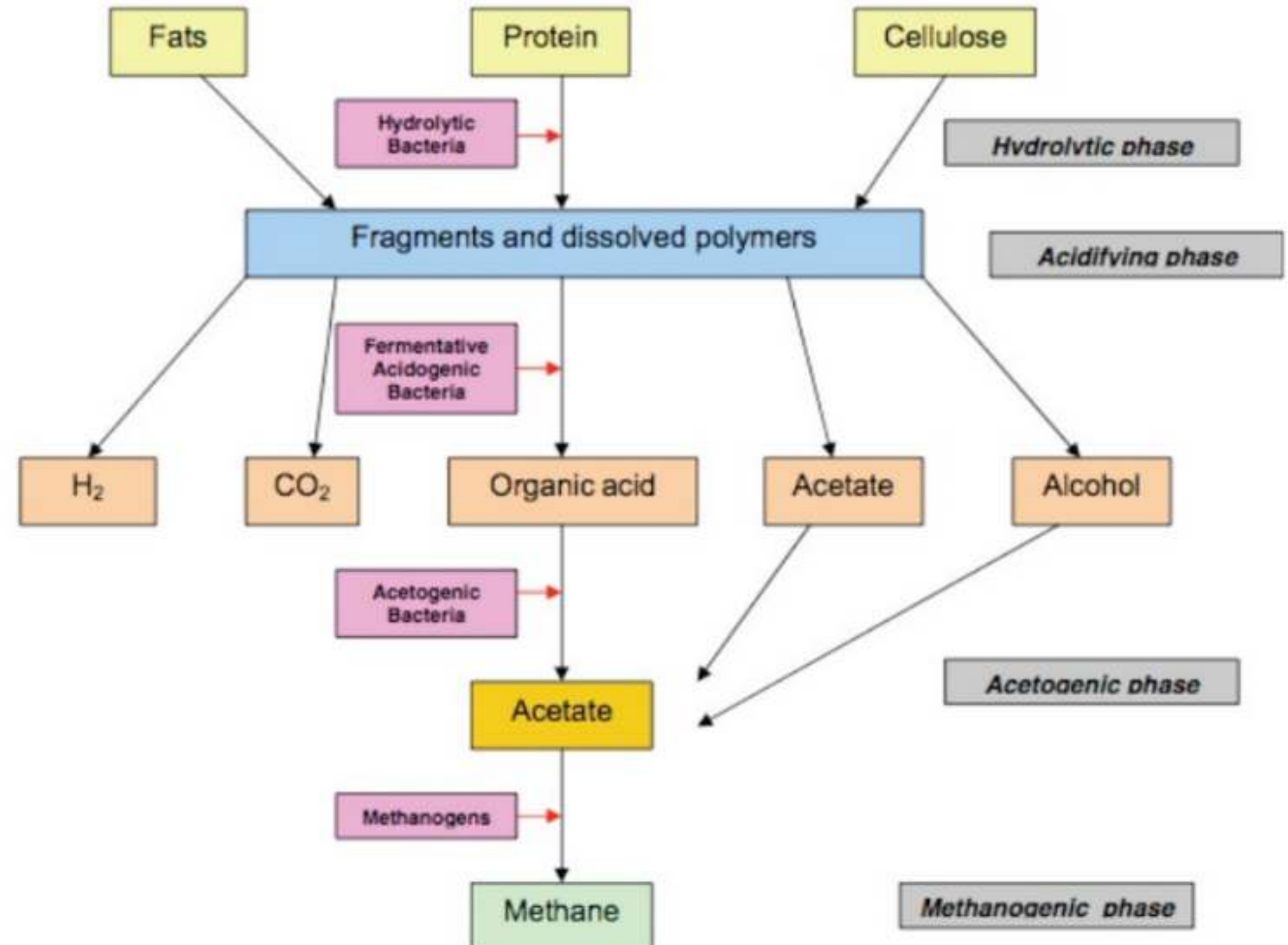
- Soluble organics are converted into volatile fatty acids (VFAs).
- VFAs, alcohols, and other organic acids are produced.

## 3. Acetogenesis

- VFAs and organic acids are converted into acetic acid.
- Hydrogen and carbon dioxide are generated.

## 4. Methanogenesis

- Methanogens convert acetic acid, hydrogen, and carbon dioxide into methane.
- Methane is produced as a valuable biogas.



# Vác Wastewater Treatment Plant

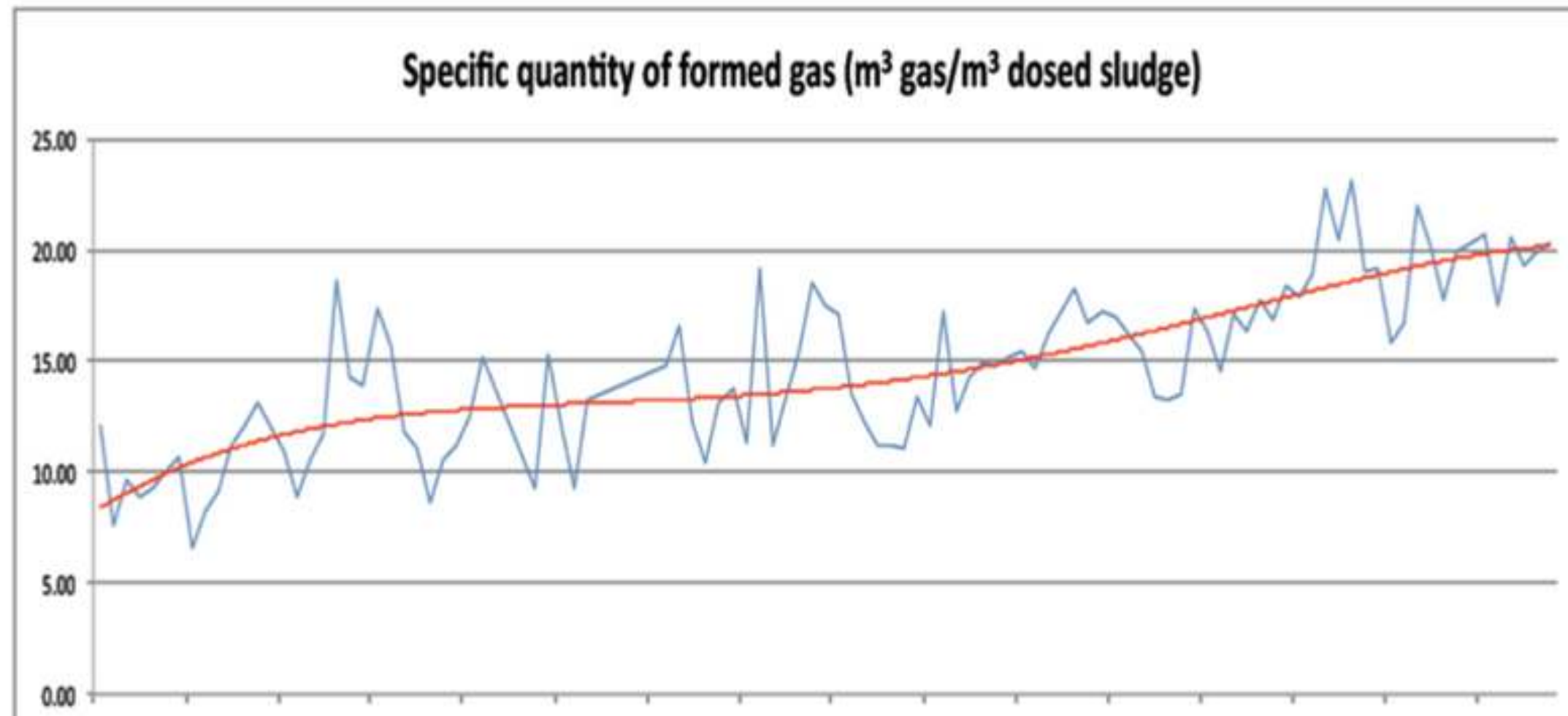
## Process Overview

- The excess sludge formed during the biological wastewater treatment is first led into the raw wastewater, and then it is removed from the primary clarifier together with the raw sludge, as mixed sludge.
- The mixed sludge is lifted up to the digester from the gravity thickener ensuring a minimal residence time in the thickener.
- The daily quantity of the thickened sludge fed into the digester is 90-120 m<sup>3</sup> day with 3.6-3.8 mass% solid content.
- The operational temperature of the digester is 32.5-33.5°C, so the digestion is mesophilic
- The hydraulic residence time is 25-30days. The reactor's mixing is intermittent and intensive. The mixers are turned on for 5 minutes every hour.



# Results

- On the fifth week after the startup of Cleanmaxx ANB treatment, the foaming problem of the reactor has been stopped.
- By the Cleanmaxx ANB optimization of the plant, we achieved the specific gas production of 18-20 m<sup>3</sup> gas/ m<sup>3</sup> sludge feed, which, compared to the volume of 8-9 m<sup>3</sup> gas/ m<sup>3</sup> sludge feed before treatment means 120-125% increase.
- More than 50% reduction in quantum of sludge





# Composting



# Recommended Technology:

# bioclean<sup>®</sup> Compost



**Bioclean Compost** is a unique bio-formulation that:

- Greatly reduces odor
- Promotes faster composting
- Ensures better degradation
- **Cost-effective solution.**
- Limits fecal coliform & promotes hygiene.



# Why choose Organica Biotech ?



Listed in **top 20 environmental biotech companies** in the world recognized by Omics International.

R&D Facility, certified by **DSIR a Govt. of INDIA**

Registered for selling our products in the European Union

Project on Bioremediation approved by MoEF, Govt of India

ISO 9001:2008 and ISO 14001:2004 certified company

Awarded as **top 100 SME's** in India by SKOCH award in Sanitation

Best Sustainable Development Technology 2022

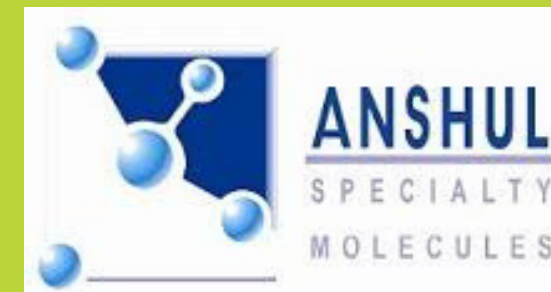
Best Wastewater Treatment Technology 2022 by Green Society of India

Best Water Treatment company of the year - Economic Times Ascent





# Clientele



& many more

# Global Presence



More than  
48 countries



# Hear From our Clients



To whomsoever it may concern

We are using Organica Biotech's product "CleanMaxx" and "Bioclean XLN" in our effluent treatment plant for


5 years. We have seen significant improvement in our ETP in terms of:

- COD & BOD reduction.
- Odour control.
- Handling shock loads and Toxic loads very well.
- Improvement in efficiency of the biological system in a cost effective manner.

Technical support and prompt service from Organica Biotech's experienced team and R&D support has made the ETP more stable & efficient. We welcome Organica Biotech's approach to all industries having problems with their wastewater treatment plants.

Our Company is always committed to taking care of the environment. We appreciate Organica Biotech's role in providing sustainable eco-friendly technologies and services.

For ANSHUL SPECIALTY MOLECULES PVT. LTD.



Anurag A. Khalkh  
Environment Dept.



Chakala, Andheri (East),  
Mumbai-400 089  
Tel: +91 22 2854 7301-08  
Fax: +91 22 2854 3761  
www.godfreyphillips.com

24<sup>th</sup> February

To Whomsoever it may concern

We are using Organica Biotech's products **CleanMaxx** & **Bioclean**® in our Effluent Treatment Plant for past 2 years. We have seen significant improvement in the performances of our ETP in terms of

- ✓ COD & BOD reduction.
- ✓ Odour control.
- ✓ Handling shock loads very well.
- ✓ The treated water is much clearer with lower TSS.
- ✓ Improvement in Efficiency of Biological system.

Technical support and prompt service from Organica Biotech's experienced and qualified team has made the ETP more stable & efficient.

We welcome Organica Biotech's approach to all industries having problem with their wastewater treatment plants.

Our Company is always committed for taking care of the environment. We appreciate Organica Biotech for their role in providing sustainable eco friendly technologies and services.

Best Regards,

For GODFREY PHILLIPS INDIA LTD.,



M. M. BRAHME (MANAGER - SHE)



To whomsoever it may concern

We have been working with Organica Biotech for the last 5 years for treatment of our sewage. Organica Biotech's products **CleanMaxx STP** and **Bioclean FOG** has shown excellent performance with significant improvement in our STP in terms of:

- Odour control.
- Improvement in efficiency of the overall treatment process.

Technical support and prompt service from Organica Biotech's experienced team and R&D support has made our treatment process stable & efficient. We welcome Organica Biotech's approach to all commercial spaces and residential societies facing problems with their sewage treatment plants.

Our Company is always committed to taking care of the environment. We appreciate Organica Biotech's role in providing sustainable eco-friendly technologies and services.

For Revive Realty Ltd




# Let's get in touch



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