

A STEP TOWARDS UNNAT BHARAT ABHIYAN

**Dr. P. Albino Kumar
Head, Civil Dept.
NIT Manipur**

Before adopting village, a survey was conducted by UBA team of NIT Manipur to identify the villages.

- Identifying Ponds which are treatable for drinking water with low cost
- Assessing the parameters of ponds
- Identification & optimisation of low cost material for treatment
- Identification of treatment techniques



INTERACTION WITH THE VILLAGERS



A STAGNANT RIVER



TURBID RIVER WITH SUSPENDED SOLIDS



A VILLAGE POND



A DRY RIVER

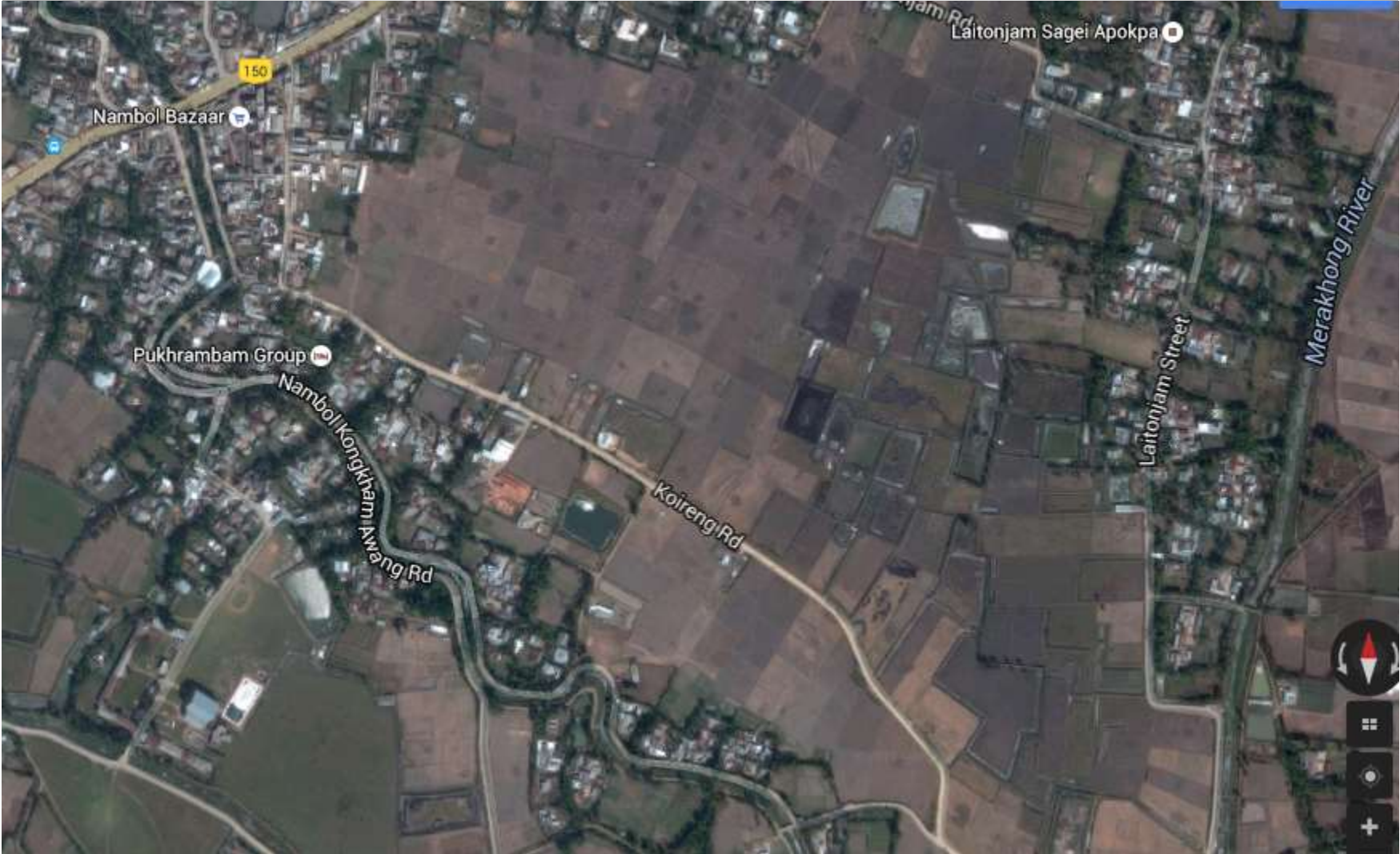
INTRODUCTION

UBA NIT Manipur has adopted 5 (five) villages at Nambol, Bishnupur District of Manipur.

- **Nambol Makha**
- **Kongkham awang**
- **Maibam Chingmang**
- **Nambol Bazar &**
- **Koriphaba.**

providing treated water to the villagers by designing and supplying filters constructed with low cost, easily available local materials, giving maximum efficiency and which is affordable to the villagers.

GOOGLE MAP OF THE ADOPTED AREA



RESULTS OF MONITORING

The following were identified as a result of monitoring the villages

- ❑ Main source of water- rivers and local ponds
- ❑ Water used without treatment
- ❑ Turbid water with suspended particles.
- ❑ Rivers not perennial
- ❑ Creates skin diseases with itchy sensation
- ❑ Lack of alum and Chlorine
- ❑ Lack of Water Supply scheme
- ❑ Rich people buys water tank, full of water from private suppliers and poor have to depend on ponds and rivers.



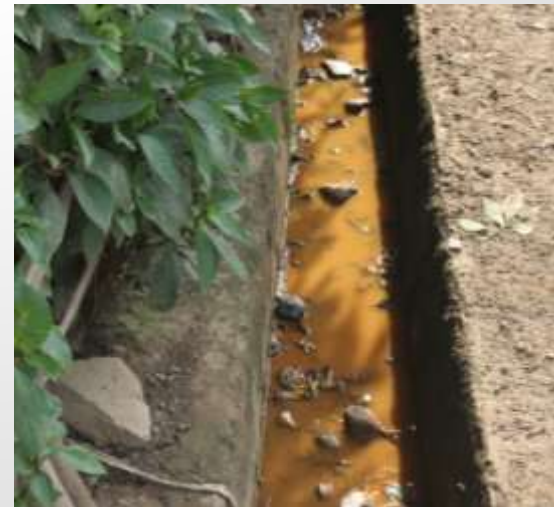
NIT UBA team discussing with local women



Iron contaminated hand pump in school



NIT UBA team discussing with Clubs



Iron contaminated drains

Laboratory studies for FILTER

To optimized and design the water treatment plant for Villages

Units of the filter-

- ❑ **Feeder** – Feeds raw water to the first treatment unit.
- ❑ **Reactor 1** – 1st treatment unit with filter media.
- ❑ **Reactor 2** – 2nd treatment unit with filter media
- ❑ **Collector** - Collection point for treated water

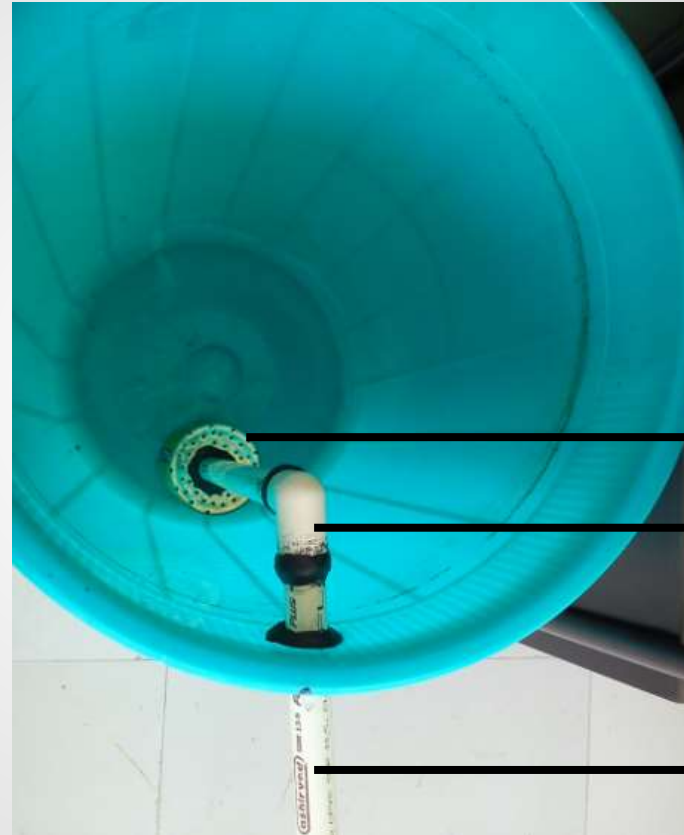


ASSEMBLY OF FILTER UNITS



FIG: FEEDER

**NOZZLE FOR
MAINTAINING
FLOW RATE**



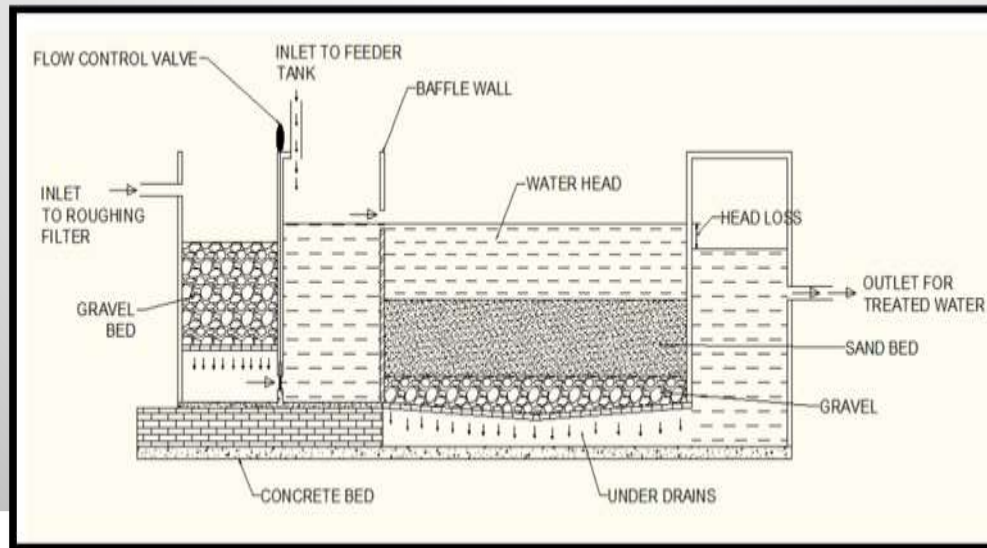
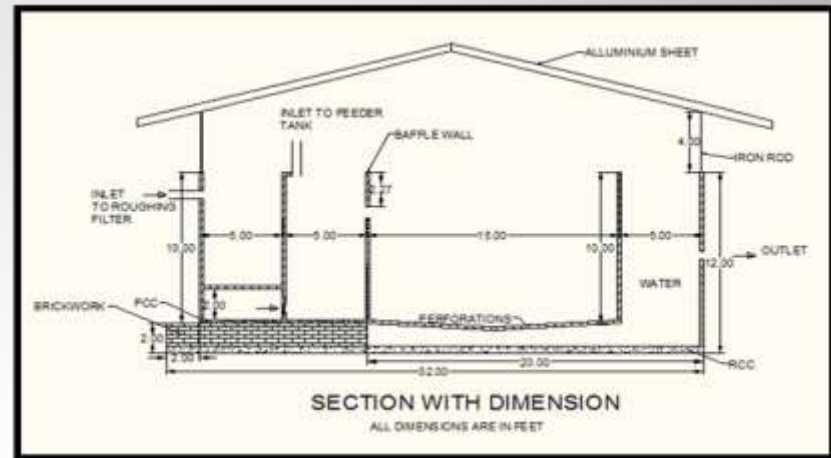
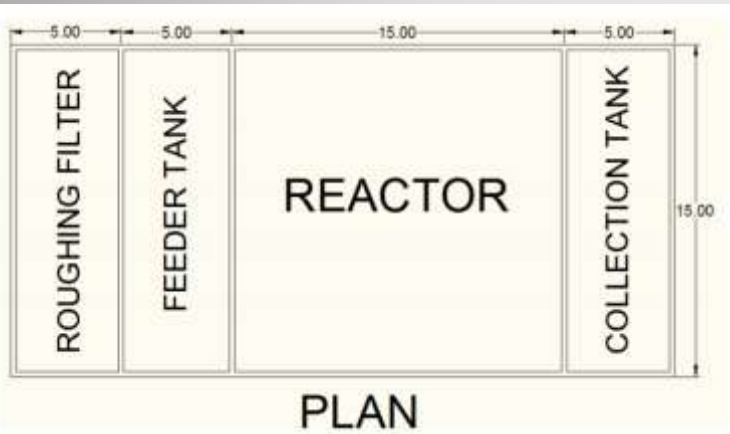
FILTER

**L-SHAPED PVC
PIPE FOR HEAD
MAINTENANCE**

OUTLET

FIG: REACTOR 1 & 2

Design of reactors



Inauguration of water treatment plant on 28th August 2016.



1. The Pond : Source of Water, where treatment is given for drinking (ii) Water treatment Plant and Reservoir



(ii) Water treatment Plant and Reservoir (iv) UBA Cordinator, NIT Manipur (Dr P Albino)giving awareness on operation and maintenance of the Treatment plant community based BIOSAND Filter



Public water collecting from plant / NIT UBA testing water at site and at Lab.





THANK YOU

NIT Manipur UBA team at site

Dr. P. Albino Kumar

Dr. Thiyam David Singh

Dr. Sangeeta Laishram

Dr. Waikhom Victory

Ms. S. Pipileima

Kh. Sachidananda

Mr. M. Nongthouba

Mr. I. Bigyananda

Ms. N. Bidyamani

Ms. P. Jesiada

Mrs. Kh. Jayalalita

Head of Department (Co-ordinator)

Assistant Professor (Chemistry)

Assistant Professor (Basic Science & Humanities)

Lecturer

Lecturer

Lecturer

Lecturer

Technical Assistant

Technical Assistant

Technical Assistant

Technical Assistant

