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SKR GOVTNMENT DEGREE COLLEGE
GUDUR

DECLARATION

I **T.Penchala Narasaiah, B.Sc II Year/ IV Semester,** Hereby declare that the project work entitled 'WATER FACILITIES AND DRINKING WATER AVAILABILITY' is a project report of the work done by me under the guidance of **BALABHADRA KRUPA KARUNA VANI**, **Lecturer in CHEMISTRY.** This project work is submitted in partial fulfillment for CBCS (4 years degree).The result embodied this thesis have not been submitted to any other college/Institute.

T.P.Narasaiah

T.Penchala Narasaiah,
B.Sc II Year/ IV Semester
SKR GDC, Gudur.

Certificate

SKR GOVERNMENT DEGREE COLLEGE, GUDUR

DEPARTMENT OF CHEMISTRY

Class: II B.Sc (MZC) **Register No:203129014**

CERTIFIED THAT THIS IS THE BONAFIDE RECORD OF COMMUNITY SERVICE PROJECT (CSP) WORK DONE IN WATER FACILITIES AND DRINKING WATER AVAILABILITY AT LINGASAMUDHRAM,SAIDHAPURAM MANDAL, GUDUR MANDAL. BY THE CANDIDATE T.PENCHALA NARASAIAH.

B.SC II YEAR/ IV SEMESTER, SKR GDC, GUDUR DURNING THE YEAR *2021-2022.*

Mentor

P.Venkateswarlu

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Submitted for the Community Service Project in Water Facilities and Drinking water availability at LINGASAMUDHRAM,SAIDHAPURAM Mandal.

Valued by

1.

2. G. Jaivan.

ACKNOWLEDGEMENT

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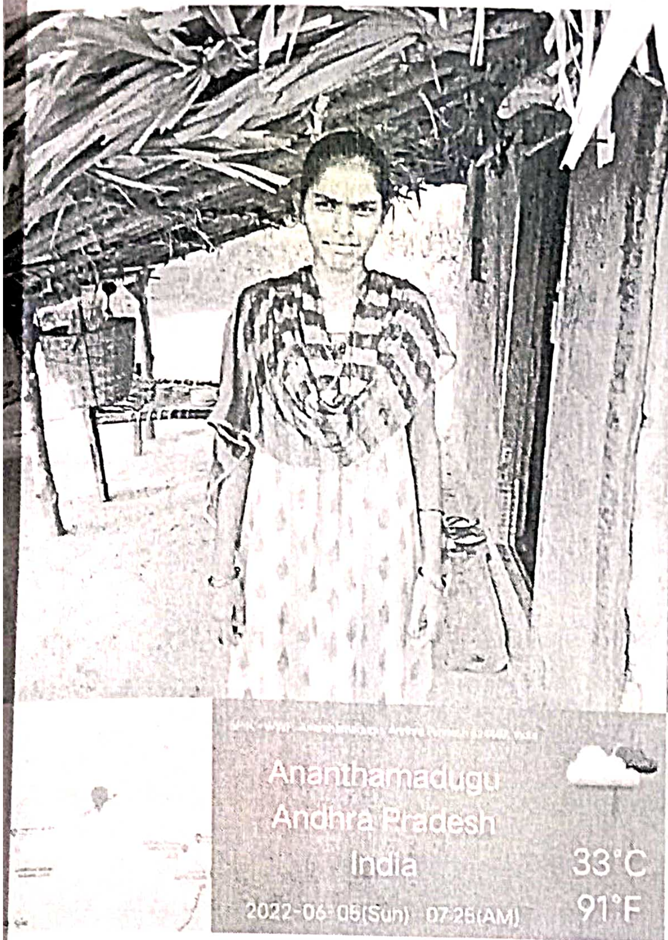
Secondly, I would also like to thank my **Dear friends** who helped me a lot in finishing this project within time.

THANKS ONE AND ALL.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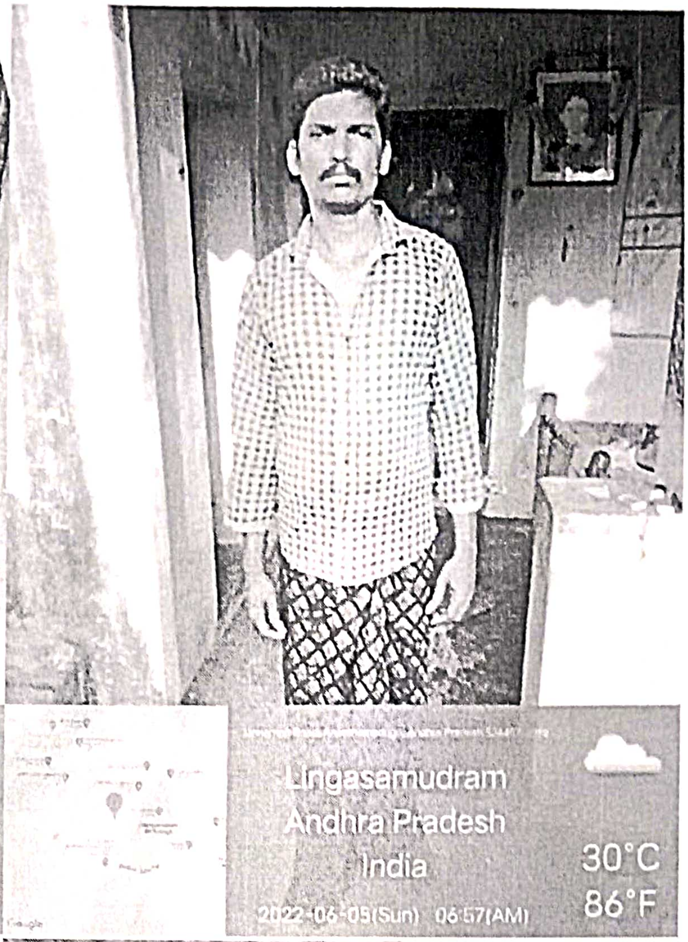
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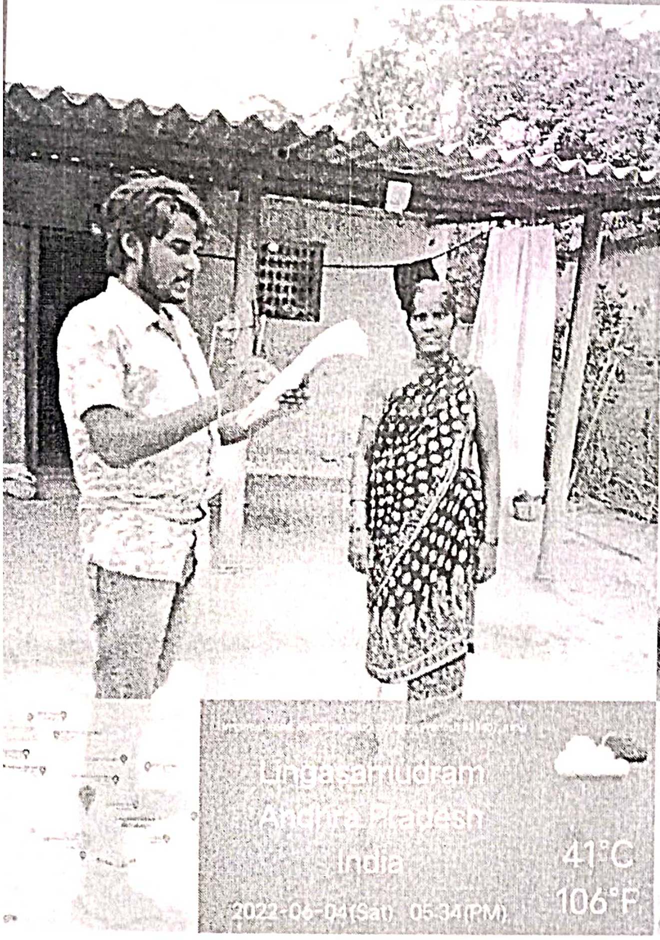
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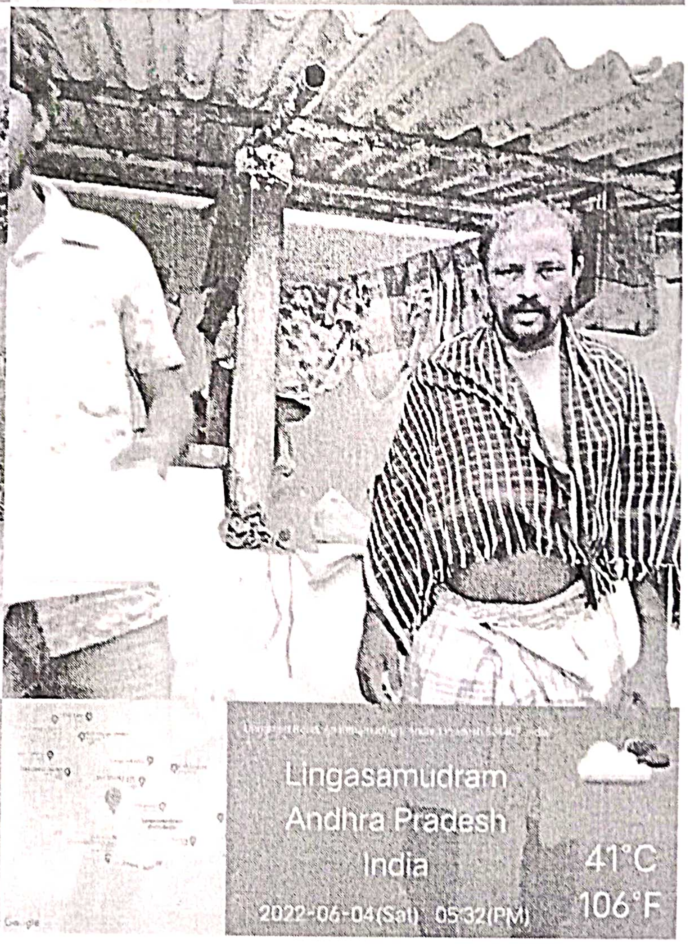
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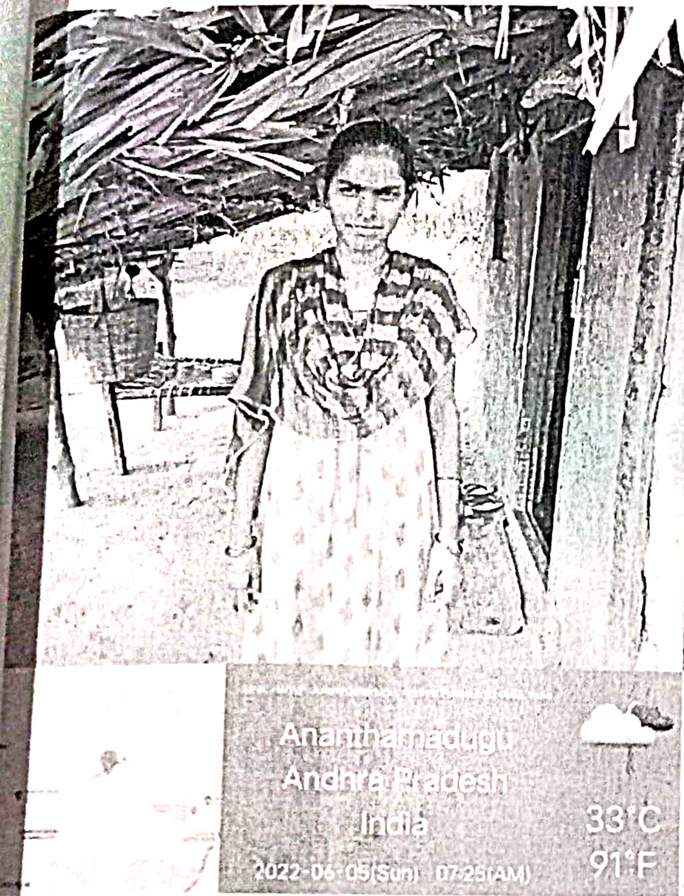
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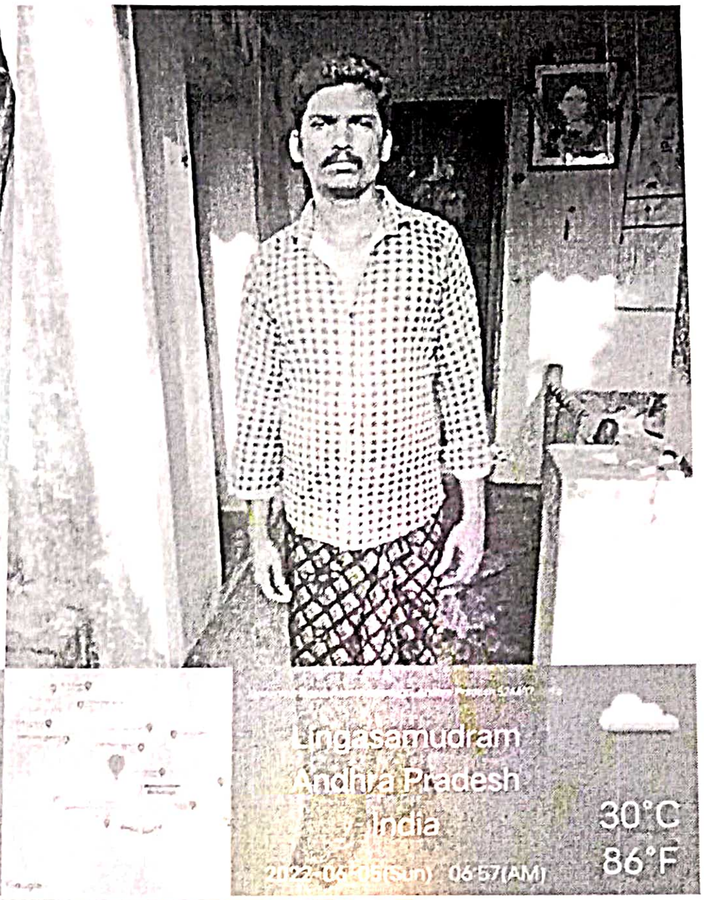
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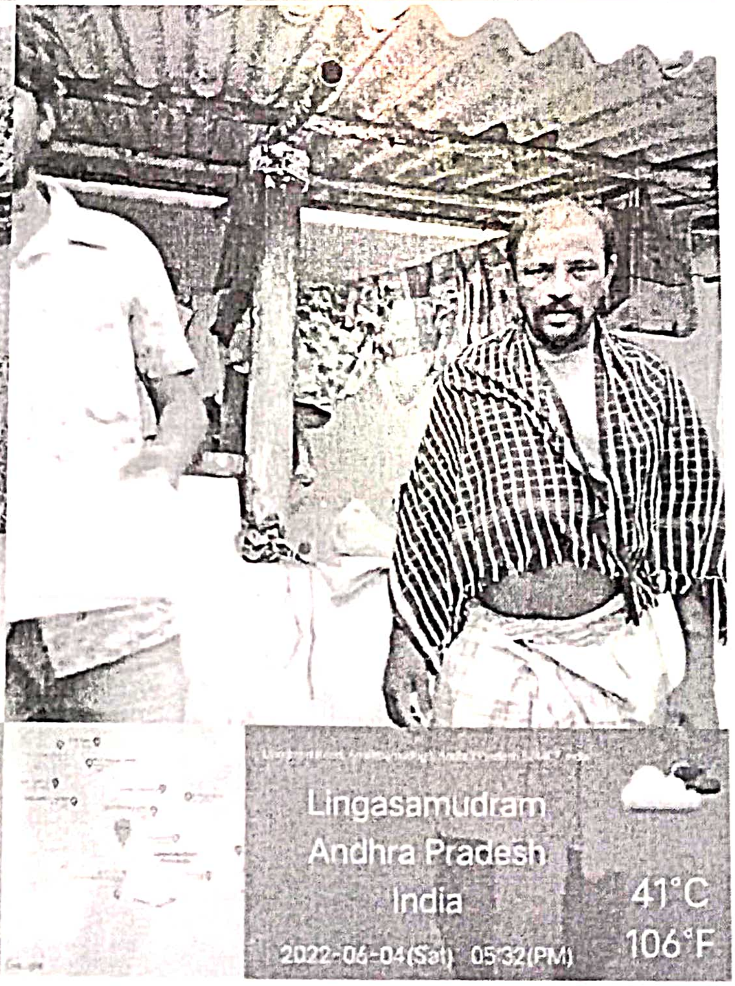
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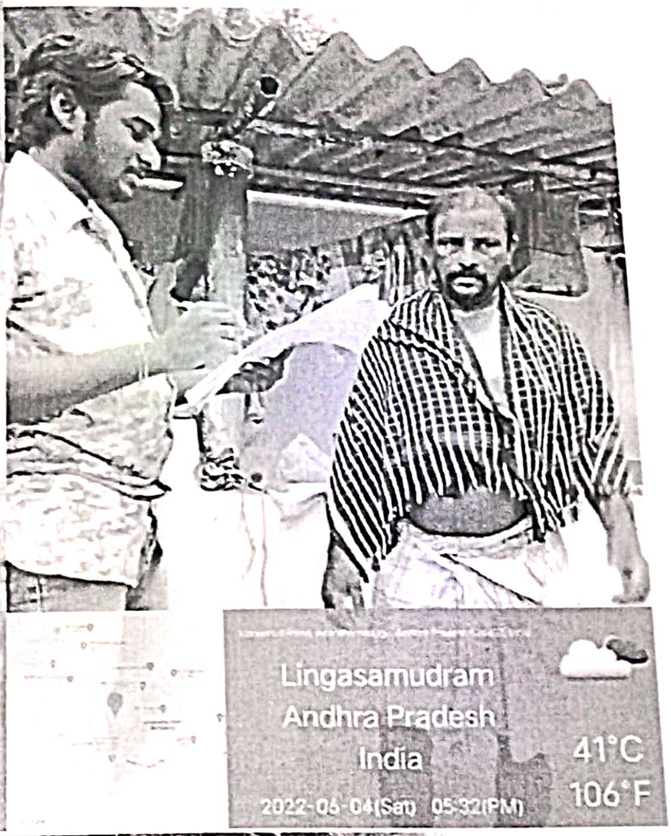
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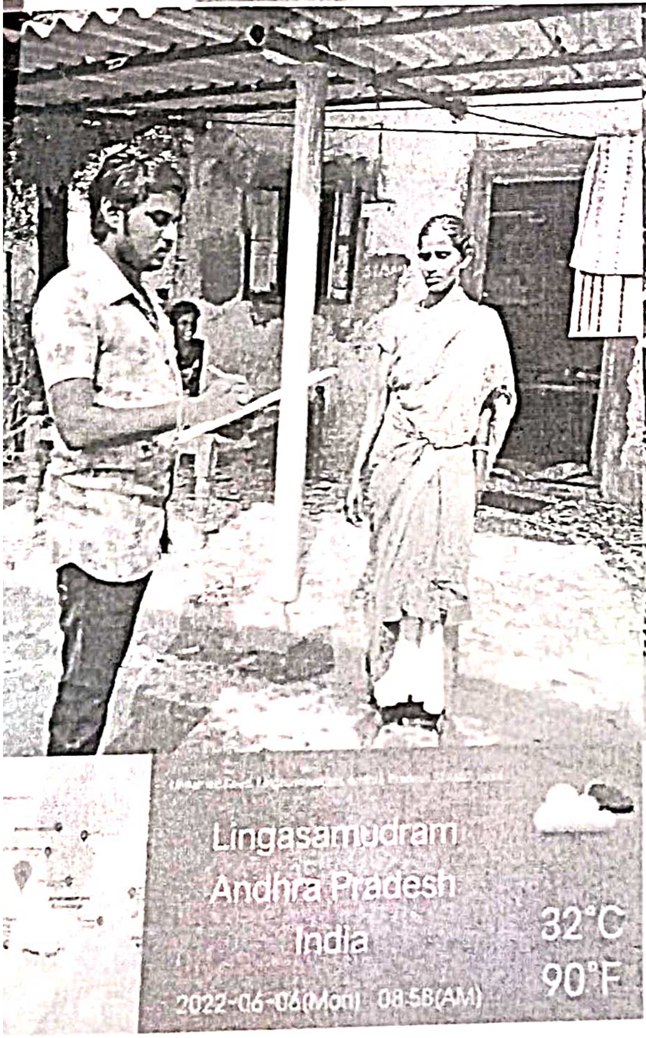
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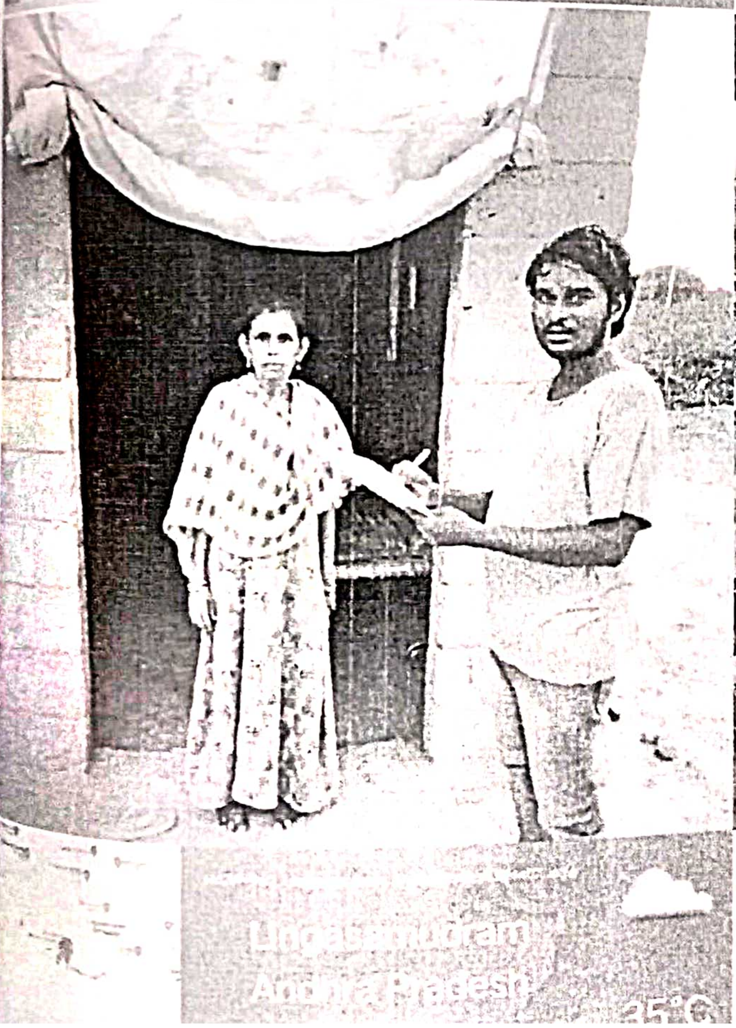
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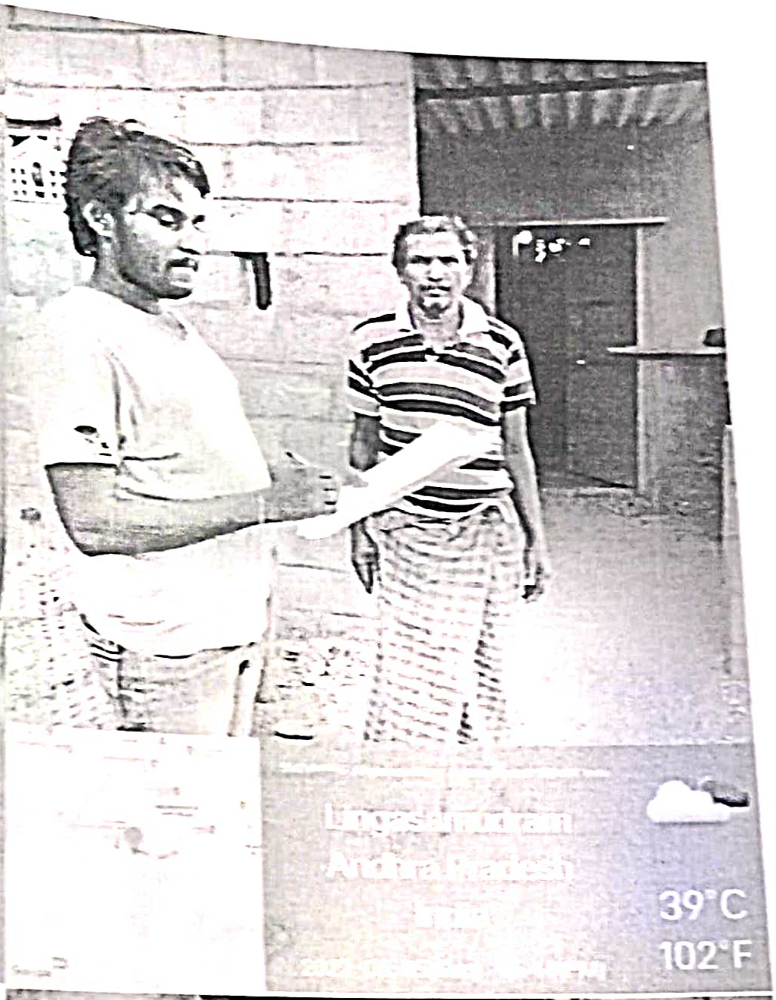
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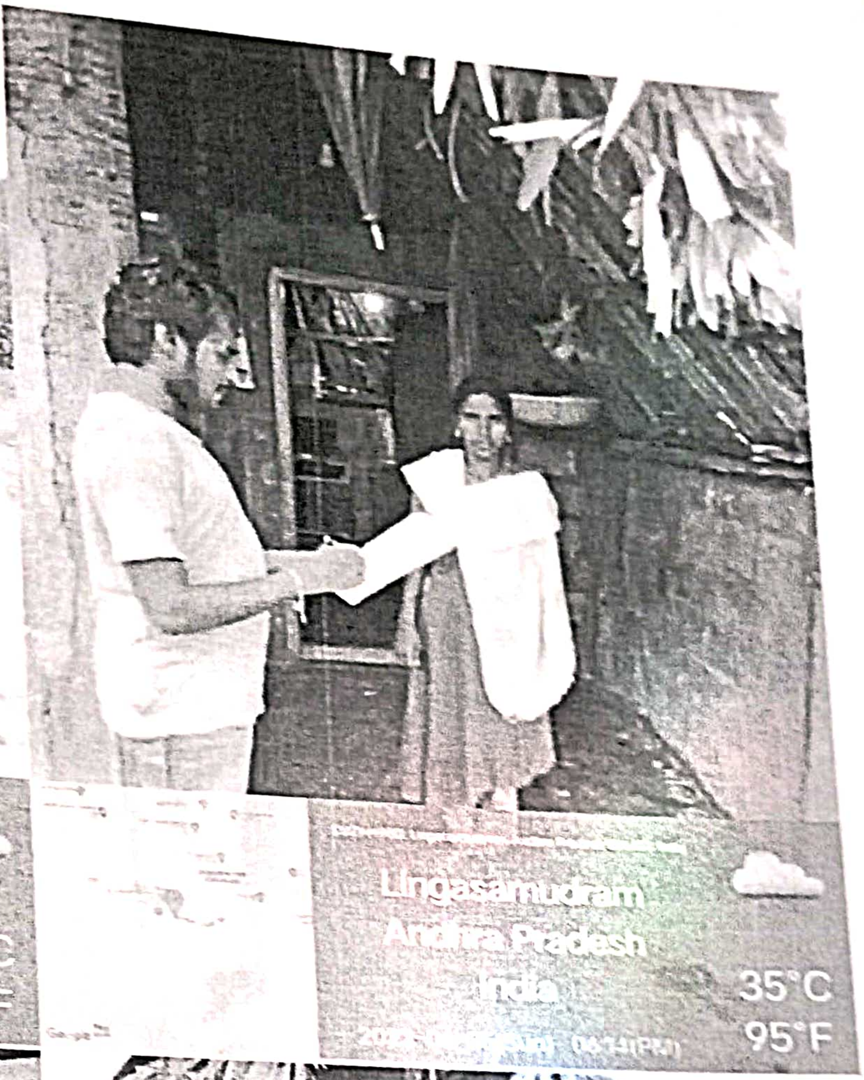
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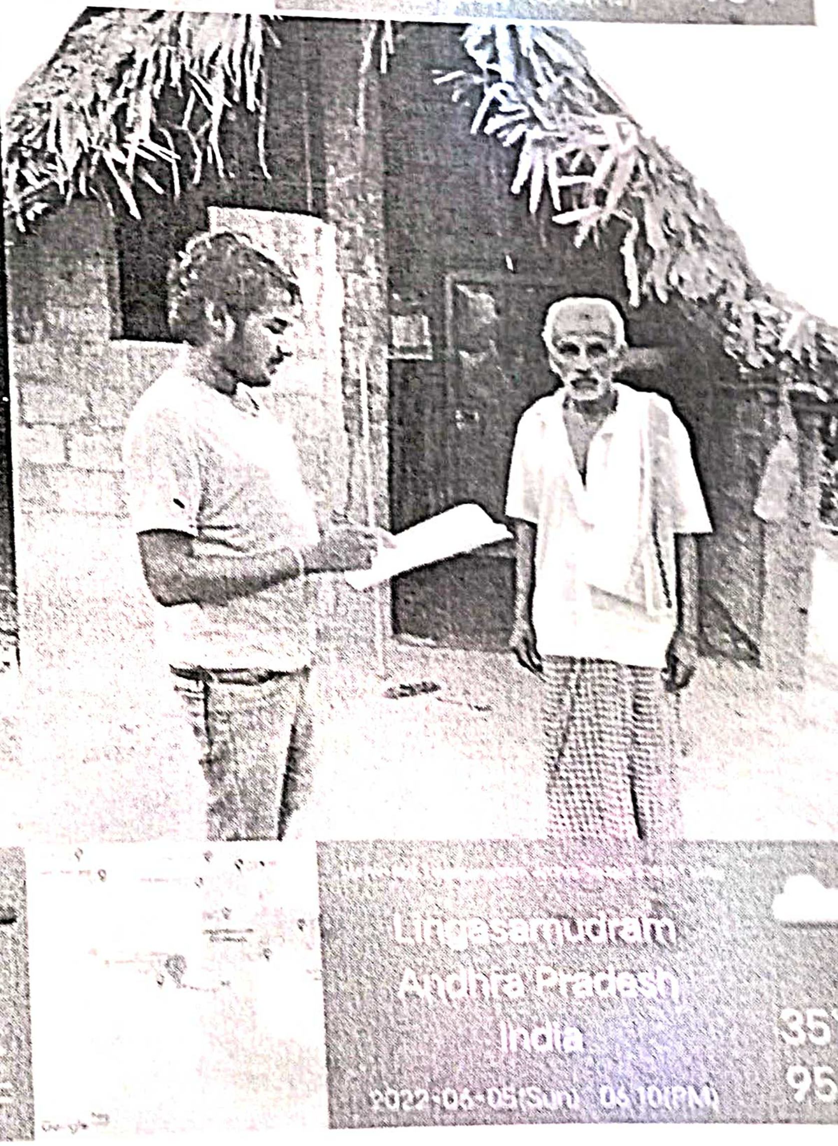
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DATA ANALYSIS

Total number of households-20

Q1. Number of Houses having public Bore-wells-**12**

Q2. Number of Houses having Municipal water supply-**5**

Q3. Number of Houses having own bore wells-**3**

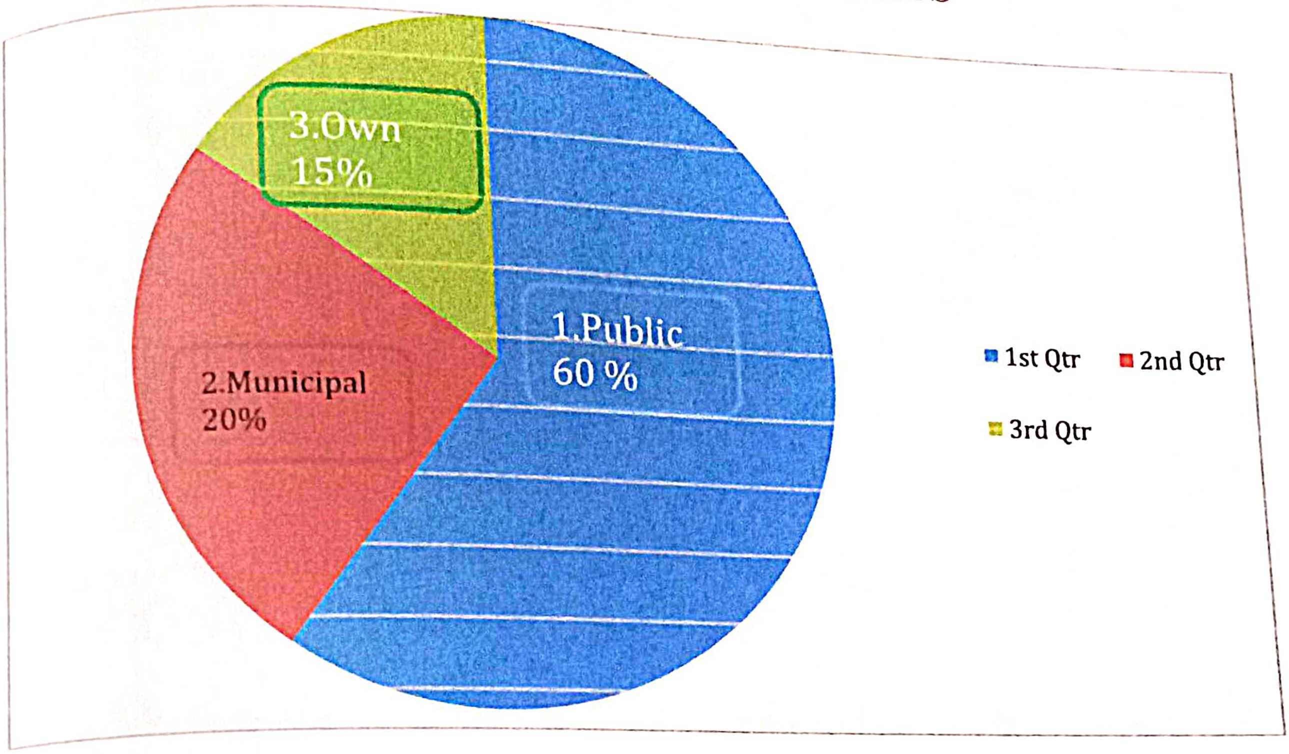
Q4. Number of Houses using Mineral water for Drinking purpose-**14**

Q5. Number of Houses using Municipal water for Drinking purpose-**6**

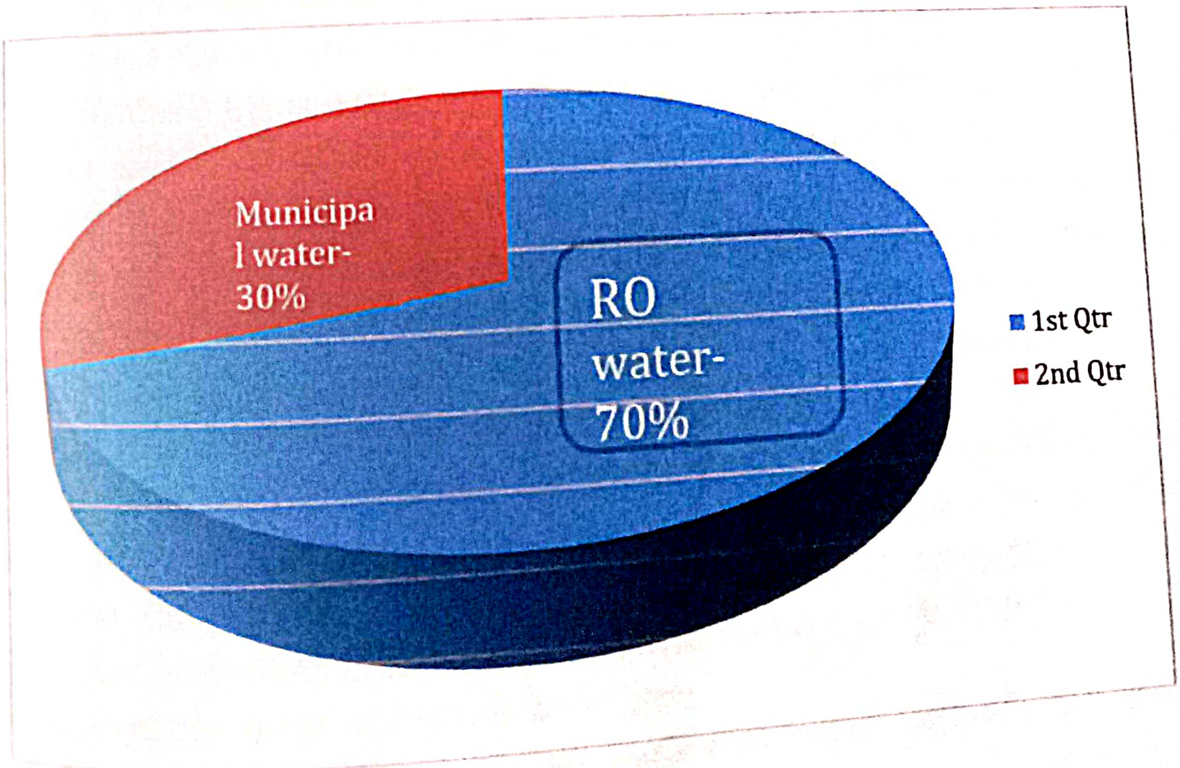
Q6. Number of Houses havin Agricultural land-**12**

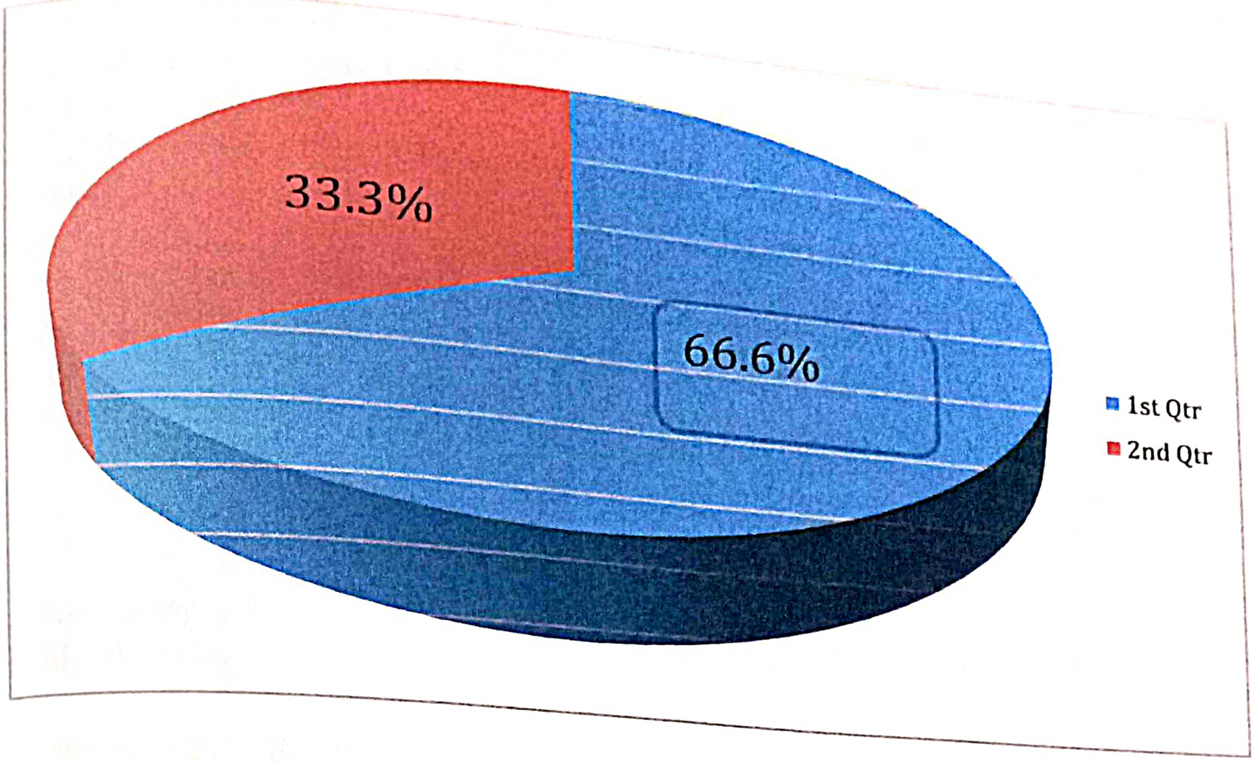
Q7. Number of Land holders having own bore-wells in their field-**4** and the remaining are using Telangana canal water.

DATA ANALYSIS –PIE-CHARTS



Pie-Chart showing the number of borewells in Percentage(20).





Pie chart showing the percentage of own borewells in the Agricultural fields(12)

CONCEPTUAL MATTER

Rural drinking water supply is a persistent public health challenge in India, but with shifting contours. Pathogenic contamination of surface waters and water in shallow aquifers was sought to be addressed through massive tube-well programs in the 1980s and 1990s. However, chemical contamination of water in deeper aquifers is now widespread, often associated with irreversible public health damage, and is forcing yet another rethink.

While government policies are still focused on the increasingly scarce "alternative safe sources," there is growing realization of the need to purify water for domestic consumption, even in rural areas. However, access to safe drinking water is largely seen as a government responsibility. But, barring Gujarat, large-scale rural drinking water schemes based on regional water supply have not materialized. Decentralized solutions face challenges of appropriate technology, management capacity, financing options, and environmental impacts. Models of public–private partnerships, community-managed systems, and social enterprises have emerged under the circumstances. These models are explored, with the help of case studies, in this chapter to understand what needs to be done, and by whom, for a sustainable and scalable solution.

Disinfection of drinking water supplies with various disinfectants has been

Disinfectant inactivates disease-causing organisms and effectively reduces waterborne diseases to ensure safe consumption of water. However, an unintended chemical reaction between disinfectants and naturally occurring organic and inorganic precursors or anthropogenic compounds in the source waters results in the generation of a number of disinfection by-products (DBPs) including trihalomethanes, haloacetic acids, and haloacetonitrile in drinking water. Due to potential adverse health effects (from cancer induction to birth defects, etc.) posed by these geno- and cytotoxic DBPs on exposure, they have received great concern worldwide and thus are regulated by the United States Environmental Protection Act in the water industry. The objective of this chapter is to provide an insight into the apprehension of DBP generation in drinking water, occurrence, types of DBPs, and associated adverse health effects.

A safe water supply is the backbone of a healthy economy, yet is woefully under prioritized, globally.

It is estimated that waterborne diseases have an economic burden of approximately USD 600 million a year in India. This is especially true for drought- and flood-prone areas, which affected a third of the nation in the past couple of years.

Less than 50 per cent of the population in India has access to safely managed drinking water. Chemical contamination of water, mainly through fluoride and arsenic, is present in 1.96 million dwellings. Excess fluoride in India may be affecting tens of millions of people across 19 states, while equally worryingly, excess arsenic may affect up to 15 million people in West Bengal, according to the World Health Organization.

Moreover, two-thirds of India's 718 districts are affected by extreme water depletion, and the current lack of planning for water safety and security is a major concern. One of the challenges is the fast rate of groundwater depletion in India, which is known as the world's highest user of this source due to the proliferation of drilling over the past few decades. Groundwater from over 30 million access points supplies 85 per cent of drinking water in rural areas and 48 per cent of water requirements in urban areas.

All children have the right to clean water and basic sanitation, as stated in the Convention on the Rights of a Child. The ultimate aim of UNICEF's work in water, sanitation and hygiene (WASH) is to ensure that all children fulfill this right, and that no child is left behind.

When families do not have a safe and reliable water source, preferably direct to their home, then it is often women and children that are responsible for collecting water.

School attendance in India decreases when children are required to spend hours collecting water. A 22 per cent increase in school drop out rates has been reported