3.6 Extension Activities

3.6.1 Outcomes of extension activities in the neighbourhood community in terms of impact and sensitizing the students to social issues and holistic development, and awards received if any during the last five years

Virtual Internship Programme on Sustainable Development Goals and Community Development - Students' Mini Project Proposal for Community Development programme

ORGANIC FARMING

SUBMISION OF PROJECT REPORT FOR VIRTUAL INTERNSHIP PROGRAMME ON SUSTAINBABLE DEVELOPMENT GOALS AND COMMUNITY ENGAGEMENT

1. TITLE OF THE PROJECT : Enhancing Organic Farming for Community Development

2.DETAILS OF THE PARTICIPANTS:

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3. UBA THEME FOR PROJECT WORK: ORGANIC FARMING

4. SDGs TO BE ACHIEVED

- NO POVERTY
- ZERO HUNGER
- GOOD HEALTH AND WELL BEING
- CLEAN WATER AND SANITATION
- AFFORDABLE AND CLEAN ENERGY
- DECENT WORK AND ECONOMIC GROWTH
- SUSTAINABLE CITIES AND COMMUNITIES

- CLIMATE ACTION
- LIFE ON LAND

5. BACKGROUND OF THE STUDY

Farming is necessary and most essential one, fruits, vegetables and other foods produced by organic farming provide food for humans and animals, as we don't know what kind of food we eat in today's situation. We should be aware of organic farming so we can cultivate our foods without spraying any pesticides and chemicals. Now in anthoniyarpuram farmers use natural predators which control pests and a clever rotation of crops each year to keep the soil rich and fertile on their own land and make their own inputs and hence don't need to buy new chemicals and fertilizers every year this makes organic farming economically sustainable as well it allows wildlife to prosper and reduces the amount of carbon and greenhouse gases released into the atmosphere. Organic farming is based on natural methods for keeping weeds and pests down and no synthetic pesticides are used which ensures soil to be fertile, and it is proven that it gains more nutrients and vitamins. Organic farming helps to protect both ground water and biodiversity, which is of major importance to the people and animals living nearby the area. In order to create an awareness we have some ideas of organic farming to be developed in anthoniyarpuram.

The primary goal of organic agriculture in anthoniyarpuram is to optimize the health and productivity of interdependent communities of soil life, plants, animals and people to build good soil structure and fertility which improves the village economically well and change the village into greenly manure and to create a good environment in anthoniyarpuram. To produce food of high nutritional quality in sufficient quantity by doing organic farming we can easily control the stagnation of water. We can motivate the farmers for diversification of areas from traditional crops to commercial crops with sufficiently high level of productivity, maximum possible use of renewable resources. In the pandemic situation many of the people's are jobless so it can give a job for the people who live in the village. It

reduces human and animal hazards by reducing the level of residues in the product and it helps in keeping agriculture production at a sustainable level. It ensures optimum utilization of natural resources for short-term benefit and helps in conserving them for future generation. Organic farming not only saves energy for both animal and machine, but also reduces risk of crop growth, control pests, diseases and weeds to ensure the right soil cultivation at the right time. It promotes more usage of natural pesticides, in addition it improves the soil physical properties such as granulation, good aeration, easy root penetration and improves water- holding capacity and reduces erosion.

In anthoniyarpuram crop diversity helps environments thrive and also protects species from going extinct, there are different ways to improve crop diversity. Crop diversity is refered to as plant genetic resources for food and agriculture, embrace the diversity within and among crops, their wild relatives and wild edible plant species, crop rotation. Crop rotation is the method of planting crops in a different area of the garden so that no single crop will be planted in the same place two or more years in a row. Soil management method also used in anthoniyarpuram. after the crop cultivation the soil loses its nutrients and it's quality depletes, organic farming initiates the use of natural ways to increase the health of the soil.

6. OBJECTIVE OF THE STUDY

The following are the objectives focused in this study

- To produce food of high nutritional quality in sufficient quantity by doing organic farming
- To promote more usage of natural pesticides to improve physical properties of the soil

7. METHODOLOGY ADOPTED IN ANTHONIYARPURAM

The present study is a general study about the surroundings of the village and also a general survey about the livelihood of the people and the sources available, their nature of work, education and utilization of the cultivation crops and the steps followed to enhance the Organic farming.

8. MAJOR FINDING IN ANTHONIYARPURAM

Following are the findings in regard to various response from the people regarding farming in Anthoniyarpuram. Palm tree is the major source of this area.

- Palm fruit: Fruit is sold as frozen pulp jam and juice, it is used to flavour ice cream and other frozen treats cake and bonbons .its also sold as powder and palm fruit has anti influence and anti oxygen properties I it's used as an expectors and also as a liver tonic .
- Palm Wood: This wood is pressed to extract oil for soft drinks, cooking, preservation, soaps , syrup, the woods fiber are used in hats, parquet flooring, and wood itself is used to construct wicker furniture .
- Palm Hearts: the palm hearts are eaten fresh or canned. because heart of palm contain 17 different amino acids, they make rich source of protein, they are also low in fats of sugar and high in fiber and contains a number of healthy vitamins and minerals .
- Palm Leaves: the leaves are constructed into houses , basket, carpets, fans and ropes for climbing trees . They also provide fertilizer and animal feeds . the children to make toy boats or untilized by parents to make hummock for babies.
- Palm Seed:The seed make excellent fertilizer and when dry are crafted into jewellery .
- Palm Trunk: the drunk are used to framing in the construction or rural houses and to make bridge across small streams .
- Young Roots: When make into a medicinal tea , the young roots help to get rid of worms .
- Fruit Stem:The stem remaining after the fruit are removed is used as a fertilizer or as a garden broom, when burned the stem serves as an insect repellent .
- Palm Oil: It is obtained from the fruit of the oil palm tree .Palm oil is used for preventing vitamin A deficiency ,cancer ,brain disease aging and treating malaria , high blood pressure , high cholesterol ,and cyanide poisoning . palm oil is used for weight loss and increase the body metabolism .

9. SUGGESTIONS FOR FARMERS TO INCREASE PRODUCTIVITY IN THE FIELD

Do not cultivate the same crop on the same land every year; instead, they grow different crops in rotation to maintain the soil's health.

- Clear Objectives: authorities must go through the in-depth analysis of the policy and they can have clear objective.
- Assigning Responsibilities: there must be assigning of responsibilities to different agencies that work together under one leading government agency, responsible for proper implementation of the policies.
- Establishment of Bridging Body: permanent bridging body must be established that works as a bridge between government and related agencies of organic sector.
- Research And Development: Government must ensure the scientific collection of data an relevant information about the organic farming sector. this data proved to be useful in preparing policy framework for the respective sector.
- Education And Awareness: it is highly recommended to take initiatives for education and awareness of the common customer of the organic food.
- Impact Assessment: government must provide support and emphasis to the research work and studies associated with scientific impact assessment of the policies. so that, the responsible authorities are aware of the policies impacts to the relevant sector.
- Scientific Monitoring: before implementation of policy, authorities must ensure the proper scientific monitoring of policy impact on ground level.

IMPACT CREATED ON US BY VISTING ANTHONIYARPURAM

We came to know how the farming is done and we are able to get some fresh air and enjoyed that place .We are able to see the people who work hard for our food in daily life and came to the idea that we should not waste even one spill of rice we should give respect to food, and the people we saw there was so overwhelming and very kind .After seeing all these

things we got more interested to learn about cultivation of organic farming. We all will try to implement the organic farming in our home also and be a best example of younger generation. and one more we learnt is when we are around some organic area our mind get relaxed and refreshed,so if we plant a tree in my house using organic farming our mind gets relaxed and also if we avoid artificial pesticide it is very safe to our tree and to our envinornment. ***" EAT GOOD AND STAY HEALTHY"***

DECLARATION

We declare that the project is original and carried out by us under the guidance of Dr.A.Parveen Sulthana. The project has not been submitted elsewhere for the award of any degree and the work is geninue.

Details of the Project Supervisor

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AISHE code of the Participating Institute:C-41151

Name of the Regional Coordinating Institute of UBA: The Gandhigram Rural Institute (Deemed to be University) Dindigul, Tamil Nadu

Certificate

This is to certify that THE PROJECT HAS BEEN CARRIED OUT UNDER MY SUPERVISION AND GUIDANCE. The project report has not been submitted for anyother title/award and the work is genuine.

A. Parveen Sulthana

Signature of the Project Supervisor

BASIC AMENITIES

"Morals are concerned with what aids or impedes the fulfilment of basic human needs"

- John T Noonan Jr

SUBMISION OF PROJECT REPORT FOR VIRTUAL INTERNSHIP PROGRAMME ON SUSTAINBABLE DEVELOPMENT GOALS AND COMMUNITY ENGAGEMENT

1. TITLE OF THE PROJECT : Basic Needs of the day in a village

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2.DETAILS OF THE PARTICIPANTS:

3.UBA THEME FOR PROJECT WORK: BASIC AMENITIES

4.SDGs TO BE ACHIEVED

- No poverty
- Good health and well being
- Quality education
- Gender equality
- Clean water and sanitation
- Decent work and economic growth
- Reduced inequality
- Sustainable cities and communities
- Climate action

- Peace and justice strong institutions

5. BACKGROUND OF THE STUDY

The theme of our project is Basic amenities that should be developed in Anthoniyarpuram village, Korampallam panchayat in Tuticorin district. Villages are the Backbone of a Country. So development of villages plays a major role in the development of a country. Basic amenities are essential things that are needed for pleasant living. The Basic amenities include Safe drinking water, Electricity and network connectivity, rural education, Medical facilities, Transportation, Skill development centres and Public Library are the basic amenities needed for the village. Water is essential for all living beings so clean and purified drinking water makes the people in the village free from water borne diseases. Nowadays, Electricity plays a great role by keeping street lights in the village we can avoid thefts. Traffic lights are important to avoid accidents because the village is located at highway without Network there is no development of technologies. Due to this Corona pandemic everything becomes online so the network connectivity also increases, this is available in cities and we have to develop it in village, also rural education and public library is needed for the young minds in the village to enlighten. Medical facilities and Transportation are the main places that needs to be in every Village. Skill development centres are needed to develop new skills among women and Children. These are the basic amenities needed for the development of the village.

As of now one of the basic amenities needed in Anthoniyarpuram is for the development of a proper educational centre for children. When children are interested in academic knowledge at an early age they will reach a better position in the future. Having a job can boost your self-esteem and confidence. Our aim is to provide more job opportunities for unemployed people. Having a public library will help us with this cause. Public library play an important role in people lives as a source of accessing information and a place of knowledge creation. Library help people find information they need. The “Youth of Today is the future of Tomorrow “So the young minds should have a clear idea about their career. Our other objective would been to make an awareness campaign about the developing technologies and opportunities so that they can develop themselves and their village. One of the basic needs for the city, and indeed for any growing population, is for accessible, good quality health care. Due to less number of Hospitals in this area, people in this area will find it difficult to seek medical assistance in case of emergencies.

Rural Development is the process of improving the quality of life and economic well-being of people living in rural areas, often relatively isolated and sparsely populated areas. Rural Development has traditionally centred on the exploitation of land intensive natural resources such as agriculture and forestry. These include, education, employment opportunities, agriculture and farming practices, administration and management, infrastructure, civic amenities, health care and medical and environmental conditions. They should have primary health centre, school facilities, public library and road facilities.

6. Objectives of the study:

The following are the objectives focused in this study

"Developing village with a 'rural soul' but with all urban amenities that a city may have"

Our goal is to provide urban amenities in ANTHONIYARPURAM and maintaining the rural soul. This will help in developing villages in sustainable manner and reduce migration from villages.

7.Methodology adopted In Anthoniyarpuram:

The present study is a general study about the surroundings of the village and also a general survey about the livelihood of the people and the sources available, their nature of work, education and facilities available.

8.Major Findings in Anthoniyarpuram:

Following are the findings in regard to various response from the people regarding the facilities available in Anthoniyarpuram.

In the Anthoniyarpuram village, there is major availability of ground water due to the presence of large number of palm trees in that area. The major occupation of the people in that village mainly depends on palm trees. They should have primary health centre, school facilities, public library and road facilities. Basic amenities are essential foundation for a decent living and it enhances economic growth and quality of life. Basic amenities are linked to qualitative and developed human living and the modern state has to ensure this through some arrangements.

9.Suggestions for basic amenities

Things considered to be essential to make life easier and more pleasant. The women should be self-employed, need of multi-speciality hospital, need of public library, job opportunities for youth, need of bus station, need of pharmacies, development of street lights, need of proper networks, implementation of rain water harvesting system.

Self-employment courses for women:

Self-employment course are important for women, so that they can earn money and lead an independent life. Are work and stitching course are highly recommended one through this they can earn and live a prosperous life. .

Need of multi-speciality hospital:

People in this area find it difficult to seek medical assistance in case of emergencies. They don't have much more facilities. So hospitals are needed.

Need of public library:

Public library plays an important role in people's lives as a source of accessing information and a place of knowledge creation. Library to help people find information they need. So public library is needed in that area. Job opportunities for Youth:

'' The Youth of Today is the future of Tomorrow"

So the young minds should have a clear idea about their career .We should make an Awareness campaign about the developing technologies and opportunities so that they can develop themselves and their village.

Need of bus station:

More bus stops are needed so that people find it easy and have a safe journey. Mainly students and rural people need bus station for their daily life.

Need of pharmacies:

Due to unavailability of pharmacies, people in this area find it difficult to get medical supplies for any medical emergencies. So proper pharmacy are needed.

Development of street lights:

Dynamical brightness change in bulbs are needed for street lights. So people can feel safer during nights.

Need of proper networks:

Due to poor network coverage in this area, students in this area find it difficult to attend online classes during this pandemic situation. So proper network is needed.

Implementation of rain water harvesting system:

Rain water harvesting system are implemented so that during rainy season flooding can be avoided accident can also prevented.

IMPACT CREATED ON US BY VISTING ANTHONIYARPURAM

Amenities are the features that produce comfort, convenience or pleasure. From this definition, we can say that in any state basic amenities are cardinal. We are able to see the people who work hard for our food in daily life which was one of our basic needs in modern society and I came to the idea that we should not waste even one grain of rice and that we should give respect to food. The people we saw there was so overwhelming and very kind .after seeing all these things we got more interested to learn about the people's basic amenities. We gained knowledge of our experience although small, gave me a better understanding of life of people in Anthoniyarpuram. It gave us an insight into the history of ANTHONIYARPURAM.

DECLARATION

We declare that the project is original and carried out by us under the guidance of Dr.A.Parveen Sulthana. The project has not been submitted elsewhere for the award of any degree and the work is genuine.

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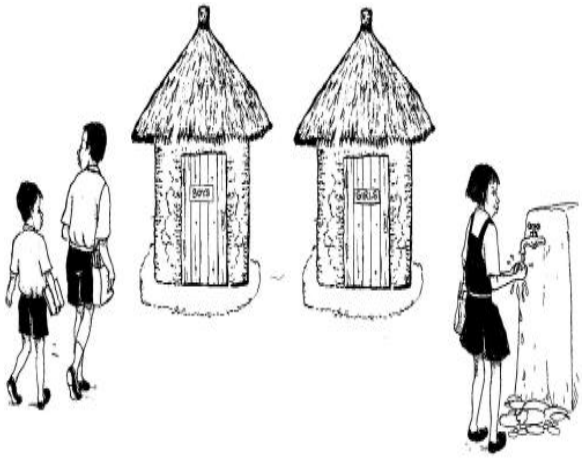
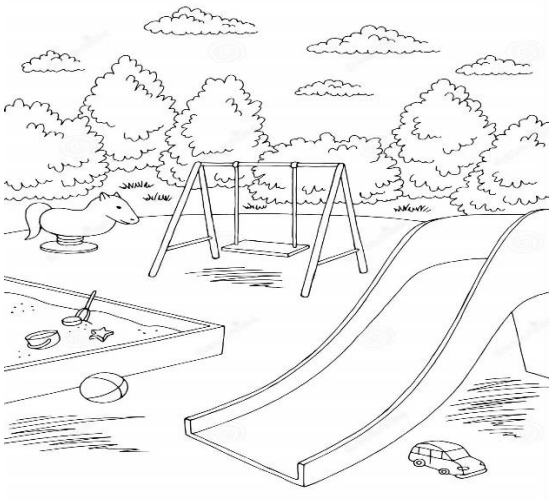
Certificate

This is to certify that THE PROJECT HAS BEEN CARRIED OUT UNDER MY SUPERVISION AND GUIDANCE. The project report has not been submitted for anyother title/award and the work is genuine.

Signature of the Project Supervisor

Project on Basic Amenities





SUBMISION OF PROJECT REPORT FOR VIRTUAL INTERNSHIP PROGRAMME ON SUSTAINBABLE DEVELOPMENT GOALS AND COMMUNITY ENGAGEMENT

1. THEME FOR PROJECT WORK - *Enhancing the Basic Amenities in Anthoniarpuram village*

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3. SDGs to be achieved

- Good health and well being
- Clean water and sanitation
- Decent work and economic growth
- Responsible consumption and production
- Partnership to achieve the goal

4. Background of the study

This report is based on small village called Anthoniyarpuram in Korampallam Panchayat.

Villages play an important part in Indian life. From the prehistoric times, the village has been enjoying an important place as the unit of Indian social structure

"Development of rural areas should not erode their unique identities but must fortify their spirits. The facilities in villages must resemble those of a city but the soul and the values of Indian villages, must be preserved" - The Vice President of India Shri. M. Venkaiah Naidu

I would say that if the village perishes India will perish too. India will be no more India. Her own mission in the world will get lost. The revival of the village is possible only when it is no more exploited.

5.Objectives of the study

The following are the objectives focused in this study

- ✓ Public Libraries
- ✓ Providing drinking water
- ✓ Community harvesting grounds
- ✓ Individual toilets
- ✓ Self-employment
- ✓ Skill developments
- ✓ Citizen service centre
- ✓ Animal Shelter
- ✓ Play ground

Methodology adopted

Public libraries:

Library policy is ruled by Raja Rammohun Roy Library Foundation – **RRRLF**:

RRRLF is a central autonomous organization established and fully financed by the Ministry of Culture, Government of India. RRRLF is registered under the West Bengal Societies Registration Act, 1961. It is the nodal agency of the Government of India to support public library services and systems and promote public library movement in the country commensurate with the objectives as embodied in its Memorandum of Association.

Providing drinking water:

Swajal scheme was launched by the government for sustained water supply in rural areas. 90 per cent of this project is funded by the government and 10 per cent is funded by the beneficiary communities.

The management of this operation is managed by local villagers and hundreds of technicians will be trained under this scheme to maintain and operate the units.

Community harvesting grounds:

Community Supported Agriculture (CSA) is a production and marketing model whereby consumers buy shares of a farm's harvest in advance. Consumers become CSA members by paying an agreed amount at the beginning of the growing season, either in one lump sum or in instalments.

Direct Purchase Centres in Tamil Nadu are opened to procure paddy from the farmers by the government. Normally a Direct Purchase Centre will have an area of about 33 cents and storage facility of 100 MT, drying platform, winnowing machine, electronic weighing scale and moisture meter.

Individual toilets:

The government of India has new launched **SWACHH BHARAT MISSION** on 2nd October 2014.Its benefits included reductions in medical cost, mortality associated with diarrheal diseases, productive time saved from fewer diarrhoea cases and accessing outside defecation options and increase in the property value of having a toilet.

Self-employment:

The Ninth Plan Programme a **Swarnajayanti Gram Swarozgar Yojana (SGSY)** was launched with effect from April 1999 with the merger of IRDP, TRYSEM, DWCRA, GKY, SITRA,

MWS (Million Wells Scheme) into it with the following objectives:

(i) focussed approach to poverty alleviation,

(ii) capitalising advantages of group lending; and

(iii) overcoming the problems associated with multiplicity of programmes

Skill developments:

Pradhan Mantri Kaushal Vikas yojana

Through this scheme - They provide new skills development training through short-term courses for school dropouts, college dropouts and unemployed youth

Citizen service centre:

CSC- Common Services Centres, has been set up by the Ministry of Electronics & IT under the Companies Act, 1956 to oversee implementation of the CSC Scheme.

Animal Shelter:

Animal shelter is a place where a place is maintained by local government or supported by charitable contribution, that provides a temporary home for dogs, cats and any other animal that are offered for adoption and puts to sleep the homeless animals.

Playground:

The Khelo India Scheme which inter-alia includes a vertical 'Play Field Development' which provides for putting in place a strong institutionalized mechanism for preserving, protecting, developing and promoting playfields though setting up of State and District Playfield Associations by the States/UTs on the lines of National Playfield Association of India (NPFAI).

Major Finding –

People in Anthoniyar puram are really good in business related to products from palm tree (Palmyra) Preserved Nungu is one of its value-added products promoted for sale. The edible palm products such as neera, palm jaggery, palm sugar, palm candy, preserved nungu, palm fruit jam and palm chocolate varieties are available in the market.

Roads in Anthoniyarpuram are well maintained so that their connective nearby town never gets disturbed.

Suggestion

i) A library is a place where books and sources of information are stored. They make it easier for people to get access to them for various purposes. Libraries are very helpful and economical too. They include books, magazines, newspapers, DVDs, manuscripts and more. It is believed that a rural library has an advantage over other communication channels such as

media and printed materials in that it can deliver highly personalized services to the village people by • helping the rural children and adults to maintain knowledge gained from their education; helping a rural community.

ii) Ways to get pure drinking water to the villages Installing reverse osmosis units and rain water harvesting storage tanks.

iii) Direct Purchase Centres are opened every year for agriculture , generally throughout the state, depending upon extent of paddy cultivation. This arrangement allows farmers to buy the seeds, transplants, and other inputs they need for the growing season, and pay their farm labour without waiting until harvest to generate revenue.

iv) Bringing about an improvement in the general quality of life in the rural areas by promoting cleanliness, hygiene and eliminating open defecation. Motivate communities and panchayat raj institutions to adopt sustainable sanitation practices and facilities through awareness creation and health education. Encourage cost-effective and appreciate ecologically safe and sustainable sanitation.

v) Anyone who is self-employed (excluding independent contractors) can choose from a variety of business structures, including a partnership, sole proprietorship, corporation and limited liability company (LLC).

Example: It helps in exportation of products of palmyra even from our state

vi) The benefits of Skill Development include increased business profits, improved performance, improved accuracy & quality, improved communication, complies with rules & regulations, improved recruitment & career opportunities and development of good customer relations

vii) Citizen Service Centres is one of the basic needs of the villages. It has been provided various services like Aadhar Card Registration, Aadhar Enrollment, E- Aadhar letter download and print, Pensions, Birth and death certificates, PAN Card etc. so it is very helpful for us.

viii) Shelter house can be constructed in each district, with small health care facilities, stall feed, etc. Animals will find someone to take care of them. We can save abandoned animals as they will find a new home.

ix) Children develop coordination, strength and motor skills in the playground. Playgrounds promote multisensory learning, physical development and are a sure way to spread smiles throughout the community

Impact of this work

This work had a great effect on our leadership qualities. Enabled us to differentiate the way of living in a village and surviving in our city. Every single thing reminded us about our tradition and where we came from.

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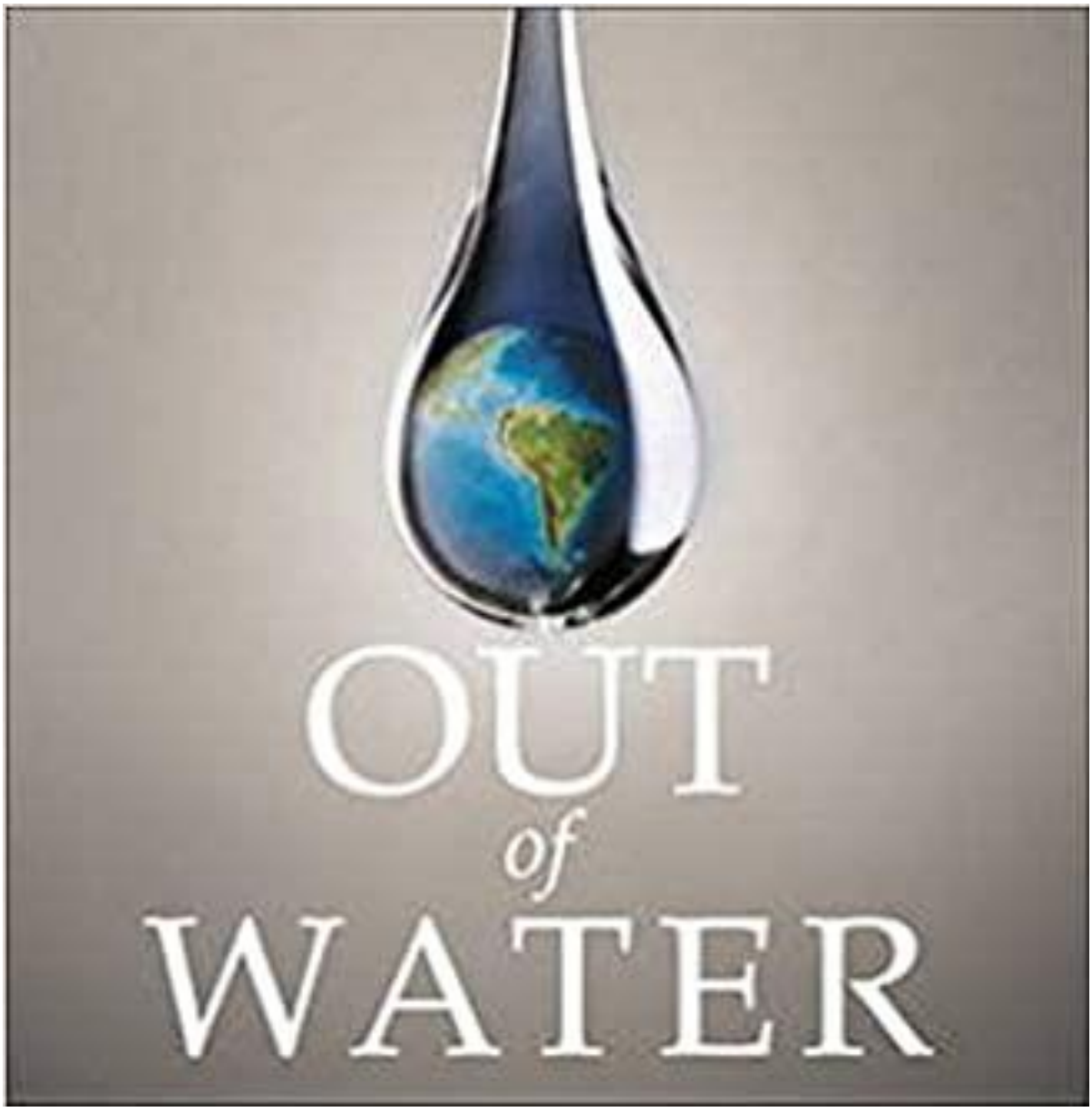
DECLARATION

We declare that the project work is original and carried out by us under the guidance of Dr.A.Lakshmi. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

SIGNATURE



WATER MANAGEMENT

SUBMISION OF PROJECT REPORT FOR VIRTUAL INTERNSHIP PROGRAMME ON

SUSTAINBABLE DEVELOPMENT GOALS AND COMMUNITY ENGAGEMENT

1. TITLE OF THE PROJECT : IMPROVING THE WATER MANAGEMENT FACILITIES IN ANTHONYIARPURAM

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3. UBA THEME FOR PROJECT WORK : " Water management"

4. SDGs to be achieved

- No poverty
- Zero hunger
- Good health and well being
- Clean Water and Sanitation
- Industry, Innovation and Infrastructure
- Life below water
- Life on land
- Partnership to achieve the goal
- Responsible consumption and production

BACKGROUND OF THE STUDY

" Water is an elixir of life". Water management is important since it helps to determine the future irrigation expectations. Water management is the management of water resources under set of policies and regulations. Water is an abundant natural resource, and now its becoming a more valuable commodity due

to droughts and overuse. Our adopted village Anthoniyarpuram faces a water crisis problem. Availability of drinking water is one of the major problems in that village. The problem is that bore water is available for their household works but they don't have drinking water. In their home they are having cattles which also needs clean water. So, the people of Anthoniyarpuram village needs safe drinking water for them and their cattles. Our body is composed of about 60% water. Drinking enough quantity of water every day is important for the health. Drinking water can prevent dehydration, a condition that can cause unclear thinking, result in mood change, cause your body to overheat and lead to constipation and kidney stones. Water helps our body to keep a normal temperature. The functions of these body fluids include digestion, absorption, circulation, creation of saliva, transportation of nutrients and maintenance of body temperature. The people in that village are paying money to get drinking water. Even though the water bought is not pure and healthy. The groundwater in that village contains more salinity it is not good enough for their drinking purpose. Primary Salinity is caused by natural processes such the accumulation of salt from rainfall over many thousands of years. The small amount of salt brought by the rain can build up in soils over time and can also move into the ground. With this impact we came out with some ideas to solve their water scarcity problem.

6. Objectives of the study

Before we enter into the objectives, we want to acknowledge the great person "**WATER MAN OF INDIA"**, **Rajendra singh** who is our true inspiration.

Water plays an important role in both agriculture and aquaculture, as great quantities of water are used in both processes. As a result, water used in both

agriculture and aquaculture has to be of sufficient quality so as not to be damaging to human health.

The main goal of water management in Anthoniyarpuram is to supply and securing of clean and sufficient drinking water for the population. It also entails managing water related risks including floods, drought and contamination of water. One of the goals of water resource management is water security. It is not possible to 'predict and plan' a single path to water security for rapidly growing and urbanizing global populations. This is due to climatic and non-climatic uncertainties. To help strengthen water security, there is a need to build capacity, adaptability and resilience for the future planning and management of water resources. The complexity of relationships between water and households, economies, and ecosystems, requires integrated management that accounts for the synergies and trade-offs of water's great number uses and values.

According to the World Bank, water management seeks to harness the benefits of water by ensuring there is sufficient water of adequate quality for drinking water and sanitation services, food production, energy generation, inland water transport, and water-based recreational, as well as sustaining healthy water-dependent ecosystems and protecting the aesthetic and spiritual values of lakes, rivers, and estuaries. It also includes promoting conditions for environmentally sustainable, economically efficient and equitably allocated use of water resources. They also include to increase the benefits and reduce the risk related to existing hydraulic infrastructure.

Throughout these projects, a common objective is to integrate policy approach within other sectoral policies in a wider area across the country. This includes often developing social, technical and administrative water resource management tools. Within water management, a key component is not only the

policy, but a process or plan on how to implement such a policy. Furthermore, policy should not be confused with legislation. After a policy has been adopted, legislation needs to be examined to see where amendments and changes are needed.

7. METHODOLOGY

Artificial ponds

Artificial ponds are best method to store rainwater in village. The village receives heavy rainfall from north east monsoon. But in summer there is no water in ponds and borewells became dried. Ground water levels is low. Borewell needs atleast 150 feets to get water, even though Ground water is too salty and not fit to drink.

To fullfil increase ground water level, reduces salinity of ground water and stores water for summer , there is one and only thing to solve these is rain water harvesting thereby using artificial ponds.

In November 2020, Tamilnadu government started a scheme for 100 percentage subsidy for construction of farm ponds and 50 percentage subsidy for farm pond lining. These scheme available only in Dharmapuri, Krishnagiri, Thiruvannamalai and Thoothukudi. So, there is no need to worry about money for construction. But they have to arrange land for farm ponds.

There is two types of farm ponds. They are Embankment farm pond and Excavated or dug farm pond.

The village is low lying area , so embankment type is suitable. Embankment farm pond is not famous than excavated type. Embankment farm pond requires lot of money. In order to get subsidy for farm pond, farm pond should be 10 meters deep and 30 meters wide.

ERADICATION OF *PROSOPIS JULIFLORA* (KARUVELAM TREE)

The village is situated in Highway from Tuticorin to Tirunelveli. There is a pond located opposite side of Highway. Currently they are using this pond as a water source.

In pond, there is lot of *Prosopis juliflora* (karuvelam) tree had grown which absorbs four times water than any other tree. Karuvelam tree produces less oxygen and absorbs more carbon dioxide,whereas other trees produces more oxygen and less carbon dioxide. These trees are major reason for dry ponds.

In October 2015 , Madurai bench of Madras court ordered Tamilnadu government to uproot karuvelam tree. So, government supports rural village people in uprooting karuvelam tree. Uprooting these trees will reduce the drying of rain water in the pond.

BORE WELL IN POND

Borewell in pond is another good source of water. Because river water provided to Thoothukudi municipal area is obtained by borewell in Thamirabarani river. We can use this method in pond which is situated in front of the village. But this water is not suitable for drinking purpose. In order to use this water as drinking source, there is a need of water purifier for whole village. They can start their own or government can initiate a water purifier plant. To start purifier plant, two things are needed, they are water purifier which costs about 30,000rupees and just a small room. These are enough source for drinking water for whole village.

MAJOR FINDINGS IN ANTHONIYARPURAM

Demography

There are three blocks lying partially in Korampallam sub basins. They are Ottapidaram, Thoothukudi and Karungulam blocks in Thoothukudi District.It includes 12 villages.

WATER POTENTIAL

Surface water potential

75% Dependable surface water potential in korampallam Sub basin is 44.73MCum

Ground water potential

Ground water has become a major source for irrigation the ground water scenario of the basin should be watched and the timely action has to be taken for ground water regulation management, conservation and augmentation of this natural resource.

SUGGESTION TO THE FARMERS

In Anthoniyarpuram the runoff water is not checked properly and causes stagnation of water or soil erosion. In order to get rid of the water scarcity we suggest to set up a water harvesting through farm ponds.

Water harvesting through farm ponds

Farm ponds are small storage structures constructed at the lowest point of the field in Anthoniyarpuram. It helps to collect and store runoff waters in Anthoniyarpuram. The runoff water from various parts of area in Anthoniyarpuram can be properly guided through water ways to the farm ponds. The size of the farm ponds depend on the quantity of rainfall, soil type and estimated runoff in Anthoniyarpuram.

Types of ponds

Based on the water source and their area in Anthoniyarpuram, farm ponds are grouped into four types.

Dugout ponds

These are excavated at the site and the soil obtained by excavation is formed as embankment around the pond. The pond is fed either by surface runoff water or groundwater wherever aquifers are available. The stored water can be used for protective irrigation to crops.

Surface water ponds

A low-lying area can be chosen for the construction of the pond in Anthoniyarpuram. These ponds are partially excavated and embankments are constructed to retain the water which is the most common type of farm ponds.

Spring or creek fed ponds

This pond is constructed based on the availability of natural springs or creeks.

Off – stream storage ponds

These ponds are constructed by the sides of the streams where the flow of water is only seasonal. The water from the streams is conveyed to storage ponds and utilised for irrigation of crops.

Advantages

- The harvested water can be used for irrigation to crops at critical situations
- Minimizes soil erosion as the runoff water is properly guided by the water ways.
- Stored water can be used as drinking water for animals and for fish rearing.

- Helps in raising ground water levels.
- Dilutes the salt content of the water in wells.
- Reduces the soil erosion.
- Intrusion of the seawater into the land is prevented.

IMPACTS

We collect data about the dynamic places, people, and facilities around them. We grabbed lot of knowledge regarding techniques of water management. We got bucket of ideas to solve the problems which the people had. This work enables us to examine the way scientific theories interact with real life. Palm trees surrounding that village symbolically, says the pinnacle of the youth span in the life.

JAL JEEVAN MISSION(Rural Water supply)

It is envisioned to provide safe and adequate drinking water through individual household tap connections by 2024 to all households in rural India

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DECLARATION

We declare that the project work is original and carried out by us under the guidance of Dr.A.Lakshmi. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

SIGNATURE

Submission of Project Report for Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. Title of the Project : **To study about Basic Amenities in Palaiyakayal in Thoothukudi District**
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3. UBA theme for Project Work : **(e) Basic amenities**

(a) Organic Farming (b) Water management

(c) Renewable energy (d) Artisans, industries and livelihood

(e) Basic amenities (f) Convergence

3. SDGs to be achieved :¬¬¬¬¬¬¬¬¬¬¬¬ **xv. Life on Land**

- No poverty
- Zero hunger
- Good health & Well-being
- Quality education
- Gender equality
- Clean water and sanitation
- Affordable & clean energy
- Decent work & economic growth
- Industry, innovation a infrastructure
- Reduced inequality
- Sustainable cities & communities
- Responsible consumption and production
- Climate action
- Life below water
- Life on land
- Peace & justice strong institutions
- Partnerships to achieve the goal

Introduction:

Thoothukudi (formerly Tuticorin), is a port city, a municipal corporation and an industrial city in the Indian state of Tamil Nadu. Thoothukudi is also known by the name 'Pearl city'. Palayakayal is a Village in Srivaikundam Block in Tuticorin District. It is located 17 KM towards South from District head quarters Thoothukudi. 9 KM from Srivaikundam. 633 KM from State capital Chennai

Background of the study:

This survey was conducted among village in Palayakayal in Thoothukudi District in Tamilnadu.

Access to basic amenities like drinking water, sanitation, electricity, housing, drainage and others are crucial to the well-being as they contribute to physical and material comfort and quality of life. They also benefits by ensuring better health, environment and providing opportunities for other useful activities. Access to basic amenities also enables the household to save foregone hours spent to arrange when these are not available in day to day life. Its importance has been highlighted in the international arena since it got included in the Millennium Development Goals. The importance of basic amenities for well-being and raising the standards of living. They have also laid down initiatives, assistance, norms and standards.

Food is the basic human need to stay alive. A food is something that provides nutrients. Nutrients are substances that provide: energy for activity, growth, and all functions of the body such as breathing, digesting food, and keeping warm; materials for the growth and repair of the body, and for keeping the immune system healthy. Moreover, it is the need of every living organism. Therefore it is important that we should not waste food.

Shelter is a basic human need crucial for survival in cases of natural hazards or conflict. Shelter provides security, personal safety and protection from the weather, and prevents ill health and disease. Shelter plays an essential role in reducing vulnerability and building resilience. It can give you a feeling of well-being. It can help you maintain your will to survive. In some areas, your need for shelter may take precedence over your need for food and possibly even your need for water.

Like food and shelter, the cloth is one of the basic needs. We need clothes because clothes give us protection and they also keep our bodies warm. In addition, people wear clothing for functional as well as social reasons. We need clothes to protect ourselves from heat, dust, rain and cold. Second most important reason for us to wear clothes is to protect ourselves from any possible injury. The wearing of clothing is mostly restricted to human beings and is a feature of all human societies.

Toilets are crucial for the healthy development of people, not to mention children. So is sanitation – facilities and services for safe disposal of human urine and feces includes maintaining hygiene through services such as garbage collection and wastewater disposal. The overall purpose of good sanitation is to provide a healthy living environment for everyone, protect the natural resources such as surface water, groundwater, and soil, and provide safety, security and dignity for people when they defecate or urinate.

Objectives:

The following objectives focused on this study:

- To identify the basic amenities needed for the village.
- To impart technology to bring in the needful amenities.

Methodology adopted

The present study is analytical and descriptive in nature. A questionnaire was structured to elicit the required information from the respondents. The data were collected from 50 sample respondents. The study is based on basic amenities at palayakayal village. Hence, the questionnaire is related on basic needs like food, shelter, clothing and sanitary. Percentage analysis was used to analyse the collected data.

Major findings

- Majority of the respondents (63%) are female.
- Most of the respondents (42%) are in between the age of 26-35 years.
- Majority of the respondents (79%) are married.
- Majority of the respondents (30%) are graduates
- Most the respondents (40%) do own business
- Most of the respondents (80%) are having 4 members in a family.
- Majority of the respondents (51%) are facing sanitation problems.
- Most of the respondents (74%) suffer from water borne diseases.
- Majority of the respondents (80%) have bore or well at their home
- Most of the respondents (69%) suffer from improper drainage for water in rainy days

Suggestions

- Government may take measures to construct schools and health care centres
- People can be given awareness regarding improvement of sanitation
- Proper roads can be constructed to have proper transport
- Proper drainage can be constructed to drain rain water
- Students can be given good education
- General public must understand their responsibility to take care of their surroundings

Impact of working

Today India is a developing country, but there are villages which is still in its underdeveloped stage. Palayakayal is one among the village with lot of problems to live, these problems starts with hospital facilities, schools and even with improper sanitation facilities. Government must take proper measures to impart technology to bring in needful measures. People must also take equal responsibility to take care of their surroundings.

DECLARATION

We declare that the project work is original and carried out by us under the guidance of MS. MANUEL INFANY.T. The project work has not been submitted elsewhere forthe award of any degree and the work is genuine.

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SANTHANA AKSHAYAA. S.P

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Name of the Regional Coordinating Institute of UBA: GANDHIGRAM RURAL INSTITUTE, DINDUGAL DISTRICT

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title/ award and the work is genuine

Signature of the Project Supervisor

Proforma for the Submission of Project Report forVirtual

Internship Programme on Sustainable DevelopmentGoals and

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3. UBA theme for Project Work :(b) Water management

(a) Organic Farming (b) Water management

(c) Renewable energy (d) Artisans, industries and livelihood

(e) Basic amenities (f) Convergence

4. SDGs to be achieved :xv.Life on land

i.No poverty

ii. Zero hunger

iii.Good health & Well-being

iv. Quality education

v. Gender equality

vi. Clean water and sanitation

vii. Affordable & clean energy

viii. Decent work & economic growth

ix. Industry, innovation and infrastructure

x.Reduced inequality

XI.Sustainable cities & communities

xii. Responsible consumption and production

xiii. Climate action

xiv. Life below water

xv. Life on land

xvi. Peace & justice strong institutions

xvii. Partnerships to achieve the goal

5. Background of the study :

Water is the basic necessity of every human being, but water scarcity is a major issue that is rising very rapidly in India nowadays. The problem has become so severe that in many states the groundwater has almost dried up and people have to depend on water supply from other sources. In addition, water is one of the most misused natural resources that we still waste. It is the central point of our lives but unfortunately, not our priority concern.

Water is essential for our survival. The field of water resources management will have to continue to adapt to the current and future issues facing the allocation of water. With the growing uncertainties of global climate change and the long-term impacts of management actions, the decision-making will be even more difficult. It is likely that ongoing climate change will lead to situations that have not been encountered. As a result, alternative management strategies are sought for in order to avoid setbacks in the allocation of water resources

Ideally, water resource management planning has regard to all the competing demands for water and seeks to allocate water on an equitable basis to satisfy all uses and demands. As with other resource management, this is rarely possible in practice.

The interplay of numerous elements that influence accessand exploitation of water resources is complex, and in light of the growing demand forwater, holistic and people-centered approaches to water management are more vital.Clearly, drinking water is far too important and basic to be put only in the hands of oneorganisation. If we are serious about socioeconomic growth, we will require everyone'sunited initiative and action. We can have safe drinking water if we make up our minds to do something about it.

Water scarcity is asevere problem in Thoothukudi that is worsening at an alarming rate. The problem hasgotten so bad that groundwater has nearly completely dried up, forcing people to rely on water from other sources. Water is also one of the most mismanaged natural resourcesthat we continue to waste. It is the focal centre of our existence, yet it isunfortunately not a top priority.

Korampallam water scarcity :

1. Physical characteristics of groundwater

It can be inferred that the physicalcharacteristics of the groundwater from various localities of Thoothukudi city such as temperature, pH, conductivity, turbidity, dissolved oxygen, total dissolved solids and salinity are within acceptable limits as prescribed by IS 10500: 2012 and the WHO guidelines for drinking water.

2. Microbiological characteristics of groundwater

Except for the sample from Muttayyapuram all the other samples do not have any microbiological contamination. At Muttayyapuram the coliform count is 300 MPN which is above the prescribed limit of <2 MPN.

3.Chemical characteristics of groundwater

As far as the major element concentrations in the groundwater samples of the Thoothukudi city is concerned, it is observed that Ca is above the IS 10500: 2012 prescribed desirable limit of 75 ppm in 8 of the 13 localities. However, the Ca concentrations are below the permissible limit of 200 ppm. Among the heavy metals measured, As at 0.012 ppm and 0.017 ppm, respectively for G 9 of Kothalarivilai and G 12 of Muniasamy Nagar are above the desirable limit of 0.01 ppm but below the permissible limit of 0.05 ppm prescribed in the standard.Cd exceeds the desirable and permissible limit of 0.003 ppm in all the samples. The exceedance factor ranges from 1.33 to 3.67 times with an average of 2.57.Hg content in groundwater collected from 9 out of 13 localities is extremely high with reference to the desirable and permissible limit of 0.001 ppm. Exceedance factors ange from 4 to 211 times that of the acceptable limit. The worst affected areas in the order of decreasing intensity of contamination are Rathanapuram>Polpettai>Kothalarivilai>Muniasamy Nagar >MathaKoil>Melur> Rajiv Nagar >Muttayyapuram>Mattakadai. This is a serious cause for concern as mercury is a hazardous contaminant.The heavy metals Cr, Cu, Mn, Ni, Pb, Zn, and Mo in the groundwater are all within acceptable limits in all the sampling locations.Overall, Hg in groundwater poses the highest threat to human health in Thoothukudi city followed by Cd and As. Based on these results, it can be concluded that the groundwater from all these localities in Thoothukudi are unfit for human consumption.

6. Objectives of the study :

- To supply and secure clean and sufficient drinking water for the public.
- To find out the problems faced by general public in getting fresh water andmanaging waste water management in Thoothukudi city.

7. Methodology adopted :

A sampling plan for groundwater collection was preparedsuch that sampling locations covered major residential areasof Thoothukudi city. Accordingly. 13 groundwater samplesfrom different localities of the city were collected accordingIS 3025: 1987 standard.

Similarly, 5 samples of lake water were collected from theKorampallam lake. The coordinates of the sample locationwere marked using a handheld GPS (Garmin eTrex). In situ analysis of the parameters such aspH.color, temperature. salinity, conductivity, totaldissolved solids (TDS), turbidity, and dissolved oxygenusing a portable water analysis kitwere measured(Systronics TYPE 371)The remaining sample was split in three parts and storedappropriately in sterile high-density polypropylenecontainers for further analysis. On one part of the samplemicrobiological examination was caried out according to IS1622: 1981, another part was analyzed for the elements Na,Ca, and K using flame photometer and the last part wasanalyzed for heavy metals such as arsenic (As), cadmium(Cd) chromium (Cr). copper (Cu). mercury (Hg).manganese (Mn), nickel (Ni), lead (Pb), zinc (Zn), andmolybdenum (Mo) using Inductively Coupled Plasma-Optical Emission Spectrometry (ICP-OES).

(i) Water Level and quality measurements through wells, piezometers, DWLR with telemetry, ground water elevation.

- In general, water levels in the observation wells and piezometerscan be taken manually by measuring tape. This is the simple, cost effective, good accuracy and less maintenance method. Water Levels are observed above the Measuring point.
- Monitoring water level in DWLR with telemetry is costly, high maintenance, good accuracy, get the data immediately on desktop, easy to analysis purpose.
- The water quality generally is analysed in the Chemical Lab only by collecting water samples in Pre Monsoon and post Monsoon period in the field. Sometimes, instant kits are used for analyzing the TDS and Ph level in the water.

(ii) Metering water supply to confirm contribution from groundwater.

- ❖ Metering the water supply is essential one to monitor the overall usage of groundwater by different sectors. Flow meter must be fixed in every extraction structure and it has to be monitored periodically by Government officials.

8. Major findings :

- Majority of the respondents (78.676) get fresh water fromMunicipal Corporation.
- Most of the respondents (37.9%) get water supply once in two days.
- Limited Fresh water availability in sedimentary areas as floating lenses makes the coastal tract vulnerable for water quality changes.
- Groundwater in alluvial /tertiary aquifer in the eastern part of the district is in hydraulic connection with the sea and hence it is vulnerable for saline water ingress
- Majority of the respondents sometimes collect rain water using rainwater harvesting system. (86.4%)
- Majority of the respondents (37.1%) monthly water bill is between Rs100-200.
- Majority of the respondents have bore or well at their home. (64.3%)

9. Suggestions / Recommendations :

As the development of ground water has already reached an optimum stage in many of the blocks of this district, further development of ground water for creation of additional irrigation potential has to be carried out with extreme caution, considering the poor sub-surface storage capacity.

a) Necessary measures for regulating the exploitation of ground water may be implemented in coastal blocks of the district. The Teri sands and fresh water bearing.
b) Tertiary sandstone area along the coast has to be notified as ground water sanctuaries and further development has to be only for drinking water purposes.
c) Roof top harvesting and direct use from ground level storage is suggested for coastal habitations including Tuticorin town so that the public water supply from distant source can be managed in a better way.
d) Modeling of coastal aquifer is needed for various stress conditions in view of brine water and fresh water development in this area.

e) Intensive monitoring of ground water levels and water quality is to be taken up in the coastal areas of the district to monitor the movement of fresh water – saline water interface.
f) Artificial recharge of ground water through cost-effective rain water harvesting systems may be popularized in the district by providing incentives to individuals/communities embarking upon such initiatives. A concerted effort involving various Government agencies and NGOs can create the necessary awareness among the rural masses.
g) Waste land development programme and micro irrigation system has to be implemented for increasing the agricultural produces by way of more food and income per drop of water in view of the limited water resources in the districts.

10. Impact of this work on learning of students/teachers:

Earlier, people understood the value of water and planned their lives around it. Moreover, many civilizations were born and lost around water, but today, in spite of having knowledge, we still fail to understand the value of water in our lives.

Institutions related to water resources management and legislations have evolved to manage the water resources of the Volta, both in relation to its hydroelectric usage and its use for domestic and commercial purposes. Some of the relevant acts for establishing new institutions and strengthening existing ones when it comes to managing water resources in Ghana, and in particular the Volta Basin are as follows:

- Act 46 of 1961 (Volta River Development Act) sets up the Volta River Authority (VRA) with mandate to plan, execute, and manage the development of the Volta River. Subsequent Acts such as Act 490 of 1994 establishes the Environmental Protection Agency (EPA) of Ghana.
- Act 522 of 1996 establishes the Water Resources Commission.
- Also, there are institutional structures and legal frameworks established in the riparian countries of the Volta Basin for environmental management and documented by various country reports.

Many traditional methods such as rainwater collection, harvesting are being refined, while more moderntechnologies suchas artificial recharge, desalination, and water reuse are being created.

Additional support is needed for policy approaches such as demand management, which emphasizesmore efficient use of water resources, as well as technical solutions on the supply side.

The projected increased variability in the availability and distribution of freshwater resources needs political commitment to maintaining and upgrading hydrological data collection and analysis technologies. With more current data, policymakers will be able to make better informed decisions about water resource management.

DECLARATION

I / We declare that the project work is original and carried out by me / us under the guidance of ____Nevathitha.P_____. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

Signature(s)

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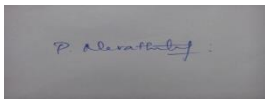
AISHE code of the Participating Institute : C-41151

Name of the Regional Coordinating Institute of UBA: Gandhigram Rural Institute - Deemed to be University, Dindigul.

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title / award and the work is genuine.

Signature of the Project Supervisor



Submission of project Report Virtual internship programme on sustainable Development Goals and Community Engagement

1.Title of the Project :GENERAL PUBLIC OPINION ABOUT WATER RESOURCES MANAGEMENT IN THOOTHUKUDI CITY.

2.Details of participants:

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7	VC010466	SONIA	MICROBIOLOGY	Soniarmstrong2003@gmail.com	7639364484

3. UBA theme for project work:WATER MANAGEMENT

4.SDGs to be achieved :LIFE ON LAND

5.Background of the study:

Water Resources Management is the activity of planning,developing.distributing and managing the optimum use of water resources.It is an aspect of water management .

Water is essential for our survival.The field of water resources management will have to continue to adapt to the current and future issues facing the allocation of water.With the growing uncertainties of global climate change and the long - term impacts of management actions,the decision-making will be even more difficult.It is likely that onging climate change will leadto situations that have not been encountered.As a result, alternatives management strategies are sought for in order to avoid setbacks in the allocation of water resources.

Ideally,water resources management planning has regard to all the competing demands for water and seeks to allocate water on an equitable basis to satisfy all uses and demands.As with other resource management,this is rarely possible in practice.

One of the biggest concerns for our water-based resources in the future is the sustainability of the current and future water resources allocation.[1]As water becomes scarce,the importance of water management grows vastly-finding a balance between human’s needs and the essential step of water resources sustainability in the environment.

6.Objectives of the study:

The following are the objectives focused in this study:

*To study the public opinion about water resource management i.e fresh water and waste water in thoothukudi city.

*To find out the problems faced by generals public in getting fresh water and managing waste water management in thoothukudi city.

7.Methodology adopted:

The methodology to achieve the project goals is the use of UWRM concept by holistically viewing the urban water network and all levels of the aquatic system according to the principle of emissions /immissions .urban water management involves comprehensive look at all urban resources :the lake as a source of drinking water and asset worthy of protection,restoration of the urban waters network,storm water management ,and waste water treatment.

8.Major findings:

General public opinion about water resources management in'' thoothukudi city ''

*Majority of the respondents (57.9%)are female.

*Majority of the respondents (70%)are married.

*Majority of the respondents (37.1%)are private employee.

9.Suggestion/Recommendation:

Its critical to generate awaresness about the crisis and motivate people,businesses,and government agencies to take action. This includes educating people about the scope and impact of water scarcity ,how to conserve water,and how to support water organization helping people get access to clean water.

10.Impacts of water resource management water scarcity affects more than 40%of the global population.water -related disasters account for 70%of all deaths related to natural disasters.The world bank helps countries ensure sustainability of water use,build climate resilience and strengthen integrated management.

DECLARATION

I/we declare that the project work is original and carried out by me /us under the guidance of NEVATHITHA P .The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

Signature

Details of project supervisior

Name of the project supervisior : NEVATHITHA P

Mobile number : 8903528638

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Area of specialization : Enivornmental Microbiology

Name of the participating institute of UBA : St . Mary,'s college (Autonomous), Thoothukudi.

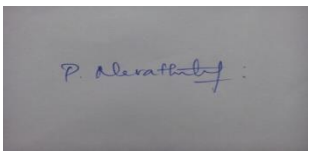
AISHE code of the participating institute : C- 41151

Name of the Regional coordinating institute of UBA: : Gandhigram Rural Institute - Deemed to be University, Dindigul.

Certificate

This is to certify that the project has been carried out under my supervisior and guidance.The project report has not been submitted for anyother title/award and the work is genuine.

Signature of the Project Supervisor



Proforma for the Submission of Project Report for
Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. Title of the Project:GENERAL PUBLIC OPINION ABOUT WATER

2. Details of Participant(s) :

Sl. No.	Unique ID	Name of the participant	Programme of study	Email ID	Mobile No.
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3.UBA theme for Project Work : ___(b.)Water managment___

(a) Organic Farming (b) Water management

(c) Renewable energy (d) Artisans, industries and livelihood

(e) Basic amenities (f) Convergence

4.SDGs to be achieved :___xv.Life of land___

i. No poverty
ii. Zero hunger
iii. Good health & Well-being
iv. Quality education
v. Gender equality
vi. Clean water and sanitation
vii. Affordable & clean energy
viii. Decent work & economic growth
ix. Industry, innovation and infrastructure
x. Reduced inequality
xi. Sustainable cities & communities
xii. Responsible consumption and production
xiii. Climate action
xiv. Life below water
xv. Life on land
xvi. Peace & justice strong institutions
xvii. Partnerships to achieve the goal

5.Background of the study :

All life on Earth depends on water, a vital natural resource. Natural resources—such as water, air, plants, wildlife, soil, and fossil fuels—are used by humans for the basic necessities of life, including food, drinking water, energy, and shelter. As a crucial resource for human life, access to freshwater has historically determined where civilizations began and thrived. Freshwater exists on Earth's surface in lakes, rivers, and ice, as well as below the surface as groundwater. However, it is a limited resource; freshwater makes up only about three percent of all water on Earth.

Athough freshwater is considered a renewable resource, the use of freshwater in some regions exceeds the ability of natural processes to replenish supplies. When the demand for freshwater cannot be met, it can lead to political tension and public-health problems. Distribution issues may arise when freshwater supplies, such as lakes, cross political boundaries. They can also occur when human activities upstream on a river adversely affect communities living downstream. Those activities can include dumping pollutants into the river or diverting large amounts of water away from where the water typically flows.

Ecosystems vary in the amount of water they hold. Places with hot and dry climates, like deserts, do not have as much freshwater as areas with cool, wet climates. North Africa and the Middle East, which are primarily desert environments, are two areas most affected by water shortages. Even in a water-rich ecosystem, such as one along a major river, the amount of available freshwater can be limited. Factors affecting water supplies in these areas include the amount of precipitation, as well as human activities, such as industry and farming, that can degrade water quality

Managing the quality of both surface water and groundwater is vital for sustaining aquatic ecosystems, which is important to protect the considerable diversity of waterways types in Western Australia, the unique biodiversity they support, and the social and economic services they provide to our community.Water quality improvements plans are developed to improve current water quality in estuaries and the rivers and streams in their catchments, and to prevent additional deterioration.

Water resource management is the activity of planning, developing, distributing and managing the optimum use of water resources. It is an aspect of water cycle management.

Water is essential for our survival. The field of water resources management will have to continue to adapt to the current and future issues facing the allocation of water. With the growing uncertainties of global climate change and the long-term impacts of management actions, the decision-making will be even more difficult. It is likely that ongoing climate change will lead to situations that have not been encountered. As a result, alternative management strategies are sought for in order to avoid setbacks in the allocation of water resources.

Ideally, water resource management planning has regard to all the competing demands for water and seeks to allocate water on an equitable basis to satisfy all uses and demands. As with other resource management, this is rarely possible in practice.

One of the biggest concerns for our water-based resources in the future is the sustainability of the current and future water resource allocation.[1] As water becomes scarce, the importance of water management grows vastly—finding a balance between humans' needs and the essential step of water resources sustainability in the environment.

Water scarcity (closely related with **water stress** or **water crisis**) is the lack of fresh water resources to meet the standard water demand.Water scarcity is a severe problem in thoothukudi it is worsening at a alarming rate.The problem has so bad that the ground water has nearly completely dried up Forcing people to rely on water from other sources.

6.Objective of study :

Thoothukudi city has an area of 91 sq.km and has a population of 4, 10,760 according to the Government of India Census 2011. It is a port city with a busy harbour and many largescale industries. Most of the heavy industries deal with processing of hazardous materials, such as copper smelting, fertilizer manufacturing, heavy water production, thermal power production and sea food processing (Arasu et al., 2016). Based on the 2011 population of the city and as per the WHO (2019) recommended quantity of 20 litres per day for food and drinking water requirement per person a total quantity of 8.21 million litres per day is required for the city. This quantity is likely to have increased by 10% by now. Considering that Thoothukudi city is situated along the coast, this requirement will have to be met entirely from

> ground and surface water resources. Drinking water supply in Thoothukudi city is scarce as most of the surface water bodies such as lakes and streams are dry during eight months in a year apart from the monsoon and post-monsoon seasons. The channels connecting to Thamiraparani river either remain dry or are filled with the city's sewage. There is only one large surface water body, the Korampallam lake, which holds water during the post-monsoon season. However, even Korampallam receives sewage and other effluents from the surrounding areas.

People in thoothukudi said that:

Even after waiting for long hours in front of water sources, the people could collect only two pots of water, said S. Ramalakshmi, a resident of Auto Colony.

Corporation authorities should ensure water supply to residential localities through tankers. During November 2015, Thoothukudi was hit by flash floods. Had the authorities taken adequate measures to conserve the water, this crisis would not have arisen now, said R. Muthuvel, a resident of New Colony.

M. Krishnamurthy, environmental activist and District Coordinator, Unorganised Workers' Federation, said water-guzzling industries had been severely affecting the lives of the people.

Welcoming the district administration's order preventing industries from drawing water from the Tamirabharani, he said such industries should be closed during crises.

But at the same time, groundwater, which was the only and the last hope of the people, was being drawn indiscriminately by water tanker operators, who mainly cater to industries.

Mr. Krishnamurthy said the authorities concerned should monitor water supply to industries. Now, the situation turned grim as a pot of water was sold at Rs. 20. But even then, water was not easily available.

Around 10 thermal power plants were functioning in Thoothukudi, which had about 1,133 industries, and it required about 1.5 lakh litres of water to produceg 1000 MW of electricity, he said.

P. Velmurugan, a resident, said in 2013, the State government proposed to set up a 100 million litres per day (MLD) seawater desalination plant here, but there was no progress on that. Desalination plant was essential for Thoothukudi to overcome the water crisis, he stressed.

7.Methodology adopted :

A sampling plan for groundwater collection was prepared such that sampling locations covered major residential areas of Thoothukudi city. Accordingly, 13 groundwater samples from different localities of the city were collected according IS 3025: 1987 standard. Similarly, 5 samples of lake water were collected from the
Korampallam lake. The coordinates of the sample locations were marked using a handheld GPS (Garmin eTrex). Table 1 provides the details about the sample locations and the sample types. The study area and the sample locations are shown in Figure 1. In situ analysis of the parameters such as pH, colour, temperature, salinity, conductivity, total dissolved solids (TDS), turbidity, and dissolved oxygen were measured using a portable water analysis kit (Systronics TYPE 371).
The remaining sample was split in three parts and stored appropriately in sterile high-density polypropylene containers for further analysis. On one part of the sample microbiological examination was carried out according to IS 1622: 1981, another part was analysed for the elements Na, Ca, and K using flame photometer and the last part was analysed for heavy metals such as arsenic (As), cadmium (Cd), chromium (Cr), copper (Cu), mercury (Hg), manganese (Mn), nickel (Ni), lead (Pb), zinc (Zn), and molybdenum (Mo) using Inductively Coupled PlasmaOptical Emission Spectrometry (ICP-OES).

8.Major findings :

Followingarethefindingsinregardtovariousresponsefromtherespondents regarding “GeneralPublicOpinion about WaterResources Management in ThoothukudiCity”,

- ❖ □ Majorityof the respondents(57.9%)are female.
- ❖ □ Most of the respondents(38%)areinbetween the ageof 26-35years.
- ❖ □ Majority of the respondents(70percent) aremarried.
- ❖ □ Majorityof the respondents(33.7percent) are graduates.
- ❖ □ Most of the respondents(37.1percent) are private employee.
- ❖ □ Majority of the respondents(50.7percent) are not earning.
- ❖ □ Most of the respondents (57.1%)arehaving4members In a family.

- Majority of the respondents(78.6%) get freshwater from Municipal Corporation
- Mostof the respondents(37.9%)getwatersupplyonce in twodays.
- Majority of the respondentssometimes collectrainwaterusing rainwater harvestingsystem.(86.4%)
- Majorityof the respondents(37.1%)monthlywaterbill isbetweenRs.100-200.
- Most oftherespondents(59.3%)opined that thefreshwaterisclean todrink.
- Majorityofthe respondentshaveboreorwellattheirhome.(64.3%)
- Majority of the respondents(27.1%)don't consume groundwater.
- Majority of therespondentsdoesn’tusewaterpurifier at their living space.(50.7)
- Majority of the respondents know about waterpurifierby their friend’s/relative’sreferences.(30.7%)
- Most of the respondentsdon’tprefer to usewaterpurifierforlongyears.(47.9%)
- Majorityofthe respondents doesn’t know aboutthe capacityof water purifier becausethey didn’tuse that.(47.1%)
- Most of the respondents agree that ROis beneficialin cleaninggerms.(36.4%)
- Majorityof the respondents(51.4%)doesn’tconsume ROpurifiersthey are notfamiliar inthebrand of waterpurifier.
- Majorityofthedoesn’tprefertoreusethewastewaterintheir housesformultiplepurposes.(71.4%)
- Most of the respondents(77.9%)prefer to clean theirdrainageonceintwomonths.

- □ Majorityof the respondents(65%)doesn’tcomeacross theleakageproblemintheir sceptictanks.
- □ Mostof the respondents(72.1%)didn’tsufferfrom waterbornediseases.

9.Suggestions / Recommendations :

- ☆ Thegovernmentandeducationalinstitutionsmay conduct awareness
- Championsto educate the generalpublictoutilize thewatereffectively to savewaterresources in their livingspace.
- ☆ Wastewaterbe recycled,irrigationandagricultural techniquesbeimproved andmakeit familiarized with each individuals.
- ☆ Thegovernmentcan initiatenewwaterconservation technologytomanagewastewater.
- ☆ Thegovernmentandeducationalinstitutions can take innovativemeasures inpurifyingthewater.
- ☆ The government should workonaddressingfreshwaterscarcityanddevelopconservationsolutions;energyusageis a criticalfactorto consider.
- ☆ Therearea variety oftechnologies that allow thepublic to recycle rainwaterand othertypesofwater in the livingspace.
- ☆ The government shouldtl take necessary steps tomanage the drainagesystem periodically.
- ☆ The general publicmust understandim it is their duty to takecare of thesurrounding

10.Impact of this work on learning of students/teachers:

Water scarcity involves water crisis, water shortage, water deficit or water stress. Water scarcity can be due to physical water scarcity and economic water scarcity. Physical water scarcity refers to a situation where natural water resources are unable to meet a region's demand while economic water scarcity is a result of poor water management resources.

There are millions of people all over the world who don't have access to water, or, if they do, that water is unable to be used. About 70% of the Earth's surface is covered with water, and 3% of it is actually freshwater that is fit for human consumption. Around two-thirds of that is tucked in frozen glaciers and unavailable for our use.

Clean drinking water is scarce, and there are millions of people across this globe who spend their entire day searching for it. Yet, people who have access to safe, clean drinking water take it for granted and don't use it wisely.

DECLARATION

I / We declare that the project work is original and carried out by me / us under the guidance of NEVATHITHA P . The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

Signature(s)

Details of Project Supervisor

Name of the Project Supervisor : Nevathitha P

Mobile number :8903528638

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Area of specialization :Environmental Microbiology

Name of the Participating Institute of UBA:St.Mary's College autonomous,thoothukudi.

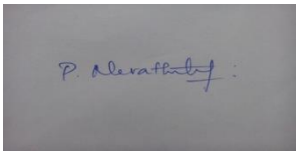
AISHE code of the Participating Institute : C-41151

Name of the Regional Coordinating Institute of UBA:Gandhigram Rural Institute - Deemed to be University, Dindigul.

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title / award and the work is genuine.

Signature of the Project Supervisor



Submission of Project Report for Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. Title of the Project: Basic needs for Sustainable cities and communities in Servaikaran Madam, Thoothukudi District

2. Details of Participant(s):

Sl. No.	Unique ID	Name of the participant	Programme of study	Email ID	Mobile No.
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11.	VC010136	Mary Santhi. R	N/A	rms.santhi@gmail.com	9790925505

3. UBA theme for Project Work: **(e) Basic amenities**

   (a) Organic farming (b) Water management (c) Renewable energy

   (d) Artisans, industries and livelihood (e) Basic amenities (f) Convergence

4. SDGs to be achieved: **xi. Sustainable cities and communities**

i. No poverty	x. Reduced inequality
ii. Zero hunger	xi. Sustainable cities & communities
iii. Good health & Well-being	xii. Responsible consumption & production
iv. Quality education	xiii. Climate action
v. Gender equality	xiv. Life below water
vi. Clean water and sanitation	xv. Life on land
vii. Affordable & clean energy	xvi. Peace & justice strong institutions
viii. Decent work & economic growth	xvii. Partnerships to achieve the goal
ix. Industry, innovation and infrastructure	

5. Background of the study

Road transport is meant for the transportation of goods and personnel from one place to the other on roads. Road is the route between two destinations, which has paved way to enable transportation by means of motorised and non-motorised carriages. Road transport can be classified as a means for transporting people or transporting either goods or materials. The major advantage of road transport is door delivery of goods and materials at a very cost effective means of cartage. Sometimes road transport is the only way for carrying people and goods to and from rural areas which are not catered to any other mode of transport. Road transport enables delivery of goods between cities, towns and small villages.

Importance of Roads and transport facility:

i. Roads play a very significant role in the transportation of goods and passengers for short and medium distances.

ii. Easy and cheap to construct and maintain roads.

iii. Transport system by means of road establishes an easy contact between factories and markets and provides door service.

iv. Road transport is more flexible. Vehicles can be stopped anywhere and at any time on the road for loading and unloading passengers and goods.

v. Perishable commodities like milk, vegetables and fruits are transported quickly by roads.

6. Objectives of the study:

The following are the objectives focused in this study:

- To find out the problems faced by general public due to lack of road facility to Servaikaran Madam.

- To analyse the difficulties encountered due to non-availability of transport facility to public residing in Servaikaran Madam.

7. Methodology adopted:

The present study is analytical and descriptive in nature. A questionnaire was prepared to collect the required information from the respondents. The data was collected from 50 residents in Servaikaran Madam by direct survey method. The study is based on general public opinion about Sustainable cities and communities in Servaikaran Madam.

8. Major findings:

Following are the findings in regard to various response from the respondents regarding “Basic needs for Sustainable cities and communities in Servaikaran Madam, Thoothukudi District”.

● More than fifty families are residing in the place of survey and ten percent of the family members have vacated their residence due to lack of facilities.

● Most of the people surveyed were female (72.2%) aged between 21 to 53.

● People residing in Servaikaran Madam do not have well established roads so there is no government transport facility available.

● Even the single pathway was blocked by the land owners so the people residing there find it very difficult for their movements.

● Due to TASMAC in the main area, men consume too much alcohol and ride two wheelers very fast, women and children find it unsafe to walk towards the village.

● People residing in the village find it very difficult to purchase their daily requirements and they have to walk for a long distance.

● Children who are pursuing their education could not be on time in their educational institutions.

● Most of the women are housewives, and during their childhood they were not educated.

● Men residing over the village are working as daily wagers. No member of the village has pursued higher education and placed well in the society.

9. Suggestions/ Recommendations

● Government should take necessary steps to construct road and provide transport facility to the entire village.

● Transport facility to the village will make the people easily access to the nearby so the younger generation will get better education.

● Transport facility will upgrade women as part time employees so that they can meet their own expenses.

● Officials concerned can change the location of TASMAC and look after the safety of villagers.

10. Impact of this work on learning of students/ teachers:

To identify the direct and indirect impact of social impacts due to any infrastructure interventions on the community. Impacts may be really a concern for local community, sometimes it might turn out to be a least of concern for the investigators which leads to affect their feelings and behaviors. Therefore constant and careful community engagements need to occur. Transport projects increases the tie mobility facilities for women. Transport facility also play an important role in reducing maternal deaths due to easy access to hospital. Transport projects can improve the access to schools especially in remote and isolated areas. Transportation facility increase the mobility of teachers and teaching equipments.

DECLARATION

We declare that the project work is original and carried out by us under the guidance of Dr. R. Mary Santhi. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

Aanjana Devi. R

Abinaya. S

Anitha. S

Antony Abinaya. A

Anushya. M

Archana. M

Bagavathi. M

Bhuvaneswari. S

Divya. S

Emibai. D

Signature(s)

Details of Project Supervisor

Name of the Project Supervisor	: Dr. R. Mary Santhi
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Area of specialization	: Botany
Name of the Participating Institute of UBA	: St. Mary's College (Autonomous), Thoothukudi
AISHE code of the Participating Institute:	
Name of the Regional Coordinating Institute of UBA:	

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title/ award and the work is genuine.

Signature of the Project Supervisor

Dr. R. Mary Santhi

Submission of Project Report for Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. Title of the Project : Study on the availability and usage of toilet and drainage in Servaikaranmadam Village, Thoothukudi District, Tamilnadu, India.

2. Details of Participant(s) :

Sl. No.	Unique ID	Name of the participant	Programme of study	Email ID	Mobile No.
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3. UBA theme for Project Work : Basic amenities

4. SDGs to be achieved : Infrastructure, Good health & Well-being

Background

Infrastructure is one of the evaluation criteria to measure the development of a specific area. In this case, toilets and drainage systems are considered basic requirements. Restrooms are essential for clean and healthy communities and contribute to the social and economic development of India. Using the toilets is vital to saving the lives of thousands of children and adults. People living in and around undeveloped and underdeveloped areas are unaware of the impact of open defecation.

Almost half of the population of India still does not use toilets. Instead, they defecate in open fields, garbage dumps, train tracks, forests, parks, and roadside ditches. Contact with human waste can cause diarrhea and other life-threatening illnesses, especially in children under 14 years. In total world population 2.4 billion people do not have access to improved sanitation facilities. Among them, 946 million people defecate in open spaces. Of them, 564 million people live in India. In undeveloped rural areas, 61% of the population defecate in open spaces. It is commonly followed in all socioeconomic groups. In urban areas of India, around 10% of people defecate in the open due to a various reasons. Open defecation is an ancient practice and is considered normal in many communities. In India, highest number of children under five years faced diarrhea-related deaths. Diarrhea and other health-related diseases can prevent children from absorbing nutrients from food, leading to malnutrition. Open defecation is also associated with developmental delay. In India, nearly 38% of children under the age of five are stunted, which means that their physical and cognitive development is declining, often leading to poor educational outcomes. The impact of stunting is not limited to individual children, but also affects communities and entire generations in terms of economic and social development.

According to the United Nations report on the Millennium Development Goals, one in five girls of primary school age does not attend school, while one in six boys. A contributing factor to this difference is the lack of sanitary facilities for girls entering puberty. For women

and girls, hygiene is important to their health, safety and dignity. For them the toilet provides a space for menstrual hygiene management and is an important measure to reduce the risk of bullying when defecating outdoors at dusk and dawn.

The use of toilets is not only important for the health of children, but also for the progress of the country. According to the World Bank, the economic loss caused by poor sanitation in India amounted to 6.4% of India's GDP in 2006, or 53.8 billion U.S. dollars (2.4 trillion rupees) per year, which is equivalent to an annual loss of 43 U.S. dollars per Indian.

The benefits of improved hygiene go far beyond reducing the risk of diarrhea. These include reducing the spread of trachoma, intestinal worms, schistosomiasis, reducing the severity and impact of malnutrition, promoting dignity and safety especially among women and girls, promoting school attendance, recovering water from feces, renewable energy and the potential nutrients.

Lack of an adequate drainage system has always been a fundamental problem for village residents. Untreated sewage is the major pollutant of water bodies in India and can cause a variety of diseases, including diarrhea, agricultural pollution and environmental degradation that kill 350,000 Indian children every year. The urban poor usually live near to the drains, where mosquitoes and harmful microorganism multiplies. This leads to the formation of pathogenic organisms and the spread of diseases.

The largest cities in India have centralized sewage systems with underground pipelines, pumping stations and treatment plants. However, these systems are expensive to build and operate. It requires uninterruptible power supplies, well-trained operators and extensive maintenance. Due to such large-scale operation projects, small cities in India cannot afford the cost of building such systems. Adequate surface and underground drainage

systems to remove excess water in a safe and timely manner play an important role in controlling water-related diseases.

Objective:

The present investigation was focused

- To identify the major requirement of the selected village.
- To study the availability of toilets
- To study the drainage facility of the selected area
- To explore the reason behind the open defecation in the selected location
- To study the knowledge and awareness level of people about toilet usage

Methodology

The present study was carried out by following survey method. A questionnaire was prepared to get the required details from the people of Servaikaranmadam. The data were collected from 150 people, among 75 respondents were male and 75 were female. In order to get the accurate results, the data was collected only from teenage and adult people. After the survey the collected responses were analyzed and presented in % value.

Major Findings:

The study reports clearly give the outline of the village status. The selected village lacks some basic life saving requirements.

- 74 % of the village people reported that they are facing problems due to the unavailability toilet and drainage facilities.
- 78 % of the people don’t have toilets in their house.
- Only 22 % of the people have toilets in their house.
- In 22% of people 8 % are not utilizing the toilet which was already constructed in their house. They prefer open defecation.

- In 14% toilet using people most of them are educated. It indicates that educated people are more aware than the uneducated people.
- Servaikaranmadam don't have any drainage facilities which lead to the production of mosquitoes in and around the waste water sources.
- Due to the lack of education most of the elder people from the village are not aware of the side effects caused by open defecation.
- People prefer open defecation mainly because of two reasons.
- The first reason is lack of money to build toilets. 68% of the people don't want to spend their hardly earned money for building toilets. The main reason behind this is unemployability and low income jobs.
- To clean the septic tanks, private company demands more than 2,500 rupees. This is one of the factor that restricts the usage of toilets among the villagers.

Recommendations / suggestions

After analyzing the results of the survey the following suggestions were made.

- ✓ Awareness program should be conducted in the selected village to educate the people about the side effects of open defecation
- ✓ Sharing the details of government schemes available for toilet building
- ✓ Movies regarding toilet usage may influence the kids to use toilets.
- ✓ Reducing the rate for septic tank cleaning will improve the usage of toilets among the people.
- ✓ Agreement between biogas producing companies and people will definitely make a way for septic tank cleaning without any cost.
- ✓ Submitting request letter to the government to construct drainage facilities.

Impact of this work on learning of students/teachers:

Students involved in the survey observed the reality of the selected village and studied the difficulties faced by the village people. The present condition of the village motivated the students to work for the undeveloped society. In this project based learning process students got deep knowledge regarding current status, impact and side effects of open defecation and improper drainage facilities.

DECLARATION

I / We declare that the project work is original and carried out by me / us under the guidance of Ms. Selvaananthi A. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

Signatures

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Maria Ajila C

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CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title / award and the work is genuine.

Signature of the Project Supervisor

Submission of Project Report for Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. Title of the Project : **Survey study on the internet usage in the village Servaikaranmadam**

2. Details of Participant(s) :

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3. UBA theme for Project Work : Basic amenities

4. SDGs to be achieved : Quality education

Background

The Internet system has completely changed the methods of communication, education and business through the interconnection of various computer networks around the world. It is referred as "network of networks". In the early phase, computer is large and immovable. In order to use the information stored in any computer, people must go to the location of the computer or send computer tapes through the traditional postal system. In the initial stage, computer networks did not have a standard way of communicating with each other. After a long time, a new communication protocol called Transmission Control Protocol / Internet Protocol (TCP / IP) was established. This allows different types of computers on different networks to "talk" to each other. ARPANET and the National Defense Data Network were officially switched to the TCP / IP standard on January 1, 1983. The Internet appeared in the United States in the 1970s, but it was not seen by the public until the early 1990s. By 2020, it is estimated that approximately 4.5 billion people, or more than half of the global population will have access to the Internet. It became the reality now.

The Internet was considered a modern high-tech technology. It provides a powerful and versatile function that can be used for almost any information-dependent purpose, and can be accessed by everyone connected to its constituent network. It supports interpersonal communication via social media, email, chat rooms, newsgroups, audio and video broadcasts and enables people to collaborate in many different locations. It supports access to digital information through many applications, including the World Wide Web. Facts have shown that the Internet is the cradle of a large number of growing "e-commerce"

From its initial appearance to the present, the Internet has completed a long journey. The Internet can be used to do different things. For example, you can learn, teach, research, write, share, receive, email, explore, and surf the Internet.

At the same time, the scope of digital services has expanded significantly in recent years. In addition, the ongoing Corona virus pandemic has led to an increase in demand for digital accessibility. In India, most of the village population does not have access to the Internet. As of March 31, 2020, the broadband penetration rate in rural areas is limited to 29.2%. Due to the lack of internet connection, students in remote areas of different state have difficulty in attending online classes. Most of the students don't even have a smartphone. In several villages, telecommunications services are poor. Due to poor Internet connection, students in the village cannot attend classes online peacefully.

Due to the above reasons, the present study was focused to analyse the internet usage of the selected village Servaikaranmadam.

Objective:

The present study was focused

- To analyze the internet facilities in the selected village
- To study the internet usage among different age group
- To explore the internet based requirement among the village people
- To find out the problems faced by student community during online classes.
- To explore the problems which limits the internet usage in Servaikaranmadam.

Methodology:

The present study was carried out by collecting data's from the Servaikaranmadam village people. A questionnaire was prepared and the required details were collected from 120 people, among 40 respondents were school going students and 80 were adults. The details were collected from the people between the age of 8 to 80. After the survey the collected responses were analysed and presented in % value.

Major findings:

The present study revealed the following details regarding internet availability and usage of Servaikaranmadam.

- ✓ The selected village has moderate internet speed. Sometimes, network speed is not enough to access large size files.
- ✓ Internet usage is high among school and college going students.
- ✓ When comparing the internet usage of male and female, male individual occupies the first place.
- ✓ In ladies circle, mostly house wives are not using android or smart phones.
- ✓ Due to pandemic situation, school and college going students started using android devices for online classes.
- ✓ In Internet using houses, 53 % of the people have started using it from Covid 19 pandemic situation.
- ✓ 32 % of the students don't have mobile/android gadgets to attend online classes.
- ✓ 24% of the students are unable to recharge/renew their data packs due to financial problem.
- ✓ Data's collected from the students revealed that nearly 80% of the students lack the knowledge about some common online platforms like Google meet, Zoom, Microsoft teams, Google classroom etc.,
- ✓ Due to the lack of basic techniques some students of uneducated people suffer in attending online classes.
- ✓ Servaikaranmadam people are not familiar with online banking, purchase, tickets booking and recharge process.
- ✓ Responses collected from the people revealed the fact that lack of higher education and proper internet facilities leads to less internet use among the village.

Suggestion / Recommendations

The following suggestions were made after analyzing the villagers responses.

- ✓ It will be useful for the people if government allows permanent or moving E-SEVAIMAIYAM in villages.
- ✓ Providing short training programs related to online meeting applications and classrooms will improve the student's performance in education.
- ✓ Fear of using online applications for transaction and education can be eradicated by proper training.
- ✓ Orientation programs for parents regarding internet access, precautions and its safety level will make them to feel secured about their children's education during pandemic situation like Covid 19.

Impact of this work on learning of students/teachers:

The present study showed the way to eradicate the barriers of digitalization in underdeveloped area. Students involved in this project work find out the day to day difficulties of uneducated people in the digital era. Students realized that, lack of internet knowledge will slow down the progress of the development in situations like Covid Pandemic.

DECLARATION

I / We declare that the project work is original and carried out by me / us under the guidance of Ms. Selvaananthi A. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

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Name of the Regional Coordinating Institute of UBA: Gandhigram Rural Institute, Dindigul

CERTIFICATE

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Signature of the Project Supervisor

Submission of Project Report for Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. Title of the Project: Basic needs for good health, decent work and economic growth of public in Servaikaran Madam, Thoothukudi District

2. Details of Participant(s):

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3. UBA theme for Project Work: **(e) Basic amenities**

(a) Organic farming (b) Water management (c) Renewable energy

(d) Artisans, industries and livelihood (e) Basic amenities (f) Convergence

4. SDGs to be achieved: **iii. Good health & Well-being, viii. Decent work & economic growth**

i. No poverty
ii. Zero hunger
iii. Good health & Well-being
iv. Quality education
v. Gender equality
vi. Clean water and sanitation
vii. Affordable & clean energy
viii. Decent work & economic growth
ix. Industry, innovation and infrastructure
x. Reduced inequality
xi. Sustainable cities & communities
xii. Responsible consumption & production
xiii. Climate action
xiv. Life below water
xv. Life on land
xvi. Peace & justice strong institutions
xvii. Partnerships to achieve the goal

5. **Background of the study**

Primary health care refers to the essential health care made accessible to individuals in a community at affordable costs. The World Health Organization (WHO) defines primary health care as, which focuses more on the importance of community participation by identifying some of the social, economic and environmental determinants. It includes the basic services required for meeting one's everyday health care needs like conducting a regular checkup with the family doctor or visiting low income health clinics.

Role and Benefits of Primary Health Care

The main role of primary health care is to provide continuous and comprehensive care to the patients. It also helps in making the patient available with the various social welfare and public health services initiated by the concerned governing bodies and other organizations. The other major role of a primary health care center is to offer quality health and social services to the underprivileged sections of the society.

Self-Help Group refers to self-governed group of people with same socio-economic background and having a desire to collectively perform common purposes. Here poor people voluntarily come together to save whatever amount they can save conveniently out of their earnings, to mutually agree to contribute to a common fund and to lend to the members for meeting their productive and emergent needs.

A SHG is an informal association to enhance the member's financial security as primary focus and other common interest of members such as area development, awareness, motivation, leadership, training and associating in other social inter-mediation programmes for the benefit of the entire community. The very existence of SHGs is highly relevant to make the people of below poverty line hopeful and self-reliant. SHGs enable them to increase the income, improve the standard of living and status in society. It also acts as a catalyst for bringing this section of society to the main stream.

6. Objectives of the study:

The following are the objectives focused in this study:

● To find out the problems faced by general public due to lack of primary health centre in Servaikaran Madam.

● To analyse the standard of living by the public residing in Servaikaran Madam.

7. Methodology adopted:

The present study is analytical and descriptive in nature. A questionnaire was prepared to collect the required information from the respondents. The data was collected from 50 residents in Servaikaran Madam by direct survey method. The study is based on general public opinion about Sustainable cities and communities in Servaikaran Madam.

8. Major findings:

Following are the findings in regard to various response from the respondents regarding "Basic needs for good health, decent work and economic growth of public in Servaikaran Madam, Thoothukudi District".

● More than fifty families are residing in the place of survey reported that they do not have primary health centre in their village.

● Most of the people surveyed were female (72.2%) aged between 21 to 53.

● Residents of Servaikaran Madam has to travel long distance for treating ailments.

● People has to spent huge amount in private hospital for treatments and their earnings are meagre.

● Public of Servaikaran Madam are employed as daily wagers.

● Women residents of the village are depending on men for complete income.

● Women are interested to earn income to upgrade their life. But lack of transport and financial aid is a barrier.

● Women residents are willing to implement the tailoring training that has been given by educational institutions.

● Women entrepreneurship trainings like candle making, orders for stitching can be given to the women so that they make an income of their own.

● Guidance of women residents by a good leader will uplift their economic growth.

9. Suggestions/ Recommendations

● Necessary steps to be taken by officials of the respective department in establishment of primary health centre.

● Establishment of health centre helps public in getting medical aid in their village.

- Women can be trained with the training programs on their field of interest.

- Training women in their field of interest will develop enterprenuers.

10. Impact of this work on learning of students/ teachers:

Primary health care has a high potential to address the social determinants of health, as it contribute to improvement of access, especially for those who are most in need. Also it contributes to empowerment and social cohesion, and is oriented towards the improvement of the living conditions of the local community.

SHGs is instrumental in rural poverty alleviation. Economic empowerment through SHGs, provides women the confidence for participation in decision making affairs at the household-level as well as at the community-level. Members of successful SHGs develop the potentiality to act as resource persons for different community developmental initiatives.

DECLARATION

We declare that the project work is original and carried out by us under the guidance of Dr. R. Mary Santhi. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

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AISHE code of the Participating Institute:	
Name of the Regional Coordinating Institute of UBA:	

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title/ award and the work is genuine.

Signature of the Project Supervisor

Dr. R. Mary Santhi

Proforma for the Submission of Project Report for Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. Title of the Project : **A study on the status of Agriculture in Maravanmadam village in Thoothukudi district.**

2. Details of Participant(s) :

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3. UBA theme for Project Work : **Organic Farming**

4. (a) Organic Farming (b) Water management

(c) Renewable energy (d) Artisans, industries and livelihood

(e) Basic amenities (f) Convergence

i. **SDGs to be achieved** : **Climate action**

ii. No poverty
iii. Zero hunger
iv. Good health & Well-being
v. Quality education
vi. Gender equality
vii. Clean water and sanitation
viii. Affordable & clean energy
ix. Decent work & economic growth
x. Industry, innovation and infrastructure
xi. Reduced inequality
xii. Sustainable cities & communities
xiii. Responsible consumption and production
xiv. Climate action
xv. Life below water
xvi. Life on land
xvii. Peace & justice strong institutions
xviii. Partnerships to achieve the goal

5. Background of the study :

Agriculture is the practice of cultivating plants and livestock. Agriculture was the key development in the rise of sedentary human civilization, whereby farming of domesticated species created food surpluses that enabled people to live in cities. The history of agriculture began thousands of years ago. After gathering wild grains beginning at least 105,000 years ago, nascent farmers began to plant them around 11,500 years ago. Pigs, sheep, and cattle were domesticated over 10,000 years ago. Plants were independently cultivated in at least 11 regions of the world. Industrial agriculture based on large-scale monoculture in the twentieth century came to dominate agricultural output, though about 2 billion people still depended on subsistence agriculture.

Modern agronomy, plant breeding and agrochemicals such as pesticides and fertilizers, and technological developments have sharply increased crop yields, while causing widespread ecological and environmental damage. Selective breeding and modern practices in animal husbandry have similarly increased the output of meat, but have raised concerns about animal welfare and environmental damage. Environmental issues include contributions to global warming, depletion of aquifers, deforestation, antibiotic resistance, and growth hormones in industrial meat production. Agriculture is both a cause of and sensitive to environmental degradation, such as biodiversity loss, desertification, soil degradation and global warming, all of which can cause decreases in crop yield. Genetically modified organisms are widely used, although some are banned in certain countries.

The major agricultural products can be broadly grouped into foods, fibres, fuels and raw materials (such as rubber). Food classes include cereals (grains), vegetables, fruits, oils, meat, milk, fungi and eggs. Over one-third of the world's workers are employed in agriculture, second only to the service sector,

although in recent decades, the global trend of a decreasing number of agricultural workers continues, especially in developing countries where smallholding is being overtaken by industrial agriculture and mechanization.

Land use pattern is envisaged on land capability profile. Since land capability in the mountainous region is determined by the characteristics of micro and mini watersheds, land use pattern is therefore envisaged on the capabilities of each watershed and thus the potential of each watershed is thus envisage to be developed to yield sustainable land use. Broadly the low lying areas were put under paddy during Kharif and with pulses, paddy, vegetables and oilseeds during the Rabi season depending on the availability of residual moisture and irrigation facilities. Gentle slopes up to 20% were put under other crops like wheat, paddy, maize, pulses, oilseeds, vegetables etc, which not only contribute towards food security but also yield substantial revenue returns per unit of land and labour. On such slopes the concept of watershed management of land and water would be encouraged. India has shown a steady average nationwide annual increase in the kilograms produced per hectare for some agricultural items, over the last 60 years. These gains have come mainly from India's green revolution, improving road and power generation infrastructure, knowledge of gains and reforms. Despite these recent accomplishments, agriculture has the potential for major productivity and total output gains, because crop yields in India are still just 30% to 60% of the best sustainable crop yields achievable in the farms of developed and other developing countries. Additionally, post-harvest losses due to poor infrastructure and un organised retail, caused India to experience some of the highest food losses in the world.

6. Objectives of the study

- To analyse the land use pattern at Maravanmadam
- To analyse the irrigation facility at Maravanmadam
- To analyse the fertilizer usage at Maravanmadam
- To analyse the Cattle population and Productivity at Maravanmadam
- To analyse the Occupation pattern of the agriculture at Maravanmadam

:

7. Methodology adopted :

The study investigated the various dimensions of the status of agriculture in Maravanmadam. This in turn comprises of the land use pattern, Irrigation facility, source wise irrigation coverage and irrigation methods used among the rural households, use and type of chemicals and fertilisers, livestock farming practices, occupational pattern in agriculture sector in the study area of Maravanmadam. The study was conducted in Maravanmadam village of Thoothukudi district.. A structured validated questionnaire used to collect the data pertaining to agriculture sector. It collected required information from 91 sample households. The reference period for the study was one year. Household information was collected considering one respondent from each household. The data were analyzed using Excel. Statistical tools

used for data analysis. The sample consisted of the Agricultural labour and allied workers of agriculture in Maravanmadam at Thoothukudi District.

8. Major findings

Table 1.1 Land use Pattern in Maravanmadam at Tamil Nadu

Particulars	Acres	Percentage
Arable land agriculture Area	150	4.8
Housing/Abadi Area	1692	53.08
Common Lands Area	1200	38.56
Waste land	70	02.24
Total	**3112**	**100**

Source: Data available from Survey

From this table 1.1 the Arable land for agriculture is 150 Acres, Housing area is 1692 Acres, Area under water bodies 1.5 Acres, Common lands area is 1200 Acres and Waste land is 70 Acres.

1.2. Source Wise Irrigation Coverage among then households in Maravanmadam at Thoothukudi District

Particulars	Village Data	Percentage
Canal	1	14.28
River	1	14.28
Others	5	71.42
Total	**7**	**100**

Source: Data available from Survey

From this above table through Canal one, River one and others sources of irrigation is five.

1.3. Irrigation methods used among the households in Maravanmadam at Thoothukudi District

Particulars	Village Data	Percentage
Sprinkler	902	99.77
Flooding	02	0.33
Total	**904**	**100**

Source: Data available from Survey

From the above table 902 people of 91 households are using the sprinkler method for irrigation. Only 2 people are using flooding.

Table 1.4 Usages of Chemical Fertilizers in Maravanmadam at Thoothukudi District

Particulars	Village Data		If Yes, Avg. Fertilizer
Chemical Fertilizers	Yes	2	0.06
	No	89	
Chemical Insecticides	Yes	2	0.04
	No	89	
Chemical Weedicide	Yes	3	3.36
	No	88	
Organic Manures	Yes	4	1.77
	No	87	

Source: Data available from Survey

From this table the farmers most of them were not using the chemical fertilizers, insecticides, weedicide and organic Manures.

Livestock is commonly defined as domesticated animals raised in an agricultural setting to produce labour and commodities such as meat, eggs, milk, fur, leather, and wool. The term is sometimes used to refer solely to those that are bred for consumption, while other times it refers only to farmed ruminants, such as cattle, sheep and goats. The breeding, maintenance, and slaughter of livestock, known as animal husbandry, is a component of modern agriculture that has been practiced in many cultures since humanity's transition to farming from hunter-gatherer lifestyles. Animal husbandry practices have varied widely across cultures and time periods, and continue to play a major economic and cultural role in numerous communities.

1.5 Cattle population, productivity, shelter and waste in Maravanmadam at Thoothukudi District

Particulars	Village Data	Percentage
Kutcha shelter for livestock	1	00.34
Open shelter for livestock	11	3.76
Average daily production of milk (Liters)	220	75.34
Total animal waste/ cow dung (kg) per day	60	20.54
Total	**292**	**100**

Source: Data available from Survey

From this table only one Kutcha shelter for livestock, eleven open shelter for livestock which inturn constitute 3.76% .and the Average daily production of milk (Liters) is 220 which implies 75.34%.and Total animal waste/ cow dung (kg) per day is 60 and it constitute 20.54%.

LIVELIHOOD ECONOMICS

Occupation Pattern:

Agricultural labourers are those persons who work on the land of others on wages for the major part of the year and earn a major portion of their income as a payment in the form of wages for works performed on the agricultural farms owned by others.

The agricultural workers can be grouped into two different categories such as:

attached labourers are those workers who are attached to some other farmer households on the basis of a written or oral agreement. On the other hand, casual labourers are those workers who are free to work in any farm on the payment of daily wages.

In India these casual labourers include:

(a) small farmers having a very small size of holdings who devote most of their time working on the farm of others;

(b) landless labourers who exclusively work for others;

(c) tenants who work on leased land but work most of the time on the land of others;

1.6 Occupation Pattern in Maravanmadam at Thoothukudi District

Occupation	Male	Percentage	Female	Percentage
Farming on own Land	2	2.35	2	3.86
Skilled Wage Worker	37	43.52	20	38.46
Unskilled Wage Worker	16	18.82	17	32.69
Salaried Employment in Government	7	8.23	5	9.61
Salaried Employment in Private Sector	10	11.76	2	3.86
Weaving	0	0	1	1.92
Other Artisan	0	0	2	3.86
Other Trade & Business	13	15.29	3	5.769
Total	**85**	**100**	**52**	**100**

Source: Data available from Survey

In the case of farming on own land a very small proportion of male and females are engaged. This constitutes 2.35% and 3.86% respectively. Th e skilled wage workers constitute 43.52% of male and 38.46% of females. Only 18.82% of the unskilled workers are males whereas 32.69% of the unskilled wage workers are females..People who are working in the government sector are comparatively low. This in turn

constitutes 8.23% of males and 9.61%of females. Only a small percentage of females that is 3.86% is engaged in private sector jobs where as 11.76% of the private sector jobs is handled by males in Maravanmadam. People engaged in weaving and other artisans work is statistically insignificant. This inturn constitutes 1.92% and 3.86% respectively. People engaged in other trade and business constitute only 5.769%.

:

9. Suggestions / Recommendations :

Arable agriculture land must be properly used to its potential

Waste land must be brought into use

Sources of irrigation and Irrigation facilities must be improved.

Agriculturalists of the village must be encouraged to use organic manures to increase productivity and total production.

A conscious use of chemical fertilisers, chemical insecticides and chemical weedicide must be encouraged.

Weaving occupation in women can be encouraged with the help of capacity building programmes.

In due course of time unskilled labour can be converted to skilled manpower with the help of training.

Efforts must be taken to improve the participation of the labour force in the government sector and private sector.

Financial assistance must be given to people who are farming on their own land.

Trade and business activities must be strengthened.

Impact of this work on learning of students/teachers:

We were able to understand the land use pattern of the rural economy of Maravanmadam.

We realised the importance of increasing skilled capacity so that they can shift to skilled jobs in the private sector and government sector.

The need for modernisation of agriculture was reemphasised.

We received first hand information on the irrigation facilities in the Maravanmadam.

We understood the occupational pattern in the village and there is a need to shift the working population from traditional economy to modern economy.

DECLARATION

We declare that the project work is original and carried out by me / us under the guidance of Ms. Alfreeda T.A. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

No	Names	Signature
VC010866	Dr.Sr.KulandaiTherese	
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VC010784	Aathilakshmi U	
VC010785	Abinaya P	
VC010786	AlphonceKebsipa A	
VC010787	Amali Joan Sophia A	
VC010788	Amirtha Varshni K	
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VC010791	Antony Harini Kirthiga A	
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Details of Project Supervisor

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Mobile number : **9446685478**

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Area of specialization : **Environmental Economics**

Name of the Participating Institute of UBA: **St. Mary's College (Autonomous), Thoothukudi**

AISHE code of the Participating Institute: **C- 41151**

Name of the Regional Coordinating Institute of UBA: **Gandhigram Rural Institute Deemed to be University, Dindigul**

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title / award and the work is genuine.

Signature of the Project Supervisor

Submission of Project Report for Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. Title of the Project: **A Study on Waste Management in Maravanmadam Village of Thoothukudi district**

2. Details of Participant(s):

Sl. No.	Unique ID	Name of the participant	Programme of study	Email ID	Mobile No.
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3. UBA theme for Project Work:

(a) Organic Farming (b) Water management

(c) Renewable energy (d) Artisans, industries and livelihood

(e) Basic amenities (f) Convergence

4. SDGs to be achieved: **Sustainable cities &communities**

i. No poverty
ii. Zero hunger
iii. Good health &Well-being
iv. Quality education
v. Gender equality
vi. Clean water and sanitation
vii. Affordable & clean energy
viii. Decent work & economic growth
ix. Industry, innovation and infrastructure
x. Reduced inequality
xi. Sustainable cities &communities
xii. Responsible consumption and production
xiii. Climate action
xiv. Life below water
xv. Life on land
xvi. Peace & justice strong institutions
xvii. Partnerships to achieve the goal

5. **Background The Study:**

Waste can be classified based on its contents, including such material as paper, metal, plastic, and organic and inorganic waste; based on its hazard potential, including categories such as radioactive, flammable, infectious, toxic or non-toxic; based on its origin, characterized as industrial, domestic, commercial, institutional or construction and demolition. Whatever the origin, content or hazard potential is, solid waste must be managed systemically to ensure environmental best practices. As solid waste management is a very important aspect of environmental hygiene, it needs to be incorporated with our environmental planning. Wastes arise in association with almost every human activity and reflect the diversity of man's actions. Some waste may have some value to someone either in its present stage or in a converted stage. Most household waste in rural areas is organic, with little inorganic material, and is non-toxic. Because of its environment - friendliness, composting is a highly suitable method of waste management in rural areas. Waste poses a threat to public health and the environment if it is not stored, collected, and disposed of properly. The perception of waste as an unwanted material with no intrinsic value has dominated attitudes towards disposal. This study investigates the domestic waste practices, waste disposal, and perceptions about waste and health in an urban community. Wastes arise in association with almost every human activity and reflect the diversity of man's actions. Some waste may have some value to someone either in its present stage or in a converted stage. The rural organic waste includes agricultural, domestic and rural industrial wastes. Agricultural waste is preliminary originated from animals (excreta and byproducts of dead animals) and plants (leaves, stalks, stubbles and shells) . The nature, proportion and methods of utilization of organic wastes differ widely from place to place. Every farm requires a waste management system, and almost every farm is unique in its combination of waste production, handling, storage, treatment and disposal either by recycling or by discharge.

6. **Objectives of the Study:**

- To bring about behavioural change in residents, to segregate wet and dry waste at source, and to prevent littering
- To spread awareness about the pollution caused and ill effects due to open burning of plastic and other waste
- To motivates the residents for weekly collection of dry waste from households
- To provide necessary infrastructure for sorting dry waste

·7. Methodology adopted:

The study uses both primary and secondary data for analysis. Primary data was collected through questionnaire and other related information was collected from various books, magazines and websites for this research work. For the present study totally 91 households were interviewed. The research work depends mainly on primary data collected through survey, personal interviews and questionnaire. The use of secondary data to a limited extent is made wherever necessary. Simple Random sampling method was used to select the samples. Formal and informal discussions were held with the people of the village. A structured validated questionnaire covering information regarding socio-economic and energy consumption related questions were prepared to collect required information from Maravanmadam households. The reference period for the study was one year. The study was carried out in the year 2020. The collected data is tabulated in the light of objectives. The data is processed and analysed with the help of a master table and statistical tools. The study was conducted in Maravanmadam village of Tamilnadu. Waste use as many purpose such as manure, fuel, landfill etc.

Profile of Maravanmadam Village

Maravanmadam is a village Panchayat located in the Tuticorin district of Tamil-Nadu state, India. The latitude 8.756365 and longitude 78.071981 are the geo coordinate of the Maravanmadam. Chennai is the state capital for Maravanmadam village. It is located around 539.8 kilometer away from Maravanmadam.. The other nearest state capital from Maravanmadam is Thiruvananthapuram and its distance is 121.8 KM. The other surrounding state capitals are Thiruvananthapuram 121.8 KM., Pondicherry 402.9 KM., Bangalore 472.6 KM. The surrounding nearby villages and its distance from Maravanmadam are Korampallam 3.4 KM , Athimarapatti 4.0 KM , Kulayankarisal 4.7 KM , Mullakadu 6.2 KM , Servaikaranmadam 6.8 KM , Milavittan 8.0 KM , Mudivaithanendal 9.5 KM , Sankaraperi 9.5 KM. The native language of Maravanmadam is Tamil and most of the village people speak Tamil. Maravanmadam people use Tamil language for communication.

8. **Major findings:**

Table 1 - Details of Household waste collection in Maravanmadam Village

Household waste collection system	Maravanmadam Village Data	Percentage
Door step	25	27.5
Common Point	53	58.24
No collection system	13	14.3

Source: Survey

Predominantly people of Maravanmadam using common point in waste collection. This constitutes 58.24%. In the case of household waste collection system door step collection amounts to 27.5%. With respect to waste collection system 14.3% of the respondents have no collection system.

Table 2 - Details of Drainage Linked to Households in Maravanmadam

Drainage linked to Households	Households	Percentage
Covered	89	97.8
Open	2	2.2
None	91	100

Source: Survey

Very high proportions of the people of Maravanmadam have drainage linked to households. It amounts to 97.8%.

Table 3 – Details of Households having Compost Pit

Compost pit	Households	Percentage
Individual	10	11
Group	56	61.5
None	25	27.5
Total	91	100

Source: Survey

Almost 61.53% of the households are using compost pit as a group. Only 11% of the households are using individual compost pit. Whereas 27.5% of the households in Maravanmadam are not using compost pit at all. These people are disposing their solid and wastes in open

Table 4 – Community wise details of households with Toilets

Caste category	With Toilets	Percentage
SC	13	14
ST	3	3.3
OBC	58	63.7
GEN	17	19
Total		

Table 5 - Use of toilets across different prevailing caste section in Village

Caste Section	Private	Community
SC	13	0
ST	3	0
OBC	56	2
GEN	17	0

Almost 53.84% of the private households using toilets belong to other backward communities. In the case of community toilets only two households of other backward communities are using community toilets. The households belong to general community using 18.69 of the toilets. No household in the general community using community toilets. Almost 14% of the toilet usage is done by household belongs to scheduled caste

- In the case of Hygiene practices there are no households in Maravanmadam without toilets.
- Households with and without toilets across different prevailing caste section in village shows that 20% of the household belongs to the Scheduled tribe community. Almost 40% of the household belongs to the Scheduled Community. The General community comprises 60% of the household. Almost 80% of the households who use toilets belong to other backward communities.
- There is need for more public environmental education in the schools. Many of the residents complained that the dump sites were insufficient and was rarely cleared by the sanitary workers, a situation which has prompted them to resort to the burning of wastes.

- There is both private and community toilet in the village. Compared to the community toilets use of private toilets are more.
- Many of the respondents were willing to participate in recycling and composting programs if they were given adequate orientation. Some residents are already involved in composting and recycling.
- There is no problem of open defecation.

9. Suggestions/Recommendations:

- Awareness to people forms the basis of the project.
- Various awareness and training sessions need to be conducted to the different stakeholders in the Maravanmadam village. Training sessions are also required to the Panchayat members and staff members of the project, during the initial stages of the project.
- Awareness sessions conducted in Anganawadi (kindergarten), schools and women self-help groups, throughout the duration of the project.
- More Awareness and training sessions are needed to Maravanmadam village People
- Casual workers should be employed to collect household garbage from house to house. The households will have to pay a small token for such services.
- Door to Door project awareness sessions should be arranged
- Door to Door Blue Bag distribution, to store dry waste in houses, shops and schools
- Awareness sessions with Anganawadi, Schools and self-help groups: Reaching out to school children is very important, as they will be the ones, taking the idea and the cause forward
- The residents should be motivated to segregate wet and dry waste at source. Wet waste is handled at the household level itself, so only dry waste is to be collected.
- Dry waste is to be collected door to door from the villages of on a weekly basis, by the waste collection personnel, using the vehicle provided.
- Dry waste need to be collected using the vehicle, is sorted and stored in the Dry Waste Collection Centre (DWCC).
- Dry waste is to be sent to cement factories, for co-processing, as a partial replacement of coal. The high value recyclables go to the respective recycling facilities through local scrap dealers.
- Dry waste flow must be encouraged.

Conclusion

The residents are generally concerned about the environment but are not doing enough to reduce, recycle and reuse the household garbage they generate. It is clear from their responses that they

are ready to help fix the garbage problem if given the appropriate support from the local government as have been identified in this survey report. The natural environment requires protection in order to remain healthy for all of its inhabitants. To protect and bring about a healthy and sustainable environment requires the collective efforts of the public, the environmental health authorities and the private sector. Let us all remember these three big words about 'waste': REDUCE, RECYCLE, REUSE.

10. **Impact Of This Work On Learning Of Students/tea**chers:

· Awareness on waste has been created among the residents of villagers of Maravanmadam.

· Visible improvement in level of cleanliness and cleaner drains

· Understood the importance of Clean up drives,

· awareness was created on single use plastic usage and encouraged students not to use any kind of disposables.

· Realised the potential of Continuous community involvement

· We were sensitized on waste and to make them aware of the health hazards and pollution, due to littering or burning waste. .

· We were understood that 95% of collected dry waste is either recycled or used as energy source during cement production.

DECLARATION

We declare that the project work is original and carried out by us under the guidance of .The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

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AISHE code of the Participating Institute: C- 41151

Name of the Regional Coordinating Institute of UBA: Gandhigram Rural Institute – Deemed to be University, Dindigul

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title/award and the work is genuine.

Signature of the Project Supervisor

Performa for the Submission of Project Report for
Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. Title of the Project: ***Energy Consumption Pattern of Households- A Case study of Maravanmadam Village, Thoothukudi.***

2. Details of Participants:

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3. UBA theme for Project Work : **Renewable energy**

(a) Organic Farming (b) Water management
(c) Renewable energy (d) Artisans, industries and livelihood
(e) Basic amenities (f) Convergence

4. SDGs to be achieved : **Affordable & clean energy**

i. No poverty
ii. Zero hunger
iii. Good health & Well-being
iv. Quality education
v. Gender equality
vi. Clean water and sanitation
vii. Affordable & clean energy
viii. Decent work & economic growth
ix. Industry, innovation and infrastructure
x. Reduced inequality
xi. Sustainable cities & communities
xii. Responsible consumption and production
xiii. Climate action
xiv. Life below water
xv. Life on land
xvi. Peace & justice strong institutions
xvii. Partnerships to achieve the goal

5. Background of the study :

Energy is a critical input for economic growth and sustaining development processes. Over one-third of the world's population, largely consisting of the poor in rural areas of developing countries does not have access to electricity. Lack of access to affordable energy is an important factor contributing to the relatively poor quality of life in rural areas of developing countries. Rural household energy use is an important part of rural energy consumption, and its main uses include all kinds of energy consumed to meet the living needs of household cooking, lighting, heating, hot water, and cultural entertainment and so on. The rural energy consumption problem is closely related to regional social and economic poverty. The issue of rural living energy and its poverty is also an important aspect closely related to regional poverty alleviation and understanding of regional socio-economic sustainable development. Direct correlation can be seen between the degree of economic growth, the size of per capita income and the per capita consumption of energy. In the earlier times, human needs were limited and therefore the same could be fulfilled through their own body. But gradually the society started to progress towards a civilized and organized one and the needs of the human beings increased and this led to a demand for an external source of energy. But to keep pace with the expanding energy requirement, the first source of external energy discovered by the people was fire. They get it either from wood or from animal tallow which they used for both heating and lighting purpose. Similarly when in course of time, agriculture replaced hunting as the main occupation, animals were used for performing certain tasks. In transportation also, bicycles and vehicles run on petrol and diesel instead of bullock carts served the need of the human beings. The changing life style of people has made energy an indispensable part of human life. With the changing scenario, mankind has to depend on both commercial and non commercial energy sources. The willingness of having a better and standard quality of life has worked as a fuel to raise energy consumption at a faster rate. All traditional rural societies initially depended upon only locally available noncommercial energy sources which are renewable in nature. Energy was gathered from the

nearby places and there was no need of energy importation. The use of solar energy, wood and charcoal, plant and animal wastes, human and domestic animal power were available in the traditional societies to fulfill their energy needs. Agricultural operations were also carried out through human and animal power only in the earlier phase. But with technological development and intelligence of the human mind, the hard labour is replaced by machineries.

Energy Scenario in India

The Economic Survey of 2018-19 states that India's annual per capita energy consumption is 0.6 tonnes of oil equivalent which is about a third of the world average. The Survey further states that the energy consumption needs to increase four times if India has to achieve a Human Development Index (HDI) of 0.8, which is considered to be 'very high'. Increase in incomes, urbanization, and rapid advances in technology are expected to change the household energy consumption levels and patterns substantially. Hence it is crucial to study these emerging patterns which can inform policies aimed at influencing demand as well as planning of resources required to meet the demand. However, there is very little information on how people use energy in their homes in India. At present, many studies have pointed out that the consumption structure of rural living energy has significant differences in different stages and regions, and is closely related to regional resource endowment, climate conditions, economic conditions, social structure, regional culture and other factors. Adopting diversification strategy is considered as the best choice to ensure the security of long-term energy supply. In a developing country like India, mostly non-commercial form of energy is consumed locally for subsistence level activities. Without energy, it is impossible to achieve a desired growth rate in any sector. Energy also bears importance in social developments like health, education, family welfare and urbanization etc. It is both the end and means to development. Energy is a vital component for sustained economic growth and energy mix is an indicator of sustainable development of a region or country. With the advancement of the societies, people are opting for cleaner energy sources in the form of coal, oil and electricity in place of falling non-commercial sources (firewood, dung cake and agricultural wastes). According to 2011 census, in India the ratio of commercial energy sources to non-commercial energy sources is 72:28. The increased use of commercial energy is due to changing preferences of the people for energy sources over the years. India, with 1.2 billion population promises it to be an emerging economic power but it still has to travel a long way to reach development. 68.84 percent out of the total Indian population still lives in village with little household amenities

Rural energy consumption in LDCs constitutes the majority of total national energy use. The social and economic costs of insufficient supplies of household fuels are high and rising rapidly. According to UNDP and World Bank estimates based on investigations in 15 LDCs, household energy consumption accounts for 30-95% [compared with 25-30% in developed countries (DCs)]of total energy use. More than half of the energy consumed in households is used for cooking in most of the developing countries. Therefore, any savings in energy consumption in cooking can have a significant impact on reducing the total household energy requirements in these countries. Natural emission of CO_2 from living animals, humans, wetlands, volcanoes, and other sources is nearly balanced by the same amount being removed from the atmosphere by plant photosynthesis and by the oceans. Human activity, on the other hand, is disturbing this equilibrium by generating increased CO_2 from fossil fuels (i.e. coal, gas, and petroleum products; and combustion via electricity generation, transportation, industry, and domestic use). Similarly, different types of biomass fuels are also responsible for carbon dioxide emission. The results of these imbalances are believed to be greenhouse effects: global warming, melting of polar ice

sheets and caps, a rise in sea levels and subsequent coastal inundations, and damage to agriculture and natural ecosystems, among others. Therefore, it is important to study CO_2emission from human activity in a developing country such as India, which is highly vulnerable to its adverse effects.

6. Objectives of the study :

- To analyse the pattern of energy use in rural households of Maravanmadam Village.
- To identify the factors that determine household energy consumption pattern in cooking, lighting and transportation.
- To highlight the problems faced by the households in consuming energy from different sources.

7. Methodology adopted:

The study uses both primary and secondary data for analysis. Primary data was collected through questionnaire and other related information was collected from various books, magazines and websites for this research work. For the present study totally 91 households were interviewed. The research work depends mainly on primary data collected through survey, personal interviews and questionnaire. The use of secondary data to a limited extent is made wherever necessary. Simple Random sampling method was used to select the samples. Formal and informal discussions were held with the people of the village. A structured validated questionnaire covering information regarding socio-economic and energy consumption related questions were prepared to collect required information from Maravanmadam households. The reference period for the study was one year. The study was carried out in the year 2020. The collected data is tabulated in the light of objectives. The data is processed and analysed with the help of a master table and statistical tools. The study investigated the fuel mix pattern among the rural households in the Maravanmadam and also tried to identify the factors that determine the household energy consumption pattern in cooking and lighting in the rural households. Along with this, the study also highlights the problems faced by the households in consuming energy from different sources. The study was conducted in Maravanmadam village of Tamilnadu.

Profile of Maravanmadam Village

Maravanmadam is a village Panchayat located in the Tuticorin district of Tamil-Nadu state, India. The latitude 8.756365 and longitude 78.071981 are the geocoordinate of the Maravanmadam. Chennai is the state capital for Maravanmadam village. It is located around 539.8 kilometer away from Maravanmadam.. The other nearest state capital from Maravanmadam is Thiruvananthapuram and its distance is 121.8 KM. The other surrounding state capitals are Thiruvananthapuram 121.8 KM., Pondicherry 402.9 KM., Bangalore 472.6 KM. The surrounding nearby villages and its distance from Maravanmadam are Korampallam 3.4 KM , Athimarapatti 4.0 KM , Kulayankarisal 4.7 KM , Mullakadu 6.2 KM , Servaikaranmadam 6.8 KM , Meelavittan 8.0 KM , Mudivaithanendal 9.5 KM , Sankaraperi 9.5 KM. The native language of Maravanmadam is Tamil and most of the village people speak Tamil. Maravanmadam people use Tamil language for communication.

8. Major findings

According to the results of preliminary analysis ad investigation, it is concluded that with the gradual improvement of the power grid project in the study area under the national energy benefit policy, it has become a reality to electrify the village and the household. At present, there are no un-electricity households in the study area. In the case of sources of energy and power consumption the people belong to other backward communities has highest proportion of

electricity connection. 14.1% of the electricity connection is being enjoyed by Scheduled caste community.

Table 1 – Registered Electricity Connections in Maravanmadam Village

Caste Category	Registered Electricity Connection	Percentage
SC	38	14
ST	10	3.8
OBC	169	62.6
GEN	53	19.6
Total	270	100

Source: Survey

Almost 62.7% of the electricity connection is being enjoyed by the OBC community. In the case of general community 19.6% of the total registered electricity connection constituted by them.

Table 2 - Lighting Source and Usage in Maravanmadam Village

Lighting Source	Households	percentage
Electricity	90	99
Kerosene	0	-
Solar power	1	01
Total	91	100

Source: Survey

Out of the total 91 households in Maravanmadam village, Almost 99% of the village households is using electricity as a lighting source. Only 01%, only one household in Maravanmadam is using solar power for lighting.

Table 3 - Cooking Fuels Usage in Maravanmadam Village Households

Caste Section	Kerosene	LPG	Biogas	Wood	Cow Dung	Agro residues
SC	1	11	0	1	0	0
ST	0	3	0	0	0	0
OBC	0	56	1	1	0	0
GEN	1	16	0	0	0	0
Total	2	86	1	2	0	0

Source: Survey

In the case of cooking fuels usage only one household of both the scheduled caste and general community is using Kerosene. In the case of LPG usage Scheduled caste constitutes 12.7%. Majority of the LPG usage is done by other backward community. It amounts to 65.1%. General community constitutes 18.6% of the total LPG usage. Only3.5% of the LPG usage is done by Scheduled Tribe people. With respect to biogas usage only one household of other backward community is utilising the biogas.

It is evident from the above table that out of 91 households, 86 households ie.94.5% of the households is using LPG as cooking fuel. Only 3.9% of the households are using kerosene and wood as their cooking fuels and only one household is using biogas as the cooking fuel.

Table 4 - Cooking Chullah Usage in village

Caste Section	Traditional Chullah	Smoke Less Chullah
SC	10	2
ST	3	0
OBC	25	24
GEN	10	4

In the case of Traditional Chullah 27.5% of the usage is done by the other backward community of the village. Almost 11% of the traditional Chullah use is done by Scheduled caste and general community. Only 3% of the usage is constituted by Scheduled tribe. Traditional Chullah dominantly used by other backward community of Maravanmadam. This constitutes 27.47%. This section of the village community constitutes 26% of the smoke less Chullah. Almost 11% of traditional Chullah is used by both scheduled caste and general community. There is no Scheduled tribe community which is engaged in the utilisation of smokeless Chullah. Almost 3.3% of this community is engaged in the use of traditional Chullah.

- Lighting, the most basic use of electricity, presents a more positive story. Almost all the houses in Maravanmadam Village have the registered electricity connection for lighting purpose.
- It is also observed that energy consumption in households is restricted by reliability in electricity supply, affordability of appliances and accessibility to clean cooking fuels.
- For purposes of space cooling, this study highlights that ceiling fans remain the most frequently used appliances. However, use of air coolers and air conditioners is found in middle and high income households.
- Energy for cooking remains one of the most important requirements of households and its demand continues to be met using multiple sources of fuels.
- This study highlights that more than 99% of the surveyed households in Maravanmadam village have LPG connections.
- Majority of these households find LPG to be expensive to use for all of their cooking. A sizeable proportion also quotes preference for food cooked on Chullah as a reason for not shifting to LPG.
- With respect to using wood as a cooking fuel only one household of both Scheduled Caste and other backward community is utilising the wood.
- There is no household using cow dung as fuel for cooking
- There is no household which is using agro residues as fuel for cooking.
- Utility of electricity supply is 23 hours per day.

- In Maravanmadam village total electricity load of households is 45.55kw.
- In the case of common village facilities total electricity load is 2kw.

9. Suggestions / Recommendations :

- Awareness should be created about environment friendly energy resources
- Fire wood; coal solar energy and biogas can be used in rural areas without creating pollution.
- Interventions, both economic and behavioral, are needed to push for sustained and exclusive use of LPG as well as other clean alternatives to eliminate the use of solid fuels for cooking.
- Financial help to use Improved Chulas
- Required a Project on Biogas Development of Community, Institutional and Night Soil based biogas plants programme.
- Rural Energy entrepreneurship must be created and supported.
- Women must be motivated to use Renewable energy.
- There must be Biomass Production, conversion & utilisation programme. Biomass gasification programme is to be adopted.
- Animal Energy Programme and Integrated Rural Energy Programme should be implemented.
- Impact of this work on learning of students/teachers:
- We were able to understand the different energy resources used by rural households of Maravanmadam.
- Awareness must be created about the significance of sustainable energy use and the potential of environment friendly energy resources.
- There is a greater need to identify the need of different schemes required for Maravanmadam.
- People need to understand the linkage between energy use and environment.

Conclusion

Energy is a key component of people's life, which has major socio-economic bearings. Promotion of energy conservation and efficiency measures in residential and transportation sectors heavily impact life habits of the residents. Smart policies and innovative technologies can be used to reduce the overall energy consumption. Often a lot of attention is given to electricity and gasoline consumption, while a complete picture of the residential and transportation energy consumption should be analyzed to optimize and rationalize the overall national energy use.

DECLARATION

I / We declare that the project work is original and carried out by me / us under the guidance of Alfreeda T.A. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

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AISHE code of the Participating Institute: **C-41151**

Name of the Regional Coordinating Institute of UBA: **Gandhigram Rural Institute Deemed to be University, Dindigul.**

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title / award and the work is genuine.

Signature of the Project Supervisor

Proforma for the Submission of Project Report for

Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. Title of the Project: **A study on water management in Maravanmadam Village, Thoothukudi.**

2. Details of Participant(s) :

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3. UBA theme for Project Work : **Water management**

4. (a) Organic Farming (b) Water management

   (c) Renewable energy (d) Artisans, industries and livelihood

   (e) Basic amenities (f) Convergence

4. SDGs to be achieved : **Clean water and sanitation**

i. No poverty
ii. Zero hunger
iii. Good health & Well-being
iv. Quality education
v. Gender equality
vi. Clean water and sanitation
vii. Affordable & clean energy
viii. Decent work & economic growth
ix. Industry, innovation and infrastructure
x. Reduced inequality
xi. Sustainable cities & communities
xii. Responsible consumption and production
xiii. Climate action
xiv. Life below water
xv. Life on land
xvi. Peace & justice strong institutions
xvii. Partnerships to achieve the goal

5. Background of the study :

Water is basic human right, most precious resource for economy and health. Sanitation is determinants of quality of life and individual's hygiene can affect the whole community. Drinking water and sanitation is a fundamental health service. It's a matter of concern that 600 million people in India face high to extreme water stress in the country. About three-fourth of the households in the country do not have drinking water at their premise. With nearly 70% of water being contaminated, India is placed at 120th amongst 122 countries in the water quality index. It's a fact that water is a State subject and its optimal utilization and management lies predominantly within the domain of the States.

Health is the level of functional and metabolic efficiency of a living organism. The World Health Organization (WHO-2006) defined human health in its broader sense as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity". Health, or health and well-being, are also includes a supportive environment, personal security, freedom of choice, social relationships, adequate employment and income, access to educational resources, and cultural identity. Over the last decade, health promotion practitioners have increasingly been asked to think about the relationships between humans and the environment in terms of ecosystems and to adopt an 'ecological' approach to health promotion with the environment an integral part of human development

Hygiene is a set of practices performed to preserve health. According to the World Health Organization (WHO), "Hygiene refers to conditions and practices that help to maintain health and prevent the spread of diseases. Hygiene is a concept related to cleanliness, health and medicine. It is as well related to personal and professional care practices. In medicine and everyday life settings, hygiene practices are employed as preventative measures to reduce the incidence and spreading of disease. Hygiene practices vary, and what is considered acceptable in one culture might not be acceptable in another. In the manufacturing of food, pharmaceutical, cosmetic and other products, good hygiene is a critical component of quality assurance. The terms cleanliness and hygiene are often used interchangeably, which can cause confusion. In general, hygiene refers

to practices that prevent spread of disease-causing organisms. Cleaning processes (e.g., hand washing) remove infectious microbes as well as dirt and soil, and are thus often the means to achieve hygiene. The effects of poor sanitation seep into every aspect of life — health, nutrition, development, economy, dignity and empowerment. With a little less than a year left to accomplish the millennium development goals, 2.5 billion people are still devoid of improved sanitation facility. The sanitation target 7C (target 7C: Halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation) to reach 75% of global coverage by 2015 from the present 63% is likely to be missed. Globally, water and sanitation hygiene practice are responsible for 90% of diarrhea-related mortality, which is much higher than combined mortality from malaria and HIV/AIDS. Although piped water facility in the rural regions almost doubled in past two decades, there are still 171 million people in rural regions who use surface water as the primary source of water. Despite limited improvement in drinking water facilities in rural regions, the trend of the sanitation is still on a slow track, with 66% of the total rural population not having toilet facilities. Limited access to safe drinking water and poor sanitation can lead to under nutrition, water borne diseases, gastro-enteropathy along with diarrhea and dysentery. Many communicable diseases can be effectively managed by improving the sanitation, hygiene and water usage practices. However, infrastructure development and policies alone are adequate to fill the existing gap of knowledge and practice of drinking water and sanitation. Nevertheless for effective reduction of effects from poor water and sanitation practices there is a need for understanding the present scenario and the effect of currently existing interventions in the rural settings. Hence, the objective of this study was to understand the knowledge, attitude, and practices related to drinking water and sanitation facilities among the rural population of Chennai, India.

Sanitation generally refers to the provision of facilities and services for the safe disposal of human urine and feces. The word ‘sanitation’ also refers to the maintenance of hygienic conditions, through services such as garbage collection and wastewater disposal. (WHO). .

6. Objectives of the study :

- To assess the quality and quantity of water required for different household uses in the study area
- To analyse the Sanitation and related health issues in Maravanmadam Village
- To discuss the Water treatment and storage practices in Maravanmadam Village

7. Methodology adopted

The study uses both primary and secondary data for analysis. Primary data was collected through questionnaire and other related information was collected from various books, magazines and websites for this research work. For the present study totally 91 households were selected. The research work depends mainly on primary data collected through survey, personal interviews and questionnaire. The use of secondary data to a limited extent is made wherever necessary. Primary data is collected through questionnaire, observation and discussions. Random sampling method was used to select the samples. A questionnaire was prepared to collect the information from the sample respondents of Siluvaipatti village. Formal and informal discussions were held with the people of the village. The collected data is tabulated in the light of objectives. The data is processed and analysed with the help of a master table and statistical tools. There are some limitations associated with our study, first it included smaller sample size and the study design was cross-sectional.

Further the study was limited to one geographical location; hence, the results of the study should not be generalised.

Profile of Maravanmadam Village

Maravanmadam is a village Panchayat located in the Tuticorin district of Tamil-Nadu state, India. The latitude 8.756365 and longitude 78.071981 are the geocoordinate of the Maravanmadam. Chennai is the state capital for Maravanmadam village. It is located around 539.8 kilometer away from Maravanmadam.. The other nearest state capital from Maravanmadam is Thiruvananthapuram and its distance is 121.8 KM. The other surrounding state capitals are Thiruvananthapuram 121.8 KM., Pondicherry 402.9 KM., Bangalore 472.6 KM. The surrounding nearby villages and its distance from Maravanmadam are Korampallam 3.4 KM , Athimarapatti 4.0 KM , Kulayankarisal 4.7 KM , Mullakadu 6.2 KM , Servaikaranmadam 6.8 KM , Meelavittan 8.0 KM , Mudivaithanendal 9.5 KM , Sankaraperi 9.5 KM. The native language of Maravanmadam is Tamil and most of the village people speak Tamil. Maravanmadam people use Tamil language for communication.

Major findings

Table -1 Sources of drinking water available for households in Maravanmadam

Availability of Drinking water	Households	Percentage
Piped Water	30	33
Community Tap	41	45
Hand Pump	10	11
Open well	11	12
Total	91	100

Source: Survey

Table 2 Caste wise Classifications of Households with Toilets

Caste category	With Toilets	Percentage
SC	13	14
ST	3	3
OBC	58	64
GEN	17	19
Total	91	100

Source: Survey

Table- 3 Drainage Linked to Households

Drainage Linked to Households	Village Data	Percentage
Covered	89	98
Open	2	2
Total	91	100

Source: Survey

Table 4 – Details regarding the Compost Pit in Maravanmadam

Compost Pit	Village Data	Percentage
Individual	10	11
Group	56	62
None	25	27
Total	91	100

Source: Survey

- There is only one primary health centre
- The number of primary health centres per thousand populations is 3.47.
- There is no civil hospital in Maravanmadam.
- The area is devoid of major health problems so far as per the survey
- Access to safe drinking water is measured by the percentage of the population having access to and using improved drinking water sources.
- In the case of availability of hygiene drinking water 30 households have piped water. It implies 33% of the village community is depended on piped water.
- 41 households are getting water from community taps. This in turn comprises 45%.
- In Maravanmadam 10 households are using hand pumps.
- There is 11 households totally depended on open well.
- Almost 23% of the village people depended on hand pump and open well.
- Access to sanitation is measured by the percentage of the population with access and using improved sanitation facilities. In the case of Hygiene practices there are no households in Maravanmadam without toilets.
- Households with and without toilets across different prevailing caste section in village shows that 3% of the household belongs to the Scheduled tribe community. Almost 14% of the household belongs to the Scheduled Community. The General community comprises 19% of the household. Almost 64% of the households from other backward community use toilets.

- Shared sanitation facilities are of an otherwise acceptable improved type of sanitation facility that is shared between two or more households. Shared facilities include public toilets. There is both private and community toilet in the village. Compared to the community toilets use of private toilets are more in Maravanmadam. 11% of the households have individual Compost pits and 62% of the households are having public compost pits.
- There is no problem of open defecation.
- Almost 98% of the households have closed drainage whereas only 2% have open drainage in their houses.

8. Suggestions / Recommendations :

- One male multi-purpose worker for a population of six to seven thousand initially.
- One female health worker for a population of ten to twelve thousand,
- Integrated training for all workers,
- Co-ordination of programmes and personnel.
- Primary healthcare or a generalist approach. In rural areas, the health professionals need to provide a range of care, for a range of conditions to people across the life cycle. ...
- Social accountability mandate of medical and nursing schools. ...
- Availability of rural training sites.
- Accelerate sanitation coverage in rural areas. Generate a push from the people to get facilities rather than expect the Government to do it (demand-led promotion).
- Focus on intensive education and awareness campaigns to ensure that people understand the need for safe sanitation.
- Access to water, sanitation, and hygiene is vital, as hand washing with water and soap has proven to be a crucial element of accessing health, education, as well as gender equity, and is one of the most effective measures of COVID-19 prevention.

9. Impact of this work on learning of students/teachers:

- Good personal hygiene is important for both health and social reasons.
- It imparted knowledge on the importance of keeping our hands, head and body clean so as to stop the spread of germs and illness. In this Covid period it can prevent the spread of this disease.
- We understood that personal hygiene benefits our own health and impacts the lives of those around us.

Conclusion

The benefits of having access to an improved drinking water source can only be fully realized when there is also access to improved sanitation and adherence to good hygiene practices. Beyond the immediate, obvious advantages of people being hydrated and healthier, access to water, sanitation and hygiene has profound wider socio-economic impacts, particularly for women and girls. Water is one of the precious natural resource and is essential element of our life. Clean water and optimum sanitation facilities can prevent the occurrence of various infectious diseases and help in curbing the associated morbidity and mortality. The current study was conducted in rural setting of India to understand the existing water and sanitation facilities, perceptions and practices. There is also a need for developing cost effective water testing devices to record seasonal variations in water quality in rural areas.

DECLARATION

I / We declare that the project work is original and carried out by me / us under the guidance of _____. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

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AISHE code of the Participating Institute: **C-41151**

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CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title / award and the work is genuine.

Signature of the Project Supervisor

Project Report for Virtual Internship Programme on Sustainable Development Goals and Community Engagement

Title of the Project: **A Study on the Socio- Economic Status of Households in Maravanmadam Village, Thoothukudi District**

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2. UBA theme for Project Work : **Basic amenities**
3. (a) Organic Farming (b) Water management
   (c) Renewable energy (d) Artisans, industries and livelihood
   (e) Basic amenities (f) Convergence

4. SDGs to be achieved : **Decent work & economic growth**

i. No poverty
ii. Zero hunger
iii. Good health & Well-being
iv. Quality education
v. Gender equality
vi. Clean water and sanitation
vii. Affordable & clean energy
viii. Decent work & economic growth
ix. Industry, innovation and infrastructure
x. Reduced inequality
xi. Sustainable cities & communities
xii. Responsible consumption and production
xiii. Climate action
xiv. Life below water
xv. Life on land
xvi. Peace & justice strong institutions
xvii. Partnerships to achieve the goal

5. Background of the study :

Socioeconomic status (SES) is an economic and sociological combined total measure of a person's work experience and of an individual's or family's economic and social position in relation to others, based on income, education, and occupation. When analysing a family's SES, the household income, earners' education, and occupation are examined, as well as combined income, whereas for an individual's SES only their own attributes are assessed. However, SES is more commonly used to depict an economic difference in society as a whole. Socioeconomic status is typically broken into three levels (high, middle, and low) to describe the three places a family or an individual may fall into. When placing a family or individual into one of these categories, any or all of the three variables (income, education, and occupation) can be assessed. Education in higher socioeconomic families is typically stressed as much more important, both within the household as well as the local community. In poorer areas, where food, shelter and safety are priority, education can take a backseat. Socioeconomic status (SES) encompasses not just income but also educational attainment, occupational prestige, and subjective perceptions of social status and social class. Socioeconomic status can encompass quality of life attributes as well as the opportunities and privileges afforded to people within society. Poverty, specifically, is not a single factor but rather is characterized by multiple physical and psychosocial stressors. Further, SES is a consistent and reliable predictor of a vast array of outcomes across the life span, including physical and psychological health. Thus, SES is relevant to all realms of behavioral and social science, including research, practice, education and advocacy. SES affects overall human functioning, including our physical and mental health. Low SES and its correlates, such as lower educational achievement, poverty and poor health, ultimately affect our society. Inequities in health distribution, resource distribution, and quality of life are increasing in the United States and globally. Society benefits from an increased focus on the foundations of socioeconomic inequities and efforts to reduce the deep gaps in socioeconomic status in rural India

6. Objectives of the study :

- To study the socio economic status of the people living in Siluvaipatti village.
- To analyse the income, expenditure and saving pattern of the village
- To study the infrastructure facilities in the village.
- To study the employment status of the people in the village

7. Methodology adopted

The study uses both primary and secondary data for analysis. Primary data was collected through questionnaire and other related information was collected from various books, magazines and websites for this research work. For the present study totally 91 households were selected. The research work depends mainly on primary data collected through survey, personal interviews and questionnaire. The use of secondary data to a limited extent is made wherever necessary. Primary data is collected through questionnaire, observation and discussions. Random sampling method was used to select the samples. A questionnaire was prepared to collect the information from the sample respondents of Siluvaipatti village. Formal and informal discussions were held with the people of the village. The collected data is tabulated in the light of objectives. The data is processed and analysed with the help of a master table and statistical tools. There are some limitations associated with our study. It has been mainly carried out through Questionnaire technique which has all its drawbacks. Since the study is mainly based on primary data, non-cooperation of respondents poses as a major limitation. The data revealed by them may or may not be authentic. The data collected was limited to 91 households only as per the convenience of the investigators. Further the study was limited to one geographical location; hence, the results of the study should not be generalised.

Profile of Maravanmadam Village

Maravanmadam is a village Panchayat located in the Tuticorin district of Tamil-Nadu state, India. The latitude 8.756365 and longitude 78.071981 are the geocoordinate of the Maravanmadam. Chennai is the state capital for Maravanmadam village. It is located around 539.8 kilometer away from Maravanmadam.. The other nearest state capital from Maravanmadam is Thiruvananthapuram and its distance is 121.8 KM. The other surrounding state capitals are Thiruvananthapuram 121.8 KM., Pondicherry 402.9 KM., Bangalore 472.6 KM. The surrounding nearby villages and its distance from Maravanmadam are Korampallam 3.4 KM , Athimarapatti 4.0 KM , Kulayankarisal 4.7 KM , Mullakadu 6.2 KM , Servaikaranmadam 6.8 KM , Meelavittan 8.0 KM , Mudivaithanendal 9.5 KM , Sankaraperi 9.5 KM. The native language of Maravanmadam is Tamil and most of the village people speak Tamil. Maravanmadam people use Tamil language for communication.

8. Major findings

This chapter deals with the analysis of the data collected. The collected data has to go through various steps such as editing, coding and tabulation. Coding refers to assigning number or placing them in categories to prepare data for tabulation. Tabulation refers to bringing together similar data in rows and columns and totalling them in an accurate and meaningful manner. Accordingly, various tables were formed. The tables are enclosed with interpretation and charts and diagrams.

Table 1 -Demographic profile of Sample respondents in Maravanmadam Village

Total Household	91
Total Population	288
Gender Ratio	1182 Females per 1000 Males
Average Members per Family	3

Source: Survey

The above table shows that the male female ratio in that village as 1000/1182 i.e. for every 1000 male there are 1182 females

Table 2 - Gender Wise Population across Age Groups

Age	**0-5 Years**	**6-18 Years**	**19-45 Years**	**46 and Above**	**Total**
Male	2	24	69	37	132 (46)
Female	7	44	75	30	156 (54)

Source: Survey

The table shows the gender wise distribution of different age groups of the sample respondents in Maravanmadam village

Table 3 - Poverty Line across Prevailing Caste Section

Caste Section	**BPL**	**APL**	**Total**
SC	11	2	13
ST	3	0	3
OBC	40	18	58
GEN	17	0	17
Total	71	21	91

Source: Survey

The table shows that out of the 91 households, 71 households i.e., 78 percent of the households lives below the Poverty line and 22 percent of the households only lives above the poverty line

Table 4 - Aadhar Coverage across Prevailing Caste Section

Caste Section	With Aadhar	Without Aadhar	Total
SC	37	1	38
ST	10	0	10
OBC	186	1	187
GEN	53	0	53
Total	286 (99%)	2 (01%)	288 (100%)

Source: Survey

The above table shows that 99% of the respondents have their Aadhar Card whereas only 1 percent is not having Aadhar.

Table 5 - Average annual income per family across prevailing caste category

Caste Section	Average Annual Income
SC	57785
ST	3467
OBC	94684
GEN	95224

Source: Survey

Table 6 - Bank Coverage across prevailing Caste Section

Caste Section	With Bank Account	Without Bank Account	Total
SC	33	0	33
ST	8	0	8
OBC	143	20	163
GEN	36	14	50
Total	220 (87%)	34 (13%)	254 (100%)

Source: Survey

The table shows that 87 percent of the respondents are having bank account for various reasons and only 13 percent respondents are not having bank account

Table 7 - Education details of sample respondents in Maravanmadam Village

Particulars	Village Data
Literacy Rate male	84.09
Literacy rate female	82.05
Total Literacy rate	82.99

Source: Survey

The table shows that Total literacy rate of the sample respondents is 82.99 percent whereas the percentage is 84.09 for male and 82.05 in female

Table 8 - Type of Houses among the households

Caste Section	Kutcha	Semi-Pucca	Pucca	Homeless
SC	0	2	11	0
ST	0	0	3	0
OBC	0	7	50	1
GEN	0	1	16	0

Source: Survey

Table 9 - Number of male and female individuals across different education levels

Education Level	Male	Female
Not Literate	21	28
Literate	13	27
Completed Class 5th	24	26
Class 8th	15	17
Class 10th	16	15
Class 12th	21	25
ITI Diploma	4	0
Graduate	17	15
Post Graduate/Professional	1	3
Computer Literate	26	17

Source: Survey

Table 10 - School Going Children and adult literacy across caste groups

Caste	Category	School Going Children			Adults		
		Male	Female	Total	Male	Female	Total
SC	BPL	4	4	8	0	11	11
	APL	0	0	0	0	0	0
ST	BPL	1	0	1	4	6	10
	APL	0	0	0	0	0	0
OBC	BPL	9	0	9	44	0	44
	APL	14	12	26	30	30	60
GEN	BPL	0	3	3	17	23	40
	APL	1	0	1	2	1	3
TOTAL	BPL	14	7	21	65	40	105
	APL	15	12	27	32	31	63

Table 11 - Details regarding Cattle population, productivity, shelter and waste

Particulars	Village Data
Total No. of Livestock	7
Pucca shelter for livestock	0
Kutcha shelter for livestock	1
Open shelter for livestock	11
Average daily production of milk (Litres)	220
Total animal waste/cow dung(Kg) per day	60

Source: Survey

Table 12 - Cattle wise population per household among various

Caste Section	Cow	Buffalo	Goats/Sheep	Bullocks	Calves	Poultry/Duck
SC	0	0	0	0	0	0
ST	0	0	0	0	0	0
OBC	1	0	0	0	0	1
GEN	3	0	0	0	0	2

Source: Survey

The findings from the study are as follows:

- 46 percent of the respondents are men and 54 percent women
- 80 percent of the male respondents and 67 percent of the female respondents belong to the age group of 19 -45 yrs and above
- Total literacy rate of the sample respondents is 82.99 percent whereas the percentage is 84.09 for male and 82.05 in female which is greater than the rural literacy rate of the state, 73.54%.
- 99 percent of the respondents have their Aadhar Card whereas only 1 percent is not having Aadhar.
- 87 percent of the respondents are having bank account for various reasons and only 13 percent respondents are not having bank account
- Majority (94%) of the respondents have 1-2 working members in their family
- 87 percent of the sample respondents lives in Pucca tiled houses
- 76 percent of the respondents belong to the monthly income group of less than Rs.15,000
- Majority (96%)of the respondents spend a major part of their income on food expenditure
- 60% of the respondents save their income with the banks and other options such as self-help groups, postal savings, chit funds etc.
- 40% of the respondents are having their investment in cattle
- Average income of the sample respondents ranging from Rs.3467/- in Schedule Tribe community to Rs. 95224/- in General Community
- Majority (100%) of the respondents which means the entire village is having drinking water connection. Some are using their own wells
- Majority (100%) of the respondents have electricity connection and use it as the main source of energy for lighting and the village is fully electrified like any other village in Tamil Nadu.
- More than 80 percent of the respondents use LPG as the major source of energy used for cooking.
- The percentage of respondents who own cattle is only 08%, which is very than that of the state average, 60%.
- Public transport facility is available to the village connecting the village to the town
- All the respondents earn an income above Rs.960 per month, which is the yardstick for deciding the poverty in the rural areas as per the Rangarajan Committee and on that basis, the respondents are above the poverty line.

Suggestions:

From the findings, the study suggests the following measures to improve the standard of living of the respondents:

- This Maravanmadam village is not covered by any government sheme as per the survey. So it is highly recommended to create awareness among the village about the various Government Schemes available for the development of the people and their village.
- Public transport is not available to reach the interior parts of the village
- To introduce subsides programmes for various activities, especially, agriculture, social services and credit.
- Credit guidelines, rural and community banking facilities should be provided.
- Fare prices food shop, road and rural infrastructure should be provided by the government.
- Employment awareness should be created through various programmes
- Small and medium scale enterprise such as sea food industries should be encouraged at village level.
- Provide better life for rural women and family planning programme.

- Income oriented programme generated at village level.
- Create awareness about Fisheries, animal husbandry, forestry, poultry farming among the villagers.
- Special programme for target group should introduce such as women, youth, beggars, children's, economically disadvantage family.
- Vocational training should be popularly launched

Conclusion:

As seen from the findings, it can be concluded that the village has a very low socio-economic status with respect to income and expenditure pattern. The village has a very high literacy rate when compared to that of the state average. All the respondents have complete access to electricity. It is also seen that the village lacks in certain key indicators such as higher education, connectivity to other villages, water facility and cattle ownership when compared to the state average. In Socio-economic development of society, nation many factors plays significant role in which educational attainment is considered as an important one. Education creates power to think rationally about every element in human beings including females. The society which is having strong educational foundation and equal shares of male and female literate can achieve the peaks of development in any field. In fact female literacy is significantly important for the overall progress of the nation, as they are an important constituent of the society and constitute nearly half of the total population. Hence their educational status should not be neglected. Literate women can become sculpture of bright future of the society. With education women can perform their various family roles that are daughter, wife, and mother with perfection as well as can become economically self-reliant and consequently achieve the proper status in society equivalent to men.

DECLARATION

I / We declare that the project work is original and carried out by me / us under the guidance of Ms. Alfreeda T.A. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

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VC011811	Alfreeda T A	
VC010818	Narmatha. N	
VC010819	Packia Nihila M	
VC010820	Ruth Wesley A	
VC010821	Sabaniya A	
VC010822	Sahaya Subitsa G	
VC010823	Selva Packiam B	
VC010824	Selva Vinisha V	
VC010825	Sesu Maria Kemi	
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AISHE code of the Participating Institute: C-41151

Name of the Regional Coordinating Institute of UBA: Gandhigram Rural Institute Deemed to be University, Gandhigram

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title / award and the work is genuine.

Signature of the Project Supervisor

Submission of Project Report for Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1.Title of the Project : **GENERAL AND PUBLIC OPINION ABOUT ARTISANS,INDUSTRIES AND LIVELIHOOD IN THOOTHUKUDI CITY**

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3.UBA theme for Project Work **:d)Artisans, industries and livelihood**

(a)Organic Farming (b)Water Management

(c)Renewable energy (d)Artisans, Industries and livelihood

(e)Basic amenities (f)Convergence

4.SDGs to be achived **: ix.Industry,innovation and infrastructure**

i. No Poverty
ii. Zero hunger
iii. Good Health& Well-being
iv. Quality Education
v. Gender Equality
vi. Clean Water and Sanitation
vii. Affordable& clean energy
viii. Decent work& Economic growth
ix. Industry, innovation and Infrastructure
x. Reduced inequality
xi. Sustainable cities& communities
xii. Responsible consumption and production
xiii. Climate action
xiv. Life below water
xv. Life on land
xvi. Peace& justice strong institutions
xvii. Partnerships to achieve the goal

5. Background of the study :

In the backdrop of the mild sound of waves lashing against their boats and mechanised vessels berthed in Tharuvaikulam wharf, fishers were busy mending their nets in a shed. The fishing ban had just ended, and those who had repaired their nets at home were seen bringing them back. These are the typical scenes in any fishing village.However, the

difference here is that Tharuvaikulam, in Thoothukudi (formerly Tuticorin) district in Tamilnadu, is not a traditional fishing village.“There were no fishermen in Tharuvaikulam 50 years ago,” said VinothRavindran, the state coordinator of NETFISH, the extension wing of Marine Products Export Development Authority (MPEDA). Most people here were into tapping toddy and some into farming.The older men and women here recall the *panankaadu* (palmyra grove) close to the shore. Further from the shore stretched acres of palmyra trees. “They were so close that we could hop from one tree to another,” recalled Francis M.

6. Objectives of the study :

Francis and Anthoniyar Pitchai, middle-aged fishermen, recall some men in the older generation mining corals. “Initially, only about 20 men set out for coral mining. As it was found to be lucrative, slowly more men started joining them,” said Anthony Duraiswamy.There were corals in abundance near the 21 uninhabited islands in the Gulf of Mannar. The palmyra climbers who ventured out into the sea to mine corals used *challiodam*, a small country boat. “The *challi* or corals, a rich source of calcium carbonate, was used in the lime industry and was transported to the kilns in Theresepuram near Thoothukudi,” said VinothRavindran. This was how the palmyra climbers here ventured into the sea first.“About 40 years ago, a few people fished in pairs near the shore using *ola* and *kuthu* nets as there was fish in abundance here. It was mostly for their consumption,” said Francis. They sold only when the catch was more than what they needed.

“Some people think that we tap *padhaneer* for most of the year and fish the rest of the time. Take a look at the number of boats here and decide for yourself,” said Vijay K. “I still like to climb. But I climb only to get *nungu* (palmyra fruit).

”According to Vijay, 80 percent of the men in his village can still climb the palmyra tree. “But there’s more money in fishing,” said Vijay with a grin. Except for a few from the younger generation who took up jobs such as teaching, driving and the like, the rest are fishermen. Their statement is reflected in a sample study on fishers’ livelihoods carried out by the Fisheries College and Research Institute, Thoothukudi in 2017. As per Census 2011, Tharuvaikulam has 1,743 households. According to the study, in Tharuvaikulam, 88 percent of

the people are dependent solely on fishing for livelihood and the remaining 12 percent depend partially on it.

Artisan

The boatwrights of Tharuvaikulam for repair. The boatwrights decided to seize the opportunity. Starting with minor repair of fiber boats, within a short period they graduated to making them. Now they are adept at making wooden and FRP boats of different categories and sizes, but as specified by the government.

Tharuvaikulam boatwrights build could be country boats or mechanized boats, with a slight variation in the structure between the two. While a wooden country boat of 65 feet length could cost about Rs 20 lakh without the engine, a fiber boat of the same length would cost about Rs 35 lakh. In a boatyard in Tharuvaikulam, boatwrights who used to build wooden boats, get a wooden frame ready for a fiber boat, preferred by most fishermen nowadays.

Industrial

Salt producers would usually start the season with the preparatory works in January every year by rectifying the damages caused by the northeast monsoon to the saltpans between October and December. Subsequently, salt production would start in February and go up to September last week before the onset of northeast monsoon. There will be no production during the northeast monsoon i.e. between October and December.

The coastal district, Tharuvaikulam produces 25 lakh tonnes of salt every year.“We can prepare the saltpans for this season only after the stagnant rainwater completely drains. If there is no fresh spell of rain and sunny days continue, we can prepare the saltpans by February alone and salt production

Livelihood

Sea-based fisheries programme could bridge the gap of fish production over the years. The fishermen should concentrate much on mariculture activities for their sustainable livelihood.Such activities are being executed in shelter bays and inlets with enormous natural resources. Mariculture activities are being promoted through cage culture of marine fin and shell fishes. Besides, an indigenous seaweed culture programme is being taken up by fishermen to enhance their profits. A lot of awareness has to be raised among the fishermen to engage themselves in profitable mariculture dealing with shrimp farming, lobster fattening and crab fattening.

7. Methodology adopted :

Tharuvaikulam fishing village was selected as present study area where sustainable fishing method was successfully practiced for a long period. Tharuvaikulam fishing village, Ottapidaram taluk, Thoothukudi district is located in the southern part of the Tamil Nadu where two types of fishing craft sectors is operated namely motorized and mechanized. Both sectors were doing Multi Day (MD) fishing by gillnet. Total sample size of the study was 90 which were distributed as 30 for motorized and 60 for mechanized

sectors. The above stated samples were selected randomly for data collection in the present study. A survey schedule was designed based on the objectives of the study and it was used for collection of data from the fishermen. In the present study area where the gillnet fishing was successfully adopted long period by fishermen in marine capture fishing. The objective of the study are to study the socio economic profile and fishing details among the fisher folk and to estimate the cost of and returns for three types fishing crafts sector in present study area. Gillnet is a passive gear and gillnet fishing method was one of the eco-friendly method in marine fishing. Gillnet fishing will help to maintain the sustainable level in marine fishery resources. Here, mechanized and motorized fishing crafts are using gill net. But the efficiency and profitability will vary depend upon the fishing crafts sector. The economic performance of marine fishing operations is affected by various factors viz., diminishing catch per unit of effort, fluctuations in revenue, and unforeseen increase in the cost of key inputs as well as catch and effort restrictions. In this context, the present study compares the economic efficiency of motorized and mechanized sectors.Initially, having no boats of their own, the men from Tharuvaikulam worked in boats owned by fishermen in Thoothukudi.

8. Major finding

- Tharavai fisherman are both mechanised and non mechanised country for fishing.
- Salt mining is another lucrative industry.
- Tharuvaikulam'spalmyra climbers turn sustainable fishers by jencysamuel. All the fisherman here belong to the commity of palmyra tree climbers
- Fishermen in Tharuvaikulam use only gill nets, protect corals to lead way for sustainable fisherman in Tamil Nadu

9.Suggestions/Recommendations

A. Industries

- Suppression of Industrial Disputes.

- Development of Research and Technology.
- Increase in Power Resources.
- Proper Use of Natural Resources.
- Efficient System of Industrial Management.
- Encouragement to private sectors.
- Earnings in foreign exchange.
- Rational taxation policy.
- Establishment of specialized institutions.

B. Artisans

- The training should be given in priority to those artisans who have been associated with the art form.
- Training should be given in the condition that the artisans use what has been taught.
- More NGO's should be encouraged and open factories.
- There can be a product extension diversifying into products which require lessertime.

C. Livelihood

- The livelihood and community development projects implemented by HPPI have holistic approach a holistic approach encompassing any components of health, education,skills training, capacity building and awareness.
- The projects work in sync with government development programmes and facilitate linkages to public services and schemes for the project beneficiaries.
- Typically, a project is implemented in the same area for a period of 3-5 years in order to achieve impact and sustainable development.
- Each project aims to ultimately enable the beneficiaries to become change makers in their communities.

10.Impacts of this work on learing of students/teachers :

About 50 years ago, most people in Tharuvaikulam in Thoothukudi district in Tamil Nadu were toddy tappers or farmers.A drought that saw palmyra trees dying out and the ban on toddy tapping in 1987 made the people here decide to give up tapping for fishing.The hamlet decided to adopt sustainable fishing practices, after realising that trawl nets were destroying the corals that were homes to the fish.In the backdrop of the mild sound of waves lashing against their boats and mechanised vessels berthed in Tharuvaikulam wharf, fishers were busy mending their nets in a shed. The fishing ban had just ended, and those who had repaired their nets at home were seen bringing them back. These are the typical scenes in any fishing village.However, the difference here is that Tharuvaikulam, in Thoothukudi (formerly Tuticorin) district in Tamilnadu, is not a traditional fishing village.“All the fishermen here belong to the community of palmyra tree climbers. I used to climb till I was in my mid-20s, then I switched to fishing,” said 54-year-old Anthony Duraiswamy. As it was found to be lucrative, slowly more men started joining them,” said Anthony Duraiswamy.There were corals in abundance near the 21 uninhabited islands in the Gulf of Mannar. The palmyra climbers who ventured out into the sea to mine corals used challiodam, a small country boat. “The challi or corals, a rich source of calcium carbonate, was used in the lime industry and was transported to the kilns in Theresepuram near Thoothukudi,” said VinothRavindran. Fishermen recall the days when the older generation used to mine corals.When they were free, some of the palmyra climbers started working in boats in Thoothukudi, about 25-km away. The men recall a season of drought and the palmyra trees slowly dying out. Then in 1987 came the state government’s ban on toddy tapping, and all the tappers started working in the boats of Thoothukudi.According to Vijay, 80 percent of the men in his village can still climb the palmyra tree. “But there’s more money in fishing,” said Vijay with a grin. Except for a few from the younger generation who took up jobs such as teaching, driving and the like, the rest are fishermen.Initially, having no boats of their own, the men from Tharuvaikulam worked in boats owned by fishermen in Thoothukudi. The fishermen of Thoothukudi are from a traditional fishing community, and some misunderstanding cropped on communal lines between the two groups after both the communities fielded a candidate for an election.“More than 250 of us were working in Thoothukudi then, and we quit,”

recalled Rajan. According to Sundaramoorthy B., dean-in-charge of Dr MGR Fisheries College and ResearchInstitute, Thalainayiru, a few of them then bought old boats and started fishing from Tharuvaikulam. “That happened 20-odd years ago,” recollected Vijay.

DECLARATION

We declare that the project work is original and carried out by us under the guidance of Mrs.S.Gnanathangam. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

Monisha Baby A

Neolit T

Nivethikha G

Pearlin Febbi S

Petchiammal E

Pon Manjula M

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Priyadharshini K

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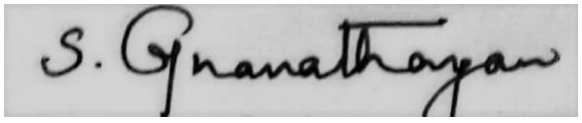
AISHE code of the participating Institute : C-41151

Name of the Regional Coordinating Institute of UBA:Gandhigram Rural Institute – Deemed to be University

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title/ award and the work is genuine.



Signature of the Project Supervisor

Submission of Project Report for
Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1.Title of the Project : GENERAL PUBLIC OPINION ABOUT BASIC AMENITIES IN THARUVAIKULAM

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3.UBA theme for Project Work : *(e)* ***Basic amenities***

(a) Organic Farming (b) Water management

(c) Renewable energy (d) Artisans, industries and livelihood

(e) Basic amenities (f) Convergence

4. **SDGs to be achieved** : . ***Sustainable cities & communities***

- ***Quality education***
- ***Industry, innovation and infrastructure***
- ***Industry, innovation and infrastructure***
- ***Good health & Well-being***
- ***Responsible consumption and production .***

i. No poverty
ii. Zero hunger
iii. Good health & Well-being
iv. Quality education
v. Gender equality
vi. Clean water and sanitation
vii. Affordable & clean energy
viii. Decent work & economic growth
ix. Industry, innovation and infrastructure
x. Reduced inequality
xi. Sustainable cities & communities
xii. Responsible consumption and production
xiii. Climate action
xiv. Life below water
xv. Life on land
xvi. Peace & justice strong institutions
xvii. Industry, innovation and infrastructure

5.**Background of the study** :

Basic amenities are essential foundation for a decent living and it enhances economic growth and quality of life. The scope of basic amenities include safe drinking water, sanitation, housing, all weather road to village, electrification, fuel, connectivity, healthcare centre, school, playground and recreational facilities and many more. There are non-negotiable conditions for living but for last sixty years of planned development intervention, the Government has neglected this aspect without any substantial achievement even today. Unless these basic issues of the poor and the marginalised sections are not solved, it is difficult to ensure inclusive growth. The long time negligence of the Government towards a section of people in a democratic setup questions our very concept of nationhood and the ongoing development process. Basic amenities are linked to qualitative and developed human living and the modern State has to ensure this out of public finance through dedicated institutional arrangement. But

this process has not produced the desired result, especially for the deserving majority of the poor and marginalised in States such as Odisha. The negligence in public investment for developing basic amenities for last sixty years has widened rural and urban gap as a result of which mostly the rural poor are migrating to urban areas for a better living. Studies found that lack of basic amenities has wider impact over working condition and the trend shows that the work culture in rural areas has been deteriorating with increasing health problems along with lack of improvement in education and skill. The social life and living condition in rural areas and its change process are linked to availability of basic amenities. The living condition of common people reflects the socio-economic, political and environmental development of a country. Mercer's annual worldwide quality of living survey ranked Singapore as highest ranking city in the Asia pacific region. The quality of living in Indian cities has been poor in comparison to global standard.The government has identified 15 basic amenities to enhance quality of life in villages. It has asked gram panchayats (GPs) to make all these facilities available to the people. These include drinking water, playgrounds and open-air theatres.

The move is aimed at arresting the migration of rural people towards urban areas. In a circular issued last week, the Rural Development and Panchayat Raj (RDPR) Department said of the 6.11 crore population of Karnataka, nearly 61 per cent live in rural areas. There are 59,532 habitats and 27,397 villages within 5,629 GPs.

The foremost priority with the government is to enhance quality of life in villages so that it is on a par with urban areas, the department said. The department has asked GPs to make the amenities available through ongoing schemes, including the Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA).

Since the government is committed to provide at least 55 litres per capita day (LPCD) of water to every family in a village, the GPs should focus on providing individual households tap connections.

Large tracks of roads (75,866 km) in the State are still mud tracks and they require development, the department said. This would help improve the economic activities of the region. Also, GPs are required to provide roads to farms under different schemes.

Playgrounds and open-air theatres provide the much-needed avenues for physical activity and recreation of village people. There should be at least one playground and one open-air theatre in each village.

The GPs should also provide animal shelters for cows and sheep. This would encourage dairy and sheep-rearing activities.

Having concurred with the department of e-governance to extend e-governance facilities, the RDPR Department said each panchayat should establish citizen service centres in their limits.

This is to avoid village people approaching hobli/taluk headquarters to get services, including land records and utility payments, the department said.

For youth

Besides providing skill development centres for the youth, panchayats should also focus on enabling the youth to set up self-employment units. Water harvesting, groundwater recharge and improvement of village tanks/lakes are also projects to be pursued.

6. Objectives of the study :

The following are the objectives focused in this study:

- **To identify the public opinion about basic amenities i.e. roads,water,sanitation,education,electrification,health care centre,etc in Thoothukudi city.**
- **To find out the problems faced by general public in getting basic amenities in Thoothukudi city.**

7 .Methodology adopted :

The present study is analytical and descriptive in nature.A questionnaire was structured to elicit the required information from there spondents.The data were collected from 125 sample respondents using Google Form.The study is based on general public opinion about Water resources management in Thoothukudi city.Hence, the questionnaire is related on education,bank facilities,medical facilities,water facilities,transport facilities,sanitation,electrification,connectivity,recreational facilities.

8. **Major findings** :

Tharuvaikulam Village Total population is 7325 and number of houses are 1743. Female Population is 48.7%.

Village literacy rate is 67.6% and the Female Literacy rate is 31.9%.

- **Tharuvaikulam name came from "kattan tharail flowers that blooms around many lakes about 250 square feets" so it the village was called as"Tharuvaikulam"**
- **In olden days,The main occupation of Tharuvaikulam peoples is to collect pines from pine trees and they did agriculture . Nowadays agriculture are done in small scale..and fishing has became their major occupation in Tharuvaikulam.**
- **Water supply to Tharuvaikulam village is from ottapidaram.**
- **Waste management of Tharuvaikulam is managed by the panjayat members and not by municipal corporation members.**
- **Wheat is the major product obtained from agriculture,once in a year**
- **Nursery,primary, secondary and higher secondary schools are there in Tharuvaikulam.**
- **Tharuvaikulam has a no colleges and Industries. Only ice planting for fishes are available.**
- **They also work on Salt formation and boats making.**
- **Electricity supply is from kayatharu electricity.**
- **Advanced machines are expected from government by Tharuvaikulam people.**
- **95% Catholic are there in Tharuvaikulam and famous for Micheal church and people go for fishing.**
- **There is no public restrooms available in Tharuvaikulam,but there are restrooms in each and every house.**
- **Only a small hospital is available with less equipments.**
- **There are no markets in Tharuvaikulam.**

- **There is also few hindu temples in Tharuvaikulam.**

- **With the demand for fiber-reinforced plastic boats increasing after the 2004 Indian Ocean tsunami, wooden boat builders of Tharuvaikulam in Tamil Nadu adapt to growing needs of the marine fishing sector.**

- **Locality Name :** Tharuvaikulam (தருவைகுளம்)

  Block Name : Ottapidaram

  District : Tuticorin

  State : Tamil Nadu

  Language : Tamil

  Time zone: IST (UTC+5:30)

  Elevation / Altitude: 38 meters. Above Seal level

  Telephone Code / Std Code: 0461

  Assembly constituency : assembly constituency

  Lok Sabha constituency : parliamentary constituency

  Pin Code : 628656

  Post Office Name : Puthantharuvai

- **The people in Tharuvaikulam mostly comes out of their village to buy jewels, vegetables,storage products, dress and basic necessities of daily life since they have no facility to buy things in and around. Distance between Tuticorin and Tharuvaikulam is 28 kms or 16.2 miles or 14 nautical miles.**

Education

1.St. Catherine Primary School.

2 .St. Michael Primary School.

3 .Government Higher Secondary School.

4 . TDTA Primary School.

9 .Suggestions / Recommendations :

- **The government should take necessary steps to manage the drainage system periodically.**
- **The general public must understand it is their duty to take care of the surroundings.**
- **Drinking water in Tharuvaikulam is not good so peoples want for good water source.**
- **There is no government hospital in Tharuvaikulam .**
- **There is no Government marriage hall.**
- **There is a park in Tharuvaikulam but not in good condition so people wanted to fix it.**
- **As the peoples in Tharuvaikulam do fishing as their major occupation they are in need of Fishing port.**
- **In Tharuvaikulam Beach there is a broken wood bridge peoples over there wanted to replace it.**
- **Government has ordered to place water pipes for each houses But they have not yet got the ordered done.**
- **Tharuvaikulam has an worst Road facility.**
- **People over there are in want of education related computer centers.**
- **There are on want of extra course class near by such as spoken English ,type writing etc..**
- **There in a wine shop near samathuvapuram people want to remove that.**
- **The main need to people in Tharuvaikulam is they want a college within there village since they have to travel a long distance for their higher studies**

most of the students are quiting their education so they are in need of college near by.

10 .Impact of this work on learning of students/teachers:

The census tells us who we are and where we are going as a nation, and helps our communities determine where to build everything from schools to supermarkets, and from homes to hospitals. It helps the government decide how to distribute funds and assistance to states and localities. As a result of fast population increase and increasing demand,our basic amenities, which are distributed over space and time, are understress.

Residents of rural India usually come with little income sources which are usually consumed in the basic survival, making education out of their realm. The lack of government schools in the local areas discourages parents more to spend on their kids resulting in no education being imparted. There are many public facilities, the government provides in day-to-day life. The government has to ensure universal access to a public facility. The government has to provide a facility either without a charge or at a charge which is affordable to the masses. Services such as water supply and sanitation, roads and drains, street-lights, collection and disposal of solid waste, maintenance of public places, burial grounds and crematoria, cattle pounds, registration of births and deaths, maintenance of markets have long been seen as the function of municipal bodies. In addition, they performed certain regulatory functions relating construction of buildings, public health areas such as eating places, slaughter houses and tanneries, etc. With more current data, policy makers will be able to make better informed decisions about basic amenities.

DECLARATION

We declare that the project work is original and carried out by me / us under the guidance of **Mrs.S.Gnanathangam**. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

Ms.Sefrin Jeeva.K

Ms.Sethumalini S

Ms.Sherwinsca.H

Ms.Snowlyn Gersha .S

Ms.Sri RamapriyaV

Ms.Subalakshmi.T

Ms.SundareswariM

Ms.Swetha.D

Ms.Thanga Reshma. E

Ms.Valar Sheeba .M

Ms.Vijaya Sankari.J

Signature(s)

Details of Project Supervisor

Name of the Project Supervisor : **Mrs.S.Gnanathangam**

Mobile number : **94428 13731**

Email ID : **gnanathangams@gmail.com**

Area of specialization :**Tharuvaikulam**

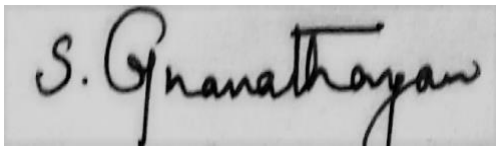
Name of the Participating Institute of UBA: **St. Mary's College (Autonomous), Thoothukudi.**

AISHE code of the Participating Institute : **C-41151**

Name of the Regional Coordinating Institute of UBA : **Gandhigram Rural Institute - Deemed to be University**

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title / award and the work is genuine.



Signature of the Project Supervisor

SUBMISSION OF PROJECT REPORT FOR VIRTUAL INTERNSHIP PROGRAMME ON SUSTAINABLE DEVELOPMENT GOALS AND COMMUNITY ENGAGEMENT :

1.TITLE OF THE PROJECT :GENERAL PUBLIC OPINION ABOUT ORGANIC FARMING IN THARAVAIKULAM.

2.DETAILS OF PARTICIPANTS:

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3.UBA THEME FOR PROJECT WORK :

a)Organic Farming

(a)Organic Farming (b)Water management (c)Renewable energy
(d)Artisans, industries and livelihood (e)Basic amenities
(f)Converge

4.SDGS TO BE ACHIEVED:

xv.Life on Land

i.No poverty
ii.Zero hunger
iii.Good health&Well-being
iv.Quality education
v.Gender equality
vi.Cleanwater and sanitation
vii.Affordable&cleanenergy
viii.Decentwork& economic growth
ix.Industry,innovationandinfrastructure
x.Reducedinequality
xi.Sustainablecities&communities
xii.Responsible consumption and production
xiii.Climate action
xiv.Life be low water
xv.Life on land
xvi.Peace&justice strong institutions
xvii.Partnerships to achieve the goal

5.BACKGROUND OF THE STUDY:

Organic farming is an agricultural system that uses fertilizers of organic origin such as compost manure, green manure, and bone meal and places emphasis on techniques such as crop rotation and companion painting. It originated early in the 20th century in reaction to rapidly changing farming practices. Organic agricultural methods are internationally regulated and legally enforced by many nations, based in large part on the standards set by the International Federation of Organic Agriculture Movements (IFOAM), an international umbrella organization for organic farming organizations established in 1972. Organic agriculture can be defined as "an integrated farming system that strives for sustainability, the enhancement of soil fertility and biological

diversity while, with rare exceptions, prohibiting synthetic pesticides, antibiotics, synthetic fertilizers, genetically modified organisms, and growth hormones".Organic farming advocates claim advantages in sustainability, openness, self-sufficiency, autonomy and independence, health, food security, and food safety.

Organic agriculture is defined formally by governments. Farmers must be certified for their produce and products to be labeled “organic,” and there are specific organic standards for crops, animals, and wild-crafted products and for the processing of agricultural products. Organic standards in the European Union (EU) and the United States, for example, prohibit the use of synthetic pesticides, fertilizers, ionizing radiation, sewage sludge, and genetically engineered plants or products. In the EU, organic certification and inspection is carried out by approved organic control bodies according to EU standards. Organic farming has been defined by the National Organic Standards of the U.S. Department of Agriculture (USDA) since 2000, and there are many accredited organic certifiers across the country.

Soil is maintained by planting and then tilling in cover crops, which help protect the soil from erosion off-season and provide additional organic matter. The tilling in of nitrogen-fixing cover crops, such as clover or alfalfa, also adds nitrogen to the soil. Cover crops are commonly planted before or after the cash crop season or in conjunction with crop rotation and can also be planted between the rows of some crops, such as tree fruits. Researchers and growers are working to develop organic

farming “no-till” and reduced-tillage practices in order to further reduce erosion. Organic pesticides are derived from naturally occurring sources. These include living organisms such as the bacteria *Bacillus thuringiensis*, which is used to control caterpillar pests, or plant derivatives such as pyrethrins (from the dried flower heads of *Chrysanthemum cinerariifolium*) or neem oil (from the seeds of *Azadirachta indica*).

Mineral-based inorganic pesticides such copper and sulphur also allowed. With the increase in population our compulsion would be not only to stabilize agricultural production but to increase it further in sustainable manner. The scientists have realized that the ‘Green Revolution’ with high input use has reached a plateau and is now sustained with diminishing return of falling dividends. Thus, a natural balance needs to be maintained at all cost for existence of life and property. The obvious choice for that would be more relevant in the present era, when these agrochemicals which are produced from fossil fuel and are not renewable and are diminishing in availability. It may also cost heavily on our foreign exchange in future.Protecting the long term fertility of soils by maintaining organic matter levels, encouraging soil biological activity, and careful mechanical intervention Providing crop nutrients indirectly using relatively insoluble nutrient sources which are made available to the plant by the action of soil micro-organisms Nitrogen self-sufficiency through the use of legumes and biological nitrogen fixation, as well as effective recycling of organic materials including crop residues and livestock manures. Weed, disease and pest control relying primarily on crop rotations, natural

predators, diversity, organic manuring, resistant varieties and limited (preferably minimal) thermal, biological and chemical intervention.The extensive management of livestock, paying full regard to their evolutionary adaptations, behavioural needs and animal welfare issues with respect to nutrition, housing, health, breeding and rearing .Careful attention to the impact of the farming system on the wider environment and the conservation of wildlife and natural habitats.

6.OBJECTIVES OF THE STUDY:

The following are the objectives focused in this study:

- The main focus of the study is to know the public opinion on organic farming i-e to get fresh fruits and vegetables through organic farming in Tharuvaikulam.
- To find out the problems faced by the general public in getting fresh vegetables and organic farming in Tharuvaikulam.
- To help them with more ideas in organic farming.

7.METHODOLOGY ADOPTED:

The study done in present is analytical and descriptive in nature. A question was structured to get the required information from the respondents. The data were collected from 70 sample respondents using Google Form. The study is based on the general public opinion about organic farming in Tharuvaikulam. Hence, the questionnaire

is related on organic farming .Percentage analysis was used to analyse the collected data.

8.MAJOR FINDINGS:

The following are the findings with regard from various response given by the respondents regarding "General Public Opinion about organic farming in Tharuvaikulam".

- The majority of the respondents (80%) are female.
- Most of the respondents (57%)are between the age of 20-35.
- Majority of the respondents (75%) are married.
- Majority of the respondents (50%) are graduated.
- Most of the respondents(48.1percent)are daily wage workers.
- One fourth of the respondents (65.7percent) are not earning.
- Most of the respondents (60.1%) are having four members in a family.
- Majority of the respondents (88.5%) get fresh water from Ootapidaram.
- Most of the respondents (47.9%) get water supply once in a two weeks.
- Majority of the respondents sometimes prefer organic pesticide (66.4%).
- Majority of the respondents (57.1%) monthly organic pesticide is between Rs.500-600.

- Most of the respondents (54.3%) mentioned that the fresh water is clean to drink.
- Majority of the respondents have home farming.(62.3%).
- A less number of the respondents (27.1%) use ground water.
- Majority of the respondents that they cultivate once a year.
- Majority of the respondents (51.4%) doesn't use harmful pesticide.

9.SUGGESTIONS/RECOMMENDATIONS:

- ❖ The government and the educational institutions may conduct awareness camps and ralley top educate the general public how to utilize organic farming in effectively and to safe guard it for the next generations.
- ❖ Organic farming must be done to get organic vegetables for the healthy life.
- ❖ The government should take the initiative to find new techniques in organic farming.
- ❖ The government can initiate clubs in every panchayat to keep their surroundings more clean.

- The educational institutions and social welfare organisations can take innovative measures in organic farming.
- The government should work on finding new steps in organic farming.
- There are variety of technologies that allow the public to recycle rain water for agriculture.
- It is not only the duty of the government to take care of the resources.It is also the duty of every citizen not to pollute the natural resources anymore.

10.IMPACT OF THIS WORK ON LEARNING OF STUDENTS:

As there is a tremendous increase in the population and and the increase in demand for food day by day which may lead to food scarcity.Day by day man is polluting the resources more and more. It is duty of every single citizen to save our natural resources. By blaming the government alone every issues cannot be solved. Each every change should be made from his/her own surroundings. Let's change ourselves to make the planet we live a better place for the future generation. Atleast they can enjoy a

pollution free environment with no harm. Lets make our environment a better and a peaceful one.

DECLARATION

We declare that the project work is original and carried out by us under the guidance of Mrs.S.Gnanathangam. The project work has not been submitted else where for the award of any degree and the work is genuine.

Durga Dharshini .M

Ferdinand Josephine Prescila .U

Indhumathi .B

Janani .J

Juli Joy E.S

Karthika .A

Karthika .M

Lakshmi Prabha.M

Manisha.D

Mariammal.J

Mario Johana.P

Mohideen Syedali Fathima

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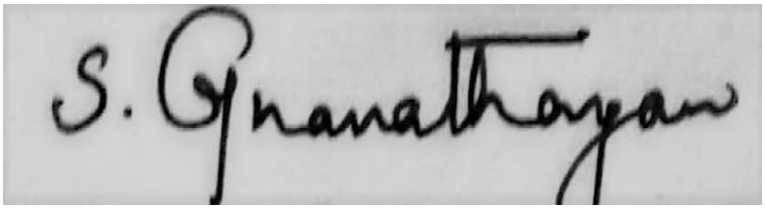
of UBA: St. Mary's College (Autonomous), Thoothukudi.
AISHE code of the Participating Institute: C-41151
Name of the Regional Coordinating
Institute of UBA: Gandhigram Rural Institute-Deemed to be University.

CERTIFICATE :

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title/award and the work is genuine.

SIGNATURE OF THE PROJECT SUPERVISOR:



SUBMISSION OF PROJECT REPORT FOR VIRTUAL INTERNSHIP PROGRAMME ON SUSTAINABLE DEVELOPMENT GOALS AND COMMUNITY ENGAGEMENT :

1.TITLE OF THE PROJECT :GENERAL PUBLIC OPINION ABOUT WATER RESOURCES MANAGEMENT IN THARAVAIKULAM.

2.DETAILS OF PARTICIPANTS:

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3.UBA THEME FOR PROJECT WORK :

b) Water Management

(a)Organic Farming (b)Water management (c)Renewable energy
(d)Artisans, industries and livelihood (e)Basic amenities
(f)Converge

4.SDGS TO BE ACHIEVED:

xv.Life on Land

i.No poverty
ii.Zero hunger
iii.Good health&Well-being
iv.Quality education
v.Gender equality
vi.Cleanwater and sanitation
vii.Affordable&cleanenergy
viii.Decentwork& economic growth
ix.Industry,innovationandinfrastructure
x.Reducedinequality
xi.Sustainablecities&communities
xii.Responsible consumption and production
xiii.Climate action
xiv.Life be low water
xv.Life on land
xvi.Peace&justice strong institutions
xvii.Partnerships to achieve the goal

5.BACKGROUND OF THE STUDY:

Water is an inorganic, transparent, tasteless, odourless and nearly colourless chemical substance, which is the main constituent of Earth's hydrosphere and the fluids of all known living organisms.It is vital for all known forms of life,even though it provides no calories or organic nutrients.Water resource management is the activity of planning, developing, distributing and managing the optimum use of water resources.It is an aspect of water cycle management. The field of water resources management will have to continue to adapt to the current and future issues facing the allocation of water.

Under stressed water availability situations, water resource management techniques should be oriented on

increasing water supply and managing water demand. Water quality management methods must be developed and implemented in order to maintain the quality of fresh water. For the planning and management of the water resources project, decision support systems must be built. The inter play of numerous elements that influence access and exploitation of water resources is complex, and in light of the growing demand for water , holistic and people-centered approach to water management are more vital.Clearly, drinking water is far too important and basic to be put only in the hands of one organisation.

If we are serious about socio economic growth, we will require everyone's united initiative and action . We can have safe drinking water if we make up our minds to do something about it. The practice of planning, producing, distributing, and managing the most efficient use of water resources is known as water resource management. The main sources of water are surface water, ground water and rainwater. To strengthen water security against this backdrop of increasing demand, water scarcity, growing uncertainty, greater extremes, and fragmentation challenges, clients will need to invest in institutional strengthening, information management, and (natural and man-made) infrastructure development.

Institutional tools such as legal and regulatory frameworks, water pricing, and incentives are needed to better allocate, regulate, and conserve water resources. Information systems are needed for resource monitoring, decision making under uncertainty, systems analyses, and

hydro-meteorological forecast and warning. Investments in innovative technologies for enhancing productivity, conserving and protecting resources, recycling storm water and waste water, and developing non-conventional water sources should be explored in addition to seeking opportunities for enhanced water storage, including aquifer recharge and recovery. Ensuring the rapid dissemination and appropriate adaptation or application of these advances will be a key to strengthening global water security.

Water resource management planning should, in theory, take into account all competing needs for water and attempt to allocate water in an equitable manner to meet all uses and demands. In practice, as with other aspects of water resource management, this is rarely attainable. The sustainability of existing and future water resource allocation is one of the most pressing challenges for our water-based resources in the future. As water becomes scarcer, water management becomes increasingly important finding a balance between human requirements and the critical step of environmental water resource sustainability. The management off our types of water in our household is revealed by this study, and they are as follows: freshwater, groundwater, RO water, and waste water. People in tharuvaikulam are supplied water from ootapidaram.

Water scarcity is becoming more and more of a problem on a daily basis. As a result, all kinds of water (solid, liquid, and gas) should be adequately harnessed.

Climate change and population increase are putting strain on water resources. Water scarcity is a severe problem in Tharuvaikulam that is worsening at an alarming rate.The problem has gotten so bad that groundwater has nearly completely driedup, forcing people to relay on water from other sources. Water is also one of the most mismanaged natural resources that we continue to waste. It is the focal centre of our existence, yet it is unfortunately not a top priority. People used to recognize the importance of water and structured their lives around it. Further more, many civilizations were formed and died around water, but despite our understanding, we continue to underestimate the importance of water in our lives.

6.OBJECTIVES OF THE STUDY:

The following are the objectives focused in this study:

- The main focus of the study is to know the public opinion on water resource management i-e fresh water and waste water management in Tharuvaikulam.
- To find out the problems faced by the general public in getting fresh water and waste water management in Tharuvaikulam.
- To help them with more ideas in water management

7.METHODOLOGY ADOPTED:

The study performed in present is analytical and descriptive in nature. A question was structured to get the required information from the respondents. The data were collected from 50 sample respondents using Google Form. The study is based on the general public opinion about Water resources management in Tharuvaikulam. Hence, the questionnaire is related on water resources like Fresh Water , Ro Water, Ground Water and Waste Water. Percentage analysis was used to analyse the collected data.

8.MAJOR FINDINGS:

The following are the findings with regard from various response given by the respondents regarding "General Public Opinion about Water Resources Management in Tharuvaikulam".

- The majority of the respondents (70.23%) are female.
- Most of the respondents (55%) are between the age of 20-35.
- Majority of the respondents (62.5%) are married.
- Majority of the respondents (42.6%) are graduated.
- Most of the respondents(38.1percent)are daily wage workers.
- One fourth of the respondents (22.7percent) are not earning.
- Most of the respondents (67.1%) are having four members in a family.
- Majority of the respondents (88.6%) get fresh water from Ootapidaram.
- Most of the respondents (47.9%) get water supply once in a two weeks.
- Majority of the respondents sometimes collect rainwater using rainwater harvesting system.(66.4%)

- Majority of the respondents (57.1%) monthly water bill is between Rs.100-200.
- Most of the respondents (54.3%) mentioned that the fresh water is clean to drink.
- Majority of the respondents have bore or well at their home.(62.3%).
- A less number of the respondents (27.1%) don't consume ground water.
- Majority of the respondents doesn’t use water purifier at their living space.(70.7%)
- Least number of the respondents know about water purifier by their friend’s / relative’s references.(23.7%)
- Majority of the respondents doesn’t know about the capacity of water purifier because they didn’t use that(61.1%).
- Least number of the respondents agree that RO is beneficial in cleaning germs.(31.4%).
- Majority of the respondents doesn’t prefer to reuse the waste water in their houses for multiple purposes.(78.4%).
- Most of the respondents (77.9%) prefer to clean their drainage once in two months.
- Majority of the respondents (51.4%) doesn’t consume RO purifiers they are not familiar in the brand of water purifier.
- Majority of the respondents (65%) doesn’t come across the leakage problem in their sceptic tanks.
- Most of the respondents (72.1%) didn’t suffer from water borne diseases.

9.SUGGESTIONS/RECOMMENDATIONS:

- The government and the educational institutions may conduct awareness camps and ralley top educate the general public how to utilize water in effectively and to safe guard it for the next generations.
- Waste water can be recycled and used to watering plants, irrigation and can also be used in agricultural techniques and also to familiarize to each individuals.
- The government should take the initiative to find new techniques in waste water management.
- The government can initiate clubs in every panchayat to keep their surroundings more clean.
- The educational institutions and social welfare organisations can take innovative measures in purifying the water.
- The government should work on addressing fresh water scarcity and develop conservation solutions; energy usage is a critical factor to consider.
- There are variety of technologies that allow the public to recycle rain water .
- The government should take measures to manage their drainage system periodically.
- It is not only the duty of the government to take care of the resources.It is also the duty of every citizen not to pollute the natural resources anymore.

10.IMPACT OF THIS WORK ON LEARNING OF STUDENTS:

As there is a tremendous increase in the population and and the increase in demand, our water resources, which are distributed over the world , are under stress.Day by day man is polluting the resources more and more. It is duty of every single citizen to save our natural resources. By blaming the government alone every issues cannot be solved. Each every change should from his/her own surroundings. Let's change ourselves to make the planet we live a better place for the future generation. Atleast they can enjoy a pollution free environment with no harm. Lets make our environment a better and a peaceful one.

DECLARATION

We declare that the project work is original and carried out by us under the guidance of **Mrs. S. Gnanathangam**. The project work has not been submitted else where for the award of any degree and the work is genuine.

Abisha M

Akila Vishnu Priya.B

Alexeria Esther.R

Anandham Nithya.V

Arockia Stefi.A

Asmi.A

Benazir Shafia.M

Beulah Benetta.D

Blessy Rachel.T

Catlina.C

Daisy Kiruba.A

Deva Ziboni J.J

DETAILS OF PROJECT SUPERVISOR:

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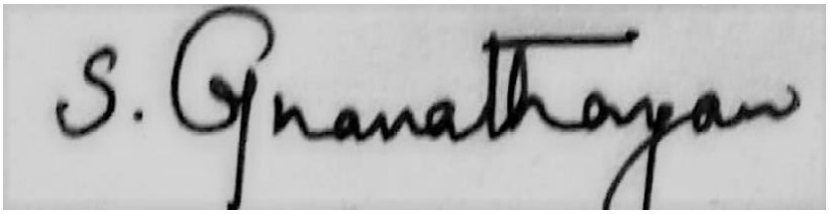
Area of specialization: Tharuvaikulam
Name of the Participating
Institute of UBA: St Mary's College (Autonomous), Thoothukudi.
AISHE code of the Participating Institute: C-41151
Name of the Regional Coordinating
Institute of UBA: Gandhigram Rural Institute-Deemed to be University

CERTIFICATE :

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title/award and the work is genuine.

SIGNATURE OF THE PROJECT SUPERVISOR:



Submission of Project Report for Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. **Title of the Project** : Organic Farming – case study in Palayakayal village
2. **Details of Participant(s)** :

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3. UBA theme for Project Work : (a) Organic Farming

(a)Organic Farming (b)Water Management

(c)Renewable energy (d)Artisans, industries and livelihood

(e)Basic amenities (f)Convergence

4. SDGs to be achieved : ¬¬¬¬¬¬¬¬¬¬¬ ii. Zero hunger

i. No poverty

ii. Zero hunger

iii. Good health & Well-being

iv. Quality education

v. Gender equality

vi. Clean water and sanitation

vii. Affordable & clean energy

viii. Decent work & economic growth

ix. Industry, innovation and infrastructure

x. Reduced inequality

xi. Sustainable cities & communities

xii. Responsible consumption and production

xiii. Climate action

xiv. Life below water

xv. Life on land

xvi. Peace & justice strong institutions

xvii. Partnerships to achieve the goal

5. Background of the study:

Organic farming, agricultural system that uses ecologically based pest controls and biological fertilizers derived largely from animal and plant wastes and nitrogen-fixing cover crops. Modern organic farming was developed as a response to the environmental harm caused by the use of chemical pesticides and synthetic fertilizers in conventional agriculture, and it has numerous ecological benefits.

Compared with conventional agriculture, organic farming uses fewer pesticides, reduces soil erosion, decreases nitrate leaching into groundwater and surface water, and recycles animal wastes back into the farm. These benefits are counterbalanced by higher food costs for consumers and generally lower yields. Indeed, yields of organic crops have been found to be about 25 percent lower overall than conventionally grown crops, although this can vary considerably depending upon the type of crop. The challenge for future organic agriculture will be to maintain its environmental benefits, increase yields, and reduce prices while meeting the challenges of climate change and an increasing world population.

Organic farming system in India is not new and is being followed from ancient time. It is a method of farming system which primarily aimed at cultivating the land and raising crops in such a way, as to keep the soil alive and in good health by use of organic wastes (crop, animal and farm wastes, aquatic wastes) and other biological materials along with beneficial microbes (bio-fertilizers) to release nutrients to crops for increased sustainable production in an eco-friendly pollution free environment.

As per the definition of the United States Department of Agriculture (USDA) study team on organic farming “organic farming is a system which avoids or largely excludes the use

of synthetic inputs (such as fertilizers, pesticides, hormones, feed additives etc) and to the maximum extent feasible rely upon crop rotations, crop residues, animal manures, off-farm organic waste, mineral grade rock additives and biological system of nutrient mobilization and plant protection".

FAO suggested that "Organic agriculture is a unique production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles and soil biological activity, and this is accomplished by using on-farm agronomic, biological and mechanical methods in exclusion of all synthetic off-farm inputs".

6. Objectives of the study:

The following are the objectives focused in this study:

- To study the adoption of organic farming in Palayakayal village
- To study the benefits of organic farming.

7. Methodology adopted:

The data for present study obtained by structuring questions required to get information from the respondents. The data were collected from the people staying in the locality though direct phone-in interviews. This study is about the adoption of organic farming in Palayakayal.

8. Major findings:

- Organic farming maintain soil health
- It maintain Ecological balance
- Avoid Ground water and air pollution

- ❖ Maintain soil and crop productivity
- ❖ Organic farming as a system of crop production is to feed the soil rather than feed the plant.
- ❖ In the selected village, people are familiar with organic farming.

9. Suggestions/ Recommendations:

- Awareness about organic farming should be given to all without age restrictions.
- Local bodies should consult the local farmers and other organic farmers and start with a plan.
- Expert opinions should be considered to know the correct time to plant and to know the correct time to harvest.

10. Impact of this work on learning of students and teachers:

Starting an organic farm is a great way to increase your yields and profits while living a more sustainable and environmentally-friendly life. Lower input costs, stability, and higher output value will make organic farming ideal for the local economy. Everyone will know exactly where the food comes from and how it was grown, all while enjoying the economic and environmental benefits to the farm as one start a cleaner, greener way of growing.

Organic farming presents many challenges. Some crops are more challenging than others to grow organically. However, nearly every commodity can now be produced organically. This includes fruit, vegetables, eggs, honey, dairy, wheat, rice, wool, beef, herbs and much more. Today, you can even buy organic processed food, organic make-up and organic cleaning products.

DECLARATION

We declare that the project work is original and carried out by us under the guidance of Ms. Tiny Jose (Assistant Professor of Commerce). The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

Dr. Sr. Kulandai Therese

Dr. S.Bulomine Regi

Signature(s)

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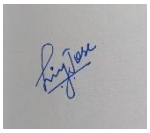
AISHE code of the Participating Institute : C- 41151

Name of the Regional Coordinating Institute of UBA: Gandhigram Rural Institute, Dindigul District, Chinnalapattai, Tamil Nadu

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title / award and the work is genuine.



Signature of the Project Supervisor

Submission of project report for Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1.Title of the Project: GENERAL PUBLIC OPINION ABOUT ORGANIC FARMING IN THOOTHUKUDI CITY

2.Details of Participants:

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3.UBA theme for Project work: Organic Farming

4.SDGs to be achieved: good health & well being

5.Background of the study:

Agriculture is considered as the backbone of Indian Economy. The methods used in organic farming seeks to increase long term soil fertility, balance insect and organism population and reduce air, soil, and water pollution while maintaining or increasing levels of production. ORGANIC FARMING is an agricultural system that uses fertilizers of organic origin such as compost manure, green manure, and bone meal and places emphasis on techniques such as crop rotation and companion planting It originated early in the 20th century in reaction to rapidly changing farming practices. The concepts of organic agriculture were developed in the early 1900s by Sir Albert Howard, F.H. King, Rudolf Steiner, and others who believed that use of animal manures (often made into compost), cover crops, crop rotation, and biologically based pest controls resulted in a better farming system. Organic farming was introduced by Lord Northbourne (Walter James:1896-1982) who gifted to the world the term 'organic farming'. His 1940 book look to the land is a manifesto of organic agriculture. In it he mooted a contest of "organic versus chemical farming" which he foresaw as a clash of world views that may last for generations. Organic farming can be defined as a system of management and agricultural production that combines a high level of biodiversity with environmental practices that preserve natural resources

and has rigorous standards for animal welfare. Since it does not include the use of synthetic pesticides or fertilizers, organic agriculture is very sustainable in many aspects. Research has shown that organic farms use 45 percent less carbon emissions, and foster 30 percent more biodiversity compared to conventional farming. It involves the use of biological materials, avoiding synthetic substances and maintaining ecological balance thereby minimizing pollution and wastage.

6.Objectives of the study:

The following are the objectives focused in this study:

*To identify the public opinion about organic farming
* To produce food of high nutritional quality in sufficient quantity.
*To encourage and enhance biological cycles within farming system-involving microorganisms, soil flora and fauna, plants and animals.
*To maintain and increase long term fertility of soil.

7.Methodology adopted:

The present study is analytical and descriptive in nature. A questionnaire was structured to elicit the required information from the respondents. The data were collected from 140 sample respondents using Google Form. The study is based on general public opinion about organic farming. Hence, the questionnaire is related on organic farming like pesticides and fertilizers. Percentage analysis was used to analyse the collected data.

8.Major findings:

1. Organic farmers are planting more organic seed

*****Across all types, 27% organic farmers responding to our survey are already using 100% organic seed

*****Furthermore, more than 30% responding are using more organic seed than they were three years ago.

*****The average percent acreage planted to organic seed by farmers responding to our survey totalled 69% across crop types, representing an 11% increase since our last report.

2. Organic farmers are happier with the results of the organic seed they're using.
3. Organic farmers believe organic seed is important to the integrity of organic food.
4. More organic farmers are saving seed for their farm or to sell.

9.Suggestions/Recommendations:

*Farmers must be able to recycle nutrients through proper nutrients management practices.

*A farmer can use biofertilizers to increase the productivity of the field.
*Plan good crop rotations – This is the important tool in managing organic farming.
*If farmer is not using chemical product in farming, then the organic products are very much useful.

10.Impact of this work on learning of students:

Today, it is globally imperative that the growing demand for food be met in a manner that is socially equitable and ecologically sustainable over the long term. Organic farming practises have been promoted as reducing the environmental impacts of agriculture. Significant differences between the two

farming systems include soil organic matter content, nitrogen leaching, nitrous oxide emissions per unit of field area, energy use and land use. Organic farming systems generally harbour larger floral and faunal biodiversity, more so than conventional systems; however, when properly managed, the latter can also improve biodiversity.

Declaration:

We declare that the project work is original and carried out by us under the guidance of Mrs.P.Dhanalakshmi. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

S.V. Abi Nivetha
S. Anna Swathi
A. Evangelin

R. Geethapriya

P. Infant gracy sona
G. Jaisla

A. Jenifer anitra
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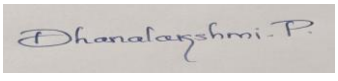
Certificate:

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title/award and the work is genuine.



Signature of the Project Supervisor

Submission of Project Report for Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. Title of the Project : **Rain Water Harvesting – case study in Palayakayal Village**
2. Details of Participant(s) :

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3. UBA theme for Project Work : **(c) Renewable energy**

(a) Organic Farming (b) Water management

(c) Renewable energy (d) Artisans, industries and livelihood

(e) Basic amenities (f) Convergence

4. SDGs to be achieved : **vii. Affordable and Clean Energy**

i. No poverty
ii. Zero hunger
iii. Good health & Well-being
iv. Quality education
v. Gender equality
vi. Clean water and sanitation
vii. Affordable & clean energy
viii. Decent work & economic growth
ix. Industry, innovation and infrastructure
x. Reduced inequality
xi. Sustainable cities & communities
xii. Responsible consumption and production
xiii. Climate action
xiv. Life below water
xv. Life on land
xvi. Peace & justice strong institutions
xvii. Partnerships to achieve the goal

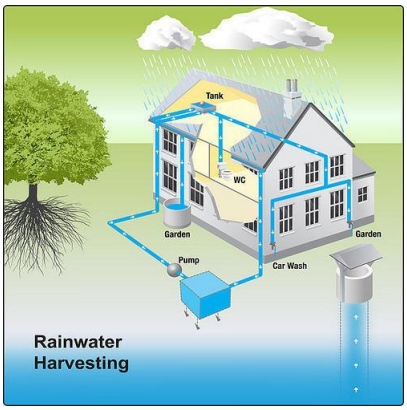
5. Background of the study:

Water scarcity is serious problem throughout the world for both urban and rural community. Rainwater harvesting is defined as process of augmenting the natural infiltration of rainwater or surface water into the ground by some artificial methods. In rooftop harvesting, the roof becomes the catchments and the rainwater is collected from the roof of the house/building it can either be stored in a tank or diverted to recharge pit etc. This method is less expensive and very effective and if implemented properly helps in augmenting the ground water level of the area. The methods of rooftop rainwater harvesting are recharge pit, recharge trenches, storage tanks, abandoned dug wells, bore well.

Rainwater harvesting is one of the simplest and oldest methods of self-supply of water for households, and residential and household-scale projects, usually financed by the user. However, larger systems for schools, hospitals, and other facilities can run up costs only able to be financed by owners, organizations, and governmental units.

Rainwater harvesting is the collection and storage of rain, rather than allowing it to run off. Rainwater is collected from a roof-like surface and redirected to a tank, cistern, deep pit (well, shaft, or borehole), aquifer, or a reservoir with percolation, so that it seeps down and restores the ground water. Dew and fog can also be collected with nets or other tools. Rainwater harvesting differs from stormwater harvesting as the runoff is collected from roofs, rather than creeks, drains, roads, or any other land surfaces. The harvested water can also be committed to longer-term storage or groundwater recharge.

Simple Steps of Rainwater harvesting at home:



Every now and then we read reports on rapidly depleting groundwater levels in many parts of India. The problem is further exacerbated during some parts of the year when water becomes scarce across the length and breadth of the country. Over the years, India has emerged as the largest user of groundwater in the world for irrigation, industrial and domestic needs. The country's burgeoning population is further putting a lot of pressure on its water resources.

We can take a few little steps to reduce our dependence on groundwater. To start with, we could save rainwater at our home or building in an effective manner without spending too much money. By using this method, an average Indian family can easily harvest enough rainwater to meet its daily needs of

water for washing, bathing, and even drinking. Following are some of the simple steps you need to take to start rainwater harvesting at your home or building:

- **Cleaning your catchment area:** This is the place where most of the rainwater is received and can be diverted from. First of all, you need to clean your roof or catchment area to prevent any dirt or other unnecessary materials from contaminating the water. Over the years, rooftop rainwater harvesting has emerged as one of the most popular options in India as it is easily doable.
- **Redirecting water with pipes:** Rainwater will be redirected towards the container through PVC pipes. These PVC pipes or gutters come in cylindrical shapes and can be easily attached to the drain pipes on the roof to redirect the water towards the storage tank.
- **Installing rain separator and storage tank filter:** The next step is to install the first rain separator or the washout pipe. It is basically a simple valve to block the entry of water into the tank while cleaning the roof and also during the initial stages of raining, when the water could be of poor quality due to air pollution and other factors. This valve requires cleaning after every rain to discharge wastewater or dust-filled water, which we usually get during the start of the rainy season. Besides that, you need to install another filter right on the storage tank to get clean water. This filter is also used to prevent the entry of dust and other small particles into the storage tank.
- **Overflow pipe for the extra water:** You also need to install an overflow pipe on top of your storage tank to release excess water. It is recommended that you put your storage tank at an elevated place to prevent any sort of bacterial or fungi growth around it and also for keeping it away from the reach of stray dogs or other animals.

Rooftop rainwater harvesting is used to provide drinking water, domestic water, water for livestock, water for small irrigation, and a way to replenish groundwater levels.

Rainwater harvesting tanks have been set up in over 1000 houses in Palayakayal village. Besides, it is mandatory to set up a rainwater harvesting tank even when permitting new constructions. Apart from this, rainwater harvesting tanks have been set up in every government building in Palayakayal.

6. **Objectives of the study**:

The following are the objectives focused in this study:

- To study the raising demands of water needs in Palayakayal.
- To analyze the rain water harvesting done in Palayakayal village.

7. **Methodology adopted:**

The Present study is analytical and descriptive in nature. Due to pandemic situation we collect details over the phone with Palayakayal panchayat people. For this study “Rain Water Harvesting – case

study in palayakayal village." the details about ground water conditions, how many home build with Rain water harvesting facilities and the government supports for new building & existing buildings were collected.

8. **Major findings:**

Folowing are the findings in regard to various response from respondents regarding the " Rain water harvesting - case study in Palayakayal village."

- 2352 houses, 1 hospital 3 schools 1 Government office building are in Palayakayal.
- Rain water harvesting facility found in 1132 houses 1 hospital 3 school & 1 Government building in Palayakayal.
- Most of the building has Rainwater harvesting facility but it was not in good condition.
- In initial stage government gives subsidy for rain water harvesting setup. But now there is no subsidy given by the government.
- It is mandatory for new buildings has to build with rainwater harvesting facility. Without Rainwater harvesting the building cannot be approved by the panchayat.
- Majority rain water set up was demolished and it was not maintained properly.
- There is no proper maintenance so that rain water not saved properly.
- In 1132 houses 90% houses rain water harvesting set up demolished.

9. Suggestions / Recommendations:

- The Government should make it mandatory for new buildings to be constructed or to be completed as soon as possible.
- For existing building the Government should instruct every building in palayakayal to modify its drainage system to connect the rain water directly to storm water drain in front of their buildings
- Rainwater Harvesting awareness camp needs to be conducted for the public, showing the importance of rainwater harvesting by displaying different technologies as well as cultures.
- The government must arrange seminars, workshops and group discussions about the rain water harvesting by inviting Scientists, experts, NGOs in this field. The best way to inform the current generation is to use mass media, such as TV, newspapers, and the internet by using campaign of celebrities like film actors, Sports persons and etc.
- The Government should be announce tax free and loans to Rainwater Harvesting equipment's.
- The installed Rainwater Harvesting structures should be maintained properly and special unit to be formed by the government to monitor and certify that.

- ❖ Monthly a day to be named for Rainwater Harvesting awareness day to particular area and best maintenance, management of Rainwater harvest structure should be appreciated by the Local government bodies.

10. Impact of this work on learning of students/teachers:

Every year as the summer sets in, water becomes scarce across the length and breadth of India. Natural resources come in abundance but they cannot be produced in our workshops. Today most of the countries of the world are facing the scarcity of water and are taking up rainwater harvesting for the dire necessity of survival. So the seriousness of the issue has been realized the seriousness and efforts to overcome this problem has been initiated. The importance of rainwater harvesting lies in the fact that it can be stored for future use. Just as it can be used directly so also the stored water can be utilized to revitalize the ground level water and improve its quality. This also helps to raise the level of ground water which then can be easily accessible. When fed into the ground level wells and tube well are prevented from drying up. This increases soil fertility. Harvesting rainwater checks surface run off of water and reduces soil erosion. If rain water, which comes for free, can be collected and stored, instead of letting it run off, it could be an alternative to back up the main water supply especially during dry spells. Its importance will not be limited to an individual family but can be used by a community as well. Systematic rainwater harvesting can help in irrigation with minimum use of technology and is therefore cost effective. This simple method can help farmers to prevent their crops from drying due to lack of water. It also creates a sense of social responsibility and awareness about the environment.

DECLARATION

We declare that the project work is original and carried out by us under the guidance of Ms. Tiny Jose. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

Dr. S. Kulandai Therese

Dr.S. Bulomine Regi

Signature(s)

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AISHE code of the Participating Institute : C- 41151

Name of the Regional Coordinating Institute of UBA: Gandhigram Rural Institute, Dindigul District, Chinnalapattai, Tamil Nadu

CERTIFICATE

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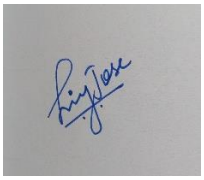

Signature of the Project Supervisor

Submission of Project Report for Internship Programme on Sustainable Development Goals and Community Engagement

1.Title of the project: **GENERAL PUBLIC OPINION ABOUT RENEWABLE ENERGY RESOURCES**

2.Details of the Participants:

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3.UBA theme for project work: **RENEWABLE ENERGY**

4.SDGs to be Achieved: **LIFE ON LAND**

5.What is renewable energy?

Renewable energy is useful energy that is collected from renewable resources, which are naturally replenished on a human timescale, including carbon neutral sources like sunlight, wind, rain, tides, waves and geothermal heat. This type of energy source stands in contrast to fossil fuels, which are being used far more quickly than they are being replenished. Although most renewable energy is sustainable energy, for example some biomass is unsustainable.

6.Objectives of renewable resources:

- To promote energy efficient building design, i.e to minimize energy use and negative environment effect of building.
- To maximize use of renewable and natural resources in building environment.
- Building Construction with optimum use of solar energy.
- Thermal comfort for the inhabitants.
- To reduce maintenance cost.

7.Best renewable energy sources with great opportunities and advantages:

❖ Wind:

The largest source of sustainable energy is wind energy. The wind is capable of generating power on a massive scale and it is

especially noted among renewable advocates for the wide range of benefits it offers. It produces few environmental side effects, offering the advantage of an overall carbon footprint even smaller than that of solar. Wind turbines don't generate smog, acid rain, or any of the numerous atmospheric toxins and particulates that contribute to the build up of greenhouse gases and exacerbate climate change. Wind power generates more than electricity. Today's wind energy sector supports the jobs of some 100,000 employees in the US and it has the potential to support 600,000 more by the year 2050.

- Sun:

Solar energy offers comparable public health benefits to those obtained through the use of wind power. The impact of solar on the environment is also relatively light, with experts noting that every kilowatt hour of solar power produced can significantly lower the number of greenhouse gases escaping into the atmosphere. Solar energy production requires only minimal water consumption, conserving available resources of water for other uses. Notably, the solar industry supports approximately 250,000 jobs in the US alone.

- Water:

Hydroelectric Power uses the natural force of flowing water to turn turbines attached to a generator. Hydroelectric plants have been in operation since 1882, when the world's first such installation began producing energy in Appleton, Wisconsin. Today, hydroelectric sources, including some 2500 dams across the country, are responsible for approximately 7.3% of all electrical power produced in the US. The generation of hydroelectric power, like wind and solar, offers the enormous advantage of producing relatively minute amounts of toxic

emissions. A signal benefit of hydropower is that it can upload power to the grid immediately, with some hydroelectric plants capable of going from zero to maximum output exceptionally quickly. Like wind and solar, hydropower can be produced entirely domestically, lessening reliance on foreign sources of oil. And, like wind and sunshine, flowing water is a constantly renewing resource. It also offers the benefits of scale and capacity. The US Department of Energy says that 97% of the nation's dams are not equipped to produce power. Retrofitting the remaining dams could produce power to more than 5 million homes and offset more than 190 million barrels of oil. Hydropower installations could also establish reservoirs that offer recreational benefits including swimming, boating and fishing.

- Garbage:

While biomass energy, derived from the burning of plant and animal byproducts, was only responsible for approximately 1.4% of all energy produced in the US in 2020, it makes a strong contribution in terms of sustainability. Biomass can be converted into a gas that can power gas driven turbines, steam generating equipment, and internal combustion engines. Multiple sectors of the American economy, such as health care, entertainment, hospitality and education get part of their electric power from biomass energy. Burning of biomass can reduce the amount of garbage in landfills by as much as 90%.

8. The role of renewable energy in sustainable development:

Renewable energy has an important role to play in meeting future energy needs in both rural and urban areas. The development and utilization of renewable energy should be given a high priority, especially in the light of increased awareness of the adverse environmental impacts of fossil based generation.

Renewable energy resources and technologies are a key component of sustainable development for three main reasons:

- ✓ They generally cause less environmental impact than other energy resources.
- ✓ They cannot be depleted.
- ✓ They favor system decentralization and local solutions has enhancing the flexibility of the system and providing economic benefits to small isolated populations.

9.Policies and strategies:

a) Green alliances are already being formed, either as green industrial alliances, public private cooperation and communication on renewable energy, "green deals" between industry and government, cooperation between environmental NGOs and industry, or in other forms.
b) Assess the levels of support for renewable energy technologies among different stakeholder groups.
c) Find creative ways, through existing policies or innovative new ones, to address stakeholder concerns and to encourage broad (including local) ownership and investment strategies for renewable energy projects and related infrastructures.

10.Policy options for the next five years, graphically represented by the six pointed action star:

i. Alliance building to lead the paradigm change.
ii. Communicating and creating awareness on all levels.
iii. Target setting at all levels of government.
iv. Integrating renewable into institutional, economic, social and technical decision making processes, while integrating renewable policies with efficiency policies.

v. Optimizing and applying proven policy instruments.
vi. Neutralizing disadvantages and misconceptions.

11. Uses of renewable energy in daily life:

Opt for solar powered light:

It is a simple switch than can avoid lights being needlessly used. Yet, when they are used they use an alternative source of power, ultimately saving energy.

Powering homes with solar and wind power:

There is no shortage of either which means that we can harness both and power our homes, leading to sustainable and off grid energy at home.

Using Bio ethanol to Power Cars:

Used as a substitute for petrol.

12. Suggestions\Recommendations:

- Embrace solar powered technologies.
- Crowd fund clean energy projects.
- Support the society of concerned scientist.
- Use water processing technology.
- Wind power for home or business.
- Keep solar, wind and waste for energy and fuels on their current 100% renewable in the next 10-15 years current rate of growth or better.
- Promote electric vehicles, in particular with “Vehicle to Grid” V2G.
- Vote for politicians who will support 100% renewable.
- If we do this, we will be 100% renewable in 10-15 years.

13. Green steps towards dream future:

The growing availability and falling cost of renewable energy generation certainly bodes well for future energy demands.

Alternative energy sources have a much lower carbon footprint than natural gas, coal and other fossil fuels. Switching to renewable energy sources to produce electricity will help the planet by slowing and reversing climate change.

Atomic energy, solar energy and energy from wind and bio fuels are just a few of the promising alternatives for a cleaner and greener future.

14. Conclusion:

Based on the present global economic growth rates, fossil fuel energy resources may last a generation or two, at the most, before they are exhausted. Therefore, the future of our energy needs lies in renewable energy resources. The use of these resources, rather than an increase in fossil fuel supplies, should be encouraged through new diplomacy that takes into account the needs and resources of all concerned.

Simply, if we don't find a way to increase our renewable energy, we will end up without sufficient energy to power our world.

Declaration:

We declare that the project work is original and carried out by us under the guidance of Mrs.P.Dhanalakshmi. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

Mariammal . C

Mary Miraculin . A

Meenakshi . S

Melciya Ancilin . A

Nithiya Sri .G.M

Preetha .P.M

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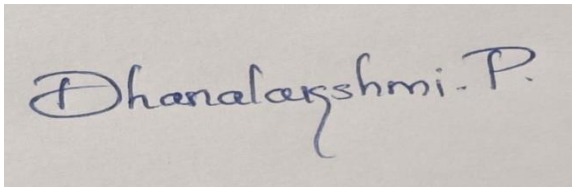
AISHE code of the Participating Institute: C-41151

Name of the Regional Coordinating Institute of UBA: Gandhigram Rural Institute – Deemed to be University, Dindigul.

CERTIFICATE:

This is to certify that project has been carried out under my supervision and guidance. The project report has not been submitted for any other title\award and the work is genuine.



Signature of the project supervisor

Submission of Project Report for Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. Title of the Project **: :** : **Case Study on Waste Water Management in Palaiyakayal Village,Thoothukudi**

2. Details of Participant(s) :

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3. UBA theme for Project Work : **(b) Water management**

(a) Organic Farming (b) Water management

(c) Renewable energy (d) Artisans, industries and livelihood

(e) Basic amenities (f) Convergence

4. SDGs to be achieved : **vi. Clean water and sanitation**

i. No poverty
ii. Zero hunger
iii. Good health & Well-being
iv. Quality education
v. Gender equality
vi. Clean water and sanitation
vii. Affordable & clean energy
viii. Decent work & economic growth
x. Reduced inequality
xi. Sustainable cities & communities
xii. Responsible consumption and production
xiii. Climate action
xiv. Life below water
xv. Life on land
xvi. Peace & justice strong institutions
xvii. Partnerships to achieve the goal

ix. Industry, innovation and infrastructure

5. Background of the study:

Water shortages, droughts and water-shedding have recently brought water management issues to the fore. In a water-scarce state like Tamil Nadu, much work needs to be done to ensure the stability of our water resources. Water is a vital necessity for any city. The state needs the skills of many individuals dedicated to making the most of our scarce water resources. Same way waste water management concerns the study of sustainable water resources. The importance of waste water management becomes very clear when you consider what would happen if a city or area ran out of clean water. Water resource managers should have a range of skills in a variety of fields. They need to understand parts of engineering, climate, urban planning, and natural resource management. They need to work across many disciplines to manage demand and planning of water resources.

6. Objectives of the study:

- To study how the waste water is managed in Palayakayal village
- To understand improvement of infrastructure for the treatment of sewage water

7. Methodology adopted:

The data for present study obtained by structuring questions required to get information from the respondents. The data were collected from the people staying in the locality though direct phone-in interviews. This study is about the waste water management in Palayakayal.

8. Major Findings:

- The respondents are not aware of any waste water treatment in the village.
- Most of the waste water is dumped to the near by water resource.
- Many of the industries has started working in recent times after the lockdown restrictions were removed.
- There is no plant for sewage treatment .

9. Suggestions / Recommendation:

A) Government or the local bodies should take an initiative to help the villagers to get plant for treatment of sewage.

B) Awareness classes should be given to villagers about the maintain the water resources clean.

10. Impact of this work on learning of students/teachers:

Wastewater is any water that requires cleaning after it is used. The goal of wastewater management is to clean and protect water. This means that water must be clean enough so that it can be used by people for drinking and washing, and by industry for commercial purposes. This study showed the lack of resources, and awareness had impact on the people of the village. Our finding suggests that Government should take few more measures for improving the water resources.

DECLARATION

We declare that the project work is original and carried out by us under the guidance of Ms. Tiny Jose (Assistant Professor of Commerce). The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

Dr. Sr. Kulandai Therese

Dr. S.Bulomine Regi

Signature(s)

Details of Project Supervisor

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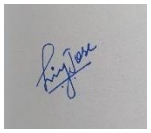
AISHE code of the Participating Institute : C- 41151

Name of the Regional Coordinating Institute of UBA: Gandhigram Rural Institute, Dindigul District, Chinnalapattai, Tamil Nadu

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title / award and the work is genuine.



Signature of the Project Supervisor

Submission of Project Report for Virtual Internship Program on Sustainable Development Goals and Community Engagement

1.Title of the Project : Basic Amenities

2.Details of Participant(s):

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3.UBA theme for Project Work: (e)Basic amenities

4.SDGs to be achieved: I No poverty ii. Zero hunger iii. Good health &Well-being iv. Quality education.

Background of the study:

The things to be essential and our make life easier and more comfortable considered as basic amenities. In India over 6.7% of population level does not have their basic amenities to live .As, we are developing nation, it is essential to make everyone in our country to fulfill their needs and requirements. Over the years the world has reconciled to an entirely different phase of development discourse where progress in development is no more certified on the basis of overall income growth of the economy, but rather on the quantum reduction in the share of population deprived with 'basic human needs'. The 'basic human needs' approach to development emphasizes on providing basic material needs to people. Though, it is well acknowledged that poverty manifests in numerous dimensions, its assessment in consideration of multiple dimensions is yet to attain consensus. It is also known that as each dimension of 'basic human needs' has its own characteristics, it thus requires different policy intervention. Therefore, it is much more rewarding to assess the individual dimension of deprivation rather than being in the quest of an aggregate measure which will be at the cost of adequacy and simplicity. In this background, this article makes an attempt to analyze India's progress in the three important 'basic human needs' essential for a human life: access to toilet facility, safe drinking water and electricity.

Objectives of the study:

1.To know the most effective media of advertisement.

2.To find out the reasons for liking the advertisement of cold drinks

3.To find out the most popular slogan of advertisement regarding cold drinks.

The main objective of equity research is to study companies, analyze financials, and look at quantitative and qualitative aspects mainly for decisions: whether to invest or not. Suggestion and comments for holdings sell or buy position can be given to stockholders. Equity Research Report adds significant credibility to portfolio. It helps to predict value of the certain equity under the specific circumstances. It is analyzing stock, it's industry and its peer group to provide earnings and valuation estimates. Research is valuable because it fills information gaps so that each individual investors does not need to analyze every stock. This division of labor makes the market more efficient...

Methodology adopted:

The present study is basic amenities. A questionnaire was structured to elicit the required information's from the respondents. The data were collected from the 140 sample respondents using Google Form. The study is based on general public opinion about basic amenities in Tuticorin City. Hence, the questionnaire is related on basic amenities like schools, tourism, food cloth, etc. Percentage analysis was used to analyze the collected data

Major findings:

So, we the girls, who gathered together to list out the basic needs of the people in our surroundings. In our view, the first and the most basic need is FOOD. Yes, many people are taking meals only two times per day. They are not having enough income to afford the food. The second most important thing is proper shelter. Of, course some people have their own house, some people are hiring the house for rent. But ,10 out

of 3 people residing in mud house or tiny houses. To the extreme one or two people passing their days in platform or under plastic cover roof.

The third amenities is proper electricity and sufficient water. These two takes the important role in day-to-day life.

The next thing is Proper Road facilities with fine Routes of public transport like Buses, Auto and Cab.

Next the people want Hospital, Medical clinic, Schools, Market and Shops to lead a comfortable life

Inadequate basic amenities

The findings from various studies and corroborated other evidence that the large and continuous increase in India's urban population, and the concomitant growth of the population residing in slums and shanty towns, has resulted in over-straining of infrastructure and a deterioration in public health. Inadequate civic amenities, lack of purchasing power, and lack of knowledge and awareness among the urban poor have resulted in urban poverty which is very different from its rural counterpart. While a few policies have specifically targeted the urban poor, these have been neither sufficient nor effective. Also, the deteriorating health status of urban people needs urgent attention because many of the recent health problems can take an epidemic form if neglected. A resurgence of malaria, dengue and tuberculosis indicates that much of the poor health emanates from a lack of basic amenities such as sanitation, clean water and housing, coupled with a lack of awareness about the need to take precautionary measures against preventable and infectious diseases. To tackle these problems effectively, it is important for policy-makers to recognize that certain groups are more susceptible to ill health than others; they are

vulnerable to the severe impact of illnesses and also the likely sources of infection for the population at large. There is an urgent need for research on the factors that prevent the urban poor from availing the services provided to them. It is possible that this is due to the lack of awareness-generating policies which should accompany any supply-side policies such as the provision of basic facilities (e.g., Sulabh Sauchalaya). To reduce the private costs as well as the negative externalities of ill health, it may be necessary to target such populations by cost-effective strategies based on holistic research on all the factors that determine well-being.

Suggestions:

The present study is analytical and descriptive in nature. A questionnaire was structured elicit the required information from the respondents. The data were collected from 140 sample respondents using Google From. The study is based on general public opinion about water resources management Thoothukudi city. Hence the questionnaire is related on water resources like fresh water, Ro water, ground water and waste water. Percentage analysis was used to analyze the collected data

Impact of this work on learning of students:

Gaining skills is one of the most important things you can do to develop your work. It is the ability to do something well. ... Learning new skills helps in your professional life a lot. It helps you to achieve your goals, gives confidence, and gives you motivation for working too. The facilities of a school impact overall learning process as well as the mental and physical growth of the students. These also affect the academic performance of the student to some extent. ... Basically, facilities offered by a school affect the health, behavior, engagement, learning, and growth of the students. The findings suggests that the

availability and effective utilization of school physical facilities play a significant role in enhancing students' academic performance, while inadequacy of such physical facilities could contribute to poor academic performance in students.

Factors that Influence Students' Motivation in Education

- Class and Curriculum Structure. ...
- Teacher Behavior and Personality. ...
- Teaching Methods. ...
- Parental Habits and Involvement. ...
- Family Issues and Instability. ...
- Peer Relationships. ...
- Learning Environment. ...

Assessment.

DECLARATION

We declare that the project work is original and carried out by us under the guidance of DHANALAKSHMI P. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

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Simona D	Varsha A
Siva Nandhini L	Varsha N
Snowfina E	Vijaya Shanthi K
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AISHE code of the Participating Institute: C-4115

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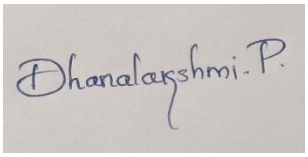
CERTIFICATE

This is to certify that the project has been carried out under my supervision.



DHANALAKSHMI P

(Signature).

Submission of Project Report for Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. Title of the Project **: Quality health service and its access in Palayakayal village**

2. Details of Participant(s) :

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3. UBA theme for Project Work : **(e) Basic amenities**

(a) Organic Farming (b) Water management

(c) Renewable energy (d) Artisans, industries and livelihood

(e) Basic amenities (f) Convergence

4. SDGs to be achieved : xv**. Life on land**

i. No poverty
ii. Zero hunger
iii. Good health & Well-being
iv. Quality education
v. Gender equality
vi. Clean water and sanitation
vii. Affordable & clean energy
viii. Decent work & economic growth
ix. Industry, innovation and infrastructure
x. Reduced inequality
xi. Sustainable cities & communities
xii. Responsible consumption and production
xiii. Climate action
xiv. Life below water
xv. Life on land
xvi. Peace & justice strong institutions
xvii. Partnerships to achieve the goal

5. Background of the study:

The study was done to determine the available health care awareness among rural backward area. The study discusses about the access to health care services in rural area and conscious about rural hospitals, managed care in rural areas, treatment and about ignorance of villagers about Government medical health schemes. The study conducted in a small population. In the chosen village wide variety of ailments observed. Many of these could be managed at PHC. None of the conditions serious in nature required immediate health care attention in urban areas. Health camp has given an opportunity and equally important role in ensuring medical safety and educating villagers about health care management. The quality health care services and its access to the rural communities have long struggle. The extensive of this study has shown the problem faced by the rural people. The result has shown variety of factors contributing for their personal self-health care in rural areas because of economic stagnation, dearth of physicians and other health care professionals, disproportionate young and old with old high rates of chronic illness. Majority of ruralites are still travelling more than 100km to avail health care facilities of which 70-80% expenditure landing them in poverty .Infrastructures well developed in urban areas by the Government but failed to do in rural which sustains 70% Indian population. The qualitative and quantitative availability of PHC facilities is far less than the defined norms of World Health Organization. Our study has given an impression about reaching the goal of the health inclusion by incorporating impoverished and needy rural population through community participation .The multilayered concept of access to health care is use of health care by those who need it . The study also examines women perspective of available women health care services and utilization of health care services during various health issues be it pregnancy and child birth, vaccination or availability of medicines in a rural community. Because of complications associated with pregnancy and childbirth worldwide, over half a million young women die every year. Inefficient health care services and accessibility of services lead to health issues for pregnant women .The hindrances to spreading of rural health insurance and other schemes of the Government due to lack of awareness.

6. Objectives of the study:

- To study quality of health service and its access in Palayakayal village
- To understand the maintenance and enhancement of quality of life

7. Methodology adopted:

The data for present study obtained by structuring questions required to get information from the respondents. The data were collected from 70 sample respondents using Google form. This study is about the Quality health service and its access in Thoothukudi city Palayakayal , Ganesh Nagar. Hence, the question is related on Quality health service provided in the village and the accessibility. Percentage analysis was used to analyse the collected data.

8. Major Findings:

- Almost whole community shows interest in the community hospital according to the interview schedule questionnaires 99% respondent shows interest in Community hospital in Palayakayal.

- Now a days according to the situation people are more aware and conscious about their health according to the interview schedule 87% shows interest in Health Insurance..

- People are not satisfied with the present medical facility they are getting. According to the 70% people are not satisfied from the Health services in that area they got.

- Community always aspects more what they already have. According to research 86% people shows interest in primary and secondary hospital.

9. Suggestions / Recommendation:

A) Awareness programme can be provided on healthcare service in rural areas, health information, health literacy, transportation, and physical accommodation.

B) Transportation is one of the most daunting care access hurdles in rural areas.

10. Impact of this work on learning of students/teachers:

This study showed the lack of utilization of educational resources, distance to travel to meet a health service for their ailments, cultural, religious and family influences had an impact on the people of the village. Our finding suggests that in expanding rural health infrastructure,

Government should take few more measures for achieving healthy rural India. In conclusion, fixed infrastructure for the expansion of health care facilities in rural areas requires financial support and a strong political commitment from the state Governments.

DECLARATION

We declare that the project work is original and carried out by us under the guidance of Ms. Tiny Jose(Assistant Professor of Commerce). The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

Dr. Sr. Kulandai Therese

Dr. S.Bulomine Regi

Signature(s)

Details of Project Supervisor

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AISHE code of the Participating Institute : C- 41151

Name of the Regional Coordinating Institute of UBA: Gandhigram Rural Institute, Dindigul District, Chinnalapattai, Tamil Nadu

CERTIFICATE

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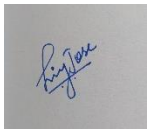

Signature of the Project Supervisor

Submission of Project Report for Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. Title of the Project **: : To Study How The Pandemic Affected The Livelihood of Local Industries in Palayakayal Village**

2. Details of Participant(s) :

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3. UBA theme for Project Work : **(d) Artisans, industries and livelihood**

(a) Organic Farming (b) Water management

(c) Renewable energy (d) Artisans, industries and livelihood

(e) Basic amenities (f) Convergence

4. SDGs to be achieved : **viii. Decent work & economic growth**

i. No poverty
ii. Zero hunger
iii. Good health & Well-being
iv. Quality education
v. Gender equality
vi. Clean water and sanitation
vii. Affordable & clean energy
viii. Decent work & economic growth
ix. Industry, innovation and infrastructure
x. Reduced inequality
xi. Sustainable cities & communities
xii. Responsible consumption and production
xiii. Climate action
xiv. Life below water
xv. Life on land
xvi. Peace & justice strong institutions
xvii. Partnerships to achieve the goal

5. Background of the study:

Artisans are faced with acute financial shortage which make it hard for them to acquire equipment and raw material of the requisite quality. They are unable to give export quality

finish to their products according to international market standards. Low pay ,lack of exposure, financial constraints, and inadequate client coverage are some of the most common challenges faced by India's craft sector in the post-lockdown era. Some of the numerous tribal crafts manufactured in India include: Antiques, Art, Baskets , Paper mache, Ceramics, Clock making, Embroidery, Book printing ,Decorative painting, Glass work, Fabric, Furniture, Gifts, Home décor, Jewelry, Leather crafts, metal crafts, paper crafts, pottery, puppets, stone and wood work. The handicraft artisans suffer due to the sector's unorganized nature, lack of education, low capital, poor exposure to new technologies, absence of market intelligence and poor institution framework. Fragmented value chains and lack of market linkages is probably the main problem of the sector.

"Artisans typically depends on piece-work rates, that depends on access to markets, exhibitions and stores- all this was stripped away from them overnight." We believe that craft production, when reinterpreted as creative manufacturing, can be the basis for sustainable livelihood and regenerative economies, so we had about 500 student volunteers helping artisans make E-commerce catalogues and connect to online sales channels to continue selling their produces." We was also closely involved in negotiating new terms fot the collective with what she refers to as "super tanker organizations" - global retailers that play a critical role in buying the wares of Indian artisans and taking them to a global marketplace. In one instance, these negotiations meant the stringently applied no- work-from-home policy for suppliers, in place to guard against child labor, was waived securing livelihood to over 10,000 women confined to their homes during lockdown. A livelihood is a means of making a living. It encompasses people's capabilities, assets, income and activities required to secure the necessities of life. A livelihood is sustainable when it enables people to cope with, recover from shocks and stresses (such as natural disasters and economic or social upheavals), and enhance their well-being and that of future generations without undermining the natural environment or resource base.

6. Objectives of the study:

- To study how the pandemic affected the livelihood of local industries in Palayakayal village
- To understand how the local industries helps in economic growth

7. Methodology adopted:

The data for present study obtained by structuring questions required to get information from the respondents. The data were collected from the owners of local industry using Google form. This study is about the effect of pandemic on the livelihood of local industries in Palayakayal.

8. Major Findings:

- The pandemic had major impact on the local industries.
- The pandemic hit the flow of raw material suppliers, thus it affected the manufactures.
- Since the production has stopped, it has hit the economy as well.\
- Many of the industries has started working in recent times after the lockdown restrictions were removed.
- Most of the work is done on contract basis therefore during lockdown these were not able to fulfil.

9. Suggestions / Recommendation:

A) Government should take an initiative to help the industries to regain their old status.

B) Government should implement scheme which would help the industries to find new buyers in the market.

10. Impact of this work on learning of students/teachers:

This study showed the lack of utilization of educational resources, distance to travel to meet a raw material suppliers, the market influences had an impact on the people of the village. Our finding suggests that in expanding rural manufacturing industries, Government should take few more measures for improving the local manufacturers. In conclusion, fixed infrastructure for the expansion of facilities in rural areas requires financial support and a strong political commitment from the state Governments.

DECLARATION

We declare that the project work is original and carried out by us under the guidance of Ms. Tiny Jose (Assistant Professor of Commerce). The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

Dr. Sr. Kulandai Therese

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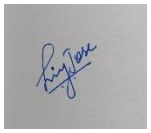
AISHE code of the Participating Institute : C- 41151

Name of the Regional Coordinating Institute of UBA: Gandhigram Rural Institute, Dindigul District, Chinnalapattai, Tamil Nadu

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title / award and the work is genuine.



Signature of the Project Supervisor

Proforma for the Submission of Project Report for

Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. Title of the Project : **Condition and Prospects of Organic farming In Tharuvaikulam**

2. Details of Participant(s) :

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3. **UBA theme for Project Work** : **(a) Organic Farming**

(a) Organic Farming (b) Water management
(c) Renewable energy (d) Artisans, industries and livelihood
(e) Basic amenities (f) Convergence

4. **SDGs to be achieved** : **(iii) Good health & Well-being**

i. No poverty
ii. Zero hunger
iii. Good health & Well-being
iv. Quality education
v. Gender equality
vi. Clean water and sanitation
vii. Affordable & clean energy
viii. Decent work & economic growth
ix. Industry, innovation and infrastructure
x. Reduced inequality
xi. Sustainable cities & communities
xii. Responsible consumption and production
xiii. Climate action
xiv. Life below water
xv. Life on land
xvi. Peace & justice strong institutions
xvii. Partnerships to achieve the goal

5. **Background of the study** :

The concepts of organic agriculture were developed in the early 1900s by Sir Albert Howard, F.H. King, Rudolf Steiner, and others who believed that the use of animal manures (often made into compost), cover crops, crop rotation, and biologically based pest controls resulted in a better farming system. Organic farming, agricultural system that uses ecologically based pest controls and biological fertilizers derived largely from animal and

plant wastes and nitrogen-fixing cover crops. Modern organic farming was developed as a response to the environmental harm caused by the use of chemical pesticides and synthetic fertilizers in conventional agriculture, and it has numerous ecological benefits. Compared with conventional agriculture, organic farming uses fewer pesticides, reduces soil erosion, decreases nitrate leaching into groundwater and surface water, and recycles animal wastes back into the farm. These benefits are counterbalanced by higher food costs for consumers and generally lower yields. Indeed, yields of organic crops have been found to be about 25 percent lower overall than conventionally grown crops, although this can vary considerably depending upon the type of crop. The challenge for future organic agriculture will be to maintain its environmental benefits, increase yields, and reduce prices while meeting the challenges of climate change and an increasing world population.

The demand for organic food was stimulated in the 1960s by the publication of Silent Spring by Rachel Carson, which documented the extent of environmental damage caused by insecticides. Organic food sales increased steadily from the late 20th century. Greater environmental awareness, coupled with concerns over the health impacts of pesticide residues and consumption of genetically modified (GMO) crops, fostered the growth of the organic sector. The price of organic food is generally higher than that of conventionally grown food. Depending on the product, the season, and the vagaries of supply and demand, the price of organic food can be anywhere from less than 10 percent below to more than 100 percent above that of conventionally grown produce. Organic agriculture is defined formally by governments. Farmers must be certified for their produce and products to be labeled “organic,” and there are specific organic standards for crops, animals, and wild-crafted products and for the processing of agricultural products.

The way we farm and eat can make a world of difference. Organic farming is better for the planet; it has higher animal welfare standards; it is better for wildlife and it is better

for people. Organic farming seems to contribute to maintaining an optimal health status and decreases the risk of developing chronic diseases. It has reduced the risk of allergic diseases, over weight and obesity. Since the people of Tharuvaikulam suffer from various problems like saline water, lack of land, non-fertile soil etc. they can depend on organic farming and there is ample scope for it.

6. **Objectives of the study** :

* To produce food of high nutritional quality in sufficient quantity.
* To work with natural system rather than seeking to dominate them.
*To improve the health of all
*To make people almost self sufficient in matters of food products.

7. **Methodology adopted** :

The present study is analytical and descriptive in nature. A questionnaire was structured to elicit the required information from the respondents. Data was collected from 85 sample respondents using Google Form. The questionnaire is designed to understand the issues pertaining to organic farming and agricultural issues in Tharuvaikulam. Percentage analysis was mainly used.

8. Major findings

1) Majority of the respondents (89.4%) are female.
2) Most of the respondents (50.06%) are in between the age of 18-25 years.
3) Majority of the respondents (53.6%) are graduates.
4) Most the respondents (83.5%) are unemployed.
5) Most of the respondents (70.6%) own land.
6) Most of the respondents didn't cultivate anything.
7) Due to lack of land and lack of water, more than 90% of people are not cultivating.
8) Most of the respondents (41.2%) feel that the causes for their diseases are due to inorganic food items.

9. Suggestions / Recommendations :

- Government must promote organic farming.
- Cultivation can be done in roofs.
- Small cultivations can be done in adjacent areas.
- Waste water and food waste can be used as manures.
- Government and NGOs can help people to sell their products and can earn income.
- Prospects of getting GI tag.
- Organic farming must be included in the curriculum.
- Various awareness programmes about organic farming must be organized.
- The government must make the necessary infrastructure for this.

10. Impact of this work on learning of students/teachers:

Overall, organic Farming appears to perform better than conventional forming and provides important environmental advantages such as halting the use of harmful chemicals along the trophic chain, reducing water use, as well as reducing carbon and ecological footprints. Since health is wealth, organic farming cannot but be made compulsory. Through organic farming, the expenditure on health sector can be diminished. It will work miracles. The student community can do a lot in this field. They can do themselves and pursues their parents to do organic farming. Even schools and colleges can be utilized for organic farming. These kinds of studies will create an awareness among student community and teachers and their households about the need and beauty of organic farming. It will enhance the teaching and student community in enhancing their outlooks on societal issues.

DECLARATION

I / We declare that the project work is original and carried out by me / us under the guidance of Ms. Keerthana Santhosh. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

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CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title / award and the work is genuine.

Signature of the Project Supervisor
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Proforma for the Submission of Project Report for

Virtual Internship Programme on Sustainable Development Goals and

Community Engagement

1. **Title of the Project** : **Problems of Waste Management in Tharuvaikulam and Its Prospects in Affordable Energy Creation**

2. **Details of Participant(s)** :

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3. **UBA theme for Project Work** : **(c) Renewable energy**

(a) Organic Farming (b) Water management

(c) Renewable energy (d) Artisans, industries and livelihood

(e) Basic amenities (f) Convergence

. 4. **SDGs to be achieved** :**(vii) Affordable & clean energy**

i. No poverty
ii. Zero hunger
iii. Good health & Well-being
iv. Quality education
v. Gender equality
vi. Clean water and sanitation
vii. Affordable & clean energy
viii. Decent work & economic growth
ix. Industry, innovation and infrastructure
x. Reduced inequality
xi. Sustainable cities & communities
xii. Responsible consumption and production
xiii. Climate action
xiv. Life below water
xv. Life on land
xvi. Peace & justice strong institutions
xvii. Partnerships to achieve the goal

5) Background of the study :

Waste management (or waste disposal) includes the processes and actions required to manage waste from its inception to its final disposal. This includes the collection, transport, treatment and disposal of waste, together with monitoring and regulation of the waste management process and waste-related laws, technologies, economic mechanisms etc.

Waste means which we no longer need it; it is not good for human's bodies; if it is not eliminated it chokes the gutters. It serves as a breeding ground for mosquitoes that transmit malaria and other diseases. Waste can be solid, liquid, or gaseous and each type has different methods of disposal and management. Waste management deals with all types of waste, including industrial, biological, household, municipal, organic, biomedical, radioactive wastes. In some cases, waste can pose a threat to human health. Waste is produced by human activity, for example, the extraction and processing of raw materials.

It goes without saying that too much garbage is lying uncollected in the streets, causing inconvenience, environmental pollution and posing a public health risk. Most often waste is burnt in the open air. Burning of plastic waste will add to the toxic gaseous emissions in the atmosphere, polluting the air and destroying the ozone layer and its protective properties.

Improper waste water disposal by one individual affects the entire citizenry. In the good old days, it was not a big problem but with increase in population and with the risk of plastic and hazardous chemicals, the situation has become alarming. The existing waste disposal facilities are inadequate to deal with the quality and quantity of waste generated. So more advanced sysetms are the need of the hour.

Health issues are associated throughout the entire process of waste management. Health issues can also arise indirectly or directly. Directly, through the

handling of solid waste, and indirectly through the consumption of water, soil and food.

Waste management is intended to reduce adverse effects of waste on human health, the environment, planetary resources and aesthetics. Waste management practices are not uniform among countries (developed and developing nations); regions (urban and rural areas), and residential and industrial sectors can all take different approaches.

Proper management of waste is important for building sustainable and livable cities, but it remains a challenge for many developing countries and cities. A report found that effective waste management is relatively expensive, usually comprising 20%–50% of municipal budgets. Operating this essential municipal service requires integrated systems that are efficient, sustainable, and socially supported. Large portion of waste management practices deal with municipal solid waste (MSW) which is the bulk of the waste that is created by household, industrial, and commercial activity.

Majority of the wastes can be separated and can be reused especially as a clean and affordable energy source. Biogas and anaerobic systems provide an opportunity to create economic activity while revolutionizing waste management. The organic material used in the process is typically manure and wastewater bio-solids. But, food waste, food scraps, industrial food waste, and wood waste can also be used. Once it is processed, biogas is exactly the same as fossil-fuel natural gas in terms of molecular structure and can be used as a renewable fuel. Digestate is the solid product that results from anaerobic digestion. It is a nutrient-rich fertilizer that is pathogen-free, doesn't smell, and can readily be absorbed by plants. It presents a lower risk of

agricultural runoff than other fertilizers and is at least as effective as fossil-based fertilizers.

Tharuvaikulam also faces issues in waste management. If the wastes are segregated in the beginning itself, it can be surely channelized as a renewable resource and can be utilized for cooking and at the same time, its solid particles can be used as manures. So the prospects for a cleaner environment is much.

6) Objectives of the study :

- To understand the various issues of waste management in Tharuvaikulam
- To find out the ways to solve the problem of waste disposal.
- To find out whether affordable energy sources are needed in Tharuvaikulam

7) Methodology adopted :

The present study is analytical and descriptive in nature. A questionnaire was structured to elicit the required information from the respondents. Data was collected from 85 sample respondents using Google Form. The questionnaire is designed to understand the issues pertaining to waste management and affordable energy in Tharuvaikulam. Percentage analysis was mainly used.

8) Major findings :

1) Majority of the respondents (89.4%) are female.

2) Most of the respondents (50.06%) are in between the age of 18-25 years.

3) Majority of the respondents (53.6%) are graduates.

4) Most the respondents (83.5%) are unemployed.

5) Only 15.5% of respondents have proper waste management facilities.

6) Most the respondents (72.9%) used cooking gas as the major energy source.

7) 11.8% of the respondents feels that their diseases are due to improper waste management.

9) Suggestions / Recommendations :

* It is necessary to have the linkage between various institutions, organizations and governmental bodies for proper waste management.

* Awareness must be provided to people regarding the significance of proper waste management

*Biogas plants must be installed in each house with aid from government or any private sources.

*People must be pursued to store domestic waste properly covered to protect it from direct exposure of flies, vermins and scavengers.

*The authorities must strictly implement laws and regulations.

*People must be encouraged to use cost efficient renewable resources.

10) Impact of this work on learning of students/teachers:

An inefficient solid waste management system may create serious negative environmental impacts like infectious diseases, land and water pollution, obstruction and drains and loss of biodiversity. With the use of biogas, instead of fossil resources, emissions of Co2 and other greenhouse gases is declined. Lesser fossil fuel is consumed during the production of biogas and as a result greenhouse gas emission decreases. Biogas as a waste management system solves almost all the major problems in this realm. Students and teachers, being part of the academics can

contribute much to this realm by creating awareness. Illiteracy, population increase, lack of awareness, lack of concern about environmental issues, poverty are some of the reasons for the alarming situation. With a little push, support and education to improve people's practices and perceptions regarding waste management, some of the challenges can be minimized. These kinds of studies will create awareness among student community and their households about the need and beauty of proper waste management and cost effiecient resources. It will enhance the teaching and student community in enhancing their outlooks on societal issues.

DECLARATION

I / We declare that the project work is original and carried out by me / us under the guidance of Ms. Keerthana Santhosh. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

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CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title / award and the work is genuine.

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Proforma for the Submission of Project Report for

Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. **Title of the Project** : PROBLEMS AND PROSPECTS OF DRINKING WATER IN THARUVAIKULAM VILLAGE

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				om	

3. **UBA theme for Project Work** : **(b) Water Management**

(a) Organic Farming (b) Water management

(c) Renewable energy (d) Artisans, industries and livelihood

(e) Basic amenities (f) Convergence

4. **SDGs to be achieved** : **(iii) Good health & Well-being**

(vi) Clean Water and Sanitation

i. No poverty
ii. Zero hunger
iii. Good health & Well-being
iv. Quality education
v. Gender equality
vi. Clean water and sanitation
vii. Affordable & clean energy
viii. Decent work & economic growth
ix. Industry, innovation and
x. infrastructure
xi. Reduced inequality
xii. Sustainable cities & communities
xiii. Responsible consumption and production
xiv. Climate action
xv. Life below water
xvi. Life on land
xvii. Peace & justice strong institutions
xviii. Partnerships to achieve the goal

5. Background of the Study :

Water is a vital source for humanity. Drinking water, also known as potable water, is water of sufficiently high quality that it can be consumed or used without risk of immediate or long term harm and is safe to drink or use for food preparation or for other purposes. The United Nations (UN) and other countries declared access to safe drinking water as a fundamental human right, and an essential step towards improving living standards. Access to water was one of the main goals of Millennium Development Goals (UN-MDGs) and it is also one of the main goals of the Sustainable Development Goals (SDGs). The UN-SDG goal 6 states that "Water sustains life, but safe clean drinking water defines civilization".

Access to safe drinking-water is a basic human right and a component of effective policy for health protection. The amount of drinking water required to maintain good health varies, and depends on physical activity level, age, health- related issues and environmental conditions. Water scarcity is becoming more and more of a problem on a daily basis in international realms itself.

In India, drinking water is a problem both in urban areas and in rural areas. India constitutes 16 per cent of the world's population, but the country has only four per cent of the world's freshwater resources. With the changing weather patterns and recurring droughts, condition of India is worsening much. Studies show that more than 50% of the population has no access to safe drinking water and about 200,000 people die every year for lack of access to safe water.

History repeats is a popular statement. More than 2500 years ago, when Indus valley civilization has reached its zenith, it mysteriously disappeared. Many archaeologists believe that it was due to a catastrophic water scarcity. Now more than 600 million (nearly half of our population) face water stress. India will have only half the water it needs by 2030, that is catastrophe is just a decade away. That is, Day Zero or the day when almost no water is left had been reached in some states of India and Tamil Nadu is not an exception. Tharuvaikulam, which is a village in Thoothukudi district of Tamil Nadu deserves special mention. It is curious to note that the etymology of the word Thoothukudi can be traced to the period when the locals used to tap drinking water by digging small ponds (Oothu in Tamil). Thus Oothukkudi means to dig and to drink. Later it came to be known as Thoothukudi.

Lack of proper planning, increasing privatization, industrial and human waste, corruption etc. can be traced as some of the reasons for this water scarcity. The situation will become worse as population is increasing. It is affecting human life in all aspects. The

construction sector is severely affected by it. It is affecting even the educational system. Most of the girls are forced to keep away from schools as they are forced to fetch water for their houses.

Population increase and over exploitation of water resources, climate change etc. are affecting the drinking water supply. Though we receive rains, most of that water flows down into the sea taking with it the fertile top soil and does not percolate down and as a result the ground water is also depleting fast.

6. Objectives of the study :

- To identify the intensity of drinking water shortage in Tharuvaikulam.
- To identify the problems faced by general public in Tharuvaikulam in getting fresh water.
- To find out proper remedies to solve the problem of drinking water scarcity.

7. Methodology adopted :

The present study is analytical and descriptive in nature. A questionnaire was structured to elicit the required information from the respondents. Data was collected from 85 sample respondents using Google Form. The questionnaire is designed to understand the issues pertaining to drinking water in Tharuvaikulam. Percentage analysis was mainly used.

8. Major findings :

1) Majority of the respondents (89.4%) are female.
2) Most of the respondents (50.06%) are in between the age of 18-25 years.
3) Majority of the respondents (53.6%) are graduates.
4) Most the respondents (83.5%) are unemployed.
6) About 35.3% of the respondents lack minimal drinking water facilities.
8) Majority of the respondents (54.1%) rely on government supply of water.
9) Only 28.2% of the respondents consider their drinking water as safe or pure drinking water.
10) 38% of the respondents suffer from water borne diseases.
11) 20% of the respondents feel that their diseases are due to contaminated water.

9. Suggestions / Recommendations

- The government must take necessary steps to ensure adequate drinking water facility to all.
- Rain water must be used properly and rain water harvesting plants must be installed.
- To develop technology to use less water in connection with flush use and tap use.
- The government must ensure the quality of drinking water.
- Awareness campaigns must be conducted for proper management of water.
- Drinking Water Plant and Reverse Osmosis Filtration Units.
- New waste water recycling systems for the optimal use of water.

10. Impact of this work on learning of students/teachers:

Water is something that all living beings – human, animals and plants depend on in order to survive. About three quarters of our planet is covered with water. But resources, by their very nature are finite. Water is not an exception. It is shocking to note how limited this resource is in terms of usability – roughly half a teaspoon per head. We need to manage our water resources properly. We need traditional and modern methods - Rainwater collection, harvesting etc. together with advanced technology to prevent wastage of precious life giving substance called water. To take just one example, to transport faecal matter weighing 100 grams, one uses 6 liters of water to flush it down. We need a technology with a human face to use less water. Only through science and technology, we can solve our problems. Studies like this will provide more data that can be used by policy makers to solve this crisis. Since students will have fresh ideas and practical experience, the data collected will be down to earth and very useful. Similarly it will create an awareness among student community and their households about the need and beauty of water management. It will enhance the teaching and student community in enhancing their outlooks on societal issues.

DECLARATION

I / We declare that the project work is original and carried out by me / us under the guidance of Ms. Keerthana Santhosh. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

Signature(s)

K.Rosy

M.sabana Afrin

J.Sahaya Riji

K.Sathya

A.Selva Rexlin

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CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title / award and the work is genuine.

Signature of the Project Supervisor
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Assistant Professor of History
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Proforma for the Submission of Project Report for

Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. Title of the Project : SANITATION AND WASTE WATER MANAGEMENT IN THARUVAIKULAM

2. Details of Participant(s) :

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3. **UBA theme for Project Work** : **(b) Water management**

(a) Organic Farming	(b) Water management
(c) Renewable energy	(d) Artisans, industries and livelihood
(e) Basic amenities	(f) Convergence

4. **SDGs to be achieved** : **(iii) Good health and well being**
(vi) Clean water and Sanitation

i. No poverty
ii. Zero hunger
iii. Good health & Well-being
iv. Quality education
v. Gender equality
vi. Clean water and sanitation
vii. Affordable & clean energy
viii. Decent work & economic growth
ix. Industry, innovation and
x. infrastructure
xi. Reduced inequality
xii. Sustainable cities & communities
xiii. Responsible consumption and production
xiv. Climate action
xv. Life below water
xvi. Life on land
xvii. Peace & justice strong institutions
xviii. Partnerships to achieve the goal

5. Background of the study :

Sanitation refers to public health conditions related to clean drinking water and adequate treatment and disposal of human excreta and sewage. Preventing human contact with feces is part of sanitation, as is hand washing with soap. Sanitation systems aim to protect human health by providing a clean environment that will stop the transmission of disease, especially through the fecal–oral route. For example, diarrhea, a main cause of malnutrition and stunted growth in children, can be reduced through adequate sanitation. There are many other diseases which are easily transmitted in communities that have low levels of sanitation, such as ascariasis (a type of intestinal worm infection or helminthiasis), cholera, hepatitis, polio, schistosomiasis, and trachoma, to name just a few.

A range of sanitation technologies and approaches exists. Some examples are community-led total sanitation, container-based sanitation, ecological sanitation, emergency sanitation, environmental sanitation, onsite sanitation and sustainable sanitation. A sanitation system includes the capture, storage, transport, treatment and disposal or reuse of human excreta and wastewater. Reuse activities within the sanitation system may focus on the nutrients, water, energy or organic matter contained in excreta and wastewater. This is referred to as the "sanitation value chain" or "sanitation economy". The people responsible for cleaning, maintaining, operating, or emptying a sanitation technology at any step of the sanitation chain are called "sanitation workers".

Several sanitation "levels" are being used to compare sanitation service levels within countries or across countries. The sanitation ladder defined by the Joint Monitoring Programme in 2016 starts at open defecation and moves upwards using the terms "unimproved", "limited", "basic", with the highest level being "safely managed". This is particularly applicable to developing countries.

The Human Right to Water and Sanitation was recognized by the United Nations (UN) General Assembly in 2010. Sanitation is a global development priority and the subject of Sustainable Development Goal 6.The estimate in 2017 by JMP states that 4.5 billion people currently do not have safely managed sanitation. Lack of access to sanitation has an impact not only on public health but also on human dignity and personal safety.

Sanitation is one of the most important aspects of community well-being because it protects human health, extends life spans, and it documented to provide benefits to the economy. The goal of sanitation is to safely reduce human exposure to pathogens.

Water scarcity is no doubt one of the major problem, the world is facing today. As we know, civilization has its mysterious regression and it seems that we are fated to be in such a

situation as far as water scarcity is concerned. Wastewater is defined as a combination of one or more of: domestic effluent consisting of blackwater (excreta, urine and faecal sludge) and greywater (kitchen and bathing wastewater); water from commercial establishments and institutions, including hospitals; industrial effluent, stormwater and other urban run-off; agricultural, horticultural and aquaculture effluent, either dissolved or as suspended matter. It is a potential resource to solve our water crisis and can be recycled to use for various wants. In this realm, Water management deserves special attention, if we want to survive. Bad water management leads to poor sanitation.

The condition of Tharuvaikulam in Thoothukudi district is no doubt, a microcosm to the macrocosm called Tamil Nadu. Lack of water and water management is one of the severe problems that the people of Tharuvaikulam are facing today and it is affecting their all-round progress and prosperity. Thus it is a severe problem and it needs much brainstorming.

6. **Objectives of the study** :

- To understand the waste water management system in Tharuvaikulam
- To identify whether the people have access to clean, safe and reliable water supply and sanitation.
- To understand the health issues due to lack of sanitation.

7**. Methodology adopted** :

The present study is analytical and descriptive in nature. A questionnaire was structured to elicit the required information from the respondents. Data was collected from 85 sample respondents using Google Form. The questionnaire is designed to understand the issues pertaining to waste water management and sanitation in Tharuvaikulam. Percentage analysis was mainly used.

8. Major findings :

1) Majority of the respondents (89.4%) are female.
2) Most of the respondents (50.06%) are in between the age of 18-25 years.
3) Majority of the respondents (53.6%) are graduates.
4) Most of the respondents (83.5%) are unemployed.
5) About 35.3% of the respondents lack minimal drinking water facilities.
6) 38% of the respondents suffer from water borne diseases.

7) Only 12.9% of the respondents have proper sanitation facilities.

8) Only 15.5% of respondents have proper waste management facilities.

9) 20% of the respondents feel that their diseases are due to contaminated water.

9. Suggestions / Recommendations :

- Government must ensure proper sanitation facilities to all.
- Waste water management must be made important.
- Government can establish a sewage treatment plant for solving waste water management issues.
- People must be given awareness about the health issues of poor waste water management and sanitation.
- Traditional methods of sanitation and technology can be interlinked to solve the issue.
- There must be a new technology for waste water management and it must be cost effective.

10. Impact of this work on learning of students/teachers:

As our world is facing water scarcity, proper sanitation and waste water management are the needs of the hour. To take just one example, to transport faecal matter weighing 100 grams, one uses 6 liters of water to flush it down. We need a technology with a human face to use less water. Only through science and technology, we can solve our problems. Studies like this will provide more data that can be used by policy makers to solve this crisis. Since students will have fresh ideas and practical experience, the data collected will be down to earth and very useful. Similarly it will create awareness among student community and their households about the need and beauty of proper sanitation and water management. It will enhance the teaching and student community in enhancing their outlooks on societal issues.

DECLARATION

I / We declare that the project work is original and carried out by me / us under the guidance of Ms. Keerthana Santhosh. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

Signature(s)

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CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title / award and the work is genuine.

Signature of the Project Supervisor
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Proforma for the Submission of Project Report for
Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. **Title of the Project :** The need for Primary Health Center in Paripooranam Nagar in Palayakkayal.

2. **Details of Participant(s):**

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12	VCO10440	Dr S R T Sherly Cross	Zoology	srtsherly@gamil.com	9486594938

3. UBA theme for Project Work **:** Basic amenities.

4. SDGs to be achieved :

- Good health and well-being

5. Background of the study:

- Primary health care center is a basic structural and functional unit of the public health service in developing areas. PHC were established to provide accessible and affordable health of the people of a particular area. Indian health care system is aware of basic health care of people under poverty line. Maternal death, infant mortality etc has been decreased on the arrival of primary health care center in rural areas.
- People are highly benefited by the schemes like National Health Mission, Ayushman Bharath, National Mental HealthProgram etc. They are first implemented in PHC s to create a strong belief in the minds of illiterates.
- The number of PHCs and Sub centers has increased in the past six years but not all of them are up to the standard set bythe Indian Public Standards.
- Primary health care center exist in more developed rural areas of 30,000 and more. Most people visit their PHC as a first step when they have a health issue that is not an emergency. The primary health care system also include allied health professionals.
- PHC can also be accessed through advice telephone helpline such as Nurse-on- call.

6. Objectives of the study:

- To collect the opinion of the public about the need for Primary Health Care Center.
- To find out the problems faced by public in travelling to hospitals for basic medical requirements.
- To give people an awareness about the need for PHC's in their locality.
- To give people an awareness on personal and community hygiene.

7. Methodology of the study:

A descriptive and analytical methodology is carried out in this study. A questionnaire was prepared and the response was collected from 200 respondents in Paripoorana Nagar,Palayakkayal.The questionnaire was related to COVID awareness, availability of vaccines and cleanliness. Percentage analysis was used to analysis the collected data. A case study from the past years surveys were also taken in consideration.

8. Major findings:

- The majority of people in Palayakayal were saltpan workers. They experience some dermatological issues. They needproper guidelines to overcome these kind of disease.
- People of Palayakayal highly suffered during monsoon season. The seasonal flood nearby the river Thamirabaraniduring monsoon season has destroyed their house and possessions. Hence their exposure to common cold and flu is very high.
- The industry nearby pollute the area .The enormous emission of waste gas pollute the air and this leads to airpollution. People get suffocated and have asthma.
- Heavy water plant in this area uses a large amount of water from River Thamirabarani. Hence the people experienceshortage of water for their daily use. The heavy water plant also releases the waste product back into the river and cause major pollution which leads to a lot of illness.

9. Suggestions/Recommendations:

- PHC is the most inclusive, equitable, cost-effective and efficient approach to enhance people's physical and mental health, as well as social well-being. Evidence of wide-ranging impact of investment in PHC continues to grow around the world, particularly in times of crisis such as the COVID-19 pandemic.
- Most of the people of Palayakkayal are economically low and hence travelling long distance for hospital visits is highly unfavorable. Hence PHC is very much needed.

10. Impact of this work on learning of students/teachers:

- As the population in the panchayat increase, the need for medical assistance is also at a high rate. To need a
  disease free panchayat, Primary health care center is more needed. PHC is the first contact point between village community and the medical officer.
- SDGs can only be sustainably achieved with a stronger emphasis on PHC.

DECLARATION

We declare that the project work is original and carried out by us under the guidance of Dr.S.R.T.Sherly Cross.The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

Dr.S.R.T.Sherly Cross
Signature(s)

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CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance.The project report has not been submitted for any other title/award and the work is genuine.

Signature of the Project Supervisor

Submission of Project Report for
Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. Title of the Project : Implementing sanitization measures in the Paripoorana Nagar of Pazhayakayal village, Thoothukudi district.

2. Details of Participant(s) :

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3. UBA theme for Project Work : **(e) Basic amenities**

(a) Organic Farming (b) Water management

(c) Renewable energy (d) Artisans, industries and livelihood

(e) Basic amenities (f) Convergence

4. SDGs to be achieved : **vi. Clean water and sanitation**

i.	No poverty	x.	Reduced inequality
ii.	Zero hunger	xi.	Sustainable cities & communities
iii.	Good health & Well-being	xii.	Responsible consumption and production
iv.	Quality education		
v.	Gender equality	xiii.	Climate action
vi.	Clean water and sanitation	xiv.	Life below water
vii.	Affordable & clean energy	xv.	Life on land
viii.	Decent work & economic growth	xvi.	Peace & justice strong institutions
ix.	Industry, innovation and infrastructure	xvii.	Partnerships to achieve the goal

5. **Background of the study :**

Sanitation is essential to children's survival and development

Sanitation is one of the most important aspects of community well-being because it protects human health, extends life spans, and is documented to provide benefits to the economy. Sanitation (e.g. toilets, latrines, mechanized wastewater treatment) is currently deployed as a way to contain and/or treat human excreta (and in some cases grey water) to protect human health and the environment. Examples of unimproved sanitation are: pit latrines without a slab and bucket or hanging latrines. Basic sanitation facilities are defined as being used by only one household and may empty on-site or are connected to a sewer system that may or may not be followed by treatment. Clean and readily available water is important for public health, whether it is used for drinking, domestic use, food production or recreational purposes. Improved water supply and sanitation, and better management of water resources, can boost countries' economic growth and can contribute greatly to poverty reduction. Water is connected to every form of life on earth and is the basic human need, equally important as air. At a basic level, everyone needs access to clean water in adequate quantities for drinking, cooking, personal hygiene and sanitation facilities that do not compromise health or dignity. The management of sanitation and clean water for household is revealed by this study.

6. **Objectives of the study :**

- To analyze the people opinion about the sanitation facilities.
- To investigate the problems faced by the people without basic sanitation

facilities i.e. toilets.

- To know the procurement faced by them to get clean water.

7. **Methodology adopted :**

Qualitative case study methodology enables researchers to conduct an in-depth exploration of intricate phenomena within some specific context. The purpose of this study is to assess the sanitation and clean water facilities in the Paripoorana Nagar of Pazhayakayal village in Thoothukudi. We investigated with the few people residing in that area and gathered the information about sanitation and clean water facilities in Paripoorana Nagar of Pazhayakayal village. We got to know more about the lack of facilities in the village because of this study. This study is based on people opinion about sanitation and clean water in Paripoorana Nagar of Pazhalayakayal village.

8. **Major findings :**

From the current investigation it was found that people residing in Paripoorana Nagar were devoid of toilets required for proper sanitation. Sanitation refers to public health conditions related to clean drinking water and adequate treatment and disposal of human excreta and sewage. Preventing human contact with feces is part of sanitation, as is hand washing with soap. Sanitation and hygiene are critical to health, survival, and development. Many countries are challenged in providing adequate sanitation for their entire populations, leaving people at risk for water, sanitation, and hygiene (WASH)-related diseases. Poor sanitation is linked to transmission of diseases such as cholera, diarrhoea, dysentery, hepatitis A, typhoid and polio and exacerbates stunting. Poor sanitation reduces human well-being, social and economic development due to impacts such as anxiety and lost educational opportunities. Lack of safe water supply, poor environmental sanitation, improper disposal of human excreta, and poor personal hygiene help to perpetuate and spread diarrheal diseases in the particular area.

9. **Suggestions / Recommendations :**

- There are many ways to improve traditional latrines. Simple pit latrines can be improved by plastering the mud floor with mortar, making the floor surface smooth, impervious and sloping.
- A mortar or concrete floor can also prevent hookworm transmission.

- Covering the hole with a tight-fitting lid aids in the control of flies.
- The government and educational institutions may conduct awareness programmes about proper sanitation and usage of clean water.
- The government should take necessary measures to manage the drainage system.
- The general public must understand the necessary use of sanitation facilities.

8. **Impact of this work on learning of students/teachers:**

Sanitation issues have contributed to environmental problems as well, as for years the country has become habituated to unsafe sanitation practices. The Swachh Bharat Abhiyan's clarion call to eradicate open defecation is commendable but it remains to be seen how the impact addresses environmental problems. Open defecation is both an environmental and a health hazard and should be tackled to stem the growth of environmental problems. Maintenance of sanitation facilities is a must to fight against unhealthy sanitation practices affecting the environment. Unfortunately, maintenance is moderately prioritised, as it brings up questions of cost and effective manpower. Ill-maintained sanitation complexes cause immense environmental and health hazard. We were able to know the difficulties of the villagers especially without the basic sanitation facilities. We also learnt that what were the problems faced by them due to the use of unclean water. In the future we want to take some measures to improve their lives because we are the future generation and we can do anything. At the same time we can able to understand them a lot that makes our study easier about their problems. As the result this study teaches us so many things that we didn't know before this day. The present study about sanitation and clean water makes us to take a deep look in the problems they faced in daily day life.

DECLARATION

We declare that the project work is original and carried out by us under the guidance of Dr.P.Subavathy. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

M. Bala Sowmya
C. Chithra Devi
A. Gnana Sobiya
J. Ishwarya
J. Jeffina Gomez
S. Jenifer Mary
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AISHE code of the Participating Institute : C-41151

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CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title / award and the work is genuine.

(Dr.P.Subavathy)

Signature of the Project Supervisor

Proforma for the Submission of Project Report for
Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. Title of the Project: The need for street lights in Anbu Nagar, palayakkayal.

2. Details of Participant(s) :

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3. UBA theme for Project Work: Basic amenities

4. SDGs to be achieved :1. Affordable & clean energy

5. Background of the study:

Between 1990 and 2010, the number of people with access to electricity has increased by 1.7 billion, and as the global population continues to rise so will the demand for cheap energy.Energy is crucial for achieving almost all of the Sustainable Development Goals, from its role in the eradication of poverty through advancements in health, education, water supply and industrialization, to combating climate change. Ensuring universal access to affordable electricity means investing in clean energy sources such as solar, wind and thermal. Using energy from renewable sources is far less expensive, and can make a huge impact on the money we pay for energy. Renewable energy sources like solar energy, wind energy and hydropower use little to no emissions, which is a huge step in the right direction for the health of our planet. Renewable energy sources are healthier for all of the living things on this planet as well, like humans, animals and plant life.

6. Objectives of the study:

- To collect the opinion of the public about the need for Proper electricity facilities.
- To find out the problems faced by public due to lack of street lights in the locality.
- To improve the perception of street safety and security.
- To analyze the problems faced by children attending online classes.
-

7. Methodology of the study:

A descriptive and analytical methodology is carried out in this study. A questionnaire was prepared and the response was collected from 200 respondents in Anbu Nagar,Palayakkayal.The questionnaire was related to need for proper electricity in the village.Percentage analysis was used to analysis the collected data. A case study from the past years surveys were also taken in consideration.

8. Major findings:

- The village is located outside the city limits and hence no proper flow of electricity.
- In an era of online classes, the education of the children is being highly affected.
- As the village is surrounded by mangroves, there is high possibilities of snake and animal encounters.
- High risk of accidents due to improper street light facilities.

9. Suggestions/Recommendations:

Street lighting provides a number of important benefits. It can be used to promote security in urban areas and to increase the quality of life by artificially extending the hours in which it is light so that activity can take place. Street lighting also improves safety for drivers, riders, and pedestrians. Street light is the immediate requirement as day today life style of people is being affected. Ensuring proper flow of electricity is the next main requirement as education is inevitable. Proper electricity also helps to reduce the incidents of night time crime.

10. Impact of this work on learning of students/teachers:

As population in the panchayat increases, the need for electricity assistance is also at a high rate. To need increases the rate of electricity. Electricity is the first important thing in common life of people. Electricity is needed for the life saving complicated operation. All the entertainment systems need electricity to become operational. We would not be able to enjoy movies in the absence of electricity

DECLARATION

We declare that the project work is original and carried out by us under the guidance of Dr.S.R.T.Sherly Cross.The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

Dr.S.R.T.Sherly Cross

Signature(s)

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CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title/award and the work is genuine.

Signature of the Project Supervisor

Proforma for the Submission of Project Report for
Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. Title of the Project: The need for street lights in Anbu Nagar, palayakkayal.

2. Details of Participant(s) :

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3. UBA theme for Project Work: Basic amenities

4. SDGs to be achieved :1. Affordable & clean energy

5. Background of the study:

Between 1990 and 2010, the number of people with access to electricity has increased by 1.7 billion, and as the global population continues to rise so will the demand for cheap energy.Energy is crucial for achieving almost all of the Sustainable Development Goals, from its role in the eradication of poverty through advancements in health, education, water supply and industrialization, to combating climate change. Ensuring universal access to affordable electricity means investing in clean energy sources such as solar, wind and thermal. Using energy from renewable sources is far less expensive, and can make a huge impact on the money we pay for energy. Renewable energy sources like solar energy, wind energy and hydropower use little to no emissions, which is a huge step in the right direction for the health of our planet. Renewable energy sources are healthier for all of the living things on this planet as well, like humans, animals and plant life.

6. Objectives of the study:

- To collect the opinion of the public about the need for Proper electricity facilities.
- To find out the problems faced by public due to lack of street lights in the locality.
- To improve the perception of street safety and security.
- To analyze the problems faced by children attending online classes.
-

7. Methodology of the study:

A descriptive and analytical methodology is carried out in this study. A questionnaire was prepared and the response was collected from 200 respondents in Anbu Nagar,Palayakkayal.The questionnaire was related to need for proper electricity in the village.Percentage analysis was used to analysis the collected data. A case study from the past years surveys were also taken in consideration.

8. Major findings:

- The village is located outside the city limits and hence no proper flow of electricity.
- In an era of online classes, the education of the children is being highly affected.
- As the village is surrounded by mangroves, there is high possibilities of snake and animal encounters.
- High risk of accidents due to improper street light facilities.

9. Suggestions/Recommendations:

Street lighting provides a number of important benefits. It can be used to promote security in urban areas and to increase the quality of life by artificially extending the hours in which it is light so that activity can take place. Street lighting also improves safety for drivers, riders, and pedestrians. Street light is the immediate requirement as day today life style of people is being affected. Ensuring proper flow of electricity is the next main requirement as education is inevitable. Proper electricity also helps to reduce the incidents of night time crime.

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Dr.S.R.T.Sherly Cross

Signature(s)

Details of Project Supervisor

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AISHE code of the Participating Institute: C-41151

Name of the Regional Coordinating Institute of UBA: Gandhigram Rural Institute, Dindigul

CERTIFICATE

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Signature of the Project Supervisor

Submission of Project Report for
Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. Title of the Project : Boosting waste management in the Paripoorana Nagar of Pazhayakayal village, Thoothukudi district.

2. Details of Participant(s) :

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3. UBA theme for Project Work : **(e) Basic amenities**

(a) Organic Farming (b) Water management

(c) Renewable energy (d) Artisans, industries and livelihood

(e) Basic amenities (f) Convergence

4. SDGs to be achieved : **iii. Good health & Well-being**

i. No poverty ii. Zero hunger

iii. Good health & Well-being
iv. Quality education
v. Gender equality
vi. Clean water and sanitation
vii. Affordable & clean energy
viii. Decent work & economic growth
ix. Industry, innovation and infrastructure
x. Reduced inequality
xi. Sustainable cities & communities
xii. Responsible consumption and production
xiii. Climate action
xiv. Life below water
xv. Life on land
xvi. Peace & justice strong institutions
xvii. Partnerships to achieve the goal

5. Background of the study :

Waste can be solid, liquid, or gaseous and each type has different methods of disposal and management. Waste management is the biodegradable and non-biodegradable. Health issues are also associated with the waste. Proper waste management is necessary to build the healthy society. Recycling is one of the biggest aspects of waste management, and over time, it helps us to conserve energy. The composting pit method helps us to prepare manure from the biodegradable kitchen wastes. The dumping of the wastes in water bodies causes water pollution and it has great impact on environment.

Drainage water management is normally concerned with reducing the amount of drainage water and with managing its disposal. Domestic sewage is made up of the wastewater from residences and institutions, carrying bodily wastes, washing water, food preparation wastes, laundry wastes, and other waste products of normal living. This is classified as sewage or domestic waste water. In areas where drainage and sanitation are poor, water runs over the ground during rainstorms, picks up faeces and contaminates water sources. This contributes significantly to the spread of diseases such as typhoid and cholera, and may increase the likelihood of contracting worm infections from soil contaminated by faeces. Household wastewater may also contain pathogens that can pollute groundwater sources, increasing the risk of diseases such as lymphatic filariasis. The discharge of drainage waters in water courses may have impacts ranging from beneficial to deleterious. Sewage can cause water pollution when discharged to the environment. Proper collection and safe, nuisance-free disposal of the liquid wastes of a community are legally recognized as a necessity in an urbanized, industrialized society. Proper drainage system can helps in reducing the water pollution. Drainage system is needed for the healthy living and it is the basic necessities.

6. Objectives of the study :

The following are the objectives focused in the present study

- To analyze the people opinion about waste and drainage management in the Paripoorana Nagar of Pazhayakayal village.
- To elucidate the problems faced by the people because of the inavailability of proper waste and drainage management.

7. Methodology adopted :

Qualitative case study methodology enables researchers to conduct an in-depth exploration of intricate phenomena within some specific context. The purpose of this study is to assess the waste and drainage facilities in the Paripoorana Nagar of Pazhayakayal village in Thoothukudi. We investigated with the few people residing in that area and gathered the information about waste and drainage management facilities in Paripoorana Nagar of Pazhayakayal village. We got to know more about the lack of facilities in the village because of this study. This study is based on people opinion about waste and drainage facilities in Paripoorana Nagar of Pazhalayakayal village.

8. Major findings :

The people in the area of Paripoorana Nagar were devoid of dustbins for proper waste management. The waste materials are thrown away in the streets. There is no proper drainage facilities in the houses of Paripoorana Nagar. The garbage in the streets isn't just unsightly. It's also a public-health threat, serving as a prime habitat for rodents and mosquitoes that can spread malaria, dengue fever, and Japanese encephalitis. "Garbage is like a bomb waiting to explode. It is a breeding ground for so many diseases". Heaps of garbage, mainly plastic waste, were dumped on the road in many residential areas and were not removed for many weeks now. In the absence of bins, residents dump the waste on roads as dogs and cattle squatter upon the waste and also consume it. Garbage is removed by conservancy workers once in a week after it gets piled up. It not only leads to environmental issues, but the width of the road that can be used gets reduced, says residents in Paripoorana Nagar. They said that people from

other streets also dump the garbage on the road leading to it getting piled up. “Either bins should be placed or garbage should be cleared regularly,” said the residents.

The majority of drainage problems are usually caused by an inadequate pitch or slope in your yard which prevents water runoff from being diverted away from the house. And the issue is often complicated by downspouts on the residence that do not pipe away the rain gutter water from the property. Some drainage problems can result in erosion areas in the yard where excessive downspout water emerges from daylights or pipe openings. Drainage problems have always been an ongoing issue be it in a residential, commercial or industrial environment. While most problems are minor enough to ignore or live with it, drainage issues can escalate to major reconstruction and investment.

9. Suggestions / Recommendations :

- The people can recycle the household and kitchen water to water the gardens.
- The government can make awareness about the proper drainage and waste management.
- People should segregate the wastes like biodegradable and non biodegradable wastes which will help the municipality.
- There are many advanced sewage management methods which will help the environment.
- The government should take necessary steps to manage the drainage system periodically.
- People should not dump their wastes in the empty land as it will cause land pollution.
- The household drainage system should be connected to the common drainage system.

10. Impact of this work on learning of students/teachers:

An inefficient municipal solid waste management system may create serious negative environment impacts like infectious diseases, land and water pollution, obstruction of drains and loss of biodiversity. Poorly maintained drainage systems and

poor waste management habits can adversely affect our environment in the following way:

- The immediate effects of flooding include loss of human life, damage to property, destruction of crops and other plants, loss of livestock.
- Poor waste management contributes to climate change and air pollution and directly affects many ecosystems and species. Landfills, considered the last resort in the waste hierarchy, release methane, a very powerful greenhouse gas linked to climate change. The negative impact on the environment will cause a severe impact not only on human beings but also other living organisms. At present, the technology has been developed in many eco-friendly ways , we can make use it of it to conserve the environment. Proper drainage and waste management is adequate for the healthy life.

DECLARATION

We declare that the project work is original and carried out by us under the guidance of Dr.P.Subavathy. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

V. Samyuktha

A. Micheal Pradeeba

J. Muthumari

J. Nithya

N. Prabha

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T. Shobanadevi

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Name of the Regional Coordinating Institute of UBA: Gandhigram Rural Institute, Dindigul

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title / award and the work is genuine.

(Dr.P.Subavathy)

Signature of the Project Supervisor

VIRTUAL INTERNSHIP PROGRAM ON SUSTAINABLE DEVELOPMENT GOALS AND COMMUNITY ENGAGEMENT

TITLE OF THE PROJECT: General public opinion about Street Lamp Maintenance in Tharuvaikulam – Thoothukudi District.

1. DETAILS OF THE PARTICIPANTS:

S. No.	Unique ID	Name of the participant	Program Of study	Email ID	Mobile No.
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2. **UBA THEME FOR PROJECT WORK**:

Basic amenities

3. **SDGS TO BE ACHIEVED**:

Clean Water and Sanitation

4. **BACK GROUND OF THE STUDY:**

Global access to safe water, adequate sanitation, and proper hygiene education can reduce illness and death from disease, leading to improved health, poverty reduction, and socio-economic development. However, many countries are challenged to provide these basic necessities to their populations, leaving people at risk for water, sanitation, and hygiene related diseases. Human health and well-being are strongly affected by the environment in which we live, the air we breathe, the water we drink, and the food and nutrients we eat. Proper sanitation and sewage waste treatment are important ways to ensure the health of the community.

In many places, communities lack the capacity to effectively adapt their current system for water, sanitation and hygiene to the community's changing needs in population growth and changes in water quality. According to the World Health Organization (WHO), the objectives of a water safety plan are to ensure safe drinking water through good water supply practices, which includes: Preventing contamination of source waters such as treating the water to reduce or remove contamination that could be present to the extent necessary to meet the water quality targets and Preventing Re-contamination during storage, distribution, and handling of drinking water.

Sanitation and hygiene are critical to health, survival, and development. Throughout the world, an estimated 2.4 billion people lack basic sanitation which is more than 32% of the world's population. Basic sanitation is described as having access to facilities for the safe disposal of human waste such as feces and urine, as well as having the ability to maintain hygienic conditions, through services such as garbage collection, industrial and hazardous waste management, and wastewater treatment and disposal.

The world did not achieve the United Nations' Millennium Development Goal (MDG) sanitation target that is to halve the proportion of people without sustainable access to basic sanitation by 2015. Now, the United Nations' Sustainable Development goal (SDG) is for everyone to have "adequate and equitable" sanitation by 2030. Proper sanitation facilities, for example, toilets and latrines promote health because they allow people to dispose of their waste appropriately. Throughout the developing world, many people do not have access to suitable sanitation facilities, resulting in improper waste disposal.

Absence of basic sanitation facilities can result in an unhealthy environment contaminated by human waste. Without proper sanitation facilities, waste from infected individuals can contaminate a community's land and water, increasing the risk of infection for other individuals. Proper waste disposal can slow the infection cycle of many disease-causing agents which contribute to the spread of many diseases and conditions that can cause widespread illness and death. Without proper sanitation facilities, people often have no choice but to live in and drink water from an environment contaminated with waste from infected individuals, thereby putting themselves at risk for future infection. Inadequate waste disposal drives the infection cycle of many agents that can be spread through contaminated soil, food, water, and insects such as flies.

Community wastewater management and adequate sewer systems play important roles in sanitation and disease prevention. Wastewater can contaminate the local environment and drinking water supply, thereby increasing the risk of disease transmission. Therefore, to improve health, it is vital to develop a system to manage community wastewater and sewage. In many countries, proper wastewater management is not practiced due to lack of resources, infrastructure, available technology, and space.

Lack of access to adequate and appropriate sanitation and hygiene can be chronic public health challenges contributing to the spread of disease in low- and medium-income countries. This situation can be made worse during environmental disasters and environmental and public health emergencies. In response to disasters and emergencies, prevention of open defecation and waste containment are critical to reduce the spread of disease. While planning for long-term waste management, immediate sanitation solutions are often needed to minimize the spread of disease during emergencies, and should include sanitation facilities, hand washing facilities with soap and water, operation and maintenance regimes, operator training, and community education.

OBJECTIVES OF THE STUDY:

The following are the objectives followed in this study:

- To maintain such an environment that not affect the public health in general.
- The creation of such conditions of living which will not result into serious outbreak of epidemic diseases.
- It is the control of environmental pollution, improve environmental quality to enable healthy ecosystem and comfortable habitation to human.
- It is a preventive measure for the preservation of health of the community in general and individual in particular.

METHODOLOGY:

The present study is descriptive in nature. It has been done based on the information collected from Secondary data sources like magazines, Government reports and repositories. We found issues like contamination of water bodies, normal life disruption and spread of diseases.

FINDINGS:

Some of the major findings of the study are:

- The residents have been facing a lot of issues due to the lack of basic facilities like proper disposal of sewage water.
- The residents were under the risk of facing numerous health issues due to stagnant water.
- The residents have been found to be insensible and indifferent towards the proper treatment of sewage waste
- If awareness is created, many epidemic diseases can be prevented from spreading in such rural areas.

SUGGESTIONS:

- The best way to maintain a healthy drainage system is through prevention. Generally, if the rural people are mindful of what they put down on the drains, it is likely they won't need to clear them of debris very often. Awareness must be created in proper usage of drainage system.
- Proper maintenance with regular cleaning and removal of clogs. Drainage system must be advanced by preventing the water from polluting the other water bodies and ground water of the lands.
- The proper way to prevent the spread of germs from sewage is to cover the drainage and sewage system with proper manhole cover. Regular checking on the proper installation of covers and repairing the old and broken manhole cover is important.

IMPACT OF THIS WORK ON LEARNING OF STUDENTS:

- Drainage systems can contribute to sustainable development and improve the places and spaces where the people live, work and play by balancing the different opportunities and challenges that influence rural design and the development of communities.

- Approaches to manage surface water that take account of water quantity (flooding), water quality (pollution) biodiversity (wildlife and plants) and amenity are collectively referred to as Sustainable Drainage Systems.
- Sustainable Drainage Systems mimic nature and typically manage rainfall close to where it falls. Sustainable Drainage Systems can be designed to transport (convey) surface water, slow runoff down (attenuate) before it enters watercourses, they provide areas to store water in natural contours and can be used to allow water to soak (infiltrate) into the ground or evaporated from surface water and lost or transpired from vegetation (known as evapo transpiration).
- Sustainable drainage is a concept that includes long term environmental and social factors in decisions about drainage. It takes account of the quantity and quality of runoff, and the amenity and aesthetic value of surface water in the rural environment. Many existing rural drainage systems can cause problems of flooding, pollution or damage to the environment and are not proving to be sustainable in the context of wider challenges from climate change.
- The community along with the government together must enhance the sewage treatment and the disposal of garbage waste in sewage and the prevention from spreading epidemic diseases.

DECLARATION:

We declare that the project work is original and carried out by us under the guidance of Ms. M. Rufina Mary. This project work has not been submitted elsewhere for the award of any degree and the work is genuine.

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Institute of UBA : Gandhigram Rural Institute ,Dindigul

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance .The project report has not been submitted for any other title/ award and the work is genuine.

M. Rufina Mary

(M.RUFINA MARY)

Signature of the Project Supervisor

VIRTUAL INTERNSHIP PROGRAM ON SUSTAINABLE DEVELOPMENT GOALS AND COMMUNITY ENGAGEMENT

TITLE OF THE PROJECT: General public opinion about Street Lamp Maintenance in Tharuvaikulam – Thoothukudi District.

1. DETAILS OF THE PARTICIPANTS:

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3	VC010346	Anima Bage . V	English Literature SSC	vincysja@gmail.com	9361947190
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2. **UBA THEME FOR PROJECT WORK**:

Basic amenities

3. **SDGS TO BE ACHIEVED**:

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4. **BACK GROUND OF THE STUDY:**

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In many places, communities lack the capacity to effectively adapt their current system for water, sanitation and hygiene to the community's changing needs in population growth and changes in water quality. According to the World Health Organization (WHO), the objectives of a water safety plan are to ensure safe drinking water through good water supply practices, which includes: Preventing contamination of source waters such as treating the water to reduce or remove contamination that could be present to the extent necessary to meet the water quality targets and Preventing Re-contamination during storage, distribution, and handling of drinking water.

Sanitation and hygiene are critical to health, survival, and development. Throughout the world, an estimated 2.4 billion people lack basic sanitation which is more than 32% of the world's population. Basic sanitation is described as having access to facilities for the safe disposal of human waste such as feces and urine, as well as having the ability to maintain hygienic conditions, through services such as garbage collection, industrial and hazardous waste management, and wastewater treatment and disposal.

The world did not achieve the United Nations' Millennium Development Goal (MDG) sanitation target that is to halve the proportion of people without sustainable access to basic sanitation by 2015. Now, the United Nations' Sustainable Development goal (SDG) is for everyone to have "adequate and equitable" sanitation by 2030. Proper sanitation facilities, for example, toilets and latrines promote health because they allow people to dispose of their waste appropriately. Throughout the developing world, many people do not have access to suitable sanitation facilities, resulting in improper waste disposal.

Absence of basic sanitation facilities can result in an unhealthy environment contaminated by human waste. Without proper sanitation facilities, waste from infected individuals can contaminate a community's land and water, increasing the risk of infection for other individuals. Proper waste disposal can slow the infection cycle of many disease-causing agents which contribute to the spread of many diseases and conditions that can cause widespread illness and death. Without proper sanitation facilities, people often have no choice but to live in and drink water from an environment contaminated with waste from infected individuals, thereby putting themselves at risk for future infection. Inadequate waste disposal drives the infection cycle of many agents that can be spread through contaminated soil, food, water, and insects such as flies.

Community wastewater management and adequate sewer systems play important roles in sanitation and disease prevention. Wastewater can contaminate the local environment and drinking water supply, thereby increasing the risk of disease transmission. Therefore, to improve health, it is vital to develop a system to manage community wastewater and sewage. In many countries, proper wastewater management is not practiced due to lack of resources, infrastructure, available technology, and space.

Lack of access to adequate and appropriate sanitation and hygiene can be chronic public health challenges contributing to the spread of disease in low- and medium-income countries. This situation can be made worse during environmental disasters and environmental and public health emergencies. In response to disasters and emergencies, prevention of open defecation and waste containment are critical to reduce the spread of disease. While planning for long-term waste management, immediate sanitation solutions are often needed to minimize the spread of disease during emergencies, and should include sanitation facilities, hand washing facilities with soap and water, operation and maintenance regimes, operator training, and community education.

OBJECTIVES OF THE STUDY:

The following are the objectives followed in this study:

- To maintain such an environment that not affect the public health in general.
- The creation of such conditions of living which will not result into serious outbreak of epidemic diseases.
- It is the control of environmental pollution, improve environmental quality to enable healthy ecosystem and comfortable habitation to human.
- It is a preventive measure for the preservation of health of the community in general and individual in particular.

METHODOLOGY:

The present study is descriptive in nature. It has been done based on the information collected from Secondary data sources like magazines, Government reports and repositories. We found issues like contamination of water bodies, normal life disruption and spread of diseases.

FINDINGS:

Some of the major findings of the study are:

- The residents have been facing a lot of issues due to the lack of basic facilities like proper disposal of sewage water.
- The residents were under the risk of facing numerous health issues due to stagnant water.
- The residents have been found to be insensible and indifferent towards the proper treatment of sewage waste
- If awareness is created, many epidemic diseases can be prevented from spreading in such rural areas.

SUGGESTIONS:

- The best way to maintain a healthy drainage system is through prevention. Generally, if the rural people are mindful of what they put down on the drains, it is likely they won't need to clear them of debris very often. Awareness must be created in proper usage of drainage system.
- Proper maintenance with regular cleaning and removal of clogs. Drainage system must be advanced by preventing the water from polluting the other water bodies and ground water of the lands.
- The proper way to prevent the spread of germs from sewage is to cover the drainage and sewage system with proper manhole cover. Regular checking on the proper installation of covers and repairing the old and broken manhole cover is important.

IMPACT OF THIS WORK ON LEARNING OF STUDENTS:

- Drainage systems can contribute to sustainable development and improve the places and spaces where the people live, work and play by balancing the different opportunities and challenges that influence rural design and the development of communities.

- Approaches to manage surface water that take account of water quantity (flooding), water quality (pollution) biodiversity (wildlife and plants) and amenity are collectively referred to as Sustainable Drainage Systems.
- Sustainable Drainage Systems mimic nature and typically manage rainfall close to where it falls. Sustainable Drainage Systems can be designed to transport (convey) surface water, slow runoff down (attenuate) before it enters watercourses, they provide areas to store water in natural contours and can be used to allow water to soak (infiltrate) into the ground or evaporated from surface water and lost or transpired from vegetation (known as evapo transpiration).
- Sustainable drainage is a concept that includes long term environmental and social factors in decisions about drainage. It takes account of the quantity and quality of runoff, and the amenity and aesthetic value of surface water in the rural environment. Many existing rural drainage systems can cause problems of flooding, pollution or damage to the environment and are not proving to be sustainable in the context of wider challenges from climate change.
- The community along with the government together must enhance the sewage treatment and the disposal of garbage waste in sewage and the prevention from spreading epidemic diseases.

DECLARATION:

We declare that the project work is original and carried out by us under the guidance of Ms. M. Rufina Mary. This project work has not been submitted elsewhere for the award of any degree and the work is genuine.

DETAILS OF PROJECT SUPERVISOR

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CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance .The project report has not been submitted for any other title/ award and the work is genuine.

M. Rufina Mary

(M.RUFINA MARY)

Signature of the Project Supervisor

VIRTUAL INTERNSHIP PROGRAMME ON SUSTAINABLE DEVELOPMENT GOALS AND COMMUNITY ENGAGEMENT

TITLE OF THE PROJECT: General public opinion about water resources management in Maravanmadam – Thoothukudi District.

DETAILS PARTICIPANTS:

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UBA THEME FOR PROJECT WORK: Water management

SDG'S TO BE ACHIEVED: Clean water and sanitation

BACKGROUND OF THE STUDY:

Water is one of the most basic needs of man kind . Water is a non-renewable resource.We need to realize the fact that although there is an abundance of water, not all of it is safe to consume. We derive some very essential uses from the water on a daily If we talk about our personal lives, water is the foundation of our existence. The human body needs water for the day to day survival. We may be able to survive without any food for a whole week but without water, we won't even survive for 3 days. Moreover, our body itself comprises of 70% water. This, in turn, helps our body to function normally. Thus, the lack of sufficient water or consumption of contaminated water can cause serious health problems for humans. Therefore, the amount and quality of water which we consume is essential for our physical health plus fitness. Further, our daily activities are incomplete without watere domestic use of water makes us very dependent on this transparent chemical.On a large scale, the industries consume a lot of water. They need water for almost every step of their process. It essential for the production of the goods we use every day. If we look beyond human uses, we will realize how water plays a major role in every living beings life. It is the home of aquatic animals. From a tiny insect to a whale, every organism needs water to survive. Therefore, we see how not only human beings but plants and animals too require water. The earth depends on water to function. We cannot be selfish and use it up for our uses without caring about the environment.Water is becoming scare with time both in the rural and urban areas. This is because of ineffective management techniques and exploitation of water resources. There is no sufficient water for irrigation in rural areas. People also face problem with the drinking water . India has enough rains. Most of the rain water flows down into the sea taking with it the fertile top soil. It does not percolate down and as a result the ground water is also depleting fast . There are technologies available both in the modern sector as well as in the traditional sector. For better water management we should employ some of these ideas .Many people suffer from water borne diseases like cholera , diarrhea etc. Over 95% of waterborne diseases are preventable. Principles of sanitation should be applied to prevent the disease spread . Government should take proper attention in providing good water for the people as it is one of the basic need of man . Water reuse offers promising opportunities to reduce water stress and to increase available water resources for different purposes ranging from agricultural reuse, industrial process water to direct potable reuse.Mmodern wastewater treatment processes can effectively remove biodegradable materials, nutrients, and pathogens, so the treated water has a wide range of potential applications. More than 50% of the population has no access to safe drinking water and about 200,000 people die every year

for lack of access to safe water. The current coronavirus pandemic isn't making this national problem easier to handle either.

OBJECTIVES:

The following are the focused in this objective study:

1) To find out about the problems faced by the people due to water scarcity and the availability of water management methods.

2) To know about the purity of drinking water.

METHODOLOGY:

The present study is an analytical and ddescriptive in nature. Case study method was employed for the project. From the analysis we found out that there are issues regarding water scarcity. We also found that the drinking water was contaminated as a result people were prone to water borne diseases.

FINDINGS OF THE STUDY:

1.Water scarcity is high during summer months of April, May and June .

2.Uneven distribution of corporation water.

3.Lack of Awareness on proper usage and storage of water.

4.Rain water harvesting system is not implemented in majority of the houses.

5.Improper sanitation of water.

SUGGESTIONS:

1. Save water whenever possible. We should also try to convince our family and friends to save water.

2. Educating people around the area to keep their water bodies clean and creating awareness regarding the usage of water

3. There are plenty of technologies available that allows to recycle rainwater and other water that we use in our home. It helps to prevent water scarcity.

4. Clean drinking water starts with a good sewage system. Without proper sanitation, the water in an area becomes ridden with disease and any number of other problems. By improving the sewage systems in these areas, we can prevent water scarcity from becoming any worse.

5. Government must take stringent measures to manage the drainage system.
6. Implementing advanced technologies in water management.
7. The people should take responsibility to take care of their surroundings and water bodies.

IMPACTS:

Water management is the control and movement of water resources to minimize damage to life and property and to maximize efficient beneficial use. Good water management of dams and levees reduces the risk of harm due to flooding. Inappropriate land and water management can deplete water sources, pollute water systems, contribute to soil infertility and erosion and destroy natural ecosystems. Reuse or conservation of water helps to recycle ground water by reducing the consumption and using alternative water sources. Water management helps to drive Trans boundary cooperation, including on climate resilience. Water cooperation helps to reduce the risk of conflict within communities and among countries. Sustainable water management role to play in doubling farmer's income, a notable goal set by the Government. It will contribute in improving crop yield and enhance quality of crops and better-quality crops will fetch more returns to farmers. Conserving water is the way to secure our future. The Water Management program works with communities to harvest and store rainwater for direct use, and/or replenish groundwater by building and restoring infrastructure in villages. It supports revival of traditional water bodies, construction of water storage infrastructure, and safe disposal of wastewater.

DECLARATION:

We declare that the project work is original and carried out by us under the guidance of Ms.S.Christina. This project work has not been submitted elsewhere for the award of any degree and the work is genuine.

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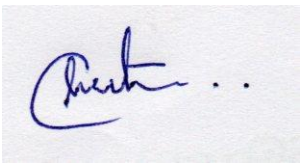
CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance .The project report has not been submitted for any other title/ award and the work is genuine.



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Signature of the Project Supervisor

VIRTUAL INTERNSHIP PROGRAMME ON SUSTAINABLE DEVELOPMENT GOALS AND COMMUNITY ENGAGEMENT

TITLE OF THE PROJECT: General public opinion about water resources management in Maravanmadam – Thoothukudi District.

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UBA THEME FOR PROJECT WORK: Dredging

SDG'S TO BE ACHIEVED: Cleaning the pond

BACKGROUND OF THE STUDY:

Water quality is a key concern for a healthy pond. Dredging helps to promote the proliferation of beneficial bacteria that can help break down the organic waste that collects at the pond's bottom. If done correctly, pond dredging will remove most of the excess nutrients (phosphorus and nitrogen) accumulated in the pond bottom. The end result of renovation is reduced management costs, better water quality, and a more aesthetically pleasing resource. Late autumn is the most practical time to de-silt a pond and will have the least disturbance on the wildlife. Small ponds can be dredged by hand, but do not remove more than half of the silt in any one year. Many animals eggs and larvae will be within it and the silt remaining will allow the pond to restock itself. Tharuvaikulam, dredging is often referred to as “muck.” This is generally a combination of silt, clay, and organics. ... Hard packed sand, or hardpan clay bottom, are more difficult to cut, and therefore more expensive Excavators work best where the silt is solid or semi-solid and there is very little water in the pond. If possible, dredge when water levels are at their lowest, usually early autumn. A dumper truck will also probably be needed to move the silt to its final dumping site away from the pond..

OBJECTIVES:

The following are the focused in this objective study:

1) To find out about the problems faced by the people due to the drained pond and the availability of tomatoes agricultural methods.

2) To investigate the source of water pond.

METHODOLOGY:

The present study is an analytical and descriptive in nature. Case study method was employed for the project.From the analysis we found out that there are issues regarding agricultural developement . We also found that the economic source is disturbed because the people were not able to use the pond.

FINDINGS OF THE STUDY:

1. Water scarcity is high during summer months of April, May and June .
2. Agriculture is affected due to the drained pond.
3. Lack of Awareness of dredging.
4. Farmers shift to towns for employment
5. Improper sanitation of water.

SUGGESTIONS

1. The typically damaging process involves first draining the pond before the heavy equipment is brought in to scrape the bottom of the pond or lake.
2. Dump trucks are brought in to haul away the collected sloppy sludge material.
3. Conventional dredging techniques, the water body's shoreline will need to be completely restored; trees, grass and the landscape will have to be replaced.
4. To determine the quantity of muck a bathymetric and vegetation survey, must be performed through the entire body of water to provide water depth information reseeded.
5. A sediment survey can be conducted to gather information about the softness or thickness of the sediment.
6. For traditional dredging techniques, after the sediment amount is accessed, the next step is to find an area to put the muck on land once it's removed.
7. High-volume suction pumps are used with our patented suction head to remove the bottom sediments. This not only removes the sediments, but also the toxic gases, nutrients, and foul orders caused by anaerobic bacteria decomposing the organic sediments.
8. It can also remove loose clay, rocks, and sand, freeing up covered springs, irrigation systems, culverts, and cisterns.
9. It’s a great ecology help to implement traditional dredging techniques.
10. Rebuilding of the natural bottom without disturbing existing water life.
11. Creating awareness regarding dredging
12. Government must take measures to manage the dredging.
13. Implementing technologies in restoring ponds can be environmentally friendly, far less invasive, and leaves little to no ecological footprint behind unlike commercial dredging.
14. The people should take responsibility to take care of their surroundings and water bodies.
15. Dredging rebuilds the natural bottom without disturbing existing water life.

IMPACTS:

Freshwater agriculture are globally important ecosystem services providing commerce, recreation, and a low-cost dietary protein source to millions of people. These agricultures are particularly important in developing nations, where subsistence tomato cultivation provides an essential source of nutrition for millions of impoverished people. Conversely, inland cultivation tend more toward recreational and commercial fisheries, each presenting their own management challenges. Agricultural value to subsistence, commercial or recreational fisheries cannot exist in isolation, but rather are part of a complex ecosystem of interconnected habitats and species. Habitat quantity and quality are essential for tomatoes productivity and there is a positive relationship between biodiversity, healthy ecosystems and the provisioning of services

Freshwater ecosystems are essential to life, and are thus critical for the development and maintenance of human societies. Globally, freshwater is a limited resource, comprising only a fraction of the volume of the world's surface water, and covering only 0.8% of the Earth. Human activities as well depend on the services provided by healthy freshwater ecosystems: fresh water, waste treatment, transportation, flood control, tourism, recreation, cultural benefits, and food resources in the form of fisheries and agriculture. Small-scale dredging activities in freshwater bodies have the potential to impact habitats and food resources that fishes depend on, and ultimately impact fisheries productivity. This systematic review will explore the evidence base for small-scale dredging impacts on the indicators of agriculture, fisheries productivity, and will help to inform management decisions that seek to reconcile biodiversity conservation, tomatoes cultivation and freshwater fisheries, with potentially disruptive anthropogenic activities in freshwater environments.

DECLARATION:

We declare that the project work is original and carried out by us under the guidance of Ms.M.Hermina. This project work has not been submitted elsewhere for the award of any degree and the work is genuine.

DETAILS OF PROJECT SUPERVISOR

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CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance .The project report has not been submitted for any other title/ award and the work is genuine.

(M.Hermina)

Signature of the Project Supervisor

Virtual Internship Program on Sustainable Development Goals and Community Engagement

TITLE OF THE PROJECT: General Public Opinion About Basic Amenities Hall in Tharuvaikulam (Thoothukudi District).

1. **DETAILS OF THE PARTICIPANTS:**

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2. **UBA THEME FOR PROJECT WORK**:

   Basic Amenities Hall

3. **SDGS TO BE ACHIEVED**:

   Good Health & Well-being

4. **BACK GROUND OF THE STUDY:**

The "happiest" metropolitan areas tended to be those with low unemployment rates, low poverty rates, and warm climates. Tharuvaikulam considers the Amenities hall important because it is an indication of individuals' satisfaction with life and highlife satisfaction encourages people to stay in communities and help them thrive. In addition, policy experts care about well-being because it is one of many ways to measure and understand the success and progress of a community.

OBJECTIVES OF THE STUDY:

The following are the objectives followed in this study:

- To ensure healthy mind and promote well-being for all at all ages.
- To protect people from mental distress and enhance access to adequate and nutritious mind.

METHODOLOGY:

The present study is with the healthy mind of the people. It has been done based on the information collected from Secondary data sources like magazines, Government reports and repositories. A thorough study of these data collected revealed the poor basic amenities facilities that were available to the people of the area.

NATURE OF THE STUDY:

The present study is about the healthy mind of the people. The study was carried based on the previous health surveys done on the village people. The study is based on the major health

issues faced by the villagers according to their surroundings. The study focuses on finding ways and means to rectify the problems of the area so that people can lead a peaceful life.

FINDINGS:

Some of the major findings of the study are:

- The residents have been facing a lot of issues due to the lack of amenities hall.
- The residents have also found to be having the problems without amenities hall.
- The residents have been found to be ignorant on the ways and means of maintaining an stressless environment.
- Proper steps have not been taken by the village administration to set things right at the proper time.
- If awareness is created, things can be changed considerably.

SUGGESTIONS:

- Strengthen the implementation of amenities hall
- Support the research and development of amenities hall for multi purpose
- Can accommodate social and sports programmes.

IMPACT OF THIS WORK ON LEARNING OF STUDENTS:

- Many community centres still offer basic adult education opportunities, as well as developmental opportunities (such as dance classes or crafts). A safe space to learn a new skill and further an individual's education is a fantastic resource.
- Not only does disease impact the well being of an individual, it burdens family and public resources, weakens societies, and squanders potential. The health and well being of people at all ages therefore lies at the heart of sustainable development. Protection from disease is not only fundamental to survival, but it enables opportunity for everyone and strengthens economic growth and prosperity.
- Individuals need to find ways to stay connected with their community. They should also be mentally fit.

DECLARATION:

We declare that the project work is original and carried out by us under the guidance of Ms.M.Hermina the project word has not been submitted elsewhere for the award of any degree and the work is genuine.

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CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance .The project report has not been submitted for any other title/ award and the work is genuine.

(M.Hermina)

Signature of the Project Supervisor

SUBMISSION OF PROJECT REPORT FOR VIRTUAL INTERNSHIP PROGRAMME ON SUSTAINABLE DEVELOPMENT GOALS AND COMMUNITY ENGAGEMENT :

1.TITLE OF THE PROJECT : GENERAL PUBLIC OPINION ABOUT WATER RESOURCES MANAGEMENT IN THOOTHUKUDI CITY.

2.DETAILS OF PARTICIPANTS:

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3.UBA THEME FOR PROJECT WORK :

b) Water Management

(a)Organic Farming (b)Water management (c)Renewable energy (d)Artisans, industries and livelihood (e)Basic amenities (f)Converge

4.SDGS TO BE ACHIEVED:

xv.Life on Land

i.No poverty
ii.Zero hunger
iii.Good health&Well-being
iv.Quality education
v.Gender equality
vi.Cleanwater and sanitation
vii.Affordable&cleanenergy
viii.Decentwork& economic growth
ix.Industry,innovationandinfrastructure
x.Reducedinequality
xi.Sustainablecities&communities
xii.Responsible consumption and production
xiii.Climate action
xiv.Life below water
xv.Life on land
xvi.Peace&justice strong institutions
xvii.Partnerships to achieve the goal

5.BACKGROUND OF THE STUDY:

Water resource management is the activity of planning, developing, distributing and managing the optimum use of water resources. It is an aspect of water cycle management.

Water is essential for our survival. The field of water resources management will have to continue to adapt to the current and future issues facing the allocation of water. With the growing uncertainties of global climate change and the long-term impacts of management actions, the decision-making will be even more difficult. It is likely that ongoing climate change will lead to situations that have not been encountered. As a result, alternative management strategies are sought for in order to avoid setbacks in the allocation of water resources.

Ideally, water resource management planning has regard to all the competing demands for water and seeks to allocate water on an equitable basis to satisfy all uses and demands. As with other resource management, this is rarely possible in practice. One of the biggest concerns for our water-based resources in the future is the sustainability of the current and future water resource allocation. As water becomes scarce, the importance of water management grows vastly—finding a balance between humans' needs and the essential step of water resources sustainability in the environment.

Visualisation of the distribution (by volume) of water on Earth. Each tiny cube (such as the one representing biological water) corresponds to approximately 1,000 cubic kilometres (240 cu mi) of water, with a mass of approximately 1 trillion tonnes (2000 times that of the Great Pyramid of Giza or 5 times that of Lake Kariba, arguably the heaviest man-made object). The entire block comprises 1 million tiny cubes.

Of the water resources on Earth, only 2.5 percent of it is fresh. Two-thirds of the freshwater is locked up in ice caps and glaciers. Of the remaining one percent, a fifth is in remote, inaccessible areas and much seasonal rainfall in monsoonal deluges and floods cannot easily be used.As time advances, water is becoming scarcer; having access to clean, safe, drinking water is limited among countries. At present, only about 0.08 percent of all the world's fresh water is exploited by mankind in ever increasing demand for sanitation, drinking, manufacturing, leisure and agriculture. Due to the small percentage of water remaining, optimizing the fresh water we have left from natural resources has been a continuous difficulty in several locations worldwide.

Much effort in water resource management is directed at optimizing the use of water and in minimizing the environmental impact of water use on the natural environment. The observation of water as an integral part of the ecosystem is based on integrated water resource management, where the quantity and quality of the ecosystem help to determine the nature of the natural resources.[citation needed]

As a limited resource, water supply poses a challenge. This fact is assumed by the project DESAFIO (the acronym for Democratisation of Water

and Sanitation Governance by Means of Socio-Technical Innovations), which has been developed along 30 months and funded by the European Union's Seventh Framework Programme for research, technological development, and demonstration. This project faced a difficult task for developing areas: eliminating structural social inequity in the access to indispensable water and public health services. The DESAFIO engineers worked on a water treatment system run with solar power and filters which provides safe water to a very poor community in the state of Minas Gerais.

Successful management of any resources requires accurate knowledge of the available resources, the uses to which it may be put, the competing demands for the resource, measures to and processes to evaluate the significance and worth of competing demands and mechanisms to translate policy decisions into actions on the ground.[citation needed] Overall, the new management participants need to create new experiences and share their experiences with outsiders to spread the government's message to make these new policies.

For making water as a resource, this is particularly difficult since sources of water can cross many national boundaries, and the uses of water include difficulties to assign financial value and may also be difficult to manage in conventional terms. Examples include rare species or ecosystems or the very long term value of ancient groundwater reserves, sometimes known as fossil water

6. Objectives of Water Resource Management:

Depending on the region and state of current water conditions, policy and implementation, water resource management objectives can vary. However, often Water Resources Management objectives can include promoting conditions for environmentally sustainable, economically efficient and equitably allocated use of water resources. They also include to increase the benefits and reduce the risk related to existing hydraulic infrastructure.

Throughout these projects, a common objective is to integrate policy approach within other sectoral policies in a wider area across the country. This includes often developing social, technical and administrative water resource management tools.

According to the GWP, an IWRM approach focuses on three pillars:

- an enabling environment of suitable policies, strategies and legislation for sustainable water resources development and management,
- putting in place the institutional framework through which to put into practice the policies, strategies and legislation, and
- setting up the management instruments required by these institutions to do their job.

7. WATER CONSERVATION METHODOLOGIES:

- Rainwater harvesting
- Sustainable use of groundwater
- Recreation of traditional water sources
- Use of advance irrigation methods
- Flood management system
- Dam and reservoir construction
- Adopting water conservation habits
- Protection of water from pollution

8. MAJOR FINDINGS:

Today, most countries are placing unprecedented pressure on water resources. The global population is growing fast, and estimates show that with current practices, the world will face a 40% shortfall between forecast demand and available supply of water by 2030. Furthermore, chronic water scarcity, hydrological uncertainty, and extreme weather events (floods and droughts) are perceived as some of the biggest threats to global prosperity and stability. Acknowledgment of the role that water scarcity and drought are playing in aggravating fragility and conflict is increasing.

Feeding 9 billion people by 2050 will require a 60% increase in agricultural production, (which consumes 70% of the resource today), and a 15% increase in water withdrawals. Besides this increasing demand, the resource is already scarce in many parts of the world. Estimates indicate that 40% of the world population live in water scarce areas, and approximately ¼ of world's GDP is exposed to this challenge. By 2025, about 1.8 billion people will be living in regions or countries with absolute water scarcity. Water security is a major – and often growing –challenge for many countries today.

Climate change will worsen the situation by altering hydrological cycles, making water more unpredictable and increasing the frequency and intensity of floods and droughts. The roughly 1 billion people living in monsoonal basins and the 500 million people living in deltas are especially vulnerable. Flood damages are estimated in $120 billion per year (only from property damage), and droughts pose, among others, constraints to the rural poor, highly dependent on rainfall variability for subsistence.

The fragmentation of this resource also constrains water security. There are 276 transboundary basins, shared by 148 countries, which account for 60% of the global freshwater flow. Similarly, 300 aquifers systems are transboundary in nature, meaning 2 billion people worldwide are dependent on groundwater. The challenges of fragmentation are often replicated at the national scale, meaning cooperation is needed to achieve optimal water resources management and development solutions for all riparians. To deal with these complex and interlinked water challenges, countries will need to improve the way they manage their water resources and associated services.

To strengthen water security against this backdrop of increasing demand, water scarcity, growing uncertainty, greater extremes, and fragmentation challenges, clients will need to invest in institutional strengthening, information management, and (natural and man-made) infrastructure development. Institutional tools such as legal and regulatory frameworks, water pricing, and incentives are needed to better allocate, regulate, and conserve water resources. Information systems are needed for resource monitoring, decision making under uncertainty, systems analyses,

and hydro-meteorological forecast and warning. Investments in innovative technologies for enhancing productivity, conserving and protecting resources, recycling storm water and wastewater, and developing non-conventional water sources should be explored in addition to seeking opportunities for enhanced water storage, including aquifer recharge and recovery. Ensuring the rapid dissemination and appropriate adaptation or application of these advances will be a key to strengthening global water security.

9. SUGGESTION FOR FULL UTILIZATION OF WATER RESOURCES IN INDIA:

Increasing Water Availability:

Water that usually runs off to the sea can be tapped to augment the availability of usable water. Water storage above ground through dams and diversion through weirs are the conventional means.

Artificial Recharge and Rainwater Harvesting:

Ground water levels are declining in many parts of the country. Artificial recharge of groundwater with rainwater is an important strategy to arrest this trend. In urban areas, many cities have by-laws making rainwater harvesting compulsory for new buildings. However, in rural areas there is no such programme.

There is significant potential for increasing the overall utilisable water through rainwater harvesting, construction of check dams, watershed management, and restoration of traditional water bodies as well as creation of new ones. In areas where ground water is under severe stress, artificial recharging would need to be undertaken with proper technical support.

Technical support systems for developing an optimal water management master plan for a micro watershed/hydrological unit need to be created. Ground water mapping, GIS mapping, satellite imagery, etc., need to be utilised for assisting the village community in preparing water resource development and management of master plans.

The flood plains in the vicinity of rivers can be good repositories of ground water. A planned management of ground water in the flood plain aquifers offers an excellent scope of its development to meet the additional requirements of water.

During rainy season, the flood water spreads over the plains but due to very shallow water table the recharge is small and the rejected recharge result in river outflows.

Tube-wells may be constructed to deepen the shallow aquifers and thus augment ground water from river flows in heavy rains. Induced recharge is an effective

10. IMPACT OF THIS WORK ON LEARNING OF STUDENTS:

Water and education together play a very crucial role in gender equality. Particularly in India, the responsibility of handling household chores is left on the shoulders of girls. Early in the morning, they get up and start the task of collecting water, they are always expected to sacrifice classes because they are duty bound. UNICEF also points out that in almost 45 developing countries the burden to fetch water falls on women, almost two third households are without a source of drinking water, whereas only 12 percent places are such where children collect water. All these issues can be solved if people have proper access to water. Clean water will ensure proper sanitation facilities as well. Though a little off track but the recent blockbuster TOILET EK PREM KATHA depicts very clearly how important it is to have proper sanitation facilities.

Apart from this, the global campaign of education argues that in a post-2015 education agenda that quality education for all will be achieved if boys and girls in schools have access to separate toilets and hygiene. Lack of this facility ensures girl students missing school, since they are more likely to to need it than boys. Without these basic necessities girl students will continue to be absent. Let's make our environment a better and a peaceful one.

DECLARATION:

We declare that the project work is original and carried out by us under the guidance of . The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

Anet jency. M

Blessi. S

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Jona Sharon. K

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AISHE code of the Participating Institute :

Name of the Regional Coordinating Institute of UBA:

CERTIFICATE :

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title/award and the work is genuine.

SIGNATURE OF THE PROJECT SUPERVISOR:

Submission of Project Report for Virtual Internship Programme on SustainableDevelopment Goals and Community Engagement

TOPIC: TO STUDY ABOUT CONTAMINATED PONDS IN PALAYAKAYAL IN THOOTHUKUDI DISTRICT

Details of participants

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UBA theme for Project Work : ***b) Water Management***

(a) Organic Farming *(b) Water management*

(c) Renewable energy *(d) Artisans, industries and livelihood*

(e) Basic amenities *(f) Convergence*

SDGs to be achieved :¬¬¬¬¬¬¬¬¬¬¬¬¬ ***xv. Life on Land***

- *No poverty*
- *Zero hunger*
- *Good health & Well-being*
- *Quality education*
- *Gender equality*
- *Clean water and sanitation*
- *Affordable & clean energy*
- *Decent work & economic growth*
- *Industry, innovation a infrastructure Reduced inequality*
- *Sustainable cities & communities*
- *Responsible consumption andproduction*
- *Climate action*
- *Life below water*
- *Life on land*
- *Peace & justice stronginstitutions*
- *Partnerships to achieve the goal*

INTRODUCTION

Palayakayal is a village in Srivaikundam block in Tuticorin district of Tamil Nadu State, India. It is located 17 km towards south from district headquarters Thoothukudi and 9 km far from Srivaikundam. At the same time, it is 633 km far from State capital Chennai.

Palayakayal pin code is 628152 and postal head office is Palayakayal. Maramangalam, Mukkani, Kulayankarisal, Punnakayal, Servaikaranmadam are the nearby Villages to Palayakayal.

Palayakayal is surrounded by Tuticorin Block towards North, Thoothukudi Block towards North, Tiruchendur Block towards South, Alwarthirunagari Block towards west. Thoothukudi, Tiruchendur, Tirunelveli, Vadakkuvalliyur are the nearby Cities to Palayakayal

BACKGROUND OF STUDY*:*

Water quality conditions in a pond are controlled by both natural processes and human influences. Natural factors such as the source of the pond water and the types of rock and soil in the pond watershed will influence some water quality characteristics. These factors are difficult to control but usually cause few problems. Instead, most serious water quality problems originate from land uses or other activities near or in the pond.

The effects of these activities can often be minimized through proper management and early detection of problems through testing Water temperature is also important when using aquatic herbicides to treat plant or algae growth. Aquatic herbicides are most effective when water temperatures are between 60 and 75°F. Consult the herbicide label for details. The amount of oxygen that is dissolved in the water is critical for fish and other pond life.

The maximum amount of oxygen that can be dissolved is controlled by the water temperature. Warmer water can hold less dissolved oxygen than colder water. A lack of dissolved oxygen is the most common cause of fish kills in ponds. This occurs frequently when aquatic plants and algae die in the summer or when they are treated with aquatic herbicides.

Fish kills due to low oxygen are most common during hot, dry spells when algae grow and then die quickly. The organisms that decompose the dead algae may use so much oxygen that what remains is insufficient for fish. In very deep ponds, the deepest portions of the pond may have very low dissolved oxygen concentrations due to poor aeration.

Problems with dissolved oxygen can usually be controlled by carefully using aquatic herbicides to prevent excessive plant and algae growth in the pond. Ponds that frequently have reduced dissolved oxygen concentrations could benefit from commercially available continuous aeration devices. Water-borne diseases are the ones caused by pathogenic microbes spread via contaminated water. Transmission of these pathogens occurs while using infected water for drinking, food preparation, and washing clothes, among others.

Many developing countries do not have proper water treatment plants, especially in the rural areas. In some places, the availability of water is so scarce that people have neither the time

nor the money to afford the water purifiers or other water treatment mechanisms. Majority of water-borne diseases worldwide mainly affect children due to poor hygiene and weak immunity.

Most of these diseases are life-threatening. The knowledge of the different types of water-borne diseases has come to the forefront with the advent of globalization over the past few decades. Several pathogenic microorganisms which were previously unknown, have become the focus of major research in this field. Recreational water illness are diarrhoea skin rashes. car pain cough or congestion and eye pain. Recreational water illness are diseases that people can get form the water in which they swim and play like in swimming pools, hot tubs/ spas, water playground or oceans or lakes and rivers. If the water is contaminated with germs. risk illness children, pregnant women and people who have health problems or takes medicines that lower than body's ability to fight germs and sickness such as people whose immune system or weakened because of the cancer, organ transplant or HIV are the most risk for recreational water illness.

The most report illness acute gastrointestinal illness such as diarrhoea or vomiting. Skin illness such as rashes acute respiratory illness such as cough or congestion. As summer approaches many children will spend times playing in pool, water parks and oceans. Several serious types of infection although relatively infrequent, have been associate with recreational water activities.

OBJECTIVES OF THE STUDY

The following objectives focused on this study:

- To study about reason for contamination of ponds.
- To analyses the rectification measures.

METHODOLOGY ADOPTED

The present study is analytical and descriptive in nature. A questionnaire was structured to elicit the required information from the respondents. The data were collected from50 sample respondents. The study is based on general public opinion about Water resources management. Hence, the questionnaire is related on problem because of contaminated ponds.. Percentage analysis was used to analyse the collected data.

MAJOR FINDINGS

- Majority of the respondents (68%/) are male
- Most of the respondents (42%) are in between the age of 26-35 years.
- Majority of the respondents (79%) are married.
- Majority of the respondents (30%) are graduates
- Most the respondents (40%) do own business
- Most of the respondents (80%) are having 4 members in a family.
- Majority of the respondents (52%) are affected from water born disease
- Majority of the respondents (79%) say that the water form the pond is wasted due to contamination
- Majority of the respondents (65%) say that the contaminated water affects cropping

SUGGESTIONS

- Government can take measures to clean the ponds
- Younsters of the village can be motivated to clean the pond
- Disposal of waste near the ponds can be avoided
- Villagers can be given awareness to keep the ponds clean
- Sewage can be treated properly to avoid future distructions

IMPACT OF THIS WORK ON LEARNING OF STUDENTS/ TEACHERS

Water the Elixir of life- natural resources should be given atmost care so as it gives plenty of advantages to us. People can take initiative to clean the ponds with the help of government. Government should also take into account about the seriousness of the issue. Technology can be imparted for cleaning. Waste dumping can be made with proper care, so that it will not affect ponds in future days. Survey can be taken among the villagers regarding treatment of water in the pond.The study concludes that people and government to work together to save the village from this issue.

DECLARATION

We declare that the project work is original and carried out by us under the guidance of MS. MANUEL INFANY.T. The project work has not been submitted elsewhere forthe award of any degree and the work is genuine.

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Arockia Amija. J

Celcia. J

Dinisha. T

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CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title/ award and the work is genuine

Signature of the Project Supervisor

Virtual Internship Program on Sustainable Development Goals and Community Engagement

1. **TITLE OF THE PROJECT:** General Public Opinion About Basic Amenities in Maravanmadam (Thoothukudi District).
2. **DETAILS OF THE PARTICIPANTS:**

Si. No.	*Unique ID*	*Name of the participant*	*Program Of study*	*Email ID*	*Mobile No.*
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3. **UBA THEME FOR PROJECT WORK**:

   Basic amenities

4. **SDGS TO BE ACHIEVED**:

   Good health & Well-being

5. **BACK GROUND OF THE STUDY:**

   The World Health Organization (WHO) defines health as ‘a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity’. This is consistent with the biopsychosocial model of health, which considers physiological,

psychological and social factors in health and illness, and interactions between these factors. It differs from the traditional medical model, which defines health as the absence of illness or disease and emphasizes the role of clinical diagnosis and intervention. The WHO's definition links health explicitly with wellbeing, and conceptualizes health as a human right requiring physical and social resources to achieve and maintain. 'Wellbeing' refers to a positive rather than neutral state, framing health as a positive aspiration. This definition was adapted by the 1986 Ottawa charter, which describes health as 'a resource for everyday life, not the object of living'. From this perspective health is a means to living well, which highlights the link between health and participation in society.

A major criticism of this view of health is that it is unrealistic, because it 'leaves most of us unhealthy most of the time.' Few, if any people will have complete physical, mental and social wellbeing all the time, which can make this approach unhelpful and counterproductive. It fails to take into account not just temporary spells of ill health, but also the growing number of people living with chronic illnesses and disabilities. Furthermore, it might be argued that focusing on 'complete' health as a goal contributes to the overmedicalisation of society by pathologizing suboptimal health states.

Huber et al. (2011) proposed a new definition of health as 'the ability to adapt and to self-manage', which includes the ability of people to adapt to their situation as key to health. It also acknowledges the subjective element of health; what health and wellbeing mean will differ from one person to the next, depending on the context and their needs. This is considered by many to be a limitation of broader definitions of health, on the grounds that wellbeing is neither objective nor measurable; this is discussed in more detail below (Mental health and wellbeing). A further limitation of this approach is that it is very individualistic and takes little account of the wider determinants of health. Responsibility for health is seen as individual rather than collective, with little scope to promote it as a human right.

Ensure healthy lives and promote well-being for all at all ages. Health for all people, all over the world, is an important part of sustainable development. Various diseases exist that cause serious health issues, including: tuberculosis, HIV/AIDS, polio, and malaria. Being healthy should be part of your overall lifestyle. Living a healthy lifestyle can help prevent chronic diseases and long-term illnesses. Feeling good about yourself and taking care of your health are important for your self-esteem and self-image. Maintain a healthy lifestyle by doing what is right for your body.

OBJECTIVES OF THE STUDY:

The following are the objectives followed in this study:

- To ensure healthy lives and promote well-being for all at all ages.
- To protect people from infectious diseases and enhance access to adequate and nutritious food.

METHODOLOGY:

The present study is descriptive in nature. It has been done based on the information collected from Secondary data sources like magazines, Government reports and repositories. A thorough study of these data collected revealed the poor basic amenities facilities that were available to the people of the area.

NATURE OF THE STUDY:

The present study is descriptive in nature. The study was carried based on the previous health surveys done on the village people. The study is based on the major health issues faced by the villagers according to their surroundings. The study focuses on finding ways and means to rectify the problems of the area so that people can lead a peaceful life.

FINDINGS:

Some of the major findings of the study are:

- The residents have been facing a lot of issues due to the lack of basic facilities like water supply
- The residents have also found to be having the problems of the accumulating garbage that is not regularly removed.
- The residents have been found to be ignorant on the ways and means of maintaining a healthy environment.
- Proper steps have not been taken by the village administration to set things right at the proper time.
- If awareness is created, things can be changed considerably.

SUGGESTIONS:

- Strengthen the implementation of World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate.
- Support the research and development of vaccines and medicines for the communicable and non communicable diseases that primarily affect developing countries.
- Can provide access to affordable essential medicines and vaccines in accordance with the Doha Declaration on the TRIPSAgreement and Public Health, which affirms the right of developing countries to use the full provisions in the agreement on trade related aspects of intellectual poverty rights regarding flexibility to protect public health and in particular provide access to medicines for all.
- Strengthen the capacity of all countries,in particular developing countries for early warning,risk reduction and management of national and global risks.

IMPACT OF THIS WORK ON LEARNING OF STUDENTS:

- Health effects are changes in health resulting from exposure to a source. Health effects are an important consideration in many areas, such as hygiene, pollution studies, and occupational safety and health and health sciences in general.
- Not only does disease impact the well being of an individual, it burdens family and public resources, weakens societies, and squanders potential. The health and well being of people at all ages therefore lies at the heart of sustainable development. Protection from disease is not only fundamental to survival, but it enables opportunity for everyone and strengthens economic growth and prosperity.
- Individuals need to find ways to stay connected with their community. They should also be mentally fit.

DECLARATION:

We declare that the project work is original and carried out by us under the guidance of *Miss. Christina* the project word has not been submitted elsewhere for the award of any degree and the work is genuine.

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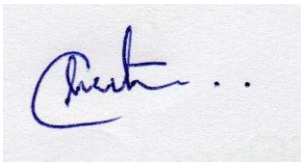
Institute of UBA : Gandhigram Rural Institute ,Dindigul

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance .The project report has not been submitted for any other title/ award and the work is genuine.



(S.CHRISTINA)

Signature of the Project Supervisor

Virtual Internship Program on Sustainable Development Goals and Community Engagement

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A major criticism of this view of health is that it is unrealistic, because it 'leaves most of us unhealthy most of the time.' Few, if any people will have complete physical, mental and social wellbeing all the time, which can make this approach unhelpful and counterproductive. It fails to take into account not just temporary spells of ill health, but also the growing number of people living with chronic illnesses and disabilities. Furthermore, it might be argued that focusing on 'complete' health as a goal contributes to the overmedicalisation of society by pathologizing suboptimal health states.

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Ensure healthy lives and promote well-being for all at all ages. Health for all people, all over the world, is an important part of sustainable development. Various diseases exist that cause serious health issues, including: tuberculosis, HIV/AIDS, polio, and malaria. Being healthy should be part of your overall lifestyle. Living a healthy lifestyle can help prevent chronic diseases and long-term illnesses. Feeling good about yourself and taking care of your health are important for your self-esteem and self-image. Maintain a healthy lifestyle by doing what is right for your body.

OBJECTIVES OF THE STUDY:

The following are the objectives followed in this study:

- To ensure healthy lives and promote well-being for all at all ages.
- To protect people from infectious diseases and enhance access to adequate and nutritious food.

METHODOLOGY:

The present study is descriptive in nature. It has been done based on the information collected from Secondary data sources like magazines, Government reports and repositories. A thorough study of these data collected revealed the poor basic amenities facilities that were available to the people of the area.

NATURE OF THE STUDY:

The present study is descriptive in nature. The study was carried based on the previous health surveys done on the village people. The study is based on the major health issues faced by the villagers according to their surroundings. The study focuses on finding ways and means to rectify the problems of the area so that people can lead a peaceful life.

FINDINGS:

Some of the major findings of the study are:

- The residents have been facing a lot of issues due to the lack of basic facilities like water supply
- The residents have also found to be having the problems of the accumulating garbage that is not regularly removed.
- The residents have been found to be ignorant on the ways and means of maintaining a healthy environment.
- Proper steps have not been taken by the village administration to set things right at the proper time.
- If awareness is created, things can be changed considerably.

SUGGESTIONS:

- Strengthen the implementation of World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate.
- Support the research and development of vaccines and medicines for the communicable and non communicable diseases that primarily affect developing countries.
- Can provide access to affordable essential medicines and vaccines in accordance with the Doha Declaration on the TRIPSAgreement and Public Health, which affirms the right of developing countries to use the full provisions in the agreement on trade related aspects of intellectual poverty rights regarding flexibility to protect public health and in particular provide access to medicines for all.
- Strengthen the capacity of all countries,in particular developing countries for early warning,risk reduction and management of national and global risks.

IMPACT OF THIS WORK ON LEARNING OF STUDENTS:

- Health effects are changes in health resulting from exposure to a source. Health effects are an important consideration in many areas, such as hygiene, pollution studies, and occupational safety and health and health sciences in general.
- Not only does disease impact the well being of an individual, it burdens family and public resources, weakens societies, and squanders potential. The health and well being of people at all ages therefore lies at the heart of sustainable development. Protection from disease is not only fundamental to survival, but it enables opportunity for everyone and strengthens economic growth and prosperity.
- Individuals need to find ways to stay connected with their community. They should also be mentally fit.

DECLARATION:

We declare that the project work is original and carried out by us under the guidance of *Miss. Christina* the project word has not been submitted elsewhere for the award of any degree and the work is genuine.

DETAILS OF PROJECT SUPERVISOR

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AISHE Code of the participating

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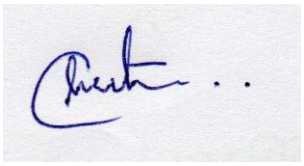
Name of the Regional Coordinating

Institute of UBA : Gandhigram Rural Institute ,Dindigul

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance .The project report has not been submitted for any other title/ award and the work is genuine.



(S.CHRISTINA)

Signature of the Project Supervisor

PROFORMA FOR THE SUBMISSION OF PROJECT REPORT FOR VIRTUAL INTERNSHIP PROGRAMME ON SUSTAINABLE DEVELOPMENT GOALS AND COMMUNITY ENGAGEMENT.

1. Title of the Project : Need for Basic amenities

2. Details of participant(s):

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3. UBA theme for Project Work : (E) Basic amenities

A) Organic Farming B) Water Management

C) Renewable energy D) artisans, industries and livelihood

E) Basic amenities F) Convergence

4. SDGs to be achieved : ix) Industry, innovation and infrastructure.

i) No poverty
ii) Zero hunger
iii) Good health & Well being
iv) quality education
v) Gender equality
vi) Clean water & sanitation
vii) Affordable & clean energy
viii) Decent work & economic growth
xi) Industry, Innovation & Infrastruture
x) Reduced inequality
xi) Sustainable cities & communities
xii) Responsible consumption production

5. Background of the study:

CENSUS PARAMETER	CENSUS DATA
Total population	3817
Total No of Houses	849
Female Population	40.3%
Total Literacy rate	64.1%
Female Literacy rate	38%
Scheduled Tribes Population	0.0%
Scheduled Caste Population	7.3%
Working Population	56.1%
Girl Child (0-6) Population by 2020	24%

Servaikarnmadam is a village in Thoothukudi Taluka, Tuticorin district and Tamil Nadu State. Servaikarmadam Village Pin code is 628 103. Non-Agricultural area is 155.03 hectares and Total irrigated area is 116.85 hectares. Policies on basic amenities should also focus on group specific targeted approach to reduce the gap across social groups. Basic amenities such as drinking water facility, sanitation facilities and drainage arrangement require special attention in both rural and urban areas with more focus towards rural areas. To ensure a decent quality of life has been internationally and nationally recognized and acted upon in the form of Millennium Development Goals (MDGs) and various policies and programmes in India. Deprivation and

disparities in access to basic amenities in Urban India have been highlighted in this article, using data from Census 2001 and 2011 and National Sample Surveys (NSS) Housing Condition Rounds unit records data 1993 and 2008-09. Determinants of households having access to basic amenities in the house have been estimated using an econometric exercise on household-level information (NSS, 2008-09). Despite improvement over time, many households in Urban India still face depreviations of basic amenities and hence, low standard of living.

The adopted village has been suffering from basic amenities from the early stage. Each human being needs some essential things to lead their life. Compared to the life of Human being in cities the life of this village people seems to be backward. So we choose to study on the Basic amenities and its need in this adopted village.

6. Objectives of the study:

The following are the objectives focused in this study:

- To identify the public opinion about basic amenities in this village . i.e. there no hospitals, bus stop etc.,
- To find out the problems faced by general public to get every facilities.

7. Methodology adopted:

In this project we have adopted Case Study method based on the survey already available in our Department Resources. The resources which were used is already available data in the year 2020 – 2021. Based on the research we have completed this project. We also had a telephonic conversation with the village people. Though we were unable to converse with all of them we had a chance to view the pictorial representation of the village through their conversation.

8. Major findings:

- There is no proper drinking water facility.
- There is no hospitals
- There is no road transport facility
- There is no ATM.
- There is no grocery shop within 1 km.

9. Suggestion & Recommendation:

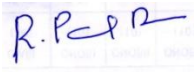
- There is a need of Hospitals.
- There is a need of Railway station in less than 1km.
- There is a need of ATM. There is No ATM in 5-10 km.
- There is a need of Mobile Coverage with Internet.

10. Impact of this Work on learning of Students\Teachers:

- The village should have all the amenities.
- Like the city, the village must move forward.
- School should have all the facility like in city.

DECLARATION

We declare that the project work is original and carried out by us under the guidance of Ms. R. Paul Roja. The project work has not been submitted elsewhere for The award of any degree and the work is genuine.



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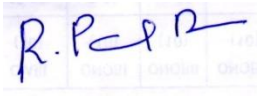
AISHE code of the Participating Institute : C- 41151

Name of the Regional Coordinating Institute of UBA: Gandhigram Rural Institute (DU), Gandhigram.

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title / award and the work is genuine.

Signature of the Project Supervisor



Proforma for the Submission of Project Report for Virtual Internship Programme on Decent Work and Economic Growth

1. Title of the Project : Decent Work nd Economic Growth

2. Details of Participant(s):

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UBA theme for Project Work: Basic Amenities

(a) Organic Farming (b) Water management
(c) Renewable energy (d) Artisans, industries and livelihood
(e) Basic amenities (f) Convergence

SDGs to be achieved: Decent Work and Economic Growth

I. No poverty
II. Zero hunger
III. Good health & Well-being
IV. Quality education
V. Gender equality
VI. Clean water and sanitation
VII. Affordable & clean energy
VIII. Decent work & economic growth
IX. Industry, innovation and infrastructure
X. Reduced inequality
XI. Sustainable cities & communities
XII. Responsible consumption and production
XIII. Climate action
XIV. Life below water
XV. Life on land
XVI. Peace & justice strong institutions
XVII. Partnerships to achieve the goal

3. Background of the Study :

Economic growth should be a positive force for the whole planet. Therefore, we must make sure that financial progress creates decent and fulfilling jobs while not harming the environment. We must protect labour rights and once and for all put a stop to modern slavery and child labour. If we promote job creation with expanded access to banking and financial services, we can make sure that everybody gets the benefits of entrepreneurship and innovation.

Sustainable Development Goal 8 (SDG 8 or Global Goal 8) is about "decent work and economic growth" and is one of the 17 Sustainable Development Goals which were established by the United Nations General Assembly in 2015. The full title is to: "Foster sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all." Progress towards targets will be measured, monitored and evaluated by 17 indicators.

SDG 8 has twelve targets in total to be achieved by 2030. Some targets are for 2030; others are for 2020. The first ten are "outcome targets". These are: sustainable economic growth; diversify, innovate

and upgrade for economic productivity; promote policies to support job creation and growing enterprises; improve resource efficiency in consumption and production; full employment and decent work with equal pay; promote youth employment, education and training; end modern slavery, trafficking, and child labour; protect labour rights and promote safe working environments; promote beneficial and sustainable tourism; universal access to banking, insurance and financial services. In addition, there are also two targets for "means of achieving": Increase aid for trade support; develop a global youth employment strategy.

This goal aims at ensuring the economic sector of every country provides the necessary need for its citizen to have a good life irrespective of their background, race or culture. Roughly half the world's population still lives on the equivalent of about US$2 a day. In many places, having a job does not guarantee the ability to escape from poverty. This slow and uneven progress requires everyone to rethink and retool the economic and social policies aimed at eradicating poverty.

OBJECTIVES:

- The main objectives of the village planning may be summarized in three words viz. Health, Convenience, Beauty and Environment.
- To make right use of the land for the right purpose by proper division of land called zoning such as residential, commercial industrial, institutional and recreational etc.
- Maintain a clean and attractive natural environment.
- Preserve the community centre and surrounding open space
- The basic objectives of Rural Development Programmes have been alleviation of poverty and unemployment through creation of basic social and economic infrastructure, provision of training to rural unemployed youth and providing employment to marginal Farmers/Labourers to discourage seasonal and permanent migration to urban areas.
- To create and promote healthy conditions and environments for the public.
- To make right use of the land for the right purpose of zoning.
- To ensure orderly development. To avoid encroachment of one zone over the other.
- Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and mediumsized enterprises, including through access to financial services.
- Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors.
- Achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

IMPORTANCE:

- Increasing employment and ensuring decent work for all are essential aspects of sustainable development. Quality employment and decent work conditions help reduce inequalities and

poverty, and empower people, especially women, young people and the most vulnerable such as people with disabilities.

- Economic growth will make our world more prosperous
- Decent work sums up the aspirations of people in their working lives. It involves opportunities for work that is productive and delivers a fair income, security in the workplace and social protection for families, better prospects for personal development and social integration, freedom for people to express their concerns, organize and participate in the decisions that affect their lives and equality of opportunity and treatment for all women and men.

PALAYAKAYAL PROBLEMS:

Palayakayal is a village in Srivaikundam block in Tuticorin district of Tamil Nadu state India. It is located 17km towards south from district head quarters Thoothukudi. Sectoral Composition of Workers The total Workers are classified in four categories, such as cultivators, agricultural labourers, household industry Workers and other workers. The growth rate of cultivator's substantially reduced from 10.64 (2001) to 6.79 (2011) to the total workers during 2001 and 2011 due to failure of monsoon and even if they cultivate may Not get fair price for their agricultural produce.

Under this circumstance, cultivators have switched over to Non-agricultural activities across the district and now major portion of land has become barren land. Therefore, it is essential to give top priority for water resources and thereby promote cultivator's livelihood. The growth rate of cultivators in all the blocks in the district seems to be decline between 2001 and 2011 Census. The actual number of cultivators and agricultural labourers has been severely reduced across the District whereas the actual number of other workers has increased substantially. The proportionate Percentage of agricultural labourers has decreased from 26.55 (2001) to 24.55 (2011). In order to sustain The overall growth rate of the economy, it is time to safeguard agriculture since agriculture is the only sector Can augment sustainable income, employment and alleviate poverty among the rural poor.

TYPES OF ECONOMIC GROWTH:

There are three types of growth in economy, including actual growth, potential growth and trend growth.

- ACTUAL GROWTH is the changing of GDP over a period of time and it is affected by the change in the aggregate demand and the efficiency of the resources in the economy.
- POTENTIAL GROWTH is the rise in the quantity and quality of the resources in the economy and it is possible to happen without actual growth taking place.
- TREND GROWTH is the expected increase in potential output over time and it is a measure of how fast an economy can grow without considering inflation.

CAUSES OF ECONOMIC GROWTH:

- Technological Progress:

The increase in the productivity of technology can increase potential output by using the same amount of capital and employment. When the economy has enough supply, consumers are able to spend more. Technological progress will also increase the productive

efficiency as the cost of production is reduced. Hence, with those extra spending, there would be an economic growth.

- Capital Investment:

Economic growth is also caused by Capital Investment. A significant amount of fixed capital investment in Factories, machinery and equipment is important for an economy to develop.

- Quantity and Quality of Labour:

The greater the amount of labour in the economy the more it will stimulates economic growth because the more workers, the higher the potential output level a firm can achieve. This will then lead to better uses of scarce resources, increase the potential output level and the long term trend rate of growth.

- Confidences and Expectations:

The cause of economic growth is people's confidences and expectations on the economy. Firms will increase investment if they feel confident and except the rate of return on the investment to rise in the future. Expectations of large increases in income will also encourage people to spend more and this will cause the Economic Boom.

- Natural Resources:

The next cause of economic growth is the presence of natural resources. Resources are important to a country because the country which has a lot of natural resources is able to produce goods and services which are low in costs and prices compared to those countries which need to import the resources. When costs are low, firms are able to increase output and export the goods to other countries and this can create surplus in country's current account.

PALAYAKAYAL WORKING POPULATION:

	Male	**Female**	**Total**
Total Workers	1442	633	2075
Non Working Persons	1077	1872	2949

CONCLUSION:

The government's focus is to make small farmers, who own less than two hectares of land and comprise over 80 percent of all farmers, the country's pride we have to bridge the gap between lives in villages and cities," the prime minister said.

DECLARATION

We declare that the project work is original and carried out by us under the guidance of Mrs.D.Daisybai .The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

Signature(s)

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Jemimah Angelien.R

Jerisha.E

Jeya Sudha.P

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Joshiba Annet Mary.L

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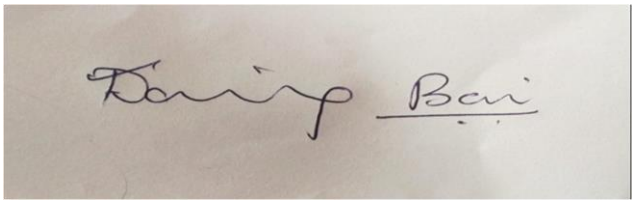
AISHE code of the Participating Institute	:	
Name of the Regional Coordinating Institute of UBA		: Gandhi graham Rural

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title/award and the work is genuine.

Signature of the Project Supervisor



Submission of Project Report for Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. Title of the Project : **PUBLIC OPINION ABOUT WATER RESOURCES MANAGEMENT IN PAKAYAKAYAL**

2. Details of Participant(s) :

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3. UBA theme for Project Work : **b)Water Management**

(a) Organic Farming (b) Water Management

(c)Renewable energy (d) Artisans, industries and livelihood

(e) Basics amenities (f) Convergence

4. SDGs to be achieved **XV. Life on Land**

i. No povertyx. Reduced inequality

ii. Zero hunger

iii. Good health & Well-being

iv.Quality education

v. Gender equality

vi.Clean water and sanitation

vii.Affordable & clean energy

viii.Decent work & economic growth

ix.Industry, innovation or infrastructure

xi. Sustainable cities & communities

xii. Responsible consumption and production

xiii. Climate action

xiv. Life below water

xv. Life on land

xvi. Peace & justice strong institutions

xvii. Partnerships to achieve the goal

5. Background of the study:

Water is an essential resource for all life on the planet. Of the water resources on Earth, only 2.5 percent of it is fresh. Two-thirds of the freshwater is locked up in ice caps and glaciers. Of the remaining one percent, a fifth is in remote, inaccessible areas and much seasonal rainfal in monsoonal deluges and floods cannot easily be used. As time advances, water is becoming scarcer having access to clean, safe, drinking water is limited among countries. At present, only about 0.08 percent of all the world's fresh water is exploited by mankind in ever increasing demand for sanitation, drinking, manufacturing, leisure and agriculture. Due to the small percentage of water remaining, optimizing the fresh water we have left from natural resources has been a continuous difficulty in several locations worldwide. Much effort in water resource management is directed at optimizing the use of water and in minimizing the environmental the use of water and in minimizing the environmental impact of water use on the natural environment. The observation of water as an integrated water resource management, where the quantity and quality of the ecosystem help to determine the nature of the natural resources. As a limited resource, water supply poses a challenge. This fact is assumed by the project DESAFIO (the acronym for Democratization of Water and Sanitation Governance by Means of Socio Technical Innovations), which has been developed along 30 months and funded by the European Union's Seventh Framework Programme for research, technological development, and

demonstration. This project faced a difficult task for developing areas: eliminating structural social inequity in the access to indispensable water and public health services. The DESAFIO engineers worked on a water treatment system run with solar power and filters which provides safe water to a very poor community in the state of Minas Gerais.

6. Objectives of the study:

- Supply and Securing of clean and sufficient drinking water for the population.
- Improvement and restoration of soil quality and thus, raising productivity rates;
- Reducing the impact of natural hazards (especially in the context of climate change);
- Improvement of infrastructure for storage, transport and agricultural marketing;
- Improvement of physical health (supported by clean drinking water, access to sanitation, improved nourishment);
- Advancement of (environmental) education and self-help;
- Improvement of an effective management of the financial resources available for environmental and international cooperation (Bollom 1998;Forch and Schutt 2004 b; Panda 2003).

7. Methodology adopted:

Conservation or water conservation helps to recharge ground water by reducing consumption and using alternative source of water. This method includes rainwater harvesting, groundwater recharge, reuse of Grey water and recycling wastewater

8. Major Findings:

The world will not be able to meet the great development challenges of the 21st century – access safe drinking water and sanitation for all, livable cities, food security, energy security, jobs through economic growth, and healthy ecosystems – without improving how countries manage their water resources . Population and economic growth, along with increased climate variability, will further exacerbate current water stress. As one of the key external financiers in water resources management, the World Bank is actively working to address these challenges through cross sectoral approaches that encompass infrastructure development, institutional strengthening, and a particular focus on the poor. Supporting water resources management in client countries is contributing to the World Bank Group's twin goals of ending extreme poverty by 2030 and promoting shared prosperity for the poorest 40 percent of the population in every country.

9. Suggestions/Recommendations:

1. Meter/Measure/Manage

2. Optimize Cooling Towers

3. Replace Restroom Fixtures

4. EliminateSingle-Pass Cooling

5. Use Water-Smart Landscaping and Irrigation

6. Reduce Steam Sterilizer Tempering Water Use

7. Reuse Laboratory Culture Water

8. Control Reverse Osmosis System Operation

9. Recover Rainwater

10. Recover Air Handler Condensate

10. Impact of this work on learning of students/Teacher:

For successful water, as well as its variability, is required. So many methods such as rainwater collection, harvesting, desalination and water reuse are being created. The projected increased variability in the availability and distribution of fresh water needs political commitments to upgrading hydrological data collection and analysis technologies.

DECLARATION

We declare that the project work is original and carried out by us under the guidance of Dr. T. Priyanka. The project work has been submitted elsewhere for the award of any degree and the work is genuine**.**

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Jaya Sree .G
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Kaviya.R
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AISHE code of the Participating Institute	: C-41151
Name of the Regional Coordinating Institute of UBA	: Gandhigram Rural Institute, Dindugal District.

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title / award and the work is genuine.

Signature of the Project Supervisor

Dr.T.Priyanka

Submission of Project Report for Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. Title of the project: GENERAL PUBLIC OPINION ABOUT CHILDRENS ATTITUDE TOWARDS COVID-19

2. Details of Participant(s):

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8	VC010855	Nissy.S	BBA	jeyanissy27@gmail.com	8903866339

3.UBA theme for Project Work: artisans, industries and livelihood

a. Organic farming b. Water management

c. Renewable energy d. artisans, industries and livelihood

e. Basic amenities f. Convergence

4.SDGs to be achieved : Life on land

i.
ii. No poverty
iii. Zero hunger
iv. Good health & Well-being
v. Quality education
vi. Gender equality
vii. Clean water and sanitation
viii. Affordable & clean energy
ix. Decent work & economic growth
x. Industry, innovation and infrastructure
xi. Reduced inequality

xii. Sustainable cities & communities
xiii. Responsible consumption and production
xiv. Climate action
xv. Life below water
xvi. Life on land
xvii. Peace & justice strong institutions
xviii. Partnerships to achieve the goal

5. Background of the study :

As COVID-19 dramatically changes human social life, restrictive lockdown periods to slow the spread of the virus have been suggested to particularly affect the psychological well-being of children and their families. To capture lockdown-related effects on a large scale, the present study used an questionnaire completed by parents of 3-10-year-olds during the most restrictive lockdown and post period in the adopted village Servaikaramadam. Parents reported their stress level, their child's well-being, and their child's problem behaviors among others. Results showed that most parents and children experienced lockdown-related stress. Concerning children, not being able to meet with friends and family members outside the household emerged as the primary challenge. Older children (7–10 years) evidenced more emotional symptoms as well as less conduct problems and hyperactivity than younger children (3–6 years). Children's own and their parents' stress level, the degree to which children missed other children, and children's age all showed to be negatively related to children's general life satisfaction. Single parenthood and being an only child were associated with higher levels of child problems. Taken together, these findings shed light on the psychological well-being of children and their families during governmental lockdown measures, as well as on relations between children's coping and demographic background. They have implications for possible avenues for interventions, inter alia by encouraging policies that facilitate the maintenance of social relationships and focus particularly on children from single parent families, on only children as well as on families in challenging housing situations.

6. Objectives of the study:

1. To provide basic knowledge of the disease and the risk that involves surrounding the children.

2. To promote the effective implementation of infection control measures in order to continue to perform their duties safely.

3. To empower the wellbeing of them who have a key role in preservating their departments and their national healthcare systems.

7. Methodology adopted :

In this project we have adopted Case Study method based on the survey already available in our Department Resources. The resources which were used is already available data in the year 2020 – 2021. Based on the research we have completed this project. We also had a telephonic conversation with the village people. Though we were unable to converse with all of them we had a chance to view the pictorial representation of the village through their conversation.

8.Major findings :

- Children felt bored playing all the time.
- They had no means of communication to outward area.
- Basic education left them to question mark.
- Moral values have been shirked.
- Children forgot about their school life.

9. Suggestions/Recommendations:

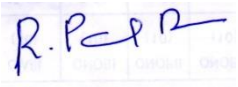
- The corona virus disease pandemic has upended family life around the world.
- If a child seems restless and agitated when you're trying to follow an online learning programme he or she should be given counseling.
- Encourage children to ask questions and express feelings with their parents, they may have different reaction to stress.
- Make sure you are in a safe environment and allow your child to talk freely.

10.Impact of this working on learning students/teachers:

This study showed me the path to establish how the environment should be for the benefit of psychological working of the children and their family members. Psychology plays an important role in this pandemic situation. So this has become a social problem hence it is the responsible of each individual to monitor the actions of children for their well being.

DECLARATION

We declare that the project work is original and carried out by us under the guidance of Ms. R. Paul Roja. The project work has not been submitted elsewhere for The award of any degree and the work is genuine.



Signature(s)

Details of Project Supervisor

Name of the Project Supervisor : Ms. R. Paul Roja

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Email ID : rojamba1990@gmail.com

Area of specialization : Human Resource

Name of the Participating Institute of UBA : St. Mary's College (Autonomus)

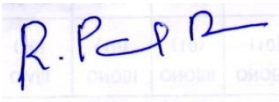
AISHE code of the Participating Institute : C- 41151

Name of the Regional Coordinating Institute of UBA: Gandhigram Rural Institute (DU), Gandhigram.

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title / award and the work is genuine.

Signature of the Project Supervisor



Proforma for the Submission of Project Report for Virtual Internship Programme on socio economic conditions

1. Title of the Project : Socio Economic Conditions

2. Details of the Participant(s):

SI. No.	Unique ID	Name of the Participant	Programme of study	Email ID	Mobile No.
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4.	VCO10573	Brindha.S	Commerce	sbrindha0324@gmail.com	9080413795
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8.	VC010579	Gayathri.B	Commerce	gayathribose012@gmail.com	7339190976
9.	VCO10580	Hebziba Beula.A	Commerce	hebzibabeula24gmail.com	9360833529
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12.	VCO10583	Jebamalai Abitha.J	Commerce	jebamalaiabitha@gmail.com	9344484425

3.UBA theme for Project Work : Socio Economic Status

1. Water Management 2. Socio Economic Status 3.Affordable And Clean Energy

4. Decent Work & Economic Growth 5.Quality Education 6.Gender Equality

I.SDGs to be achieved: Life on land

II. No poverty
III. Zero hunger
IV. Good health & Well-being
V. Quality education
VI. Gender equality
VII. Clean water and sanitation
VIII. Affordable & clean energy
IX. Decent work & economic growth
X. Industry, innovation and infrastructure
XI. Reduced inequality
XII. Sustainable cities & communities
XIII. Responsible consumption and production
XIV. Climate action
XV. Life below water
XVI. Life on land
XVII. Peace & justice strong institutions
XVIII. Partnerships to achieve the goal

Background of the Study

- Socioeconomic status is the social standing or class of an individual or group.
- It is often measured as a combination of education, income and occupation. Income, age, marital status, family size, religion, occupation, and education are all predictors for wealth attainment.
- Examinations of socioeconomic status often reveal inequities in access to resources, plus issues related to privilege, power and control.
- Socio-economic factors include occupation, education, income, wealth, where and how someone lives.

Place of survey – Palayakayal

- It is located in the district of Thoothukudi.
- According to the 2020 census, population in Palayakayal is 5381.
- Male – 2698 ; Female – 2683
- It comes under the Srivaikundam taluk.
- It is a gram panchayat with 3 schools and 3 primary health centres.
- DMK is the ruling party.
- It has 5 sub villages – Pullaveli, Ramachandrapuram, Anthoniyarpuram, Ratchanyapuram, and Uppalam.

- Postal head office – Asirvathapuram
- Mukkani (5 KM) , Servaikaranmadam (6 KM) , Punnakayal (6 KM) , Maramangalam (6 KM) , Senthamangalam (6 KM) are the nearby Villages to Palayakayal

- Thoothukudi , Tiruchendur , Tirunelveli , Vadakkuvalliyur are the nearby Cities to Palayakayal.

Objectives:

The sole aim of the Socio Economic planning of our country is to transform the socio - economic condition of the people living in the rural areas.

Main objective of the survey:

- To identify the occupation, income, family status, basic education levels of families in Palayakayal.
- To find out the problems faced by the general public in Palayakayal in earning and attaining their basic needs.
- To know the environment conditions of the public.
- To know their living standards.
- To know the transportation and communication in the village.
- To know the water supply and electricity conditions.
- To know the economic background of the families.

Findings:

- Most of the people here are fishermen.
- Some earn their bread through agriculture.

Suggestions :

- The government should take necessary steps to improve the living conditions of the people.
- The general public must understand their duty to take care of the surroundings.
- The educational institutions can take innovative measures to improve the economic conditions of the suffering people by establishing trusts, charity homes, etc.
- There are a variety of technologies that allow people to earn higher. Government should conduct campaigns and educate people about this.

DECLARATION

We declare that the project work is original and carried out by us under the guidance of Mrs.D.DaisyBai. The project work has not been submitted elsewhere and the work is genuine.

Deiva Nandini.M

Avelin.J

Brightni.J

Brindha.S

Buvaneshwari.M

Dorothy Louisaa Shiny.A

Flavia Harran.J

Gayathri.B

Hebziba Beula.J

Infant Benial.A

Infant Sharon.B

Jebamalai Abitha.J

Details of Project Supervisor

Name of the Project Supervisor	:	Mrs.D.Daisybai
Mobile number	:	8903658754
Email ID	:	daisyjustes@gmail.com
Area of specialization	:	Financial Management
Name of the Participating Institute of UBA	:	St.Marys College (Autonomous) Thoothukudi
AISHE code of the Participating Institute	:	

Name of the Regional Coordinating Institute of UBA : Gandhigram University

CERTIFICATE

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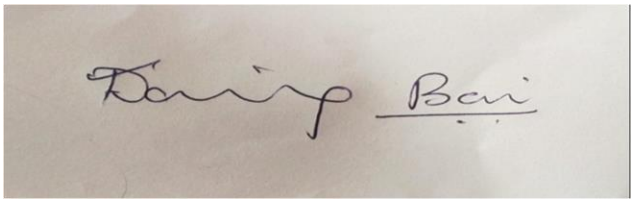

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I.SDGs to be achieved: Life on land

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III. Zero hunger
IV. Good health & Well-being
V. Quality education
VI. Gender equality
VII. Clean water and sanitation
VIII. Affordable & clean energy
IX. Decent work & economic growth
X. Industry, innovation and infrastructure
XI. Reduced inequality
XII. Sustainable cities & communities
XIII. Responsible consumption and production
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- To know the water supply and electricity conditions.
- To know the economic background of the families.

Findings:

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- Some earn their bread through agriculture.

Suggestions :

- The government should take necessary steps to improve the living conditions of the people.
- The general public must understand their duty to take care of the surroundings.
- The educational institutions can take innovative measures to improve the economic conditions of the suffering people by establishing trusts, charity homes, etc.
- There are a variety of technologies that allow people to earn higher. Government should conduct campaigns and educate people about this.

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Hebziba Beula.J

Infant Benial.A

Infant Sharon.B

Jebamalai Abitha.J

Details of Project Supervisor

Name of the Project Supervisor	:	Mrs.D.Daisybai
Mobile number	:	8903658754
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Area of specialization	:	Financial Management
Name of the Participating Institute of UBA	:	St.Marys College (Autonomous) Thoothukudi
AISHE code of the Participating Institute	:	

Name of the Regional Coordinating Institute of UBA : Gandhigram University

CERTIFICATE

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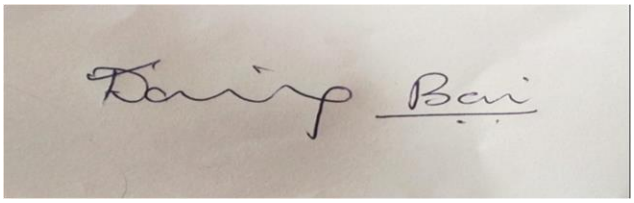
Signature of the Project Supervisor



Submission of Project Repor tfor Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1.Title of the Project : GENERAL PUBLIC OPINION ABOUT TRANSPORT FACILITIES IN SERVAIKARAMADAM

2.Details of Participant(s):

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4.	VC010859	Priya.M	B.B.A	priyam202021@gmail.com	9176513201
5.	VC010860	Riticka.K.B	B.A.A	rickariticka36@gmail.com	8098654513
6.	VC010861	Roselin Soosanna.S	B.B.A	roselinsoosana@gmail.com	9787579459
7.	VC010862	Sinthiya.K	B.B.A	sinthiyaniviii@gmail.com	9943090502
8.	VC010863	Snofar.S	B.B.A	hannasno1807@gmail.com	73051 69578
9.	VC010864	Vaijayanthimala.M	B.B.A	mvaisu125@gmail.com	6374534646

3.UBA theme for Project Work :b)Transport Facilities

(a)Organic Farming (**b**)Transport Facilities

(c)Renewable energy (d)Artisans,industriesandlivelihood

(e)Basic amenities (f)Convergence

4.SDGs to be achieved: Industry, innovation and infrastructure

i.
ii. No poverty
iii. Zero hunger
iv. Good health & Well-being
v. Quality education
vi. Gender equality
vii. Clean water and sanitation
viii. Affordable & clean energy
ix. Decent work & economic growth
x. Industry, innovation and infrastructure
xi. Reduced inequality
xii. Sustainable cities & communities
xiii. Responsible consumption and production
xiv. Climate action
xv. Life below water
xvi. Life on land
xvii. Peace & justice strong institutions
Partnerships to achieve the goal

5. Background of the study:

Good transport infrastructure is part of the enabling environment for rapid, efficient, and sustainable economic growth. India has an extensive and diversified transport system, comprising 3.31 million kilometres (km) of roads, 63,465 km of rail, 12 major and 187 minorports, 11 major international airports, 89 domestic airports, and 14,500 km of navigable inland waterways. The transport sector in India expanded in the first 50 years after independence, both in spread and in capacity. Along with the increase in quantity, there have been some quality improvements, such as the emergence of a multimodal container transport system, a reduction in the use of obsolete assets, and improvement in the self-financing capacity of the sector. Despite this progress, the Government of India realizes that the country's transport system is far from adequate in service quality, coverage, and capacity. Inadequate transport infrastructureand services are widely believed to be a major constraint on economic development in India.

There is clearly scope for major improvements. Better rural transport is crucial to reducing poverty and isolation and in promoting economic growth. An inefficient and unsafe transport system has key adverse knock-on effects on livelihoods, the delivery of health and education, social interaction and the development of agriculture and the service sector.The problems of rural transport are largely the manifestation of a wider vicious circle of rural poverty. Low incomes, a weak tax base and a deficient institutional structure lead to a poor quality of infrastructure, a lack of investment and maintenance. Despite its importance, outside of donor-driven programs, rural road planning is poorly carried out, with little analysis of alternatives, and based on very limited data. Low density of transport demand coupled with poor infrastructure lead to low transport productivity with infrequent and high cost transport services.

This in turn leads to low mobility rates and poor interaction with markets and services as well as low goods movement and development of resources. These factors, in turn, lead to poor health and education outcomes and poverty—and so the circle is completed. The challenge is how to break the vicious circle of low demand and incomes, poor infrastructure and weak institutions. This paper provides an overall framework for identifying, planning and prioritizing rural transport infrastructure and services interventions. A key element is to encourage a holistic understanding of rural transport. Although services and infra-structure can be planned in isolation of each other, the best long-term results are likely to be achieved if they are improved in conjunction with each other.

6. Objectives of the study:

The following are the objectives focused in this study:

- To provide detailed advice and an overall framework, for identifying, planning and prioritizing rural transport infrastructure and services in Thoothukudi district.
- It focuses more on how rural transport interacts with people's lives and how different types of intervention may be identified, and prioritizing in thoothukudi district.
- To find out the problems faced by the village people's in getting transport facilities and also road facilities in Servaikaramadam.

7. Methodology adopted:

In this project we have adopted Case Study method based on the survey already available in our Department Resources. The resources which were used is already available data in the year 2020 – 2021. Based on the research we have completed this project. We also had a telephonic conversation with the village people. Though we were unable to converse with all of them we had a chance to view the pictorial representation of the village through their conversation.

8.Major findings :

Following are the findings in regard to various response from the respondents regarding "**General Public Opinion about Transport Facilities** in Servaikaramadam Village in Thoothukudi district.

- Major finding in this village they don't have a proper road and there is a one way road only for entering into Servaikaramadam

- And the distance between Servaikaramadam to Thoothukudi is 15.5 km and the distance between Servaikaramadam to Tirunelveli is 38.6 km.
- The total population of Servaikaramadam is 4473, and total number of houses 1148.
- And there is major political parties also but still now the Servaikaramadam Village doesn't have the proper transport facilities.
- Since there is no road transport facilities it is quite difficult for the people to reach out their basic amenities.
- Travel to various workplaces is a day to day problem.
- For getting a public transport they have to travel nearly 7 kms.
- No cab or auto facilities are available.

9.Suggestions/Recommendations :

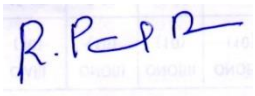
- The government can initiate new road facilities in Servaikaramadam.
- And the general public must understand and it is their duty to take care of the surrounding villages.
- A bus stop can be built in Servaikaramadam for the convenience of the people.
- The government and any other private company near that village can take any steps for solving the transportation problem in the village.

10. Impact of this work on learning of students/teachers:

The results of access to safe and reliable transportation impacts the health and well-being of village populations. Transportation is necessary for accessing healthcare services in that village communities, particularly in communities where walking or cycling may not be feasible alternatives to reach a healthcare provider. The village populations rely on personal vehicles, public transport, and non – emergency medical transport to meet their healthcare needs. And it is also important for accessing recreation and other activities of daily life. Hence transportation plays a vital role in people life.

DECLARATION

We declare that the project work is original and carried out by us under the guidance of Ms. R. Paul Roja. The project work has not been submitted elsewhere for The award of any degree and the work is genuine.



Signature(s)

Details of Project Supervisor

Name of the Project Supervisor : Ms. R. Paul Roja

Mobile number : 9003744586

Email ID : rojamba1990@gmail.com

Area of specialization : Human Resource

Name of the Participating Institute of UBA : St. Mary's College (Autonomus)

AISHE code of the Participating Institute : C- 41151

Name of the Regional Coordinating Institute of UBA: Gandhigram Rural Institute (DU), Gandhigram.

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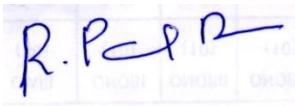

Proforma for the Submission of Project Report for
Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. **Title of the Project** : QUALITY EDUCATION

2. **Details of Participant(s)** :

Sl. No.	Unique ID	Name of the Participant	Programme of Study	Email ID	Mobile No.
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2.	20AUCO37	MARIA NAVIS SELINA J	Commerce	marianavisselina@gmail.com	9791218772
3.	20AUCO38	MARIA NESA JENIMA T	Commerce	---	---
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5.	20AUCO40	MARIYAM RAMEESHA M	Commerce	mariyamrameesha001@gmail.com	9994524884
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7.	20AUCO42	MAZY V	Commerce	mazyvinodh@gmail.com	9025176469
8.	20AUCO43	MEKRIN W	Commerce	mekrinwilbred@gmail.com	6380261410
9.	20AUCO44	MUTHU RATHI H	Commerce	muthurathih1009@gmail.com	9384776187
10.	20AUCO45	MUTHULAKSHMI A	Commerce	muthulakshmi96714@gmail.com	7603996714
11.	20AUCO46	NIMISHA S	Commerce	subashnimisha2000@gmail.com	9500603419
12.	20AUCO47	NITHYASRI M	Commerce	nithyasri22m@gmail.com	9360685831

UBA theme for Project Work: Basic Amenities

(a) Organic Farming (b) Water management
(c) Renewable energy (d) Artisans, industries and livelihood
(e) Basic amenities (f) Convergence

SDGs to be achieved: QUALITY EDUCATION

I. No poverty
II. Zero hunger
III. Good health & Well-being
IV. Quality education

V. Gender equality
VI. Clean water and sanitation
VII. Affordable & clean energy
VIII. Decent work & economic growth
IX. Industry, innovation and infrastructure
X. Reduced inequality
XI. Sustainable cities & communities
XII. Responsible consumption and production
XIII. Climate action
XIV. Life below water
XV. Life on land
XVI. Peace & justice strong institutions
XVII. Partnerships to achieve the goal

3. INTRODUCTION:

Education is the most powerful weapon we can use to change the world and for self-enlightenment. This is so because quality education equips one with capability to interpret things rightly and applying the gathered information in real life scenarios. These two words, "quality" and "education" are commonly and carelessly used in every day discussion – especially among leaders and business men and women. Every leader promises to provide the populace with quality education. Many of such promises have come and gone without any remarkable impact on the quality of education provided to the populace. It is on records that many leaders, institutions, organizations and individuals have in various ways spent large amount of their resources to ensure that the objective of providing quality education is achieved. In most cases, the situation remains the same if not worsened. The big question one may ask here is, do such leaders or institutions or bodies understand what constitutes quality education? This is because a woman who doesn't know the ingredients that make soup tasty may be given a huge amount of money – yet the husband may be tempted to sack her because of the nature of the soup she prepared. It is therefore necessary that the two key words, "quality" and "education" be defined. Quality as contained in Oxford Advanced Learner's Dictionary (2010), means the standard of something when it is compared to other things like it; how good or bad something is. Quality is used on every commodity e.g., quality shoes, shirts, cars, etc. When a woman selling banana in the market sees a potential customer approaching her shed, she

will not waste time to make use of "quality" to draw the man nearer for the purchase of her banana. Thus, she will say "buy high quality banana". This means that any commodity can either be of a high quality or low quality. Equally we have low quality and high-quality education. Having seen what quality stands for, let us now briefly define education before marrying the two words – for a better understanding of the concept "Quality education" Today, education has become one of the greatest enterprises and has been defined in different ways by different people in different parts of the world and

occupations. A renowned scholar, R.S. Peters defined education as the transmission of what is worthwhile to those who are committed to it – be they children or adults. Another educator and philosopher, Brameld saw education as "the greatest power man has not yet subdued. Okpala in his lecture stressed that education is a process of tendering, nurturing and nursing the individual so as to make him a full-fledged member of the society to which he belongs. Generally, education can be regarded as an activity which goes on in a society and its aims and methods depend on the nature of the society in which it operates; so, education is sensitive to time, place and circumstances. This is because it is constantly changing, adapting itself to new demands. Quality education entails the following aspects; learning resources, technology, program enrolled, modules done, lecturing methodology, attachments, qualifications, co-curricular activities, performance awards, students and lecturers' perspective in the institution operating management also their opinions and appraisal toward education. The basic educational skills; like reading and writing increases a person's income up to 10% acting as the perfect weapon that lifts individuals to freedom, which helps to eradicate international poverty and hunger.

4. BACKGROUND OF THE STUDY:

Education is important for everybody, whether they are learning new facts, skills, or trades. Having the opportunity to learn always benefits the individual. Over the past years, we have seen a focus on providing education to females all over the world, arguing that girls receive an education no less than men. However, if we take a step further, we can think about educating communities, specifically rural communities. What effects would education have if we were to educate a group of people?

The role of education in an individual's personal growth, skill development & democratic responsible behaviour, thereby contributing immensely to the overall prosperity of a nation, is irrefutable. India has a significant drop-out ratio with some states exceeding 50% before standard 10^{th}. Quality of education in government-run schools with a teacher-student ratio is not appropriate. The lack of basic amenities like library and playgrounds further adds to the drop out ratio. In the current rural scenario like Palayakayal, the government-run schools

merely have a roof and solid walls, without any proper seating arrangement, and impaired connection to the electricity, thus leading to partial or no education at all.

Educating communities means developing schools and educating children and leaders. By doing so, rural communities will lead to a healthier and more sustainable future. An education system in rural communities has the opportunity to build capacity and knowledge in

the rural populace, helping them to make informed decisions about their farms and to innovate in agricultural affairs. Education also exposes the masses to information and helps prevent the misinterpretation of information. Education can lead to many positive outcomes, such as an improved ability to understand policies, procedures, rights, duties, government schemes, legislation, available benefits, and protection laws. It is important to understand the need for good quality education in rural areas, as it helps keep rural areas populated. Young people move to urban areas for better opportunities in education and employment, improved rural education is one possible strategy for keeping them in rural areas. It was recently documented that 69% of India's population lives in rural areas. Quality education is a pertinent tool for enhancing quality of life, creating awareness and capability, increasing freedom, and improving overall holistic human development for the people and the nation. Education is considered a vital element in the development of a society, a system, and a country. I am convinced that a well-supported, easily accessible education system is an efficient means to make people economically conscious, and thereby, make them actively participate in their economic prosperity and cultural development.

5. OBJECTIVES OF THE STUDY:

1. To Provide Free Standard Education to the Children belong to rural communities.
2. The children should be supported for higher education.
3. Guiding and supporting research scholars in educational development.
4. Implementation of new teaching methodologies and the system of assessment.
5. Promoting a stress free and an amiable atmosphere in all schools.
6. Aims to provide equal access to affordable vocational training, and to eliminate gender and wealth disparities with the aim of achieving universal access to a quality higher education.
7. Equal access to quality pre-primary education.
8. Equal access to affordable technical, vocational and higher education.
9. Increase the number of people with relevant skills for financial success.
10. Eliminate all discrimination in education.
11. Universal literacy and numeracy.
12. Education for sustainable development and global citizenship.
13. Build and upgrade inclusive and safe schools.
14. Expand higher education scholarships for developing countries.
15. Increase the supply of qualified teachers in developing countries.

6. IMPORTANCE:

1. Development and progress of the rural communities will come through sustainable education system which will build capacity and knowledge in the

rural populace to make informed decisions, about their farms, innovative agricultural inputs/tools, market: basically, their overall lives or regarding their education and the necessity of schooling itself.

2. Lack of information and exposure, misinterpretation of information are barriers to development in the rural which prevents them from better understanding their rights/duties, government schemes and benefits, functions and accountability of local bodies and laws to protect them from various kinds of abuse, encroachment or any kind of violence.
3. There are different set of strengths and challenges associated with living in rural areas. Children sometimes lend a hand in the farm or with the livestock, girl child with the household chores or taking care of the younger kids etc. Taking this in account it becomes all the more important to give special importance to take education to the rural areas so that they are able to embed education in their context. Also, there is an increasing trend of young people moving to urban areas for better opportunities of education and livelihood, but not everyone migrates. Moreover, with weak formative education, the urban migrants lag behind amongst their counterpart.
4. Education can bring the elementary shift in the values, actions, and responsibilities of an individual. Schools play a pivotal role in bringing the change, as it starts during the elementary years which are considered to be the most critical in shaping an individual.
5. Well delivered education promises employment, better earnings, health, and strong economic background. Education spurs innovation and it fosters social solidarity in communities.
6. The rate of development of any country depends on the pace of universal primary education. Of course, the sustainable future cannot be achieved in months but with well-designed policies and framework, it can be moved on to the right path.

7. MAJOR FINDINGS:

SCHOOL NAME:	ST MARYS MS, PALAYAKAYAL MIDDLE SCHOOL	ST ANTONY PS, PALAYAKAYAL PRIMARY SCHOOL	ST ANTONY'S HSS, PALAYAKAYAL HIGH SCHOOL
*Address / Location	Thoothukudi Srivaikuntam G.H.S, Mukkani Palayakayal Tamil Nadu India 628152 (Map)	Thoothukudi Srivaikuntam G.H.S, Mukkani Palayakayal Tamil Nadu India 628152	Thoothukkudi Srivaikuntam G.H.S, Mukkani Palayakayal Tamil Nadu India 628152
Block Name	Srivaikuntam	Srivaikuntam	Srivaikuntam
Number of Instructional Days (Primary)	228	221	---
Number of Instructional Days (Upper Primary)	228	---	220
Student Hours in School (Upper Primary)	8	---	6
Approachable by All-Weather Roads	Yes	Yes	Yes
Cce Curriculum	Yes	Yes	Yes
Pupil Cumulative Records Maintained	Yes	Yes	Yes
School Management Committee (Smc)	No	Yes	No
Text Books Received	Yes	Yes	Yes
Mid-Day Meal	Provided and Prepared in School Premises	Provided and Prepared in School Premises	Provided and Prepared in School Premises
Kitchen Devices Grant	Yes	Yes	Yes
No. Of Male Teachers	---	---	7
No. Of Female Teachers	8	4	19

School Building Type	Private Building	Private Building	Private Building
No. Of Class Rooms Approximate	5	8	4
Computer Aided Learning	No	No	No
Separate Room for Head Teacher/ Principal	Yes	Yes	Yes
Electricity Connection in School	Yes	Yes	Yes
School Building Boundary Wall	Pucca	Pucca	Pucca
Books Library	Yes	Yes	Yes
Playground	Yes	Yes	Yes
Drinking Water Type	Tap Water	Tap Water	Tap Water
Medical Check-Up	Yes	Yes	Yes
Disabled Friendly Ramps	No	No	Yes
Location Type	Rural	Rural	Rural
Medium of Instruction	Tamil	Tamil	Tamil
District	4	4	5
Founded in Year	1919	1906	1982
Pre-Primary Section	No	No	No
Residential School	No	No	No
School Management	Private Aided	Private Aided	Private Aided
Classes Starts From	Class 1	Class 1	Class 6
Highest Class Offered	Class 2	Class 5	Class 12
School Category	Primary with Upper Primary	Primary Only	Upper Primary with Secondary/Higher Secondary

School Type	Girls Only	Boys Only	Boys Only
School Building Part of Shift School?	No	No	No
Residential School Type	Not Applicable	Not Applicable	Not Applicable
No. Of Books in Library	1050	748	5300
School Head Master	Sr. Vinnarasi	Poorana Josephin Ananthi	Xavier Sahayaraj Renir

8. SUGGESTIONS / RECOMMENDATIONS:

FACILITIES

The first problem is the school itself. Many of these schools are structured makeshift huts, with no real doors, windows or walls. With simple infrastructure, the schools in these rural areas are extremely prone to the natural elements like rain water leaking through roofs, mould developing in the walls and termites. Needless to say, there are also insufficient furniture, chairs and desks to cater to each child.

COMMUNITY AND FINANCIAL STATUS

Families in the rural community are living in poverty. They may not have enough money to send their children to receive a consistent education at the school, especially if the families are increasing in number and can no longer afford to pay school fees. As education is not perceived as priority to these communities, the bigger children drop out when they get older as their families want them to help out in the field or at home.

TEACHERS

Can we all agree that a teacher plays the most important part in a child's education? Teachers impart knowledge, creates curriculum and inspires the child to have a curious and eager spirit to learn. If you had a terrible teacher that made you lose interest in a subject and even skip their classes, you would understand what I mean.

There are many volunteer programs out there that bring in trained professional teachers or educated people to impart knowledge on the children. But most of the time, these are short term projects where the person helps out the community for a few weeks or months before

returning to their regular lives. Most teachers from within the community are not academically trained or experienced enough to give the students a high quality education. In the case of an overcrowded classroom, the teachers are also unable to ensure each child will absorb the learning materials that were being taught that day.

BASIC COMPUTING IN RURAL AREAS

On one hand, India is a land of IT giants; on the other, rural India is completely digitally ill-equipped. In a situation like this, the first change that the education system must bring forward is to start free computing classes for skill development in rural areas. Only then will rural India move in the same pace as that of the urban Digital India and the country will embark on the journey of development.

MAKE SPORTS COMPULSORY

One of the main reasons for the alarming rise in suicide amongst students in the country is the fact that they cannot handle stress. That in turn is because they are subjected to too much mental pressure. By making sports compulsory it can be ensured that all the students indulge in some sort of some physical activity. This will lead to their mind performing better and enable them to grasp their theory lessons well.

SUBSIDISING PROFESSIONAL COURSES

It is a sad reality that many meritorious students are not able to afford professional courses because of the sheer expense involved in the same. This is all the way truer in case of students from the general category who do not have access to many scholarships. In such a situation subsidising the cost of professional education will ensure that the same is within the reach of deserving students from the lower and lower middle-class strata of the Indian society.

GENDER NEUTRAL EDUCATION

The Indian education system has always favoured men over the fairer sex. The major change that must be brought about is to involve women in the same. Particularly subjects that are now considered to be the strength of men alone (like carpentry, engineering, etc.) should be made more accessible to women. Pioneer women in these fields should be given due encouragement and appreciation

DECLARATION

I / We declare that the project work is original and carried out by me / us under the guidance of _____. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

SAHAYA SHERINA A
MARIA NAVIS SELINA J
MARIA NESA
JENIMA T
MARIYA RESHMI P
MARIYAM RAMEESHA M
Marysheeba R
MAZY V
MEKRIN W
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MUTHULAKSHMI A
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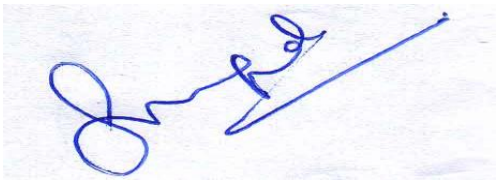
Name of the Participating Institute of UBA	:	St.Marys College (Autonomous) Thoothukudi
AISHE code of the Participating Institute	:	
Name of the Regional Coordinating Institute of UBA		: Gandhigram Universit

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title/award and the work is genuine.

Signature of the Project Supervisor



Submission of Project Report for
Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. Title of the Project : **PUBLIC OPINION ABOUT ARTISANS, INDUSTRIES AND LIVELIHOOD OF PALAYAKAYAL**
2. **Details of Participant(s)** :

Sl. No.	Unique ID	Name of the participant	Programme of study	Email ID	Mobile No.
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4	VC010680	Sesilda S	Commerce	Sesildasesiya75@gmail.com	6383344769
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13	VC010659	Madhumitha S	Commerce	maddymad2328@gmail.com	6383215505

3. UBA theme for Project Work : **(d) Artisans, industries and livelihood**

(a) Organic Farming (b) Water management

(c) Renewable energy (d) Artisans, industries and livelihood

(e) Basic amenities (f) Convergence

4. SDGs to be achieved **XV. Life on land**

i. No poverty
ii. Zero hunger
iii. Good health & Well-being
iv. Quality education
v. Gender equality
vi. Clean water and sanitation
vii. Affordable & clean energy
viii. Decent work & economic growth
ix. Industry, innovation and infrastructure
x. Reduced inequality
xi. Sustainable cities & communities
xii. Responsible consumption and production
xiii. Climate action
xiv. Life below water
xv. Life on land
xvi. Peace & justice strong institutions
xvii. Partnerships to achieve the goal

5. Background of the study: Nuclear Fuel Complex, after assessing the need to increase production of nuclear fuel and zircaloy structural components to meet the requirement of the Indian Nuclear Power Programme, decided, in 2001 to enhance zirconium sponge production by setting up a project, Zirconium Complex on a green-field site at Pazhayakayal in the port city Tuticorin in Tamil Nadu. ZC was commissioned in November 2009 to produce Zirconium Oxide and Zirconium Sponge to meet the enhanced demand. During the last 10 years, the production capacity of the Plant has been gradually increased and the rated capacity was achieved in FY2014–15. A common platform to market handmade productsAn initiative taken by Collector V. Vishnu is all set to revive sagging business fortunes of highly skilled rural artisans of the district who produce a range of exquisite handcrafted products. The rural artisans are producing excellent handmade products such as Pattamadai mat, sisal fibre ornaments of Kalakkad, banana fibre products of Kalakkad, wooden toys of Ambasamudram, brassware of Ambasamudram, terracotta of Kaarukurichi and

Pudukkudi sarees and pure honey of the Western Ghats by Kaani Tribes, crispy Kallidaikurichi appalam and Maanjolai Tea, known for its mesmerizing aroma.

Since these products lack attractive marketing strategies, the artisans are not able to push their products in the highly competitive market.

6. Objectives of the study :

The following objectives are focused in this study:

- The objective is to find the public opinion on how they live, what do they do for living
- The supporters for artisans, handlooms and handicrafts and their concern on industries

7. Methodology adopted

:

The Present study of Industries & Livelihood a questionnaire was structured to elicit the required information from the respondent. The data were collected from sample respondents using Google form.The study is based on general public opinion about Industries and Livelihood in Palayakayal Village in Thoothukudi.Hemce the questionnaires is related on industrialization, Poverty, alleviation projects, rural households and village organisational ability. Percentage Analysis was used to analyse the collector data.

8. Major findings

Following are the findings of various responses from the respondents regarding to “Public opinion about Artisans, Industries and livelihood of Palayakayal”

- 67% of respondents are female
- 48% of respondents are in the age between 30-40
- 45% of respondents are degree holder
- 50% of the respondents are earning
- 73% of respondents families are earning 1,00,000-2,00,000
- 66% of respondents have handmade products in their houses
- 39% of respondents have agriculture as their major profession
- 89% of respondents doesn't know any Artisans

- 93% of respondents said that palayakayal has 2-3 schools
- 54% of respondents said that they have proper food and proper water
- 75% of respondents didn't want industries in palayakayal
- 41% of respondents have been seeing jute products more often
- 81% of respondents do natural based livelihood like agriculture, livestock, forests, honey, handicrafts etc.
- 97% of respondents consume rice
- 33% of respondents have 5 members in their family
- 47% of respondents travel in auto
- 76% of respondents supports food industry in palayakayal
- 98% of respondents supports handlooms
- 60% of respondents said that industries helps in employment opportunities
- 53% of respondents lives in their own house.

9. Suggestions / Recommendations

- To promote handicrafts artisans should bring back the mixture of old and new designs
- In order to bring the handicrafts to the market the artisans should be aware of the promotional strategies
- Manufacturer should increase the interaction with the customers
- Workshop should be organized to enhance the skills and also knowledge of the people
- They can also initiate collaboration between designers and artisans in order to promote traditional crafts

10. Impact of this work on learning of students/teachers:

The income and standard of living of artisan designers has clearly increased. As a genre of Artisan Designers emerges, children of artisans gain interest and pride in their heritage, and many have returned home to work with their ancestral traditions. Traditions have begun to thrive at a higher end, and more valuable level. Most impact assessments focus on numbers such as increase in income. For traditional artisans, craft is a livelihood, but it is also an essential part of their identity and culture. By

December 2019, 197 artisans will have graduated from our design education program. We believe they and their families have benefited, but to insure that the program grows appropriately, we need to have data on the impact we have made in terms of artisans' values. In development work, we make assumptions about people we serve and their needs. This project will change the way we understand the values of artisans who take our education courses, and the impact that our program has had upon them and their community in terms of those values. It will enable us to most appropriately and effectively work with artisans, and serve as a model for more effective assessments and succeeding actions, for us and other development professionals.

DECLARATION

We declare that the project work is original and carried out by us under the guidance of Dr.T.Priyanka. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

Dr.T.Priyanka
Saranya T
Sathyarani J
Selvapriya M
Sesilda S
Shalini A
Shiny S
Shobika K
Sindhuja S
Srigayathri T
Sutha R
Vinusha P
Vishwa Harini S
Madhumitha S

Signature(s)

Details of Project Supervisor

Name of the Project Supervisor	: Dr.T.Priyanka
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Area of specialization	: Accounting, Marketing
Name of the Participating Institute of UBA	: St. Mary's College(autonomous) Thoothukudi
AISHE code of the Participating Institute	: C-41151
Name of the Regional Coordinating Institute of UBA	: Gandhigram Rural Institute, Dindigal district

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title / award and the work is genuine.

Signature of the Project Supervisor

Dr.T.Priyanka

Submission of Project Report for Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. Title Of The Project : GENDER EQUALITY
2. Details Of Participants :

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3.UBA theme for Project Work : Gender Equality

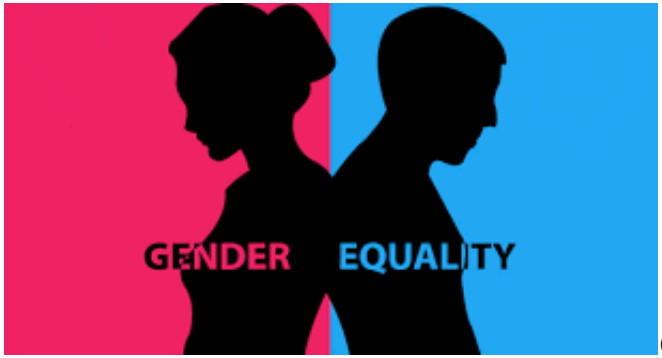
1. Water Management 2. Socio Economic Status 3.Affordable And Clean Energy

4. Decent Work & Economic Growth 5.Quality Education 6.Gender Equality

SDGs to be achieved: Gender Equality

I. No poverty
II. Zero hunger
III. Good health & Well-being
IV. Quality education
V. Gender equality
VI. Clean water and sanitation
VII. Affordable & clean energy
VIII. Decent work & economic growth
IX. Industry, innovation and infrastructure
X. Reduced inequality
XI. Sustainable cities & communities
XII. Responsible consumption and production
XIII. Climate action
XIV. Life below water
XV. Life on land
XVI. Peace & justice strong institutions
XVII. Partnerships to achieve the goal

3. Background of the Study



Gender equality is not only a fundamental human right, but a necessary foundation for a peaceful, prosperous and sustainable world. It is fundamental to the achievement of human rights and is an aspiration that benefit all of society , including girls and women. It can only be achieved when both male and female individuals are treated similarly.

UNICEF says gender equality "means that women and men, and girls and boys, enjoy the same rights, resources, opportunities and protections. It does not require that girls and boys, or women and men, be the same, or that they be treated exactly alike.

In this century, women and men enjoy the same privileges. The perception is changing slowly but steadily. People are now becoming more aware of their rights and what they can do in a free society. It has been found that when women and men hold the same position and participate equally, society progresses exclusively and creates a landmark. When a community reaches gender equality, everyone enjoys the same privileges and gets similar scopes in education, health, occupation, and political aspect. Even in the family, when both male and female members are treated in the same way, it is the best place to grow, learn, and add great values

According to the Gender Gap Index (GGI), India ranks 113 among 135 participating countries. The Indian society is still wrecked by such stigmas that dictate that women are meant to manage home and stay indoors. Women are neglected even though our country is quickly gaining pace in economic development in the world.

A nation can progress and attain higher development growth only when both men and women are entitled to equal opportunities. Women in the society are often cornered and are refrained from getting equal rights as men to health, education, decision-making and economic independence in terms of wages. Women generally are the caregivers in the family. Because of this, women are mostly involved in household

activities. There is lesser participation of women in higher education, decision-making roles, and leadership roles. This gender disparity is a hindrance in the growth rate of a country. When women participate in the workforce increases the economic growth rate of the country increases. Gender equality increases the overall wellbeing of the nation along with economic prosperity.

4.Objectives :

The following are the objectives focused in this study :

1) Gender equality helps prevent and ends , violence against women and girls and makes our communities safer and healthier. It is a human right and it is good for the economy.
2) Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life.
3) To promote empowerment and upliftment of women in all fields.

5.Statement of the problem :

Women play important roles in the rural economy. Women can make a unique contribution to natural resource management .Rural women comprise a quarter of the world's population. Women also make up 41 per cent of the world's agricultural labour force, a ratio which rises to 49 per cent for low income countries. Empowering rural women can have a significant impact on productivity and agriculture-led growth .Yet, women in rural areas face constraints in engaging in economic activities.

Because of gender-based discrimination and social norms, most of their work remains unseen, unrecognized and undervalued. Women's presence in rural workers' and employers' organizations remains low, leading to lack of voice and representation. Rural women are at high risk of sexual harassment and other forms of gender-based violence. There is an urgent need to eliminate the persistent inequalities between men and women that perpetuate violence and harassment.

6.Findings :

1) In present study female literacy has been significantly lower as compared to male literacy in rural areas. The reason for this may be several parents did not have permitted their female children to go to colleges or that most people are below the poverty line and weren't conscious that children should get the education .
2) Although gender inequality varies considerably across regions and sectors, there is evidence that, globally, women benefit less from rural employment, whether in self- or wage-employment, than men do.
3) The actions of women in decision making or leadership in political matter or election is limited .
4) The entrepreneurship of women is not easily accepted by the society and also by her family . Women's entrepreneurship is not very successful because they face lots of challenges because of lack of education, lack of role models in entrepreneurship, gender issues, weak social and economic status etc.

7.Importance of Gender Equality :

1) Gender equality prevents violence against women and girls. It is essential for economic prosperity.
2) When women receive the same education and job opportunities as men, they can improve any organization they join.
3) Empowering women to work has benefits not just for the individuals, but also for the wider economy.
4) Improves prospects for future generation and strengthens political and social system.

8.Recommendation :

1) Promote female participation in public and political affairs.
2) Share household chores and childcare equally.
3) Educational centers and courses can be offered for children in rural places.
4) Handloom or handicraft industries can be provided for uneducated rural women.
5) To educate public and private sectors about gender equality and sexual harassment and the consequences of harassing.

9. Conclusion :

"NO COUNTRY CAN VERY TRULY FLOURISH IF IT STIFLES THE POTENTIAL OF ITS WOMEN AND DEPRIVES ITSELF OF THE CONTRIBUTION OF HALF ITS CITIZEN."
-MICHELLE OBAMA

Men and Women may assume unequal responsibility for household work, with mothers bearing the brunt of caregiving and chores. It is important to promote common values such as respect for human rights and equality between women and men As a result, 1 in 4 girls between the ages of 15 and 19 are neither employed nor in education. Women might not be similar to men in terms of physical strength and physiological traits. Both are differently built biologically but they have the same brain and organs to function. Women these days are creating milestones that are changing society. They have travelled to space, running companies, creating history, and making everyone proud. Women are showing their capabilities in every phase and hence, they should be equal to men in all aspects.

DECLARATION

We declare that the project work is original and carried out by us under the Guidance of Mrs.D.Daisy Bai The project work has not been submitted else where for the award of any degree and the work is genuine.

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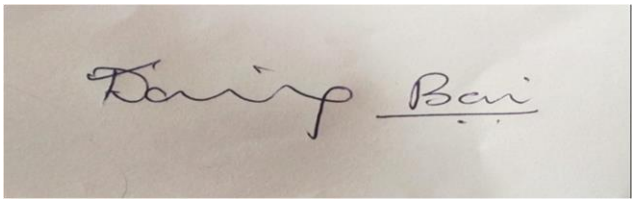
CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title/award and the work is genuine.

Signature of the Project Supervisor



Proforma for the submission of project report for virtual internship programme on clean and affordable energy

Title : Clean and affordable energy

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UBA THEME FOR PROJECT WORK;RENEWABLE ENERGY

SDG'S TO BE ACHIEVED;AFFORDABLE AND CLEAN ENERGY

INTRODUCTION

What is clean energy? NCSEA defines clean energy as zero-emissions sources ("renewables"), as well as energy saved through energy efficiency ("EE") measures. ... The most common renewable energy resources are biomass, geothermal, hydropower, solar, and wind.

greenhouse gases cause climate change and have harmful impacts on people's well-being and the environment. It is caused primarily by electricity generation which produces a lot of Canadian nitrogen oxides and sulphur dioxide emission The health and well-being of some 3 billion people are adversely impacted by the lack of clean cooking fuels, such as wood, char-coal, dung and coal, which causes indoor air pollution.

People need energy for the most basic things in their lives: heating and lighting their homes, cooking their food, and getting to and from work. Since people need energy for absolutely everything and this particular era just can't function without energy, energy resources should

be made cheap and reasonable. Moreover, when the poor do not have affordable access to energy, the environment can suffer. So affordable energy is an utmost essential. But on the contrary 60% of the global greenhouse emissions is caused by the current electrical and automobile energy only. Also these energy resources are way too expensive.

The government is working towards bringing a complete clean and affordable energy by 2030.Universal access to affordable and clean energy means consumimg energy out of solar ,wind and thermal

OBJECTIVES OF CLEAN AND AFFORDABLE ENERGY

1.Clean energy is focused predominantly to subside greenhouse gases which eventually makes way for pure oxygen

But for many decades, fossil fuels such as coal, oil or gas have been major sources of electricity production, but burning carbon fuels produces large amount of greenhouse gases which cause climate change and have harmful impacts on people's well-being and the environment.

2.Affordable energy is dedicated to remove the hindrance of unemployment ,gives proper education and makes it conducive to run errands

Without electricity, women and girls have to spend hours fetching water, clinics cannot store vaccines for children, many school children cannot do homework and many competitive companies cannot run their businesses.

3.Switching to sustainable energy can lead to a better health of the people

The transition to an affordable, reliable, and sustainable energy system by investing in renewable energy resources, prioritizing energy efficient practices, and adopting clean energy technologies and infrastructure can dissolve diseases such as cancer etc.

4.Clean energy can save aquatic life

Most nuclear plants are located along lakes, rivers or seacoasts because the facilities use water to cool the reactors also the water discharged from a plant can affect the ambient habitat conditions for aquatic species.so clean renewable energy can save aquatic life.

ZICRONIUM AS NUCLER REACTOR IN PAZHAYAKAYAL:Nuclear Fuel Complex, after assessing the need to increase production of nuclear fuel and zircaloy structural components to meet the requirement of the Indian Nuclear Power Programme, decided, in 2001 to enhance zirconium sponge production by setting up a project, Zirconium Complex on a green-field site at Pazhayakayal in the port city Tuticorin in Tamil Nadu. C was commissioned in November 2009 to produce Zirconium Oxide and Zirconium Sponge to meet the enhanced demand. During the last 10 years, the production capacity of the Plant has been gradually increased and the rated capacity was achieved in FY2014–15.

The plant has been successively producing zirconium sponge at its rated capacity since then.

Zirconium Complex, NFC

Use of zirconium and its alloys for nuclear applications requires stringent monitoring of quality of raw materials, chemicals and intermediate process streams / products. A Materials Testing Laboratory is set up for analysis of samples using state-of the art analytical instruments for process control and quality control of products. Zirconium with amazing corrosion resistance, high melting point, high hardness, and strength. It is widely used in aerospace, military, nuclear that explains why zirconium is used in nuclear reactors

Zirconium Complex was certified for Quality Management System as per ISO-9001:2015 by Bureau of Indian Standards on 15th May 2018.

Continuous efforts towards improvement / development of Production processes are being made for higher production, better recovery, less consumption of chemicals and reduction of effluents.

The plant has been successively producing zirconium sponge at its rated capacity since then.

ZC has Future Plans of:

- Setting up of Magnesium Recycling Technology Development & Demonstration Facility.
- Capacity augmentation of zirconium sponge production to meet the future demand commensurate with the nuclear power programme.
- Augmentation of Zirconium Complex Township infrastructure to cater to the future requirement
- Construction of Atomic Energy Central School building in the township.

For the welfare of the employees ZC has township and other amenities such as medical centre, shopping complex etc. for employees of ZC and CISF personnel.

DISADVANTAGES OF ZIRCONIUM AS A NUCLEAR REACTOR

- Expensive to Build. Despite being relatively inexpensive to operate ,zirconium in nuclear power plants are
- incredibly expensive to build—and the cost keeps rising. ...
- Accidents. ...
- Produces Radioactive Waste. ...
- Impact on the Environment. ...
- Security Threat. ...
- Limited Fuel Supply

Recommendations or suggestions to the Government

Since the zirconium complex contributes a lot to the Indian nuclear power programme,all of a sudden the production of the zirconium for nuclear reactors cannot be stopped instead they can gradually reduce the amount of production which can make the environment more cleaner and hygienic in pazhayakayal.

Solar energy is inexaustible.It is the best alternative source of energy.Solar panels can be used to convert sunlight into electricity.Solar panels can be used to convert sunlight into electricity.Its also much cheaper and affordable.So the Indian Government should contemplate abourt switching to solar energy in the future.

CONCLUSION

Therefore the government should incorporote more sustainable and renewable energy sources in pazhayakayal by bringing solar energy projects which is both clean and affordable and try to reduce the use of zirconium in nuclear plants.The government should be a part of the solution not a part of the pollution.

DECLARATION

We declare that the project work is original and carried out by us under the guidance of Ms.O.Sony Fernando. The project work has not been submitted elsewhere for the award of any degree and the work is genuine

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CERTIFICATE

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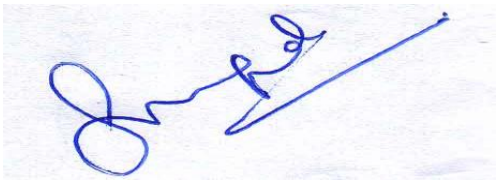
Signature of the Project Supervisor



Proforma for the Submission of Project Report for
Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. Title of the Project : A STUDY ON CONSUMERS PREFERENCE ABOUT ORGANIC FOOD PRODUCTS AT PALAYAKAYAL

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3. UBA theme for Project Work : (a) Organic Farming

(a) Organic Farming (b) Water management

(c) Renewable energy (d) Artisans, industries and livelihood

(e) Basic amenities (f) Convergence

4. SDGs to be achieved : **iii. Good health & Well –being**

xii. Reasonable consumption and production

i. No poverty
ii. Zero hunger
iii. Good health & Well-being
iv. Quality education
v. Gender equality
vi. Clean water and sanitation

vii. Affordable & clean energy
viii. Decent work & economic growth
ix. Industry, innovation and infrastructure
x. Reduced inequality
xi. Sustainable cities & communities
xii. Responsible consumption and production
xiii. Climate action
xiv. Life below water
xv. Life on land
xvi. Peace & justice strong institutions
xvii. Partnerships to achieve the goal

5. **Background of the study** :

Organic food products promote no artificial preservatives and best maintain the originality of food. This prevents excess use of harmful ingredients and there-by ensure heath. The term organic farming was coined by Lord North borne. He described a holistic and ecologically balanced approach to farming. When crops are grown without the use of conventional pesticides, sewage sludge or unnatural fertilizers and proceed without the use of ionizing radiation or the addition of food additives, they are termed "Organic ". Organic food is widely available and has become very popular with soaring sales. There are many benefits involving organic food products. Organic foods contain fewer pesticides. This means that things such as insecticide that is used in most agricultural practices are eliminated. People are concerned with these chemicals that are used to preserve foods are then being consumed by the people who purchase them. Farming without pesticides is also better for the environment. Fewer chemicals are being placed on the ground, entering the soil and water supply. Organic meats can also contain a lot of more nutrients. Nutrients like omega-3 fatty acids were up to 50 percent higher in organic meats and milk than in conventionally raised products. One of the main reasons that deter people from organic products is costs. In 2015 on an average, organic products were 47 percent more expensive. Organic products can vary a lot in price. The reason why organic products cost so much more on average is the production process. Many factors contribute to its cost. First the demand for an organic product is larger than the number of organic products available. Without synthetic pesticides, quantities of foods will be smaller. This smaller production of organic food means an increased cost.This study attempted to gain more knowledge about consumers preference towards

organic food product consumption and to see whether is any potential that might have for changing their behaviour. Consumer preference towards organic food product is carried with the objective to determine the factors influencing them to use organic food products. The research is done to analyze the reason increasing the demand and health consciousness towards organic food. The study mainly focus on the factor like quality, quantity, consumer preference, price and age.

6. **Objectives of the study** :
   - To determine the preference and intention to use organic food products in Palayakayal'
   - To know the satisfaction level of consumption organic food products in Palayakayal.
7. **Methodology adopted** :

   The present study is analytical and descriptive in nature. A questionnaire was structured to elicit the required information from the respondents. The primary data were collected from 50 sample respondents through Google Form and the secondary data were through websites. The study is based on consumer preference about organic food products only at Palayakayal. Hence the questionnaire is related to organic food product like sprouts, fruits and vegetables, nuts and seeds, fishes, etc. All the information are classified and arranged in a tabular form and percentage method was adopted as statistical tools for the research.

8. **Major findings :**

   Following are the findings in regard to various response from the respondents regarding Consumers Preference about Organic food product in Palayakayal
   - Majority 78% of the respondents are female.
   - Majority 42% of the respondents belong to the age group of 21-30 years.
   - Majority 62% of the respondents are unmarried.
   - Majority 72% of the respondents are degree holders.
   - Majority 32% of the respondents are students.
   - Majority 54% of the respondents earn monthly income of Rs25000-50000.
   - Majority 46% of the respondents are Non–Vegetarian.
   - Majority 52% of the respondents are influenced by their friends' families.

- ❖ Majority 38% of the respondents are using the organic food products more than 3 years.
- ❖ Majority 32% of the respondents prefer to buy organic food product from organic stores.
- ❖ Majority 64% of the respondents agree that there is organic food store in Palayakayal.
- ❖ Majority 42% of the respondents prefer often to buy fish, 18% poultry meats, 16% fruits & vegetables and so on…
- ❖ Majority 36% of the respondents have an intention to use organic food products to retain their nutrition level.
- ❖ Majority 42% of the respondents thinks that the quality of organic food products are good.
- ❖ Majority 36% of the respondents prefer the best nutritional value as nuts &seeds.
- ❖ Majority 52% of the respondents agree that the price of the organic food product are expensive.
- ❖ Majority 46% of the respondents prefer to continue their purchase of organic food product even if the cost goes high.
- ❖ Majority 48% of the respondents say that the overall opinion about organic food product is more fresh and chemical free, 20% say that organic food has rich nutrient, Ideal for children / elders and so on….

9. **Suggestions / Recommendations** :
   - ✓ The price of the organic food product should be reasonable to attract consumers.
   - ✓ Offers and discounts can be announced for increase of sales, extra goods may be introduced and packages may be improved to attract the new customers.
   - ✓ The organic food product should try to concentrate on advertisements. It has less reach. So try to create awareness to the public.
   - ✓ The product must be made readily available to the consumers. It will help the farmers to increase the sales volume.
   - ✓ Window display is also attractive method for attracting the minds of people especially the house wives.
10. Impact of this work on learning of students/teachers:

This study identified the consumer preference of organic food products, the influence and their intention to use the product. The study reveals that most of the respondents are aware of the organic food products in Palyakayal. People are considering that organic food products are not only luxurious but their intention in improving their health condition. Now a days most of the consumers feel that the ordinary products consists more chemicals which cause many side effects and start switching over to organic based products. Hence there is a need to advertise more to create awareness and use of herbal products. The recognition of organic food products in the market among consumers is essential. There is not at all shortage in the demand for organic food products in the market. Organic food products help people to build their good health with the help of natural sources. Organic foods do not produce instant cures, but rather offer a way to put the body in proper tune with nature. The consumers concern towards health risk and harmful effect of chemical products forcing them to switch over to natural products. Organic food products are mainly sold through outlets than the wholesale system. Hence, this channel of distribution is to be strengthened in their market. The food loyalty of consumer towards organic food products is low. People use more than one organic food products at a time. They switched over to other food in case of non - availability. Therefore, it is very essential for a firm that it must think that what it is doing and what its competitors are doing and must emphasize to create a market driven organization. A cost-benefit analysis is required to check the efficiency and effectiveness of its marketing plan. Thus, the research concludes that consumer preference plays a vital role in determining the usage of organic food products.

DECLARATION

I / We declare that the project work is original and carried out by me / us under the guidance of Dr. T. Priyanka. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

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Signature of the Project Supervisor
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Proforma for the Submission of Project Report for
Virtual Internship Programme on Sustainable Development Goals and
Community Engagement

Title of the Project : **PUBLIC OPINION ABOUT THE BASIC NEEDS OF PALAYAKAYAL VILLAGE IN THOOTHUKUDI DISTRICT**

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3.UBA theme for Project Work : (e)**Basic amenities**

(a) Organic Farming (b) Water management

(c) Renewable energy (d) Artisans, industries and livelihood

(e) Basic amenities (f) Convergence

4. SDGs to be achieved :xv **Life on land**

i. No povertyx. Reduce inequality
ii. Zero hungerxi Sustainable cities& communities
iii. Good health & Well-being xiiResponsible consumption and production
iv. Quality education xiii Climate action
v. Gender equality xiv Life below water
vi. Clean water and sanitation xv Life on land
vii. Affordable & clean energy xvi Peace & justice strong institution
viii. Decent work & economic growth
ix. Industry, innovation and infrastructure

5**. Background of the study** :

This article examines the changes in access to basic amenities like drinking water, sanitation, electricity, housing qualities and drainage arrangement for rural and urban India during 2002, 2018 and 2020–2021using National Sample Survey's Housing Conditions unit record data across social and economic groups. With respect to all the indicators of basic amenities, improvement was observed between 2002 to 2018–2020 with acceleration during 2002 and 2018–2020. Basic amenities such as drinking water facility, sanitation facilities and drainage arrangement require special attention in both rural and urban areas with more focus towards rural areas. Even for identical economic groups (poor and non-poor), SCs and STs were found lagging behind in reducing the gap with lower rate of improvement than others and also in the existing levels in 2018–2021. It indicates that even if same economic conditions prevail there is variation in attainment by different social groups. Results suggest that there are factors acting as constraints based on social backgrounds leading to denial on access to basic amenities. Findings of this study implies that various policies on basic amenities needs to be supplemented with pro poor and group specific policies (social) for raising the overall standard of life and well-being. First, there was new economic policy based on liberalization adopted and rural and urban India witnessed decentralization in their governance as urban local bodies and panchayati raj system came into existence by constitutional sanctity. And second, the consistency in the data collection, generation process and methodology in these rounds. Indicators of Basic AmenitiesFor the analysis, we have selected indicators which show the unavailability of basic amenities, in other words the indicators are a deprivation measure which highlight the household not having access to corresponding basic amenities.1 Selected indicators for the analysis are discussed below:

1. Access to Drinking Water Facility:

No facility of drinking water in the house: It refers to the community use of the household for drinking water facility. Household's exclusive use and common use of the households in the building both are excluded here.

2. Access to Sanitation Facilities:

No latrine facility in the house: It refers to Public/community use and no facility in the house. Exclusive use and shared with other households both are excluded here

3. Access to Electricity use for Domestic Purpose

No electricity use for domestic purposes.

4. Access to Housing Quality:

Bad condition of structure of the house: It refers to the houses where major repair are required. Good and satisfactory condition of structure both are excluded here. Katcha roof type: It refers to the roofs consisting of grass, leaves, unburnt brick, canvas, cloth and others. Pucca roof types are excluded here. The indicators are created based on the information from the NSSO Housing Conditions Surveys unit record data. These are the recoding of the variables as available from the same. The focus here is to include those indicators which significantly capture the unavailability and no access to the corresponding basic amenities.

6. Objectives of the study:

The followings are the objectives focused in this study :

- To identify the public opinion about basic amenities (i.e) education, road facilities etc in Palayakayal.
- To find out the problems faced by general public in getting education, road facilities etc inPalayakayal.

7. Methodology adopted :

The present study is analytical and basic needs. A questionnaire was structured to elicit the required information from the respondents. The data were collected from 120 sample respondents using Google Form. The study is based on general public opinion about basic amenities in Palayakayal village. Hence, the questionnaireis related on basic needs like Water, education, road facilities etc. Percentage analysis was used to analyse the collected data.

8. Major findings :

Following are the findings in regard to various response from the respondentsregardingGeneral Public Opinion about basic amenities inPalayakayalvillage.

- Majority of the respondents(50.7%)are male.
- Most of the respondents(40%)are in between the age of 23-40years.
- Majority of the respondents(81percent)are married.
- Majority of the respondents(39.9percent)aregraduates.
- Most the respondents (43.5percent)are private employee.
- Majority of the respondents (46.9percent)are not earning.
- Most of the respondents(48.11%) are having 4 members in a family.
- Majority of the respondents (84.8%) are getting good education from the government school.
- Majority of the respondents (40.7%) are getting fresh water from the municipality.
- Most of the respondents (60.9%) are sanitized.
- Majority of the respondents (78.8%) are under graduated.
- Most of the respondents (88.8%) have clean road facilities.

9. Suggestions / Recommendations :

In India, Amenities Needed In a School are at variance as per the standard of the school furthermore as per the fees structure. There are various Perks Of Studying In An International School. Schools that are in the higher end of the range can give a great deal more than simply fundamental amenities, while there are a few government and government supported schools that are attempting to furnish their students with even essential framework. New Horizon Gurukul is a pioneering combination of the cultural heritage of the primeval Gurukul system with current methods of teaching and learning. Here are some of the basic facilities that a school ought to have: A school campus must encompass the following amenities:

- ✓ Striking school buildings unified with lush green gardens and lawns
- ✓ Huge, airy classrooms with cross aeration and natural light overlooking gardens
- ✓ Indoor and outdoor playing Courts and sports area
- ✓ State-of-the-art Science Lab, Mathematics and Languages Laboratory
- ✓ Amenities for indoor physical activities like table tennis, chess and board games
- ✓ Day Care facility on request
- ✓ A big auditorium with first-rate acoustics and a capacity to seat at least 1000 people
- ✓ Well-equipped laboratories for Chemistry, Physics, Biology and Computer Science
- ✓ Great out-door courts for Volley Ball, Basket Ball, Foot Ball and Throw Ball
- ✓ Meditation centre and Yoga centre
- ✓ Large rooms for Art, Craft, Dance and Music
- ✓ Huge and hygienic dining hall
- ✓ School bus services to transport children to and from school

In India, basic facilities provided in a school depend on its standards and furthermore on the fee structure.

10. Impact of this work on learning of students/teachers:

In the overall study,the quality and access to education is the major concern in their schools as there are fewer committed teachers, lack of proper text books and learning material in the schools. Though Government schools exist, but when compared to private schools then quality is a major issue. Majority of people living in Palayakayal have understood the importance of education and know that it is the only way to get rid of poverty. But due to lack of money they are not able to send their children to private schools and hence depend upon government schools for education. Above that, in some of the government schools there is only one teacher for the entire school and if they don't show up at work, then it is a holiday. Poverty is another setback. Government schools are not as good and private schools are expensive. This results in a very low number of students actually clearing their secondary education and taking admission in a colleges for further studies. So the drop-out-rate at the secondary level is extremely high in there.

DECLARATION

I / We declare that the project work is original and carried out by me / us under the guidance of Dr. T. Priyanka. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

Dr.T.Priyanka
Daisy Priya.P
Delphine Shiny Derose.V
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AISHE code of the Participating Institute : C-41151

Name of the Regional Coordinating Institute of UBA : Gandhigram Rural Institute, Dindigal District

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title / award and the work is genuine.

Signature of the Project Supervisor

Dr.T.Priyanka

Proforma for the Submission of Project Report for Virtual Internship Programme on Sustainable Development Goals

1. Titleof the project : GENERAL PUBLIC OPINION ABOUT RENEWABLE ENERGY IN PALAYAKAYAL

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3. UBA theme for project work : **c) Renewable Energy**

a)organic farming. b) Water management

c) Renewable energy. d) Artisans, industries and livelihoods

e) Basic amenities

4. SDG's to be achieved: **7) Affordable and Clean Energy**

1)No Poverty. (2) Zero Hunger. (3) Good Health and Well-being (4) Quality Education. (5) Gender Equality. (6) Clean Water and Sanitation.

(7) Affordable and Clean Energy. (8) Decent Work and Economic Growth. (9) Industry, Innovation and Infrastructure. (10) Reducing Inequality (11) Sustainable Cities and Communities. (12) Responsible Consumption and Production(13) Climate Action. (14) Life Below Water. (15) Life On Land. (16) Peace, Justice, and Strong Institutions. (17) Partnerships for the Goals.

5. **Background of study:**

THE IMPORTANCE OF RENEWABLE ENERGY

Renewable energies are sources of clean, inexhaustible and increasingly competitive energy. They differ from fossil fuels principally in their diversity, abundance and potential for use anywhere on the planet, but above all in that they produce neither greenhouse gases – which cause climate change – nor polluting emissions. Their costs are also falling and at a sustainable rate, whereas the general cost trend for fossil fuels is in the opposite direction in spite of their present volatility. Growth in clean energies is unstoppable, as reflected in statistics produced annually by the International Energy Agency (IEA): they represented nearly half of all new electricity generation capacity installed in 2014, when they constituted the second biggest source of electricity worldwide, behind coal. According to the IEA, world electricity demand will have increased by 70% by 2040 – its share of final energy use rising from 18 to 24% during the same period – driven mainly by the emerging economies of India, China, Africa, the Middle East and South-East Asia.

CLEAN ENERGY TO FIGHT CLIMATE CHANGE:

Clean energy development is vital for combating climate change and limiting its most devastating effects. 2019 was the second warmest year on record. The Earth's temperature has risen by an average 0.85 °C since the end of the 19th Century, states National Geographic in its special November 2015 issue on climate change. Meanwhile, some 1.1 billion inhabitants (17% of the world population) do not have access to electricity. Equally, 2.7 billion people (38% of the population) use conventional biomass for cooking, heating and lighting in their homes – at serious risk to their health. Renewable energies received important backing from the international community through the Paris Accord signed at the World Climate Summit held in the French capital in December 2015.

The agreement, which entered into force in 2016, establishes, for the first time in history, a binding global objective. Nearly 200 signatory countries pledged to reduce their emissions so that the average temperature of the planet at the end of the current century remains “well below” 2 °C, the limit above which climate change will have more catastrophic effects. The aim is to try to keep it to 1.5 °C. The transition to an energy system based on renewable technologies will have very positive economic consequences on the global economy and on development. According to the International Renewable Energy Agency (IRENA), doubling the renewable energy share in electricity generation to 57 % worldwide by 2030 will be necessary for meeting the Paris Agreement targets. This requires raising annual investments in renewable energy from the current USD 330 billion to USD 750 billion, thereby boosting job creation and growth linked to the green economy.

TYPES OF RENEWABLE ENERGY

Renewable energies include:

Wind energy: the energy obtained from the wind

Solar energy: the energy obtained from the sun. The main technologies here are solar photovoltaic (using the light from the sun) and solar thermal (using the sun’s heat)

Hydraulic or hydroelectric energy: energy obtained from rivers and other freshwater currents

Biomass and biogas: energy extracted from organic material

Geothermal energy: heat energy from inside the Earth

Tidal energy: energy obtained from the tides

Wave energy: energy obtained from ocean waves

Bioethanol: organic fuel suitable for vehicles and obtained from fermentation of vegetation

Biodiesel: organic fuel for vehicles, among other applications, obtained from vegetable oils

MAIN ADVANTAGES OF CLEAN ENERGIES

AGAINST CLIMATE CHANGE:

Renewables do not emit greenhouse gases in energy generation processes, making them the cleanest, most viable solution to prevent environmental degradation.

INEXHAUSTIBLE

Compared to conventional energy sources such as coal, gas, oil and nuclear – reserves of which are finite – clean energies are just as available as the sun from which they originate and adapt to natural cycles, hence their name “renewables”. This makes them an essential element in a sustainable energy system that allows development today without risking that of future generations

REDUCING ENERGY DEPENDENCE:

The indigenous nature of clean sources gives local economies an advantage and brings meaning to the term “energy independence”. Dependence on fossil fuel imports results in subordination to the economic and political short-term goals of the supplier country, which can compromise the security of energy supply. Everywhere in the world there is a renewable resource – whether that be the wind, sun, water or organic material – available for producing energy sustainably.

INCREASINGLY COMPETITIVE:

Nowadays renewables, specifically wind and photovoltaic, are cheaper than conventional energies in much of the world. The main renewable technologies – such as wind and solar photovoltaic – are drastically reducing their costs, such that they are the most economically efficient way to generate electricity in a growing number of markets. Economies of scale and innovation are already resulting in renewable energies becoming at lightning speed the most sustainable solution, not only environmentally but also economically, for powering the world.

A FAVORABLE POLITICAL HORIZON

Decisions adopted at COP21 and forwards – like the COP25 Chile-Madrid – have shone the spotlight firmly on renewable energies. The international community has understood its obligation to firm up the transition towards a low-carbon economy in order to guarantee a sustainable future for the planet. International consensus in favor of the “de-carbonization” of the economy constitutes a very favorable framework for the promotion of clean energy technologies.

ACCIONA, THE LARGEST COMPANY DEDICATED 100% TO RENEWABLE ENERGY

WE GUARANTEE ACCESS TO CLEAN ENERGY ACCIONA is leading the corporate fight to mitigate the effects of the climate emergency and accelerate change towards a decarbonized energy model. For the fifth consecutive year, it heads the Top 100 Green Utilities de Energy Intelligence as the world's largest 100% renewable energy corporation.

Major findings:

- Majority of area is 3.72km
- Population at last year (2020) is 1230
- Population Density is 330 people per km.
- Population of male: 595
- Population of Female: 635
- Size of the area (palayakayal) is about 3.72 Square km.

DECLARATION

I/ We declare that the project work is original and carried out by me/us under the guidance of Dr.T.Priyanka. The project work has not been submitted elsewhere for the award ofany degree and the work is genuine

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Name of the Regional Coordinating Institute of UBA	: Gandhigram Rural Institute, Dindugal District

CERTIFICATE

This is to certify that the project has been carriedout under my supervision and Guidance. The project report has not been submitted for any othertitle/awardand the Work is genuine.

SignatureoftheProjectSupervisor:

Dr.T.Priyanka

Proforma for the Submission of Project Report for

Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. **Title of the Project** : Development of Organic Farming in Kalangarai
2. **Details of Participant(s)** :

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3. **UBA theme for Project Work** : (a) Organic Farming
4. **SDGs to be achieved** : (iii) Good health & Well-being
5. **Background of the study** :

Health was earlier said to be the ability of the body functioning well. However, as time evolved, the definition of health also evolved. It cannot be stressed enough that health is the primary thing after which everything else follows. When you maintain good health, everything else falls into place. Health and well-being is a high priority in current health and social care provision. The importance of promoting health and well-being is due to the dramatically increasing trend of morbidity and mortality from health problems, illness and chronic disease. Maintaining good health is dependent on a lot of factors. It ranges from the air you breathe to the type of people you choose to spend your time with..

First, we have our physical health. This means being fit physically and in the absence of any kind of disease or illness. When you have good physical health, you will have

a longer life span. Studies have proved that one may maintain their physical health by having a balanced diet.

Lifestyle constitutes of our way of living in aggregate; the way we eat, sleep, and perform our daily duties. It also comprises of the more abstract and complex behaviours like our thinking patterns, beliefs, manners, social interaction, and so on. Thus, lifestyle comprises our culture, which we can improve to achieve a sound health. For example, rather than relying upon medicine after catching a disease, we can prevent most of the diseases through balanced diet, regular exercise and proper rest.

Many people have some kind of addiction such as smoking, drinking alcohol and using drugs. Cigarettes, tobaccos, alcohols and drugs are harmful for the health of people. They affect the body organs of the people like lungs, liver, kidneys and so on. All these harmful effects cannot be stopped by using medicine. But we can achieve this with the help of organic foods. Once we start consuming organic foods our body will automatically starts to function well because of the nutrition present in them.

One of the serious health problems in nations is obesity which is the result of intake of excessive calories of food. Obesity with the passage of time leads to serious health problems like high blood pressure, diabetes, asthma, heart problems and so on. These problems have no permanent medical treatment. The only way that can help these people achieve a sound health is through exercise and cutting back on food consumption. Therefore, type of food we eat plays a more important role in maintaining the good health of our body.

At basic level each and every one should consume organic food for their wellbeing. Consumption of organic foods instead of junk foods leads to healthy life and has a possibility of increasing our life span. It also makes all the parts of our body to function well. It gives much more nutrition to our body. We can conclude that by consuming organic foods one can be rich in his health. Obtaining good and wellbeing from organic foods and good diet is revealed by this study.

6. Objectives of the study :

- To identify the public opinion on the organic farming in Kalangarai.
- To find out the need of the rural areas in the field of organic farming.
- To know about the problems faced by them to get the yield of the farming.

7. Methodology adopted :

The required information was gathered by the participants by meeting the villagers in person. On meeting them we came to know more about the village and then we tried our best to give the ideas for making more profit in their life. This study is based on the general public opinion about the organic farming in the rural area that is in Kalangarai village. All the people in the village readily helped us to know more about the village.

8. Major findings :

Following are the findings in regard to various response from the respondents regarding "General Public Opinion about the Development of organic farming in the village Kalangarai".

- Total number of livestock in Kalangarai is 48 percentage.
- Putcha shelter for livestock is 10 percentage
- Kutcha shelter for livestock is 17 percentage
- Open shelter for livestock is 11 percentage
- Average daily production of milk is 70 litres.
- Animal waste or cow dung per day is 60.76 kilograms
- 13.3% of household uses canal irrigation
- 13.3% of household uses bore well irrigation
- 6.7% of household uses river irrigation.
- 53.3% of household uses other irrigation
- 13.3% of household uses none of the irrigation
- 57.1% of flooding is used among the households in irrigation method
- 42.9% of households uses none of the irrigation method
- The village uses 4.01 kg/acre chemical fertilizer
- The village uses 2.76 kg/acre chemical insecticide
- The village uses 2.34 kg/acre chemical weedicide
- The village uses 2.5 kg/acre Organic manures.

9. Suggestions / Recommendations :

- Organic farming can be simply done in the terrace of our houses where we usually grow plants of flowers or others.
- First thing is containers or big pots. We suggest to select lightweight plastic containers for easy movement. Avoid using bright or black color containers that absorbs heat and impacts the plant growth.

- Then the soil, It is suggested to choose red soil for plant growth. It is important that the soil must be healthy and rich in nutrients. Here, in organic farming we will not use the chemical fertilizers. It is suggested to use cow dung and waste parts of vegetables and fruits like biodegradable waste in the soil for fertilizing.
- The plants suitable for growing in pots are brinjal, tomatoes, okra, chillies, beans and some spinach varieties like mint and coriander requires small pots.
- Choose seeds of the plants that you are growing. First, grow the seedlings in seed tray and then transplant them into the containers. If it is not affordable, Cardboard boxes can be used instead of them.
- For pesticides, it is suggested to use neem oil and homemade pesticides with garlics, chillies and onion can be organic.
- Then at last, watering is the inevitable things for plants to get nutrients. Appropriately watering twice a day would be good.
- Organic farming is not only done in terrace but it can also be done in big level. Farming in field level needs a certification from National Program for Organic Production (NPOP).
- Suggestions to get certified:
    - The conversion of land for Organic farming must be done.
    - All the inputs to the farm should be natural.
    - No Genetically modified inputs should be used.
    - The integrity of all processes such as physical,biological, mechanical must be maintained at all times.
    - No contamination from nearby farms or other means should be present.
    - Sustainable practices should be followed on the farm.

These are the Suggestions that recommended in managing and developing organic farming either in terrace or farm level.

Commented [u1]:

10. Impact of this work on learning of students/teachers:

- Ever since there has been urbanization and industrialization, the population explosion has also been in one of the causes of concern for environmentalists and governments alike. To fulfil the hunger of our growing population, harmful agricultural practices have been employed to increase crop production and decrease the time of production through artificial ways. These ways include the use of chemical fertilizers, harmful pesticides, fungicides, herbicides and

insecticides to improve the production rate of the crops. While these techniques might help farmers to improve their yield, they are short-sighted in nature and can cause poisoning of the food we consume. Hence organic farming is the ultimate solution to prevent this disaster upon human civilization.

- One of the most important impact of organic farming takes the form of increased ecology and soil health. These factors create a system that is more resilient to both climate and pests. As the farmers in the Village are illiterate about the benefits of organic farming, we had the responsibility as a student to guide them about the process. We also learnt the problems faced by the farmers like soil erosion, water scarcity and lack of capital. As the process of organic farming minimizes the use of pesticides, reduces the soil erosion and thereby shortage the environmental issues. This survey about the organic farming will be so helpful to the farmers and vanish their problems in the field.
- We had a great time with the farmers of the area and understood their own difficulties. The survey is also helpful for us to develop our skills and knowledge about farming.

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AISHE code of the Participating Institute	: 41151

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DECLARATION

We declare that the project work is original and carried out by us under the guidance of **Priscilla Pacifica. G**. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

Signature

Kamaladarshni.P	Jini Mol.S
Nikitha.P	Shehina.K
Muthumari.R	Oshin merisha.R
Saranya.D	Muthu Rajasri.R
Rithiya M	Dibya Lugun

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title / award and the work is genuine.

Signature of the Project Supervisor

G. Priscilla Pacifica

Proforma for the Submission of Project Report for
Virtual Internship Programme on Sustainable Development Goals and Community Engagement

Title of the Project : STUDY ON PROTECTION AND RESTORATION OF LAND

Details of Participant:

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UBA theme for Project Work. **:** Convergence

SDGs to be achieved **:** Life on land, Responsible consumption and production, Climate action .

Background of the study **:**

The land we live in is very precious, not only for us but also for all the living things on land.Human life depends on the earth for our sustenance and livelihood. Plant life provides 80 percent of our human diet, and we rely on agriculture as an important economic resource and means of development. Forests account for 30 percent of the Earth's surface, providing vital habitats for millions of species and important sources for clean air and water; as well as being crucial for combating climate change. A flourishing life on land is the foundation for our life on this planet.We are all part of the planet's ecosystem and we have caused severe damage to it through deforestation, loss of natural habitats and land degradation etc. Promoting a sustainable use of our ecosystems and preserving biodiversity is not a cause. It is the key to our own Survival. Terrestrial ecosystems provide a series of goods, raw materials for construction and energy, food and a series of ecosystem services including the capture of carbon, maintenance of soil quality, provision of habitat for biodiversity, maintenance of water quality, as well as regulation of water flow and erosion control, therefore contributing to reduce the risks of natural disasters such as floods and landslides, regulate climate and maintain the productivity of agricultural systems. Maintaining those ecosystems greatly support climate change mitigation and adaptation efforts. Trees provide food and oxygen. They help save energy, clean the air, and help combat climate change. Each part of trees have some medicinal values in it. Neem tree which is very common in our place has appreciable medicinal values and economic values too. Global warming has reached its peak , the only way to combat the drastic change is to grow more trees , make our planet green

.we can't stop the use of vehicles and industries but we can reduce its impact on land by growing more trees. That's why growing trees is the need of the hour. Forest protection is concerned with the preservation or improvement of forest and prevention and control of damage to forest by natural or man made causes like forest fires, plant pests, and adverse climatic conditions (global warming). One of the main reasons of deforestation is commercial felling of trees. According to an estimate, about 1,600 million cubic metres of wood have been used for various purposes in the world. Although trees are considered as perennial resource, when exploited on a very large scale, their revival cannot be possible. Now most of our resources are lost. We have to take a step forward to plant more trees and appreciate animal growth to conserve and preserve our natural resources. Trees, animals, microorganisms, birds, and insects compromises the eco system. We all know about the carbon cycle, plants are eaten by herbivores, herbivores are eaten by carnivorous, when, these animals die they become manure for trees. Thus every part of eco system is very important to have healthy eco system. A healthy eco system can be created protecting and growing trees, animals and also the birds. Birds also play vital role in the eco system, the seeds that we plant may fail to grow but the seeds excreted by birds never fails to grow. A number of animals and birds have become endangered which drastically affects our eco system. Growing crops and cattles together also forms a small eco system. If we have a good eco-system , we can get most of our basic requirements without a halt. The exploitation of land has also lead to various health issues both in humans and animals. Deforestation and forest degradation results in loss of habitat for all species, a decrease in freshwater quality, an increase in soil erosion, land degradation and higher emissions of carbon into the atmosphere. In short, not taking action on forests impacts both the health of the planet and our communities. Trees also prevent soil erosion and

landslides. If our land is restored the quality and quantity of under water, food production increases and there will decrease in natural disasters and control in climatic changes. Therefore it is very important to preserve and restore our forest.

Objectives of the study:

We have to bring back our lost eco system. Halt deforestation and excessive mining. Encourage afforestation and plant more trees. Encourage the growth of cattle and cash crops or food crops as it would be helpful to bring back our eco system and make us build a strong economy. Every plants and trees has its own medicinal values, such plants should be grown. If it's exported, it will increase our country's economy. To meet the needs of the growing population agriculture should be encouraged. Bio gas production should also be encouraged. To solve the problems on land we should

✓ Conserve and restore terrestrial and freshwater ecosystems.

✓ End deforestation and restore degraded forests.

✓ Ensure conservation of mountain ecosystems.

✓ Protect biodiversity and natural habitats.

✓ Eliminate poaching and trafficking of protected species.

People should employee themselves in afforestation, cattle framing and Poultry farming which would be helpful to bring back our eco system and build our economy. Many industries depend on trees for raw materials, so by growing such trees we can get an income. We humans get our food from plants, if plant growth is increased food. Production will also be increased. Thus starvation can be eradicated.

Methodology adopted:

Surveying a questionnaire based on eco system was structured to elicit the required information from the respondents through google forms. The data were collected from 50 respondents. This study is based on general public's opinions about habitat and eco system in Thoothukudi district.

Major finding :

- ✓ Agricultural land in the Kalangarai village is 130.20 acres.
- ✓ It has 180.52 acres of water bodies.
- ✓ 206.86 acres of housing area
- ✓ There is 44.7% of kutcha shelter livestock.
- ✓ 26.3% of pucca shelter livestock.
- ✓ 28.9% of open shelter livestock.
- ✓ 47.6% of unirrigated area and 52.4% of irrigated area.
- ✓ Average production of milk is 70 litres per day.
- ✓ Cow dung produced per day is 60.76 kilograms .
- ✓ Most of the people suffer from breathing problems.

Suggestions / Recommendations:

We can give our support to protect our eco system by doing the following

- ✓ Reduce your use of paper. Avoid printing and substitute it with electronic devices or carriers.

✓ Clean your local parks and forests.Organise your own or join an existing clean-up event to sustain the ecosystem of your local green space.

✓ Composting food scraps can reduce climate impact while also recycling nutrients.

✓ Awareness about the protection and restoration of eco system should be created to every people. Make people aware about the encouraging government schemes to promote our eco system. Every people should come together to restore our eco system .

✓ Dumping of hazardous waste on land also affects the lands fertility. Degradable and non degradable waste should be disposed accordingly . These waste should be recycled in a productive way such that it is again useful or made harmless .

✓ We humans have destroyed the land by our activities. Still we have time to conserve, protect, and restore our land and the organisms on it. We can conserve our land by avoiding further deforestation, excessive mining, dumping non - degradable waste on land . It will be more productive, if we grow food crops or cash crops and cattles together because if there is a loss in crops, we can manage our income from the cattle's milk . And weeds in the crop field can be used as cattle feed. The recycled water for waste water treatment plants shall be used for growing crops. Cattle's excreta can use as manure for the crops.

✓ We are responsible for protecting all the organisms on land .we have to conserve our native species with great care and importance. Plants, trees and animals suitable for a particular land should be appreciated to be grown.

Impact of this work on learning of students/teachers:

We came to know more about the importance of eco system, it's conservation, restoration. We understood that how we have exploited our beautiful environment. We searched about the restoration of the exploited land effectively. We hope our land and it's valuable resourceswill be restored.

"A perfect land a happy life."

Details of Project Supervisor

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DECLARATION

We declare that the project work is original and carried out by us under the guidance of **Dr.G Priscilla Pacifica .** The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

Signature

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CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title / award and the work is genuine.

Signature of the Project Supervisor

G. Priscilla Pacifica

Proforma for the Submission of Project Report for
Virtual Internship Programme on Sustainable Development Goals and Community Engagement

1. Title of the Project : GENERAL PUBLIC OPINION ABOUT COVID-19 PANDEMIC IN THOOTHUKUDI CITY

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3. UBA theme for Project Work : Covid 19

(a) Covid-19 (b) Water management

(c) Renewable energy (d) Artisans, industries and livelihood

(e) Basic amenities (f) Convergence

4. SDGs to be achieved : iii. Good health & Well-being

i. No poverty
ii. Zero hunger
iii. Good health & Well-being
iv. Quality education
v. Gender equality
vi. Clean water and sanitation
vii. Affordable & clean energy
viii. Decent work & economic growth
ix. Industry, innovation and infrastructure
x. Reduced inequality
xi. Sustainable cities & communities
xii. Responsible consumption and production
xiii. Climate action
xiv. Life below water
xv. Life on land
xvi. Peace & justice strong institutions
xvii. Partnerships to achieve the goal

5. Background of the study:

Coronavirus disease is an infectious disease caused by by a newly discovered coronavirus. This pandemic originated in China and it has been still spreading over the world. The entire world is trembling to handle this pandemic. Covid-19 has swallowed many lives and also still swallowing many lives. People were locked up in their houses. All theme parks, theatres, parks, schools, colleges, stadiums, shops and malls were closed. Nowadays some relaxations are being given to the people by the government. Masks and applying sanitizers are recommended to the people by the government to safeguard themselves. Restrictions are made to pass through the states, countries and continents. Since no medicines are found till now, ministers, millionaires, countries, states and citizens of all the countries are fixed with horror. But some vaccines are found to fight it against this disease. So covid vaccines play an inevitable role in the fight against this pandemic. So so it is necessary for all to get vaccinated. Let's get united in the fight against covid-19.

In late December 2019 a new (novel) coronavirus was identified in China causing severe respiratory disease including pneumonia. It was originally named Novel Coronavirus and The World Health Organization (WHO) advised the following language associated with the virus. The virus causing the infection has been named - severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).The disease caused as a result of infection is named - coronavirus disease (COVID-19). COVID-19 has been categorised as an airborne High Consequence Infections Disease.SARS-CoV-2 is spreading between people globally and can be seen on the WHO situation reports dashboard which is updated daily.

Symptoms may differ with severity of disease. For example, shortness of breath is more commonly reported among people who are hospitalized with COVID-19 than among people with milder disease (non-hospitalized patients). Atypical presentations of COVID-19 occur often, and older adults and people with medical comorbidities may experience fever and respiratory symptoms later during the course of illness than people who are younger or who do not have comorbidities. In one study of 1,099 hospitalized patients, fever was present in only 44% at hospital admission but eventually 89% of patients had a fever sometime during hospitalization.Fatigue, headache, and muscle aches (myalgia) are among the most commonly reported symptoms in people who are not hospitalized, and sore throat and nasal congestion or runny nose (rhinorrhea) also may be prominent symptoms. Many people with COVID-19 experience gastrointestinal symptoms such as nausea, vomiting or diarrhea, sometimes prior to having fever and lower respiratory tract signs and symptoms.Loss of smell (anosmia) or taste (ageusia) has been commonly

reported, in a third of patients in one study, especially among women and younger or middle-aged patients.The World Health Organization declared the coronavirus outbreak to be a public health emergency of international concern on 31 January 2020. Severe COVID-19 patients should be managed and treated in a critical care unit. Performing a chest X-ray/CT can judge the severity of the disease. The management of COVID-19 patients includes epidemiological risk and patient isolation; treatment entails general supportive care, respiratory support, symptomatic treatment, nutritional support, psychological intervention, etc. The prognosis of the patients depends upon the severity of the disease, the patient's age, the underlying diseases of the patients, and the patient's overall medical condition. The management of COVID-19 should focus on early diagnosis, immediate isolation, general and optimized supportive care, and infection prevention and control. Despite having a small footprint origin, COVID-19 has expanded its clutches to being a global pandemic with severe consequences threatening the survival of the human species. Over the past two decades, rural village has been negatively impacted by terrorism, lack of funding and loss of population. COVID-19 has had similar effect, but in an incredibly short period of time. Covid-19 has affected the fishing practices, agriculture , salt mining. These affected the village people to a great extent

6. Objectives of the study:

- To identify the public opinion about COVID-19 in Thoothukudi city.

- To find out the problems faced by general public in getting vaccination and knowing their health conditions and medications at the time of infection.
- We will be contacting patients who have or have had COVID-19 and will be inviting them to participate by giving their individual consent.
- To provide the basic knowledge about the disease and the prevention measures that should be implemented in Thoothukudi city.
- To make them identify the early symptoms of Covid-19 disease due to underlying conditions.
- To find out the problems faced by general public in getting vaccination and knowing their health conditions and medications at the time of infectio.

7. Methodology adopted:

The present study is descriptive and analytical in nature.A questionnaire was structured to elicit the required information from the public. The study is based on general public opinion about Covid -19 in Thoothukudi city. Hence the questionnaire is related on importance of vaccination,awareness and basic knowledge about Covid - 19 . Percentage analysis was used to analyse the data .

8. Major findings:

Following are the findings in regard to various response from the public regarding "General Public Opinion about Covid - 19 Pandemic in Thoothukudi city "

- Our research found that their working process was 50% decreased. Their major works like fishing, agriculture and salt mining were decreased to a great extent.
- 40 % of the population has been vaccinated. Many of them were not aware about the importance of vaccination.
- Due to Covid-19 their regular schedules has been collapsed. There prevails health risks such as depression,S anxiety and insomnia among the people.

9. Suggestions / Recommendations :

- Stay safe by taking some simple precautions, such as physical distancing, wearing a mask, keeping rooms well ventilated, avoiding crowds, cleaning your hands, and coughing into a bent elbow or tissue.
- Vaccination is the most effective way to protect against infectious diseases. Vaccines strengthen your immune system by training it to recognise and fight against specific viruses.Being vaccinated is important.
- When stressors throw your nervous system out of balance, relaxation techniques such as deep breathing, meditation, and yoga can bring you back into a state of equilibrium.Engaging yourself through indoor work activities can help more during this pandemic.
- Aviod touching surfaces, especially in public settings or health facilities, in case people infected with COVID-19 have touched them. Clean surfaces regularly with standard disinfectants.
- Frequently clean your hands with soap and water, or an alcohol-based hand rub.

10. Impact of this work on learning of students/teachers:

Initially, most governments have decided to temporarily close the schools to reduce the impact of Covid-19. Later it was reopened for a few grades, which increased the number of infection rates and then closed again.

Though schools are closed, students are attending their classes through various education initiatives like online classrooms, radio programs. Though it is a good thing happening on the other side, there are lots of students who didn't own the resources to attend the online classes suffer a lot. Many students are struggling to obtain the gadgets required for online classes.Teachers who are all experts in Blackboard, Chalk, books, and classroom teaching are really new to this digital teaching, but they are adopting the new methods and handling it like a pro to aid the students in the current position.But on the negative side, many teachers are looking for an alternative job to support their families.

Educated parents are supporting their children throughout the pandemic, but we require to understand that there are some illiterate parents and their feeling of helplessness to help their children in their education.There are students in India who came to school just because they can get food. The great midday meal scheme has helped many children who couldn't bring their food from the home to get their nutrition.Because of the closure of the schools, many students were suffering from not having enough food for their survival.

DECLARATION

I / We declare that the project work is original and carried out by me / us under the guidance of _____. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

Signature(s)

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AISHE code of the Participating Institute :

Name of the Regional Coordinating Institute of UBA:

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title / award and the work is genuine.

Signature of the Project Supervisor

Proforma for the Submission of Project Report for

Virtual Internship Programme on Sustainable Development Goals and Community Engagement

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3. UBA theme for Project Work **:** (e) Basic amenities

4. SDGs to be achieved:

i. No poverty
ii. Zero hunger
iii. Quality education
iv. Decent work & economic growth
v. Reduced inequality
vi. Gender equality

5. Background of the study in Kalangarai:

✓ As per the study in Kalangarai we found that education is their major need. An educated man can develop their village, so in order to develop village we suggest to give the basic education for the people in Kalangarai.

✓Quality education enables people in Kalangarai village of korambalam panchayat to develop all of their attributes and skills to achieve their potential as human beings and members of society. Quality education provides the foundation for equity in society. Quality education is one of the most basic public services.

✓A quality education is one that focuses on the whole child—the social, emotional, mental, physical, and cognitive development of each student regardless of gender, race, ethnicity, socioeconomic status, or geographic location. This will help the people in Kalangarai to contribute and develop their village.

✓Rural education is important not only for the enhancement of life quality of the rural community, but also for the overall progress and development of the Kalangarai village.

✓Quality education specifically entails issues such as appropriate skills development, gender parity, provision of relevant school infrastructure, equipment, educational materials and resources, scholarships or teaching force in the village.

✓The right to education is not only the right to access education but also the right to receive an education of good quality. Education must be available and accessible but also acceptable and adaptable. So high level education should be given to Kalangarai people.

✓The Sustainable Development Goal target 4: states that “By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy". So, for sure we should enhance the village people knowledge to achieve the goal.

✓Target 4. By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least.

✓Teachers are the key for achieving all of the SDG 4 targets.

6. Objectives of the study in Kalangarai village:

✓The basic objectives of Rural Development Programmes have been alleviation of poverty and unemployment through creation of basic social and economic infrastructure, provision of

training to rural unemployed youth and providing employment to marginal Farmers/Laborer's to discourage seasonal and permanent migration to urban areas.

✓To promote state, regional and local delivery systems which bring about efficient and effective education for children in Kalangarai village.

✓To stimulate discussion, research, and policy development regarding equal educational opportunities for all students in the village.

✓To develop the powers of critical independent thought. So that their thoughts increase to develop their village.

✓To induce sensitiveness of perception, receptiveness to new ideas and imaginative sympathy with the experiences of others.

✓To produce an awareness of the mainstream of our cultural and literary and scientific traditions in Kalangarai village.

✓To make available important bodies of knowledge concerning nature, society, ourselves, our country and its history.

✓To cultivate an intelligent loyalty to the ideals of the democratic community.

✓To equip young men and women with the general skills and techniques and the specialized knowledge, which together with the virtues and aptitude already mentioned will make it possible for them to do some productive work related to their capacities and interests.

✓To strengthen those inner resources and traits of character, which enable the individual, when necessary, to standalone and to establish and fulfill the needs of village.

✓University Education Commission (1948) rightly points out that the purpose of all education is to provide a coherent picture of the universe and an integrated way of life. The Committee on Higher Education for Rural Areas (1955) clearly mentions that there is no difference between rural and urban education. It remarks, 'In our opinion, the aims and objectives of higher education in rural areas are not fundamentally different from those of higher education in urban areas.' So, it is very important to educate the Kalangarai young people.

7. Methodology adopted in Kalangarai village:

In Kalangarai village of korambalam panchayat, certain educational needs are necessary and talented teachers and motivating guides are required.

✓A teaching method comprises the principles and methods used by teachers to enable student learning.

✓It is clear that rural areas suffer from many problems that people living in first world countries would consider a basic necessity. So, we think that knowledge is necessary for life.

✓For a particular teaching method to be appropriate and efficient it has to be in relation with the characteristic of the learner and the type of learning it is supposed to bring about. So, teaching method is more important.

✓The education system is seriously lacking in many aspects and these are a few common problems that these schools will face in the rural areas. So, to eradicate illiteracy problem we should bring good education system in Kalangarai village.

✓Teaching and assessments are connected; student learning is continuously measured during teacher instruction. So that there will be good relation with students and teachers in Kalangarai village.

✓Families in the rural community are living in poverty. They may not have enough money to send their children to school. So free education should be provided. Knowledge is not for sale.

✓The approaches for teaching can be broadly classified into teacher centered and student centered. Student learning is measured through objectively scored tests and assessments.

✓However here are 4 practical ways to improve the quality of education for these rural area communities

***DIGI-ESKWELA PROJECT E-LEARNING TABLETS**

***BOOK DONATIONS**

***VOLUNTEER PROGRAMS**

***THE CASESTUDY PROJECT**

8. Major findings in Kalangarai village:

In Kalangarai village of korambalam panchayat, we found that education and poverty is their major problem. Our project is about to solve their problems. More methodologies are created to help them. Some ideas which should be implemented within 2030 are:

*By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes in Kalangarai village.

*By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education. Change should be brought from primary education which will help Kalangarai to develop.

*By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university. Students should not stop with school level they should enhance their knowledge in college also.

*By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship. Young people should develop Kalangarai people.

*By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy.

*By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries.

So, in Kalangarai quality education should be given. Education liberates the intellect, unlocks the imagination and is fundamental for self-respect. It is the key to prosperity and opens a world of opportunities, making it possible for each of us to contribute to a progressive, healthy society. Learning benefits every human being and should be available to all.

9. Suggestions / Recommendations:

To eradicate poverty and unemployment, certain things to be done in Kalangarai village of korambalam panchayat. We suggest some of the needs of the people to be fulfilled.

✓**Quality education:** Education is the most important need for all the human beings. Proper and well-advanced education should be given.

✓**Zero Hunger**: We all should take a vow that ' No people should die due to hunger'. Free food supply like sathunavu should be supplied for school going children in Kalangarai.

✓**Job opportunities:** Major crisis in our country is lack of job opportunities. Job opportunities should be allotted for people who are suffering from poverty.

✓**No poverty:** Poverty can be easily eradicated by educating people. People should be given high standard knowledge, so that they will get proper job and good salary.

✓ **Valuable salary:** Valuable salary should be given to people in Kalangarai, for that they should learn basics of mathematics. Knowledge is all they want to develop themselves.

10. Impact of this work on learning of students/teachers:

After things survey, we came to know that we should do a lot to develop our country. In Kalangarai, there is no proper school for education, they lack electricity facility, they lack knowledge etc... They didn't know what is the source to fulfill their needs, for that we feel proper education should be given. If the base is strong, then the building will be beautiful without damage. In the same way if knowledge is given to Kalangarai village people then for sure they will deal with their own needs. Helping others gives us a wonderful feeling which is unreplaceable.

“Education is the passport to the future, for tomorrow belongs to those who prepare for today"

DECLARATION

We declare that the project work is original and carried out by us under the guidance of **G. Priscilla Pacifica.** The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

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CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title / award and the work is genuine.

Signature of the Project Supervisor

G. Priscilla Pacifica

Submission of Project Report for Virtual Internship Programme on SustainableDevelopment Goals and Community Engagement

Topic: To study about the Problems faced by Saltpan workers in Palaiyakayal in Thoothukudi District.

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UBA theme for Project Work : ***b) Water Management***

(a) Organic Farming *(b) Water management*

(c) Renewable energy *(d) Artisans, industries and livelihood*

(e) Basic amenities *(f) Convergence*

SDGs to be achieved :¬¬¬¬¬¬¬¬¬¬¬¬ ***xv. Life on Land***

- No poverty
- Zero hunger
- Good health & Well-being
- Quality education
- Gender equality
- Clean water and sanitation
- Affordable & clean energy
- Decent work & economic growth
- **I**ndustry, innovation a infrastructure Reduced inequality
- Sustainable cities & communities
- Responsible consumption andproduction
- Climate action

- Life below water
- Life on land
- Peace & justice stronginstitutions
- Partnerships to achieve the goal

INTRODUCTION

Thoothukudi District is one of the 38 districts of Tami Nadu State in Southern India. Thoothukudi district is traditionally known as " Pearl City ". In that Palaiyakayal is a village in Srivaikundam in Thoothukudi district. It is a Panchayat town. The Palaiyakayal Village is located in the banks of river Thamirabarani. Palayakayal village block is a revenue block. In Srivaikundam, it has total of 31 Panchayat villages.

BACKGROUND OF THE STUDY

This survey was conducted among Saltpan workers and supervisors in a rural area of Palaiyakayal in Thoothukudi District in tamil nadu. Saltpan is an important physicological necessity of life with an enormous and growing population. Thoothukudi is a major port city in Tamil Nadu. Salt production is carried out on an area of 25,000 outskirts of Thoothukudi. Many village workers complained that there are no basic amenities on site with no provision for safe drinking water, food,or sanitary facilities. There is not even a temporary toilet facility. It is very difficult to the Village Saltpan workers, especially the women. The workers were working were very harsh and physically draining.

Many of the Salt pan workers felt that their lives were miserable due to the poor wages they receive which was not commensurate with the efforts put in. The wages given to the workers accordingly to the working days. There is no work during the rainy season . It is very difficult to the Saltpan workers. "The Women workers are paid around Rs 150-200 for every three hours of work and men are paid around Rs 400 for the same duration in Palaiyakayal. The workers expressed dissatisfaction at these wages and felt that they are were underpaid for the amount of work extracted.

The current study on Salt workers in Palaiyakayal Village also brings to light the fact that these workers too face similar problems in their daily lives. Adverse working conditions and financial insecurity are the main problems in the lives of the Salt workers which they face in their lives. The Salt pan workers feel that more needs to be done for improving their quality of life from the side of both, the government and the employers. In the village Salt pan workers had Dental problems (41.7%) ,Skin problems (38.1%) ,and Musculoskeletal problems (36.7%) as common among them.

The socio economic conditions of Salt pan women workers are still backward with poor income. The basic needs are not given to them properly and they are unsecured. They are affected many health issues through their poor working conditions

OBJECTIVES

- ★ To study about the problems faced by Saltpan workers.
- ★ To offer suitable suggestions to improve the working condition of the Salt pan workers.

METHODOLGY USED

The study is descriptive and analytical in nature. A questionnaire was prepared and circulated among 50 respondents working at the salt pan in palayakayal village. The study was about the problems faced the villagers at salt pan, recovery idea. Percentage analysis was used to analysis the collected data.

MAJOR FINDINGS

- Majority of the respondents (68%/) are male
- Most of the respondents (42%) are in between the age of 26-35 years.
- Majority of the respondents (79%) are married.
- Majority of the respondents (30%) are graduates
- Majority of respondents (75%) work for 5-7 hours
- Majority of the women respondents (80%) are paid between Rs. 300-400
- Majority of the male respondents (90%) are paid between Rs. 500-600
- Majority of the respondents (85%) fill upto 5-6 tonnes of salt/ per day
- Majority of the respondents (65%) are not satisfied with the amenities provided at work place
- Majority of respondents(92%) face vision defectives
- Majority of respondents (95%) are below poverty level

SUGGESTIONS

- Alternative job options can be given to salt pan workers during rainy season, because salt cultivation is not possible during those days
- Protective garments can be given to workers to safeguard them from extreme temperature
- Government can avail welfare schemes to improve their livelihood
- One child from one family of these workers can be educated to raise their standard of living
- Medical camps can be conducted to check the health conditions of the workers

IMPACT OF THIS WORK ON LEARNING OF STUDENTS/ TEACHERS

Saltpan workers live in very poor and inhuman living conditions without access to basic services and living requirements. For the most months of the year, saltpan workers live in makeshift accommodations near salt mines. Medical camps can be conducted to have a periodic check about the health of the workers as they are highly affected by vision problems, arthritis and blood pressure. Workers can be supported with proper safety measures to avoid harmful effects on working in extreme temperature. The study focuses on the uplift of the workers life by giving education for atleast one child in one family, government can take needful measures for the problem.

DECLARATION

We declare that the project work is original and carried out by us under the guidance of MS. MANUEL INFANY.T. The project work has not been submitted elsewhere forthe award of any degree and the work is genuine.

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Name of the Regional Coordinating Institute of UBA: GANDHIGRAM RURAL INSTITUTE, DINDUGAL DISTRICT

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title/ award and the work is genuine

Signature of the Project Supervisor

Proforma for the Submission of Project Report for
Virtual Internship Programme on Sustainable Development Goals and Community Engagement

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3. UBA theme for Project Work : (b)***Water Management***

4. SDGs to be achieved. : (vi)***Clean water and sanitation***

5. Background of the study :

Water is the most needed substance for all living beings. So it is important to conserve it. But now the main problem faced by the people is water scarcity. So we are insisted to take this water management topic to know more about managing

water and to conserve it. Water Management is important since it helps to determine future irrigation expectations. Water management is the management of water resources under set policies and regulations. Water, once an abundant natural resource, is becoming a more valuable commodity due to droughts and overuse. Water resource management is the activity of planning, developing, distributing and managing the optimum use of water resources. It is a sub-set of water cycle management. Ideally, water resource management planning has regard to all the competing demands for water and seeks to allocate water on an equitable basis to satisfy all uses and demands. As with other resource management, this is rarely possible in practice. Only three present of the water resources on Earth is fresh and two-third of the freshwater is locked up in ice caps and glaciers. One percent is in remote, inaccessible areas and much seasonal rainfall in monsoonal deluges and floods cannot easily be used. At present only about 0.08 percent of all the world's fresh water is exploited by mankind in ever increasing demand for sanitation, drinking, manufacturing, leisure and agriculture.

The field of water resources management will have to continue to adapt to the current and future issues facing the allocation of water. With the growing uncertainties of global climate change and the long-term impacts of management actions, the decision-making will be even more difficult. It is likely that ongoing climate change will lead to situations that have not been encountered. As a result, alternative management strategies are sought for in order to avoid setbacks in the allocation of water resources.

Ideally, water resource management planning has regard to all the competing demands for water and seeks to allocate water on an equitable basis to satisfy all uses and demands. As with other resource management, this is rarely possible in practice. One of the biggest concerns for our water-based resources in the future is he sustainability of the current and future water resource allocation.

6. Objectives of the study:

- To identify the public opinion about Water Management and the Sanitation facilities in Kalangarai.
- To find out the problems faced by the villagers without basic sanitation facilities such as toilets, pure drinking water and waste water management.

7. Methodology adopted:

This study is based on the general public opinion about water management and sanitation facilities in Kalangarai. The required information was gathered by the participants by meeting the villagers in person. We made them feel comfortable so that we could observe and record information about their lives.

8. Major findings :

- Majority of the respondents (81.1%) drainage linked to households are covered.
- Some of the respondents (11.3%) drainage linked to households are open
- Some of the respondents (7.5%) have no drainage linked to households.
- Majority of the respondents (49.5%) use piped water.
- Majority of the respondents (34.8%) use community tap.
- Majority of the respondents (9.1%) use hand pump.
- Majority of the respondents (6.6%) use open well.
- All the respondents of ST caste are having toilets.
- Most of the respondents of SC caste (96%) are having toilets.
- Very few respondents of the OBC caste (1.17%) are having toilets
- Majority of the respondents of the general category (99.17%) are having toilets.

9. Suggestions / Recommendations :

It is suggested that

- The government should set up drip irrigation, rainwater harvesting tanks or large canals in rural areas to alleviate water scarcity.
- The government can come up with a plan as one toilet for each home and uplift the livelihood of the rural people.
- To create awareness by conducting awareness programs through colleges and schools.
- Implement some new techniques to conserve the available water.
- The government should limit the water supply in those areas which enjoys the unlimited water supplies.
- There are many traditional water bodies which have been in disuse for the longer time. So the government can reuse these water bodies as the recharging points.
- In rural areas the government can lay drains by open trenching method meaning you can cut the earth & lay drainage lines from top.
- In the cities this may not be always possible as large infrastructure has grown over & there is no space to lay drainage lines.
- The government can also use techniques such as trench less technology or micro-tunelling technique
- All treated water should be utilised for irrigation, fish culture, horticulture, gardening, water sprinkling and no fresh water should be permitted for these activities.
- Other measures which the new government should immediately adopt include identification of non-point sources, restricting abstraction of water for the purpose of cultivating the river bed, total ban on sand mining,

undertake dredging of river beds to increase water holding capacity, and monitor groundwater recharging at regular intervals.

10. Impact of this work on learning of students/teachers:

We learned about the difficulties faced by the villages and places where water is not managed properly. We learned that we also need to take some steps to save water and save life. We came to know that many have lost their lives by drinking dirty water, due to diarrhoea caused by poor water, sanitation and hygiene and scarce or unreliable water and sanitation facilities. Water is the essential need of each and every human being. So water scarcity is the critical problem faced by public in many of the places. In this village we came to know that water scarcity affects the daily life of the respondents. Without clean, easily accessible water, they really suffer a lot.

We came to know that Women and children are worst affected because they are more vulnerable to diseases of dirty water and women and girls because they often bear the burden of carrying water for their families.We understood that only access to clean water changes everything; it's a stepping stone to development. When people gain access to clean water, they are better able to practise good hygiene and sanitation.

By doing this project we came to know that villages are facing an acute shortage of water for households and agriculture activities with farmers bearing the brunt during cropping season.

Details of Project Supervisor

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Name of the Regional Coordinating Institute of UBA: Gandhigram Rural Institute.

DECLARATION

We declare that the project work is original and carried out by me / us under the guidance of **Priscilla Pacifica.G**. The project work has not been submitted elsewhere for the award of any degree and the work is genuine.

Signature

Marsalin monika. R.	Gomathi Ambigai. K
Maria Amali Infanta. R.	Catherin Imagulate. J
Buhari Fathima. K.	Nandhini. L
Eginsha. E.	Shanthi. M
Anisha briskilla. A.	Mary Ronalda. R

CERTIFICATE

This is to certify that the project has been carried out under my supervision and guidance. The project report has not been submitted for any other title / award and the work is genuine.

Signature of the Project Supervisor
G. Priscilla Pacifica