DEPARTMENT OF INFORMATION TECHNOLOGY

AD1006 - Unnat Bharat Abhiyan (UBA)

Focusing Area: Awareness drive about the central/state government rural development schemes/programmes.

Location: Amarambedu, Tiruvallur District, Tamil Nadu

REPORT

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UBA Focusing Area Mapping with SDG and Justification

Goal 4: Quality Education

The project includes training sessions on digital literacy and awareness campaigns that empower villagers, especially youth and women, with knowledge and skills for the digital world. It promotes lifelong learning through inclusive, community-based education.

4.4 – Increase the number of youth and adults with relevant skills, including technical and vocational skills, for employment and entrepreneurship.

Goal 10: Reduced Inequalities

TechBridge bridges the digital divide by enabling marginalized rural populations including women, the elderly, and economically weaker sections to access vital government schemes and services. By empowering these communities with digital literacy and support, the project promotes social and economic inclusion, reducing inequalities both within the village and in comparison to urban areas.

10.2 – Empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.

INTRODUCTION

Rural development has always been a crucial focus in India's journey toward becoming a self-reliant and inclusive nation. The government of Tamil Nadu, along with central authorities, has launched a wide range of welfare schemes aimed at empowering youth, improving employability, supporting entrepreneurs, and uplifting underprivileged communities. Programs like TNSkill, Naan Mudhalvan, Tamil Pudhalvan, TN Velaivaippu, StartupTN, NSIC, and DIC offer valuable opportunities such as free training, placement assistance, entrepreneurship funding, and preparation support for competitive exams like TNPSC and UPSC. However, in many villages such as Amarambedu in Thiruvallur district, awareness about these schemes remains significantly low.

Amarambedu is located near the Tamil Nadu–Andhra Pradesh border and is home to hardworking people, including farmers, students, and blue-collar workers. While many residents now own Android phones and televisions, they still lack proper updates about available government support. Language barriers, lack of localized communication, and low digital literacy further prevent them from exploring or benefiting from these schemes. Many youth complete their education but end up working in unrelated or low-paying jobs due to a lack of proper guidance and exposure to career-building resources.

This report aims to address this gap by proposing a hybrid solution that uses accessible technologies and Tamil-language communication to bridge the information divide. Through a community-based awareness system—including digital groups, IVR calls, mobile awareness vans, and trained local volunteers— this initiative hopes to connect the people of Amarambedu with valuable government schemes and help them build brighter futures.

OBJECTIVES OF THE PROJECT

The main objective of this project is to bridge the information gap between the government and the rural population of Amarambedu by introducing a tech-enabled, multilingual awareness system. The project aims to ensure that every individual in the village, regardless of education, age, or digital accessibility, is made aware of various beneficial government schemes and opportunities.

Specific objectives include:

1. **Enhancing Awareness:**
   To educate villagers about free government schemes related to employment, skill development, entrepreneurship, and education.

2. **InclusiveCommunication:**
   To design a system that works across devices—smartphones and basic feature phones—using mobile apps, IVR systems, and SMS alerts in the Tamil language.

3. **Human-Centered Outreach:**
   To introduce Digital Link Officers (DLOs) who guide, educate, and assist people in applying for relevant schemes.

4. **Multi-Mode Engagement:**
   To implement QR posters, awareness vans, and monthly registration camps to ensure effective offline outreach.

5. **Real-Time Support and Tracking:**
   To establish a centralized database and dashboard for tracking user activity, registration progress, and feedback for continuous improvement.

6. **Scalability and Replicability:**
   To develop a solution that can be expanded to other rural areas facing similar challenges

VILLAGE PROFILE – AMARAMBEDU

Amarambedu is a small rural village located in the Thiruvallur district of Tamil Nadu, close to the border of Andhra Pradesh. Due to its geographical position, the village often experiences mobile network issues, with phones switching to Andhra Pradesh towers and incurring roaming charges—especially for users of basic button phones. The village is predominantly home to middle-class families, small-scale farmers, and private company employees. While agriculture is practiced mainly during the rainy season, many youth take up low-paying company jobs after completing school or basic degrees. Only a few pursue higher education or competitive exam training, often due to a lack of awareness and support. Most students have studied in Tamil medium, which causes difficulty in understanding English-based college content and government schemes.
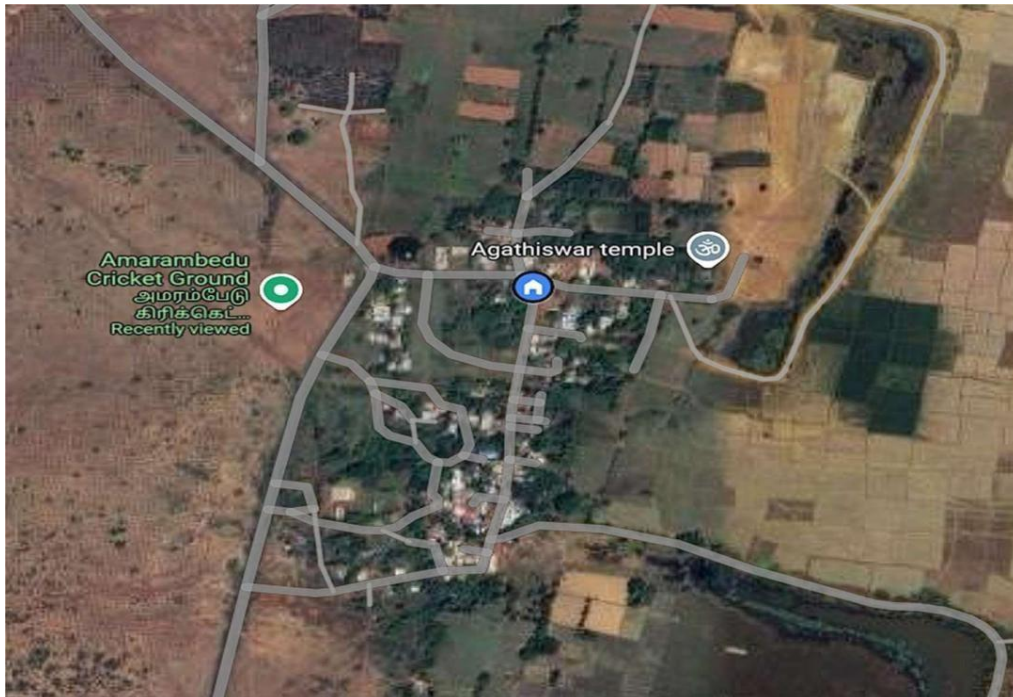
Although the use of Android smartphones and televisions has increased, proper awareness about valuable government initiatives like TNSkill, Naan Mudhalvan, Tamil Pudhalvan, and StartupTN remains very low. The village has basic internet facilities and moderate transport access, with Chennai being the nearest major city.

| Village Demographics – Amaramabedu	
Parameter	**Details**
Total Population	2.400 people
Male Population	1,230 maletc
Female Population	1,170 female
Gender Ratio	65%
Overall Literacy Rate	65%
Female Literacy	73%
Youth Population	680 individuals
Households	Approx, 540
Primary Occupation	Agriculture, Daily Wage, Private Jobs
Devices in Use	80% Android phones, 20% feature phones

The total population of Amarambedu is approximately 2,500–3,000, comprising various age groups with a substantial number of young people and school-going children. The gender ratio is nearly balanced, but a noticeable gap exists in literacy levels. The overall literacy rate stands at around 64.04%, with male literacy at 72.96% and female literacy at 55.23%. This gap highlights a need for focused educational support, especially for women and girls.

Gender-Based Family and Literacy Comparison
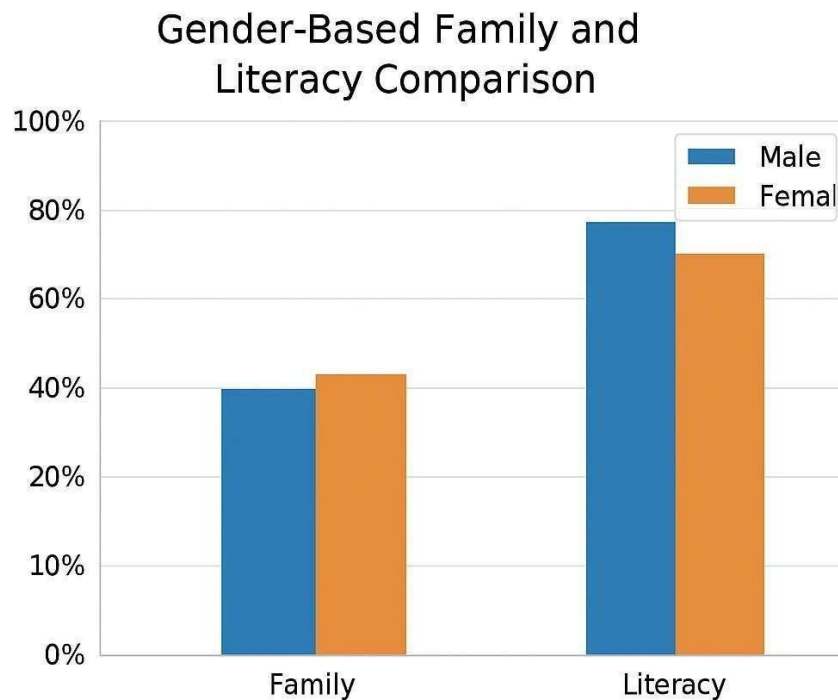
Educational institutions in and around the village are limited to government primary and middle schools. Students often travel to nearby towns or cities like Chennai for higher education. A significant number of the youth study in Tamil medium, which creates challenges in adapting to English-based college curriculums and competitive exams.

Transport infrastructure is moderate. The village is connected to nearby towns through local bus services that run a few times a day. The closest railway station is in Tiruvallur, which connects the village to Chennai and other major cities. However, the frequency and reliability of public transport remain a concern, especially during emergencies or for daily commuting.

Digital connectivity is available but inconsistent. Although many households now own smartphones and have access to televisions, network signals frequently switch to Andhra Pradesh roaming due to the village's proximity .

Education Levels by Age Group
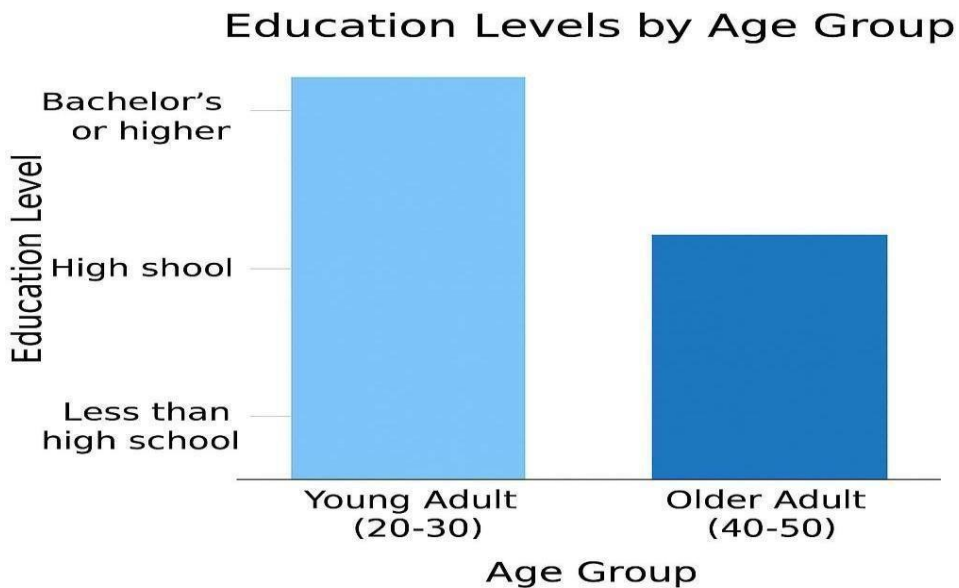
The Healthcare facilities are basic. A government primary health center is located nearby, but for more advanced medical needs, residents must travel to Tiruvallur or Chennai. The village has limited access to clean drinking water and sewage systems, though gradual improvements are being made under government rural development programs.
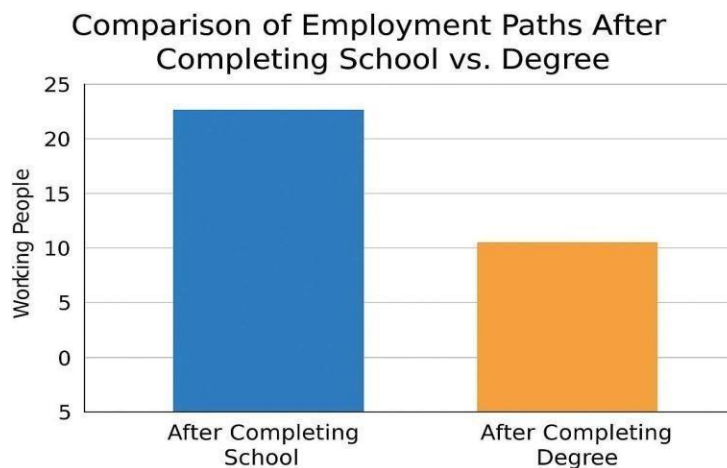
Overall, while Amarambedu has shown signs of development, it still faces challenges in digital access, educational infrastructure, transportation, and awareness about government schemes. A comprehensive and tech-driven outreach solution could bridge these gaps and empower the local population, especially the youth.

SOLUTION FOR RURAL SCHEME AWARENESS
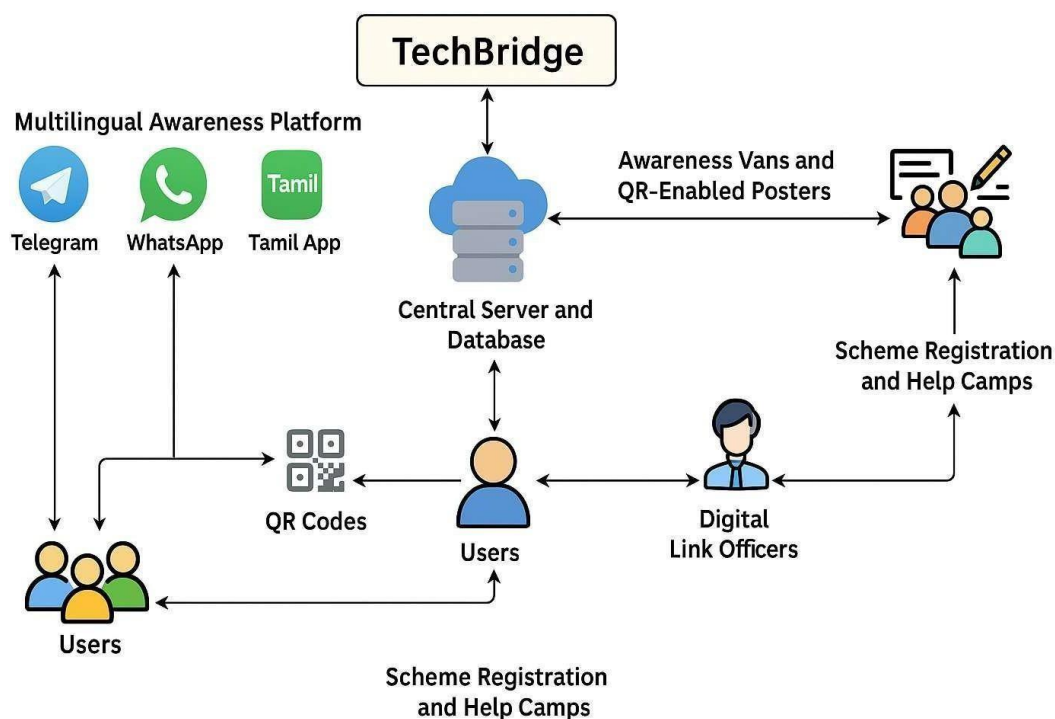
To address the widespread lack of awareness about government welfare schemes in the rural village of Amarambedu, a comprehensive and inclusive system named **"TechBridge"** is proposed. This solution is thoughtfully designed to bridge the gap between rural communities and available public resources, ensuring that every individual—irrespective of their education level, language fluency, or access to technology—can understand and benefit from various government initiatives. By integrating user-friendly digital tools with grassroots- level outreach and personalized guidance, TechBridge aims to empower villagers through information. Its modular structure makes it not only suitable for Amarambedu but also adaptable for similar under-informed rural regions across the country.

3.2.1 MULTILINGUAL AWARENESS PLATFORM

The first part of the solution involves creating a centralized platform that distributes scheme information in the Tamil language, ensuring that language is not a barrier. For Android users, the information will be shared via WhatsApp and Telegram channels, providing daily updates, video tutorials, and scheme announcements. For people with no smartphones, traditional methods such as SMS alerts in Tamil will be used. A lightweight Android application with voice navigation, large fonts, and simplified Tamil text will be developed to further assist semi-literate users.

3.2.2 IVR (INTERACTIVE VOICE RESPONSE) SYSTEM

To make scheme information accessible to users of button phones, an IVR-based system will be set up. Villagers can call a toll-free number to listen to pre-recorded Tamil voice messages about the latest schemes. This system requires no internet and works on all phone types. New content can be updated weekly to keep the users informed. Users will be given options to repeat, skip, or move to different topics during the call.

3.2.3 DIGITAL LINK OFFICERS (DLOS)

Young educated volunteers or government-appointed Digital Link Officers will be assigned in the village. Their role is to spread awareness door-to-door, explain schemes personally, and help with filling out application forms. DLOs will also track user interests and collect data that helps in personalizing the scheme recommendations. They act as a bridge between villagers and government systems, especially for those who lack the skills or confidence to navigate these platforms themselves.

3.2.4 AWARENESS VANS AND QR-ENABLED POSTERS

Mobile awareness vans equipped with speakers, LED screens, and pamphlets will travel to different parts of the village on scheduled days. These vans will play recorded messages and videos explaining various schemes and success stories in a visual format that villagers can easily understand. Additionally, QR-code enabled posters and stickers will be placed at bus stops, shops, and temples, allowing Android phone users to scan and get instant access to the app or information.

3.2.5 SCHEME REGISTRATION AND HELP CAMPS

Monthly camps will be conducted at central places like schools, community centers, or temples. These camps will provide hands-on help in registering for schemes, verifying eligibility, uploading documents, and solving technical issues. Officials or DLOs will guide the villagers in completing applications, thereby reducing errors and increasing successful registrations. Special focus will be given to students, farmers, unemployed youth, and women entrepreneurs.

3.2.6 CENTRAL SERVER AND ANALYTICS DASHBOARD

All activities, user queries, preferences, and registration data will be stored in a secure, cloud-based database. An analytics dashboard will be used by administrators to monitor the progress, find out which schemes are popular, and identify which demographic groups need more support. This allows for better planning, targeted communication, and continuous improvement of the system.

CHALLENGES FACED BY RURAL DEVELOPMENT PEOPLES

Rural development in villages like Amarambedu is often hindered by multiple socio-economic, infrastructural, and educational challenges. One of the primary issues is lack of awareness among the villagers about government schemes and welfare programs. Despite having access to Android phones and televisions, the flow of information is limited, and many people are unaware of opportunities like free skill training, placement support, startup loans, and exam preparation offered by both state and central governments.

Language barriers and low literacy rates, especially among women, further worsen the situation. Most of the population has studied in Tamil medium, making it difficult to understand English-based instructions, application processes, and scheme documents. This often leads to confusion, misinformation, or complete avoidance of beneficial schemes.

Another major issue is unemployment and underemployment. Many degree holders are forced to take up low-paying, unrelated jobs due to lack of career guidance and access to quality training. This is particularly true for youth who return to the village after completing graduation in nearby cities like Chennai.
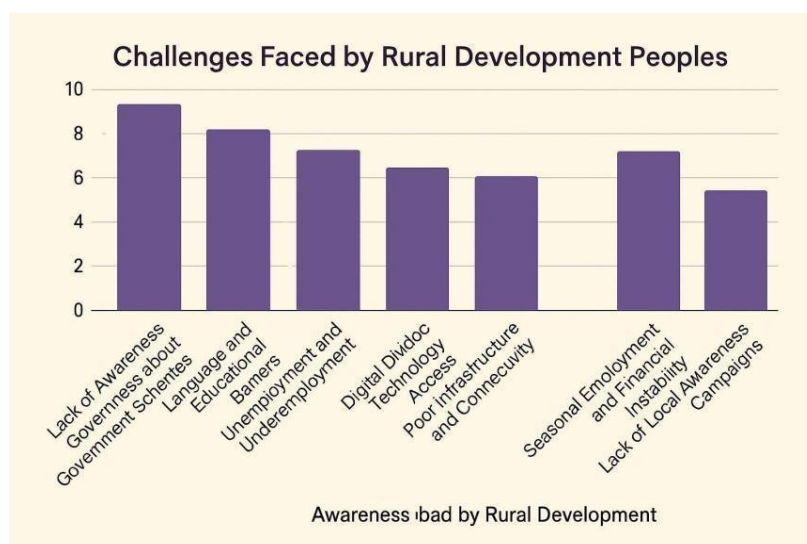
1. **Lack of Awareness about Government Schemes**

Many villagers are not informed about available schemes related to training, job placement, or entrepreneurship. The gap in communication between government services and rural communities remains a major issue.

2. **Language and Educational Barriers**

Most villagers have studied in Tamil medium and face difficulty understanding English instructions in official documents or scheme portals. Low literacy, especially among women, adds to the problem.

3. **Unemployment and Underemployment**

Even after graduation, many youth end up in low-paying jobs unrelated to their field of study. This is due to lack of career guidance, awareness about upskilling, and limited job opportunities in the village.

4. **Digital Divide and Technology Access**

Although smartphones are available, many villagers lack digital literacy. Elderly people struggle to use online services, and younger people are unaware of how to register or apply for schemes through online portals.

5. **Poor Infrastructure and Connectivity**

Inadequate internet access, transportation issues, and limited presence of training centers make it difficult to reach or benefit from government initiatives.

6. **Seasonal Employment and Financial Instability**

Dependence on agriculture during the rainy season leads to irregular income. During off-seasons, villagers often rely on low-income labor jobs, leading to long-term poverty and migration to cities.

GOVERNMENT SCHEMES AVAILABLE FOR RURAL DEVELOPMENT

To uplift and empower rural communities like Amarambedu, several government schemes are actively available under three broad categories: employment, entrepreneurship, and skill training.

In the employment category, schemes like the TN Velaivaippu Portal and TN Private Job Portal provide digital platforms where job seekers from rural areas can register and connect with employers. The Naan Mudhalvan initiative offers placement guidance, career development programs, and internship opportunities to college students and graduates. Additionally, the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) assures 100 days of wage employment per year for rural households, offering job security for agricultural laborers during non-farming seasons. District-level employment camps conducted by TNSDC also help bridge job gaps through local recruitment drives.

1. Employment and Job Opportunities :

1.1 TN Velaivaippu Portal

This portal is managed by the Tamil Nadu Employment Exchange and acts as a bridge between employers and job seekers.

• **Eligibility:** 10th pass, diploma, graduates, postgraduates

• **Benefits:** Job fairs, career guidance, vocational counseling, government job notifications

• **Features:** Online registration, resume upload, employment seniority tracking

1.2 TN Private Job Portal

A government-backed job listing site connecting private employers with local youth.

• **Eligibility:** Job seekers from all educational backgrounds

• **Benefits:** Filters for location, sector, salary; instant alerts

• **Key Advantage:** Targets rural and semi-urban youth who lack city-based job networks

1.3 MGNREGA

Mahatma Gandhi National Rural Employment Guarantee Act ensures a livelihood for the rural population.

• **Eligibility:** Unskilled adult rural citizens

• **Benefits:** Guaranteed 100 days of employment per year, daily wage payments

• **Additional Note:** Includes work like road building, water conservation, and irrigation

2. Entrepreneurship Support Schemes:

2.1 StartupTN & IND StartupTN

These initiatives promote innovation among young entrepreneurs in Tamil Nadu.

• **Support:** Incubation centers, business competitions, seed funding

• **Special Focus:** Tech startups, women-led startups, rural innovation

2.2 PMEGP (Prime Minister's Employment Generation Programme)

A scheme by the Ministry of MSME to encourage self-employment.

• **Financial Help:** Subsidy of 25–35% on project cost

• **Focus Sectors:** Manufacturing, services, and agri-business

2.3 TANCO (Tamil Nadu Industrial Cooperative Bank)

Supports cooperative societies and micro-industries with funding.

• **Support Type:** Term loans, working capital loans

• **Repayment:** Easy EMI with subsidies

2.4 DIC (District Industries Centre)

Provides a single-window clearance and support system for rural entrepreneurs.

• **Services:** Business registration, MSME Udyam registration, startup mentorship

• **Additional Help:** Market exhibitions, EDP training

2.5 NSIC (National Small Industries Corporation)

A government enterprise for empowering small industries.

• **Key Offerings:** Raw material assistance, marketing support, technical services

• **Extra Support:** Skill development centers for artisans and manufacturers

3. Skill Training and Exam Preparation Schemes:

This category focuses on improving **youth skills**, **career readiness**, and **exam preparedness**—especially crucial for rural youth struggling with English and modern job requirements.

3.1 Naan Mudhalvan Scheme

A flagship initiative by Tamil Nadu to empower college students with **job-oriented training**.

• **Courses Offered:** Coding, digital marketing, AI, cybersecurity, communication skills

• **Mode:** Online + Offline

• **Additional Features:** Industry exposure, certifications, career guidance

3.2 Tamil Pudhalvan Scheme

Designed specifically for **Tamil medium students** who struggle with English and soft skills.

• **Core Focus:** Spoken English, aptitude, presentation, interview skills

• **Impact:** Increases placement chances in top companies and government sectors

• **Mode:** Conducted via colleges and online platforms

## 3.3 TNSkill – Tamil Nadu Skill Development Corporation

Provides vocational training for unemployed youth to **prepare for industry-specific jobs**.

• **Sectors Covered:** Automotive, electronics, textiles, healthcare, IT, tourism

• **Features:** Free training, stipend during training, job placement support

• **Training Partners:** NSDC, private institutions, it is

3.4 Free TNPSC/UPSC Coaching Scheme

To encourage rural youth to appear for competitive exams, free coaching is offered in government centers.

• **Includes:** TNPSC Group 2, Group 4, UPSC Prelims coaching, SSC

• **Free Materials:** Books, mock tests, doubt-clearing sessions

• **Centers:** Located in each district, sometimes within arts and science colleges

Awareness Distribution of Government Schemes in Rural Areas
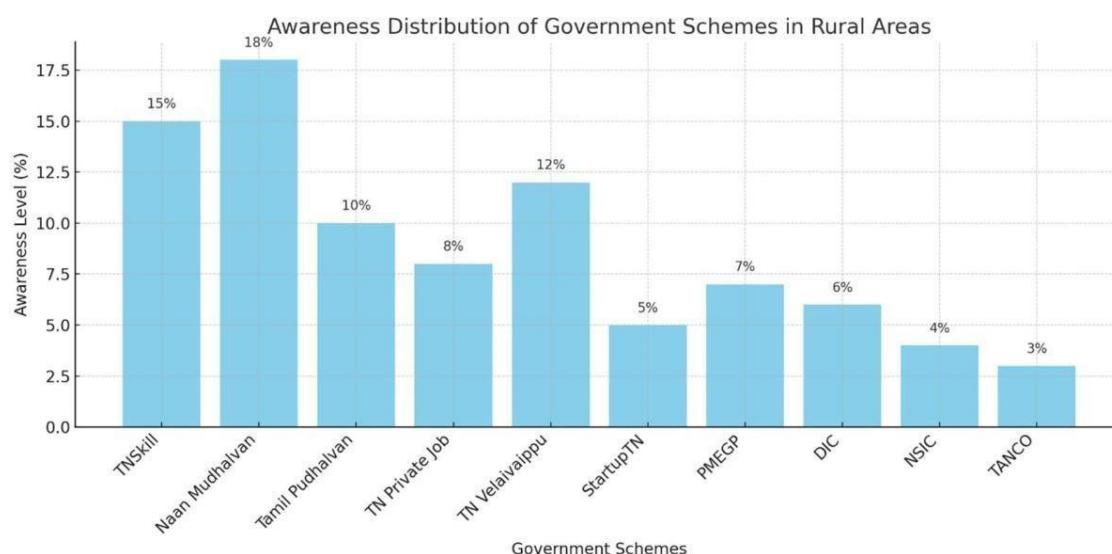
ACTIVITES

The implementation of TechBridge in Amarambedu involved a series of planned activities aimed at addressing the key issues faced by the villagers, especially in terms of awareness about government schemes, digital literacy, and application assistance. The following activities were conducted to empower the villagers and bridge the knowledge gap.

1. Community Surveys

A comprehensive survey was conducted to assess the existing demographic, economic, and educational conditions of the village. This survey helped identify the gaps in digital literacy, knowledge of government schemes, and the availability of resources. Key metrics were gathered, such as:

- Literacy rate by gender and age group
- Ownership of mobile phones and internet access
- Familiarity with available government schemes
- Existing skills and employment opportunities

2. Awareness Campaigns

One of the most critical activities was raising awareness about government schemes and opportunities for skill training, employment, and entrepreneurship.

These campaigns included:

- **Public Awareness Sessions:** Regular meetings were held at the village hall and local schools to inform villagers about various schemes such as **TN Skill**, **Naan Mudhalvan**, **Tamil Nadu Private Job Portal**, and more.

- **Poster and Pamphlet Distribution:** Printed materials explaining government schemes, eligibility criteria, and benefits were distributed in common areas like village squares, schools, and markets to reach a wider audience.

- **Radio Announcements:** Partnering with local radio stations to broadcast information about schemes was another effective way to spread the word, especially for those who may not have been able to attend in-person sessions.

3. Digital Literacy Workshops

In order to address the lack of digital literacy, multiple workshops were organized to teach villagers how to use smartphones and access online resources. These workshops included:

- **Basic Smartphone Training:** Teaching villagers how to operate smartphones, use apps, and browse the internet for essential services.
- **Online Application Tutorials:** Practical sessions on how to fill out and submit online forms for government schemes.
- **Social Media Literacy:** To increase access to job portals and government updates, sessions on using social media platforms for information sharing and job search were held.

4. Application Assistance

Once villagers were aware of the available schemes, application assistance was provided to ensure that they could apply successfully. Activities included:

- **Step-by-Step Guidance:** Volunteers and facilitators provided one-on-one assistance to help villagers complete online applications for government schemes like skill training and financial aid.
- **Document Collection:** Assistance in gathering required documents (such as identification proof, income certificates, etc.) for the application process.
- **Follow-Up Services:** After applications were submitted, follow-up services were provided to track application status, resolve issues, and ensure that villagers received benefits in a timely manner.

5. Local Leader Involvement

Local leaders were trained to be **Digital Champions**, enabling them to continue spreading awareness and assisting villagers in their absence. These leaders:

- Helped ensure that the knowledge gained through the workshops remained within the community.
- Became the primary point of contact for villagers who required further assistance with government schemes and digital literacy.

6. Job and Entrepreneurial Opportunities

A key objective of the project was to create job and entrepreneurial opportunities for the villagers. Some of the activities in this area included:

- **Entrepreneurship Awareness Sessions:** Introducing villagers to government-backed schemes that could help them start their own businesses, such as **StartupTN** and **NSIC**.

- **Job Fair and Placement Drives:** Organizing local job fairs with recruiters from nearby cities and companies that were hiring, especially for entry-level jobs.

- **Skill Development Workshops:** Conducting workshops on skills that were in demand in local industries, such as basic computer literacy, farming techniques, and small-scale business management.

7. Infrastructure Support

Improving the digital infrastructure was another key activity. The project worked to enhance:

- **Internet Connectivity:** Collaborating with local authorities to improve the internet speed and accessibility for villagers.

- **Public Wi-Fi Zones:** Establishing free public Wi-Fi zones in central locations like the village hall, schools, and market areas.

- **Digital Kiosks:** Setting up kiosks with computers and internet access in central locations, where villagers could access government services online or get help from trained facilitators.

8. Continuous Monitoring and Feedback

To assess the effectiveness of the activities and make improvements, continuous monitoring was carried out through:

- **Community Feedback Surveys:** Regular surveys were conducted to gather feedback from villagers regarding the schemes, training programs, and application assistance.

- **Impact Assessment:** The outcomes of applications submitted, the

  number of villagers employed, and the success rate of entrepreneurs were monitored to assess the project's impact on the community.

9. Future Sustainability

To ensure the longevity of the activities, partnerships with local organizations, government bodies, and private stakeholders were established. This will allow the villagers to continue benefiting from the resources and systems even after the project ends. These partnerships include:

- **Sustainability Plans with Local Schools:** Collaborating with local educational institutions to integrate digital literacy into their curricula.

CONCLUSION

In conclusion, the village of Amarambedu, like many rural areas, faces a series of challenges that hinder its overall development, including poor digital connectivity, lack of awareness about government schemes, limited access to quality education, and gender disparities in literacy. The primary occupation remains agriculture, with a significant portion of the population depending on seasonal farming and low-paying, unskilled labor jobs during the off-season.

Despite these challenges, the community in Amarambedu is resilient, with many young people pursuing higher education and showing potential for growth in various fields. However, gaps in language proficiency, especially in English, and a lack of awareness about the benefits of government welfare programs restrict opportunities for growth and skill development. Additionally, the absence of accessible digital tools and inconsistent internet connectivity further hinders progress.

To bridge these gaps, we have proposed the "TechBridge" initiative, a comprehensive system designed to increase awareness of government schemes, provide skill training, and create job opportunities for the youth of the village. Through the use of digital platforms, local outreach, and personalized support, TechBridge will ensure that villagers can make the most of government initiatives such as Naan Mudhalvan, TNSkill, and other training programs.

"Our Journey in Amarambedu"

(Survey→Awareness → Overcoming Digital Barriers→Community Empowerment→ Long-Term Vision)