

# CAUVERY Project - Tiruvarur District

## A Project of Asha Chennai Chapter.

### Mission of Asha for Education

To catalyze socio-economic change in India through the education of underprivileged children.

### Why Digital Education Matters along with traditional education:

Traditionally, education has been defined as the acquisition of knowledge in languages, mathematics, and science. However, in today's era of digitalization, education without exposure to **digital literacy** is incomplete.

The **digital divide** in rural India threatens to widen the gap between privileged and underprivileged communities. Bridging this divide requires introducing digital learning alongside the three R's—reading, writing, and arithmetic—from an early age. This equips students with essential skills for success in the modern world.

### Project Cauvery

To address this need, **Project Cauvery** was launched in **November 2022** in Tiruvarur district. Its goal is to strengthen government schools—where the most marginalized students are enrolled—by providing access to digital education and quality teaching support. Project Cauvery also provides avenues for children to have a joyful experience via Excursions.

- **Current Reach:** 18 schools (partially funded by Amazon)
- **Team:** 1 Project Steward (volunteer), 9 teachers, 1 coordinator
- **Focus Areas:**
  - Appointing computer teachers in schools
  - Teaching **Computer Science, Maths, English, and Science**
  - Leveraging **Asha Kanini**, a curated open-source digital platform with content from **Khan Academy, PhET, NLVM**, and more.

**Our Computer Curriculum:** The computer curriculum developed by Asha Chennai is designed specifically for government school students in rural Tamil Nadu, keeping in mind their background and access limitations. It is progressive, starting from basic digital exposure and moving towards creative and problem-solving skills.

### **1. Foundation Level – Basic Digital Exposure**

- Introduction to Computers – hardware, software, safe usage
- Typing skills and navigation
- File management and understanding operating systems

### **2. Creativity & Confidence Building**

- Tux Paint – drawing, storytelling through art, using colors and shapes
- Helps younger children overcome hesitation in using computers

### **3. Mathematical & Analytical Skills**

- GeoGebra – interactive visualizations of geometry, algebra, and graphs
- NLVM (National Library of Virtual Manipulatives) – virtual tools for exploring maths concepts
- Builds conceptual clarity and interest in mathematics

### **4. Practical Productivity Skills**

- OpenOffice (Writer, Calc, Impress) – word processing, spreadsheets, presentations
- Creating reports, tables, charts, and presentations (building real-world skills)
- PowerPoint / Impress – communication and structured thinking through visual presentations

### **5. Coding & Logical Thinking**

- Scratch – block-based programming to create stories, animations, and games
- Teaches sequencing, logic, and problem-solving in a playful way



## 6. Advanced Learning & Integration

- Internet usage: searching information, safe browsing
- Email, document sharing, and digital collaboration (where infrastructure allows)
- Integrating with Asha Kanini for maths, science, and English content

## Asha Kanini – The Digital Learning Platform

**What is Asha Kanini?:** Asha Kanini is a **free, open-source digital learning platform** developed by Asha Chennai . It is designed to provide **quality educational content in regional languages** and to make digital learning accessible to children in government schools.

### Key Features of Asha Kanini:

- **Curated Content:** Includes world-class open-source educational resources such as
  - **Khan Academy** (Maths, Science, English, problem-solving videos & exercises)
  - **PhET Interactive Simulations** (Science & Maths concepts made visual and interactive)
  - **NLVM (National Library of Virtual Manipulatives)** (hands-on Maths learning tools)
  - **CK-12 Foundation resources** (STEM content, simulations, adaptive practice)
  - Other localized and teacher-created content.
- **Multi-lingual Support:** Content is available in **Tamil and English**, with the aim to expand into more Indian languages.
- **Offline Functionality:** Works even in schools with poor or no internet connectivity. Content is preloaded on school computers, ensuring uninterrupted access.
- **Teacher-Friendly:** Comes with tools for teachers to:
  - Track student progress
  - Assign lessons and exercises

- Use interactive teaching methods instead of rote learning.
- **Student-Centered:** Encourages self-learning and exploration beyond textbooks, which boosts confidence and curiosity.
- **Customizable:** Schools and teachers can adapt the platform to their specific curriculum and teaching needs.

### Why Asha Kanini is Important for Rural Schools:

- Reduces dependency on textbooks alone by providing **visual and interactive learning**.
- Bridges the **digital divide** by giving underprivileged children the same exposure to digital tools as urban students.
- Enhances learning outcomes, especially in **Maths and Science**, where conceptual clarity is critical.
- Empowers teachers in government schools with **world-class teaching aids** in their own language.
- Prepares students with **21st-century skills** such as problem-solving, analytical thinking, and digital literacy.

### Impact so far:

- Implemented across multiple government schools in Tamil Nadu and other states.
- Hundreds of teachers trained and actively using it in classrooms.
- Thousands of students gaining exposure to **interactive, enjoyable, and effective digital education**.

### Approach & Pedagogy

- **Developed by Asha Staff & Volunteers:** The curriculum is not a copy-paste of urban programs; it is adapted to rural realities.
- **Activity-Based Learning:** Students learn by doing, not memorizing.
- **Language Support:** Instruction happens in **Tamil and English**, ensuring inclusivity.

- **Progressive Skill Development:** From fun and creativity in primary school → to logic, coding, and productivity in middle and high school.
- **Integration with Academics:** Links digital learning with school subjects, reinforcing maths, science, and language lessons.

**By empowering students with both academic and digital skills, Project Cauvery is working to create lasting, positive change in the quality of education in the district of Thiruvarur, Tamil Nadu.**

### Timeline of the Support given to the schools covered under Cauvery Project -

<u>YEAR</u>	<u>School</u>
2022	Irulneeki PUMS KeezhaPanaiyur PUPS Komalapettai PUMS
2023	Tirupathur PUMS Vilakkudi PUPS Vikarapandiyam PUPS Adichapuram PUPS Kottur Thottam PUPS Nerunjanakudi PUPS Rayanallur PUPS MelaPanaiyur PUPS Karuppukilar PUMS
2024	83 Kulamanickkam PUMS Kalappal PUPS NaduvaKalappal PUPS OverCheri PUPS Sollangnallur PUPS Kottur PUPS

## Details of the Schools

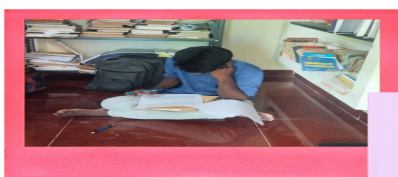
School	Block	No. of Girls	No. of Boys	Total Strength	No.of Classrooms	No.of Teachers	Pvt School Nearby
Irulneeki PUMS	Kottur	36	28	64	7	6	No
Panaiyur PUPS	Thiruthurai poondi	17	13	30	2	3	1 school about 3 kms away
Komalapettai PUMS	Thiruthurai poondi	55	41	96	5	6	No
Vilakkudi PUPS	Thiruthurai poondi	77	68	145	6	6	No
Thirupathur PUMS	Thiruthurai poondi	51	56	107	7	6	1 school about 3 kms away.
Adichapuram PUPS	Kottur	7	7	14	2	2	1 school
Vikkirapandiyam PUPS	Kottur	34	34	68	4	2	1 school
Kottur Thottam PUPS	Kottur	8	10	18	2	2	1 school about 2 kms away
Nerunjanakudi PUPS	Kottur	12	16	28	2	2	Nil
Rayanallur PUPS	Thiruthurai poondi	48	53	101	6	4	4 schools
Karuppukilar PUMS	Kottur	51	65	116	6	6	nil
MelaPanaiyur PUPS	Kottur	29	24	53	3	2	nil
OverCheri PUPS	Kottur	13	14	27	1	2	1 school
Solangnallur PUPS	Kottur	8	10	18	1	2	nil

Kottur PUPS	Kottur	36	38	78	3	3	1school
83 Kulamanickam PUMS	Kottur	38	25	63	3	3	nil
Kalappal PUPS	Kottur	27	40	67	3	2	nil
NaduvaKalappa PUPS	Kottur	20	17	37	1	2	nil

## Important Events at the project in the year 24-25 .

**June:**

### **Teacher Evaluation Test -**



Every year, as a part of the training program, all Asha teachers who have completed one year service take up an Annual test with the goal of relearning and testing their basic knowledge. Three teachers took the exam at the project office.

**September :**

### **Study Materials distribution.**

Asha provides additional stationery to government school students, enhancing their learning experience. This annual initiative was held in September. The team procured stationery materials from Ranjith Traders in Thiruvavur. The distribution was done between September 20-27 which benefitted 1,115 children in 18 government schools. Longsize Notebooks , Math Notebooks , Pens

,Pencils , Geometry boxes , writing pads are a few examples of the materials distributed by Project Cauvery .



### **Teachers 2nd Term Training At Kovilpatti:**

In the 3rd week of September Project Cauvery Teachers and Staff travelled to Pearl Project to attend the 2nd term Maths and Science Training. The training was conducted by our respective Maths and Science Mentors/ Resource Persons Meena Ramanujam and Purva Bhatte. These sessions focus on effective pedagogy for training these subjects.





**November :**

**Volunteer Visit-** Chennai Chapter Co ordinator Mr. Rajaraman visited the Project. He visited a few schools to assess the teachers and also oversaw the Oral Assessment that had just begun. A meeting with Teachers was held at the project office.



**December :**

**Computer Teachers Training At Thiruvallur:**

The training was primarily an internal event led by our dedicated Lead Teachers, Volunteers, Software Engineers, and RTC Teachers, who conducted sessions on various computer-related topics. This year, we also incorporated two sessions facilitated by external trainers, adding valuable perspectives to the program. Mr. Bharath, a content developer from Education Initiatives, and Ms. Ramapriya, a teacher from Singapore and Australia who teaches Visual Arts through technology enriched the training.





January :

### **Bently computers distribution-**

Bentley Systems donated 6 desktops to two schools , Rayanallur PUPS and Karuppukalar PUMS supported by the project. Before distribution, the desktops were inspected by our software team in Chennai to ensure they were in optimal condition. These new computers will enhance our work and children will be able to learn their CS curriculum better. Asha Chennai sincerely thanks Bentley Systems for their thoughtful contribution.



## February :

**Written Assessment** :The question papers were prepared by our teachers, printed, and distributed by project coordinators at each site. These assessments are not meant to evaluate individual students but to gain an overall understanding of their comprehension and learning progress. The insights help us tailor our lesson plans for the next academic year, focusing on areas that need improvement. Our project coordinator and teachers oversaw the process at each location.



## March :

**Annual Day Celebrations** - This year funds from Project Cauvery were distributed to 18 schools as they celebrated their Annual Day with full enthusiasm! 2 schools also proudly marked a century of existence—a truly historic milestone!



The Tamilnadu education department had asked all schools to celebrate annual days. The funds provided to the schools were insufficient. Asha Chennai pitched in by sponsoring prizes and snacks to keep spirits high and tummies happy. The school teachers and the public managed the rest.



## **Students Annual Excursion -**

Excursions are far more than a “fun trip” for rural children. They carry huge educational, social, and psychological value. They are an essential part of holistic education giving rural children exposure, joy, confidence, and aspirations for a brighter future.

200 students accompanied by 20 staff and teachers from Thiruvavarur went on an excursion on 8 and 29 March, 2025. The first batch explored the rich heritage and engineering marvels of Tamil Nadu with visits to: Trichy Mukkombu Dam, Planetarium, Kallanai Dam and Thanjavur’s majestic Periya Kovil. Asha Volunteer, Ms. Komalavalli accompanied the children on this trip.

The second batch soaked in the spiritual and coastal beauty of: Chidambaram Nataraja Temple, Pichavaram Dam and Poompuhar Beach. To keep spirits high and energy up, students were treated to a delicious spread! Morning breakfast included soft idlis and warm Pongal, while lunch featured a flavorful trio of Curd rice, Lemon rice, and Tamarind rice—simple, satisfying, and perfect for a day of exploration.



**April :**

## **CS Assesment -**



We also conduct Computer assessment aligned to the curriculum the students are learning for all classes from 4<sup>th</sup> upwards. These include pen and paper questions as well as questions that require them to do something on a computer like create a presentation or write a small program. Each individual student will need to work on a computer independently to take this assessment.



### **Asha Impressions :**

Recognizing that computer science is best learned through hands-on experience, Asha requires all students to submit their own projects at the end of the term. Students in 4<sup>th</sup> and 5<sup>th</sup> standard create presentations using OpenOffice Impress, while those in 7<sup>th</sup> and 8<sup>th</sup> standard develop creative projects using Scratch. To provide a platform for the students to showcase their efforts, we organize Asha Impressions which acts as a motivator for students to do better for selected Projects. The event was held in April at IITM Research Park. This was the first time Cauvery students were attending an Impression Event . A total of 12 schools participated in the event. 72 POWERPOINT PRESENTATIONS and 30 SCRATCH Projects were submitted.

Vilakudi PUPS students L.Mahashwin , K.Rishwanth and M.Monith won the 3rd prize in the event for their PPT on the Dangers of PLASTIC.



**Staff Excursion** - Staff excursions are just as important as student ones, sometimes even more so, because they **refresh, motivate, and empower teachers and other admin staff** who are the backbone of the Project. This year the staff visited the state of Kerala (Guruvayoor, Cochin and Atharapally falls to name a few) and undoubtedly came back relaxed , rejuvenated and most importantly motivated.

**MAY :**

**RIGHT START -**

Rightstart is Asha's annual teacher training program, bringing together educators from all our locations for a five-day event at IIT Madras. It's a chance for teachers to learn, grow, and connect while participating in engaging training sessions. A well planned Training for our Teachers before they start the next Academic year.

For a detailed report please click this link.

<https://chennai.ashanet.org/news/2025/08/rightstart-2025/#:~:text=Rightstart%20is%20Asha's%20annual%20teacher,participating%20in%20engaging%20training%20sessions.>