Best Practices implemented in the U.T. of Puducherry to promote Ease of Living

1. Education

2. Health & Wellness

3. Water Resources

4. Unified Data Hub

Sub-theme: Schooling

1. Early Childhood Care and Education (ECCE)

2. Puducherry Assessment Survey (PAS)

3. Breakfast

I. Early Childhood Cared Education (ECCE)

1. Name of the State / UT: **Puducherry**
2. Name of District / Village / Block: **Puducherry, Karaikal, Mahe & Yanam**
3. Name of Intervention: **Early Childhood Care Education (ECCE)**
4. Name of Sector in which implemented: **Samagra Shiksha**

5. Overview of the Project / Initiative being implemented (not more than 500 words):

Early Childhood Care Education (ECCE) has played a significant role in the educational landscape of Puducherry (UT) since its inception in 2006. Initially, ECCE programs primarily benefited the rich community, posing challenges for children from economically disadvantaged backgrounds. However, Puducherry has made commendable efforts to ensure that ECCE is accessible to even the poorest people in the UT.

6. Ground Situation – Pre implementation of the project / Initiative:

To facilitate effective teaching and learning, 297 primary schools in Puducherry UT have established pre-primary classrooms for LKG and UKG students. These classrooms are supported by 350 Trained Balasevikas and 22 Conductresses who engage with the students and ensure their holistic development.

Aligned with the objectives of the National Education Policy (NEP) 2020, a theme-based curriculum has been developed by Samagra Shiksha, Puducherry.

This curriculum, outlined in the Teacher Handbook, incorporates best practices in ECCE pedagogy to promote the five developmental domains in pre-primary students, namely, Physical Development, Cognitive Development, Language and Literacy Development, Aesthetic and Cultural Development, and Socio-Emotional and Ethical Development.

The "Teacher Handbook" and "Activity Books" has gained recognition and acknowledgment in the newly released National Curriculum Framework - Foundational Stage 2022. This signifies the importance of the handbook as a valuable resource for pre-primary educators, providing them with guidance and strategies to nurture young minds effectively.

7. Achievement / Impact of the project / intervention:
Child Friendly Furniture:

Moreover, in line with the vision of NEP 2020, pre-primary classrooms across Puducherry UT have been equipped with crescent-shaped tables and age-appropriate chairs. This investment in physical infrastructure ensures a conducive learning environment that fosters active engagement and development, as envisioned by the policy.

To support the implementation of the curriculum, activity books (Vol 1 & Vol 2) have been created for LKG and UKG students. These activity books align with the National Curriculum Framework - Foundational Stage 2022 and offer theme-based activities that cater to the five developmental domains of ECCE. By engaging in these activities, young learners acquire essential skills and knowledge while exploring a wide range of subjects.

Capacity Building Training:
Recognizing the importance of continuous professional development, pre-primary teachers have received orientation on the Thematic Curriculum. Training sessions have equipped teachers with valuable skills in story narration, songs, and puppet making, among others. Additionally, theme-based resources have been created by teachers during these training sessions, encouraging their active involvement in curriculum development.

Indigenous Games and Story-telling Competition:
A special story-telling competition for teachers further fostered literacy enhancement. Around 200 stories were received and compiled, which were

then shared across schools. This initiative not only showcases the creative abilities of teachers but also provides additional reading material for students, promoting a culture of literacy and storytelling.

Breakfast and Midday Meals Scheme:

Addressing the nutritional needs of pre-primary students, the breakfast scheme ensures that boiled milk is provided to all students. Additionally, the midday meal scheme offers nutritious and well-balanced food, further supporting the holistic development of young learners.

ECCE Resource Centre:

To showcase an exemplar of a developmentally appropriate learning environment for the Foundational Stage, model ECCE resource centers have been established in 10 schools during the 2022-23 academic year. This initiative aims to demonstrate the ideal physical setup for effective teaching and learning. With plans to scale this idea to all other schools in a phased manner, the objective is to ensure that every ECCE classroom is equipped with the necessary resources and infrastructure.

8. Role of Technology, if any:

Leveraging technology to enhance learning experiences:

300 Bluetooth devices have been provided to all schools with pre-primary sections. These devices include features like a loudspeaker, voice recording, and USB connectivity, which teachers utilize to facilitate various aspects of FLN (Foundational Literacy and Numeracy). Through activities such as story narration, listening comprehension, and rhymes recitation, the Bluetooth device helps develop key competencies among pre-primary students.

9. Challenges faced in implementation, if any:

Co-locating Anganwadi centers with the existing school system poses significant challenges in implementing the new education policy. The

process involves several logistical considerations, such as providing additional furniture, classrooms, and teachers.

The integration of Anganwadi centers within the school infrastructure requires careful planning and resource allocation. Additional furniture, such as small chairs, tables, and learning materials suitable for young children, must be procured. This entails budgetary considerations and coordination with relevant authorities to ensure a seamless transition.

10. Future plan & way forward to sustain the project / initiative over time:

The future vision for ECCE in Puducherry UT includes the establishment of ECCE resource centers in all schools by 2030. This ambitious goal aims to provide educators with the necessary tools and materials to facilitate high-quality early childhood education. Additionally, various events such as ECCE Day, Colours Day, and theme-based day celebrations are organized to create a joyful and engaging learning environment for young learners.

ECCE – Pre-Primary Class Rooms

ECCE EXHIBITION – Learning materials

II. Puducherry Achievement Survey (PAS) / Compulsory Reading and Writing Languages (CRAWL)

1. Name of the State / UT: **Puducherry**

2. Name of District/ Village / Block: **Puducherry, Karaikal, Mahe & Yanam**

3. Name of Intervention: **(PUDUCHERRY ACHIEVEMENT SURVEY)PAS / Compulsory Reading and Writing Languages (CRAWL)**

4. Name of Sector in which implemented: **Samagra Shiksha**

5. Overview of the Project / Initiative being implemented (not more than 500 words):

The **Puducherry Achievement Survey (PAS)** is a significant state-level assessment conducted by the Samagra Shiksha, Directorate of School Education – Puducherry. The primary objective of this survey is to gather data and information about the foundational literacy and numeracy achievement of students in classes 3, 4, and 5 who are studying in government schools in Puducherry.

The PAS focuses on competency-based evaluations, which means that it assesses students' abilities and skills rather than just their knowledge. This approach aligns with the principles advocated by the NIPUN Bharat mission, which aims to ensure that every child in India acquires foundational literacy and numeracy skills by the end of Grade 3.

By conducting the PAS, the Samagra Shiksha and the Directorate of School Education identifies the learning gaps that exist among students in government schools. The survey helps in diagnosing these gaps and provides valuable insights into the effectiveness of education policies, teaching practices, and student learning outcomes.

The PAS report serves as a valuable tool for policymakers, educators, and stakeholders in the education system. It provides a comprehensive synthesis of the survey results at the state level, presenting a detailed analysis of the students' performance in foundational literacy and numeracy. The report serves as a rich repository of evidence that informs the design of future action plans and interventions to improve education policies, teaching practices, and student learning outcomes in Puducherry.

Compulsory Reading and Writing Languages (CRAWL) has been initiated to bridge the learning gap of the children in Puducherry UT. Itemphasis the students to enrich their ability of reading and writing skills with much excitement in their mother tongue and English. The most important benefits of reading for children.

- **Improves the functioning of the brain**
- **Increases Vocabulary**
- **Improves theory of mind**
- **Increases Knowledge**
- **Sharpens Memory**
- **Strengthens Writing Skills**

6. Ground Situation – Pre implementation of the project / Initiative:

Expanding the **Puducherry Achievement Survey (PAS)** to include classes 6, 7, and 8 is a valuable initiative for understanding students' general competencies in the academic year. Here are some reasons why conducting the PAS for these grades is important:

Holistic Assessment: The PAS for classes 6, 7, and 8 allows for a more comprehensive assessment of students' competencies beyond foundational literacy and numeracy. It provides insights into their overall academic abilities, including subject-specific knowledge, critical thinking, problem-solving skills, and conceptual understanding. This holistic assessment helps in gaining a comprehensive understanding of students' capacities and areas that may require improvement.

Early Intervention: By conducting the PAS in these higher grades, it becomes possible to identify learning gaps and address them at an earlier stage. Early intervention is crucial for students' academic progress and prevents the accumulation of knowledge gaps. Identifying specific areas where students may be struggling enables educators to provide targeted interventions and support to enhance their learning outcomes.

Evidence-Based Decision Making: Similar to the PAS for classes 3, 4, and 5, extending the survey to higher grades provides valuable data for evidence-based decision making. The data gathered from the PAS helps in formulating effective educational policies, designing curriculum enhancements, and allocating resources appropriately. Decision makers can utilize the findings to identify strengths and weaknesses within the

education system and implement evidence-based strategies to improve overall student performance.

Monitoring Progress and Trends: The PAS for classes 6, 7, and 8 enables monitoring of students' progress and identifying educational trends. It helps track the development of students' competencies over time and provides insights into the effectiveness of educational initiatives implemented at various levels. The data obtained from this assessment aids in identifying patterns, trends, and areas of improvement, facilitating evidence-driven adjustments to educational practices.

Equity and Inclusion: Expanding the PAS to higher grades promotes equity and inclusion in education. By assessing students' competencies across different grades, the survey ensures a more comprehensive understanding of their educational journey. This allows for the identification of disparities among different student groups and the development of targeted interventions to address these disparities. It aids in promoting a more inclusive and equitable education system.

Implementing the Program CRAWL in Schools:
- The main goal of the programme is to achieve the progress among the students in Linguistic intelligence especially to give them training in reading continuously and writing.
- For few months, the students will be focused on basic reading and extracting meaning from what they read along with writing what they understood.
- The program will be scheduled for 1 ½ hour on every Tuesday (Tamil / Malayalam / Telugu) and Friday for English Language.

7. Achievement / Impact of the project / intervention:

PAS:
- The use of OMR sheets offers several advantages. Firstly, it eliminates the labor-intensive task of manual data entry, thereby reducing the potential for errors and enhancing the overall accuracy of data collection. Additionally, the automated processing of OMR sheets enables us to retrieve and analyze data more quickly, providing timely insights for decision-making.
- Moreover, the digital mode of conducting the survey allows for easier data management and storage. The electronic format facilitates the organization, retrieval, and sharing of survey data, saving time and resources in the long run.

CRAWL:

- There were strategies that helped address this issue and promote student coordination:

- **Rebuilding trust and confidence**: It was important to understand that students may have had apprehensions about returning to school due to the fear of COVID-19. Prioritizing their health and safety and consistently communicating the measures taken by the school to create a secure environment was crucial. Providing clear information about hygiene protocols, sanitization practices, and vaccination efforts helped rebuild trust and boost confidence among students and their families.

- **Individualized support**: Recognized that each student had unique concerns and experiences during the post-lockdown period, offered individualized support such as counseling services or one-on-one conversations was valuable and it was carried out by trained teachers. Addressed their fears and providing guidance based on their specific needs helped them overcome any barriers to regular attendance.

- **Parent and community involvement**: Engaged parents and the wider community in promoting student coordination. Regularly communicated with parents regarding the importance of attendance and their role in supporting their children's return to school. Fostered a collaborative approach by involving parents in decision-making processes and encouraging open lines of communication.

8. Role of Technology, if any:

- OMR Scanning technique is used for recording and evaluating the students achievements through responses.

- Available ICT labs / ICT equipments are used for teaching the students and to train teachers.

9. Challenges faced in implementation, if any:

The **Puducherry Achievement Survey (PAS)** has been successfully completed, with only minor constraints encountered during the process.

One of the primary challenges faced was the requirement for manual power for data entry. Additionally, the training aspect proved to be time-consuming. Despite these constraints, the Puducherry Achievement Survey reached its intended goals.

10. **Future plan & way forward to sustain the project/ initiative over time:**

The way forward after conducting the **Puducherry Achievement Survey (PAS)** for classes 3, 4, and 5 involves several key steps:

Expand PAS to Higher Grades: Extend the PAS to include classes 6, 7, and 8 to assess students' general competencies and gain a comprehensive understanding of their academic progress beyond foundational literacy and numeracy.

Data Analysis and Reporting: Analyze the data collected from the PAS at the district and state levels to identify learning gaps and trends. Prepare comprehensive reports that provide insights into student performance, strengths, and areas of improvement. Share these reports with policymakers, educators, and stakeholders to inform decision-making.

Interventions and Remedial Programs: Based on the findings of the PAS, develop targeted interventions and remedial programs to address the identified learning gaps. These interventions should be designed to improve foundational literacy and numeracy skills among students. Provide additional support and resources to schools and teachers to implement these interventions effectively.

Teacher Training and Professional Development: Conduct specialized training programs and professional development workshops for teachers to enhance their instructional practices. Focus on equipping teachers with strategies to address the specific learning gaps identified in the PAS. Provide ongoing support and mentoring to ensure effective implementation of new teaching methods.

Curriculum Enhancement: Review and revise the curriculum to incorporate the findings of the PAS. Align the curriculum with competency-based evaluations and integrate activities and assessments that target the identified areas of improvement. Ensure that the curriculum promotes critical thinking, problem-solving, and application of knowledge.

Monitoring and Evaluation: Establish a robust monitoring and evaluation system to track the progress of students after the implementation of interventions. Regularly assess student performance, monitor learning outcomes, and provide timely feedback to teachers and schools. Use this feedback to make necessary adjustments and improvements to the interventions.

CRAWL:

By emphasizing the use of the mother tongue, CRAWL aims to instill a sense of pride and cultural identity among young learners. It recognizes the importance of a strong linguistic foundation in overall cognitive development and academic success.

Through these initiatives, CRAWL envisions nurturing young learners in Puducherry UT to become proficient readers and writers in their mother tongue. This approach not only enhances their language skills but also strengthens their connection to their cultural heritage and promotes inclusive and diverse educational practices.

Puducherry Achievement Survey Training Programme for Field Investigators during March 2023
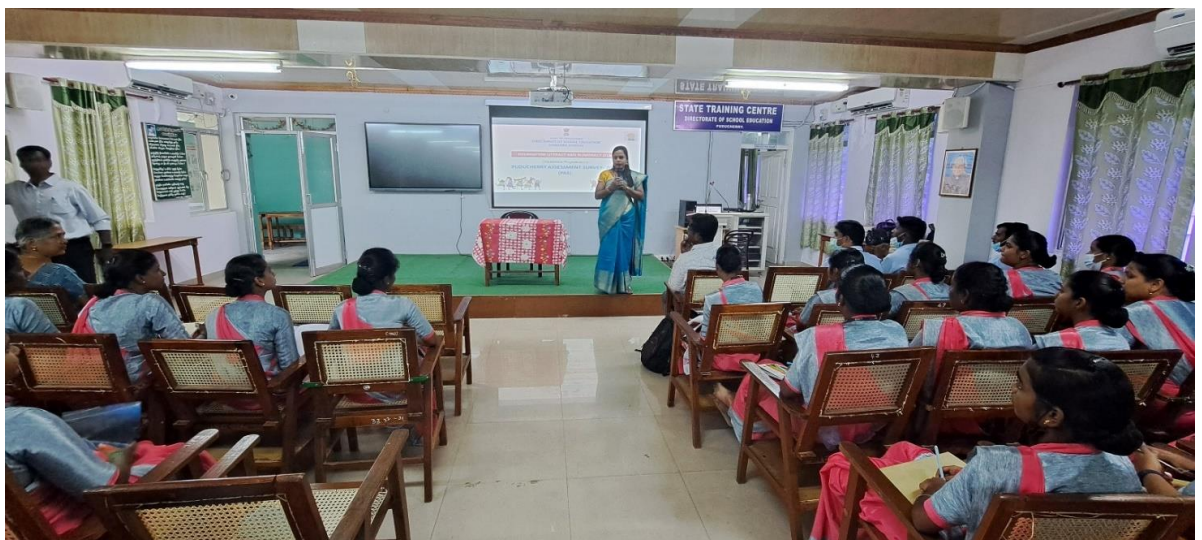
III. BREAKFAST

1. Name of the State / UT: **Puducherry**
2. Name of District /Village / Block: **Puducherry, Karaikal, Mahe & Yanam**
3. Name of Intervention: **Breakfast**
4. Name of Sector in which implemented: **PM POSHAN**

5. Overview of the Project / Initiative being implemented (not more than 500 words):

Puducherry is a pioneer in the Breakfast Scheme across the country. It was launched in 2002, aiming to provide essential nutrition to students from LKG to 12th grade. As part of the program 150 ml of milk/bananas/Bread and sweet biscuits are provided to all students of government and government aided schools. **This initiative recognizes the significance of physical nutrition in promoting optimal mental growth and development among students**. This is the state specific initiative and self-funded.

6. Ground Situation – Pre implementation of the project / Initiative:

The state-specific initiative in Puducherry extends to four regions namely Pondicherry, Karaikal, Mahe, and Yanam. **This program brings about positive change by providing a daily benefit to approximately 65,100 (sixty-five thousand one hundred only) students across these regions**. The implementation of this initiative incurs a cost of Rs. 7.50 per student.

By offering a balanced breakfast, the scheme ensures that students receive the necessary nutrients to kick start their day. Milk, known for its rich source of calcium, vitamins, and minerals, plays a vital role in supporting bone health and overall growth. Coupled with biscuits, which provide carbohydrates for sustained energy, the breakfast combination contributes to the students' nutritional needs.

Additionally, the Breakfast Scheme promotes the overall well-being of students. It addresses the issue of food insecurity and ensures that all students have access to a nutritious meal, irrespective of their socio-

economic background. This initiative fosters inclusivity and equal opportunities for every student to thrive academically and physically.

The UT of Puducherry's commitment to the Breakfast Scheme reflects its dedication to the holistic development of students. By recognizing the importance of physical nutrition in nurturing mental growth, the scheme contributes to creating a conducive learning environment and supporting the overall well-being of students in the region.

7. Achievement / Impact of the project / intervention:

1. **Accessibility for all students**: Ensures the Breakfast Scheme reached all students, regardless of their socio-economic background or geographical location. Efforts are made to identify and address any barriers to access, such as transportation or distribution challenges, to ensure that every student benefits from the program.

2. **Nutritional diversity**: Providing a variety of nutritious food options caters to different dietary needs and preferences. Including a mix of fruits, whole grains, proteins, and dairy products ensures a well-rounded and balanced breakfast for students.

3. **Hygiene and food safety**: Maintaining high standards of hygiene and food safety is crucial to protect the health and well-being of students. Regular monitoring, proper storage and handling of food, and adherence to hygiene protocols are essential priority areas focussed on.

4. **Nutrition education**: Integrating nutrition education into the Breakfast scheme helps students develop healthy eating habits and make informed food choices. Providing information on the nutritional value of different food items and promoting the importance of a balanced diet empowers students to take ownership of their health and well-being.

5. **Continuous program evaluation**: Regular monitoring and evaluation of the Breakfast Scheme are done to assess its effectiveness and identify areas for improvement. Gathering feedback from students, parents, and school staff also provide valuable insights to enhance the program's impact and address any challenges or shortcomings.

By focusing on these priority areas, the Breakfast scheme effectively address the nutritional needs of students, promote their overall well-being, and support their academic success.

8. Role of Technology, if any:

Daily feeding strength is captured online directly from the school by using a mobile app.

9. Challenges faced in implementation, if any:

One of the major issues faced by the Breakfast Scheme in Puducherry UT is financial crisis, which hampers the smooth functioning and expansion of the program.

As the Breakfast Scheme is an exclusive initiative of Puducherry UT, the financial burden falls solely on the government's budget, making it challenging to allocate sufficient funds for the program's sustainability.

The rising cost of milk in the market poses a significant challenge for the Breakfast Scheme. As milk is a vital component of the program, the increasing prices put additional strain on the program's budget and affordability.

The program requires additional financial resources to provide millets, which are nutritious and beneficial for students. Securing funding to incorporate millets into the breakfast menu can be a financial constraint for the scheme's implementation and expansion.

10. Future plan & way forward to sustain the project / initiative over time:

1. Efforts have been initiated to enhance the nutritional value of the breakfast program by incorporating millets along with the hot milk provided to students.

2. Continuously **review and adapt the breakfast scheme based on feedback, lessons learned, and changing needs.** Stay informed about emerging trends and research in the field of nutrition and educational well-being to ensure the scheme remains relevant and effective.

The inclusion of millets with hot milk in the program aligns with the goal of providing diverse food options that cater to the nutritional needs and

preferences of students. This initiative not only improves the nutritional quality of the breakfast but also encourages the consumption of traditional and locally available grains.

Serving of Milk to Students (from L.K.G. to XII Std.)

Students enjoying their breakfast

Sub-theme: Health & Wellness

CHANDRAYAN

Name of the state/ UT: **UT of Puducherry**
Name of the District: **Puducherry & Karaikal**
Name of the Intervention :   **CHANDRAYAAN Scheme**
Name of the Sector in which Implemented :   **Health Sector**

1. CHANDRAYAAN Scheme

CHANDRAYAAN - Puducherry

23.11.2023

1. CHANDRAYAAN Scheme

Door to Door screening for NCD-TB-Hb-Stunting and Creation of ABHA and ABPMJAY cards

Overview

With the rise in the number of cases and with urban sedentary lifestyle , the burden of NCD is huge. The Govt of India through NPNCD Program does door to door enumeration and does screening at Subcentre or PHC . In Puducherry, we have included other national targets like Tuberculosis elimination, anemia elimination , NCD screening , Stunting Screening , creation of ABHA ID at door steps through a Program initiated by UT of Puducherry called   C.H.A.N.D.R.A.Y.A.A.N" h(**C**omprehensive **H**ealth **A**wareness , **N**CD screening , **D**igital Mission , **R**CH screening, **A**yushman Bharat - PMJAY, Anemia screening for All Population Now).

Under this program, house to house survey and screening for all the above mentioned activities are done and we are striving towards 100% achievement in this activity.

Ground Situation- Pre Implementation of the initiative

All National Programs are focused to achieve one particular target however converging all National Programs is a herculean task for primary level health workers. The health workers were surveying/ screening one particular activity alone. Say for e.g., if there is target for ABHA ID enrollment ASHA/ANM workers visit the houses only to create ABHA.

This created a fatigue among the health workers who visit the field on an everyday basis. To overcome the issue and to set an achievable target the state decided to implement the CHANDRAYAAN Scheme.

The policy makers by developing a converging scheme, utilizing the existing resources and optimal utilization of the funds shall definitely lead to the fulfillment of the dream of "Healthy India". Converging all National Health Programs for early screening and enrollment through technological support is the best strategy for achieving Universal Health and Wellness and thereby meeting the goals of SDG / NHP or any Key indicators as and then indicated.

Objectives

1. Improvising the performance on all the national programs such as NCD/ RNTCP/ RCH/ABDM by converging the activities .

2. 100% AADHAR linked ABHA ID

3. Screening of all above 30 years for Diabetes,Hypertension,obesity at house hold level and screening for ,oral cancer,Breast Cancer and Cervical Cancer at facility level

4. Enrollment for AB - PMJAY

5. Screening for anemia for all populations and providing treatment at door step.

6. Screening for TB to all eligible populations by taking X-ray at door steps using the support of medical college students .

7. Screening all children for Stunting using the Anganwadi workers

8. Updating ABHA number in the NCD Portal for all the NCD cases. Patients whose phone number is not linked with AADHAR, mandatory creation of ABHA using the NCD MO portal.

9. Specialist visit to all PHC level for cervical cancer and breast cancer screening monthly once.

In a nutshell, the activity to be done house to house is summarized as follows
- **ABHA Health ID creation**
- **NCD Screening**
- **HB Screening**
- **TB Screening**
- **Screening for stunting**
- **AB - PMJAY Enrollment**

Progress Achieved

Screened under this Campaign

Activities	Screened/ Enrolled
Health ID Creation (ABHA ID)	135401
NCD screening	81055
Hb Screening	81055
Stunting Screening	16306

Tb screening	81055
X Rays Taken	4253
ABPMJAY Enrollment	6319

Achieved minimum 25% of screening of eligible population at all levels till date from September 13,2023.

The progress of the scheme may be in a slower phase but impactful . Cooperation of the general public is much higher . Since screenings like sugar/ bp/ Anemia/ X ray were done at door step the cooperation of the public is very high.

Use of Technology- Data Collection & Analysis -

The ABHA ID is created through NCD Portal thereby it is expected electronic health records will be created.

Monitoring and reporting were done through google sheets. Data on a daily basis is collected from the Sub-Centes/ PHCs/ CHCs through a google form and data analyzed weekly. These reports are then shared with the director/ DD (PH), Medical Officer in-charge to assess their performance and identify lacunas or areas of improvement. The reason for lower performance is identified and appropriate strategies are planned to address the challenges in the upcoming week.

Challenges Faced:

1. Health workers visit the house during the working hours (9.00 A.M-1 PM) where most of the houses in the urban areas are door locked and individuals won't be available during the screening survey
2. Server and OTP issues. Creation of ABHA ID needs AADHAR linked with a mobile number.
3. TB Screening- Social Stigma still prevailing for volunteering for X ray.
4. Working against the fixed target are new to the system which needs more sensitisation and motivation.

10. Future Plan & way Forward:

1. To achieve universal screening and promote early detection thereby meeting the demands of National Health policy also parallely creating a digital ecosystem.
2. Completion of the screening for 100% of the population and creation of ABHA for every individual.
3. Screening Every year.
4. Collection of blood samples will be the next step.

Conclusion

The health scheme we've outlined is more than just a program; it's a gateway to a healthier and more equitable society. By prioritizing preventive care, fostering community engagement, and ensuring accessibility for all, this initiative aims to revolutionize healthcare delivery. Through collaborative efforts and a commitment to individual well-being, we strive not only to address current health concerns but also to lay the foundation for a sustainable, inclusive, and healthier future for generations to come. Together, we can build a healthier world where everyone has the opportunity to thrive.

Screening for Hypertension	**Screening at worship places**

Screening for Diabetes	Anemia Screening and awareness talk by Medical officer at Govt. Schools
Announcement by ANM through PA system for screening	Screening of labourers at construction work site
Referred patient at field screened at facility	Screening for Stunting

Sub-theme: Drinking Water

(Constructing Innovative Recharge Structures – Water Resources)

Best Practice Implemented by State / UT to Promote Ease of Living

Sector : Water Supply

1. Name of State/UT   : Puducherry

2. Name of District/Village/Block   : Puducherry

3. Name of Intervention   : Constructing innovative
                                                               recharge structures.

4. Name of Sector in which   : Water Resources
   Implemented.

5. Overview of the Project/   : Project details enclosed.
   Initiative being implemented
   (not more than 500 words):

6. Ground Situation –   : Reduction in ground water
   Pre implementation of the   quantity and quality
   project/ initiative

7. Achievement/ Impact of the   : Ground water quality and
   Project / intervention   quantity substantially
                                                           improved.

8. Role of Technology, if any   : Stagnating the runoff for
                                                           recharge.

9. Challenges faced in   : Inter-State approval
   Implementation, if any   constraints in water bodies
                                                           falling at inter-State borders.

10. Future plan & way forward –   : By constructing additional
    to sustain the project/initiative   storm water storage structures
    over time.   for recharging.

11. Photographs to be attached   : Enclosed.
     with caption (when + where
     + what)

Water supply, challenges and the plan of action towards water management in Puducherry

The Union Territory of Puducherry comprises of four regions with a total area of 492 Sq.kms. Puducherry (293. Sq.Kms), Karaikal (160 Sq.Kms) and Yanam (30 Sq.Kms) are situated on the east Coromandel coast and Mahe (9 Sq.Kms) is situated on the West Malabar Coast of India. Puducherry, Karaikal and Yanam receive an average rainfall of 1200mm and Mahe receives 3300mm of rainfall (as it is located in the Western Ghats). Puducherry region lies discontinuously at the tail end of two river basins viz., River Gingee & Pennaiyar. Karaikal is situated at the tail end of Cauvery basin. Yanam is situated as a tiny pocket at the tail end of Godavari basin and Mahe is situated at the tail end of Mahe River.

Topography

Puducherry region is having uneven topographs with an average elevation of about 15m above the mean sea level. The land becomes a little undulatory with prominent high grounds varying from 30m to 45m above mean sea level towards the interior and North West of Puducherry city.

Soils

The main soil types found are sandy loam, clay and clayey loams. Sandy soils occur along the sea coast in Puducherry and Karaikal region. Deep clay and clayey loams occur in the Cauvery of Karaikal region.

Rainfall

The normal annual rainfall of Puducherry is 1267mm. This region receives rain fall both from South West monsoon (June to September) and North East monsoon (October to December). The bulk of the rainfall in this region nearly 63% occurs in North East monsoon period (October to December) and 27% of the annual rainfall comes from South West monsoon.

MONTHLY RAINFALL DATA FROM 2013 TO 2022 IN "mm"

Year/Month	2013	2014	2015	2016	2017
Jan.	Nil	Nil	16.00	5.00	114.80
Feb.	Nil	29.00	Nil	Nil	Nil
March	34.00	Nil	Nil	Nil	3.00
April	Nil	Nil	105.20	Nil	Nil
May.	0.60	148.00	115.20	144.60	8.20
June	24.20	111.00	9.60	48.10	43.40
July	38.20	50.20	58.00	14.60	79.80
Aug.	333.00	74.00	148.00	144.40	152.80
Sep.	136.00	210.00	114.00	156.80	128.40
Oct.	74.40	418.00	80.80	40.00	308.30
Nov.	219.00	209.20	834.80	18.00	540.40
Dec.	100.00	83.60	900.40	85.60	127.20
Total	**959.40**	**1333.00**	**2382.00**	**657.10**	**1506.30**

Year/Month	2018	2019	2020	2021	2022
Jan.	2.00	Nil	37.00	153.20	28.60
Feb.	Nil	Nil	4.40	259.40	5.00
March	94.20	Nil	Nil	Nil	8.00
April	Nil	Nil	11.40	17.20	16.00
May.	10.00	13.60	22.00	41.00	134.40
June	57.60	34.40	30.00	72.40	50.00
July	25.40	137.00	115.60	115.20	139.00
Aug.	174.80	182.00	96.40	199.40	128.00
Sep.	158.00	239.20	116.20	104.00	90.40
Oct.	232.40	267.20	181.40	405.00	227.00
Nov.	364.40	372.20	512.40	1102.80	316.60
Dec.	92.20	262.20	601.80	92.00	124.00
Total	**1211.00**	**1507.80**	**1728.60**	**2561.60**	**1267.00**

Temperature

The climate in Puducherry region and its neighbourhood is considered tropical, situated along the sea coast, both winter and summer are not severe. The temperature ranges from a minimum of 17°C to a maximum of 41°C. The humidity is comparatively higher becoming as high as 83% at times.

Ground Water availability

The annual water availability of the Puducherry District is assessed to be 184.975 MCM. Out of which share of surface water is 60.905MCM (32.92%) and ground water is 124.07 MCM (67.08%).

Now in Puducherry region, Groundwater is the main source for irrigation, drinking and industrial needs. The water consumption of agriculture, industrial and domestic sectors are in the order of 80%, 7% and 13% respectively.

Increasing demand on ground water resources has resulted in drastic exploitation of groundwater levels throughout Puducherry region to a depth of 12 to 45 meters BGL (Below Ground Level) and also sea water has intruded into the ground water aquifers to a distance of 1to 4 kms inland along the coastal tract. Realizing the need to initiate efforts to restore, conserve, manage and maintain the lakes and ponds as an inseparable part of the whole Irrigation and Sustainable agro ecosystem and the significant role played by them in recharge of ground water the Government of Puducherry is taking continuous measures for restoration of surface water bodies and watershed development to store the excess water during aberrant rainy days due to climate change.

In general, it is found that the water levels are declining gradually due to over exploitation of groundwater for Agriculture and other purposes, vagaries of monsoons and non-receipt of water in surface water reservoirs.

In Puducherry, the ground water is the only available source to cater the needs of the public. The water supply of entire areas of Puducherry region serving a population of seven lakhs is being effected by Public Health Division, PWD, through its 18 water supply zones through extracting water from the confined aquifer of 379 deep tube wells erected in the Puducherry region. The extracted water is pumped to the nearest sump eventually raised to the Over Head Tank (OHT) in order to develop required pressure and supply to the public through well laid underground water supply distribution network. On a day 220 million litres of water is supplied through 70 nos. of Over Head Reservoir located in the Puducherry region by extracting continuously for about 16 to 20 hrs per day to meet the per capita demand of the people and supplied to the people in 3 shifts i.e., in the morning 5:30am to 8:30am; afternoon 12:30pm to 1:30pm and in the evening 5:30pm to 8:30pm. Due to continuous extraction of the ground water to balance the demand and supply of water requirement, the quality of water started deteriorating over a period of time. Presently various physical and chemical qualities such as TDS, PH, Nitrate, Iron, Chloride are over

shooting the permissible limit as mentioned in the Indian Standards BIS 10500 to 2012.

Similarly for agriculture, the water needs had been met through the surface water stored in 84 Nos. of tanks/ ponds which was collected during monsoon period by way of rainwater runoff from rivers and tributaries through feeder canals. Those tanks and ponds were acted as rain water holding units. Subsequently in view of liberalized policy measures the ground water extractions became the preferred mode of extraction and the usage of tank irrigation had become obsolete and it was neglected by most of the farmers in Puducherry region. Since the availability of ground water is perennial throughout the year the farmers are more comfortable in using the ground water for farming minimum of three times in a year which is not possible in tank irrigation. This practice of irrigation usage of ground water in abundant quantity (85% total usage of ground water) resulted in depletion of ground water.

Status of existing Water Source in Puducherry

Preliminarily during past decades, the water needed for irrigation purpose was majorly practiced to use the surface water stored in 84 Nos. of tanks/ ponds which was collected during monsoon period by way of rainwater runoff from rivers and tributaries through feeder canals. Those tanks and Ponds tanks were acted as rain water holding units.

Subsequently over a period, the practice of conjunctive usage of surface and ground water was practiced for irrigation mainly. Further by year on year the usage of tank irrigation had become obsolete and it was neglected by most of the farmers in Puducherry region.

Effect due to over extraction of Ground Water

From the year 2003 scientific approach started for analyzing the extraction percentage of Ground water with respect to natural recharging and it was ascertained that there is huge gap in natural recharge and extraction by all stake holders of Ground Water resulting depletion in

ground water by means of quantity and quality. Hence to achieve sustainability in resource management of Ground Water, necessary efforts were made to recharge the ground water by implementing scientific approach of rainwater recharging structures in the rivers and reducing/ stopping the runoff to the sea.

Negative Ground Water pressure

The only source for domestic water consumption from the ancient days in urban area of Puducherry is only ground water. But due to increase in population the demand increased and because of over extraction, negative ground water pressure has been developed which resulted in sea water intrusion and quality deterioration.

Consequences due to Sea Water intrusion

The Total dissolved solids (TDS) and soluble constituents increased above the permissible limit for domestic supply, which creates a challenge to the Government to give more attention to supply of potable water.

Conjunctive Surface and Ground water management strategy

To overcome the above impact, GoP has successfully implemented the two pronged approach namely

(1) Mandating the harvesting of rain through roof top rain water through recharge pits in all the Residential /Industrial and institutional buildings though policy.
(2) PWD initiatives by implementation of **Series of Bed/Check dams across various river courses** and creating recharge wells/ erection of Shafts to increase the ground water table.
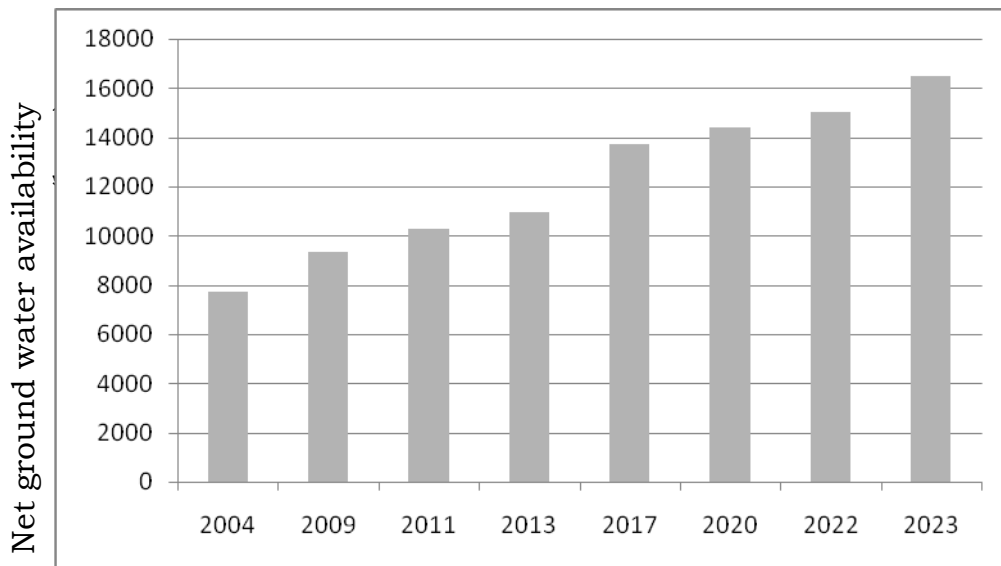

Effectuation of recharge projects in past 20 years

The Irrigation system Puducherry region was started since from beginning of French time. There were six (6) nos. of Check dams constructed during the French rule. By realizing the benefits of those cross masonry structures (Check dams) across the river courses, the Government of

Puducherry also adopted and promoted similar like structures and **constructed additional 25 Nos. of check dams from the year 2003 to 2020. One such check dam is constructed this year and 4 more structures are planned next year** to avoid the letting of precious resource in to the sea and to re-charge/ replenish the ground water table by way of percolation methods.

Details of groundwater resource availability, utilization and stage of development in Puducherry region (2004-2023) (in Ham)
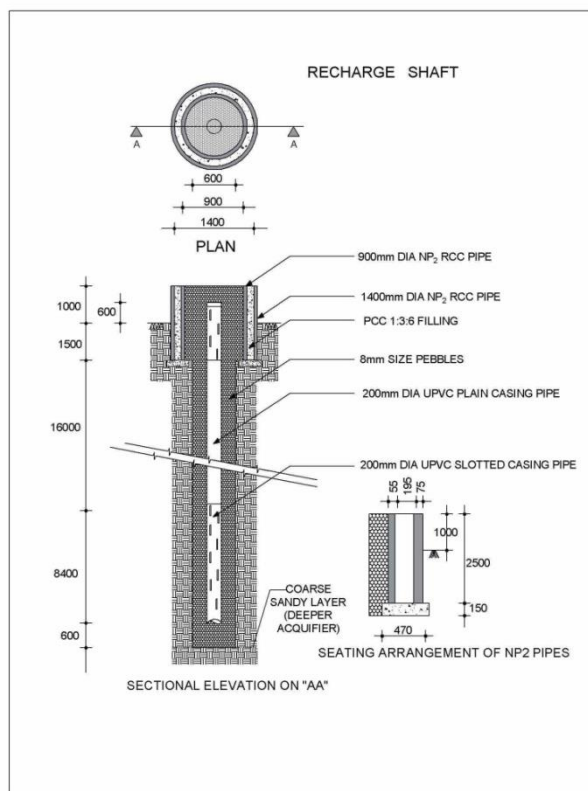
Sl. No.	Assessment year	Stage of ground water development (6/3*100)%	Status
1	2004 (as on 31.3.2004)	179%	Over Exploited
2	2009 (as on 31.3.2009)	150%	Over Exploited
3	2011 (as on 31.3.2011)	139%	Over Exploited
4	2013 (as on 31.3.2013)	130%	Over Exploited
5	2017 (as on 31.3.2017)	102%	Over Exploited
6	2020 (as on 31.3.2020)	98.81%	Critical
7	2022 (as on 31.3.2022)	94.77%	Critical
8	2023 (as on 31.3.2023)	86.34%	Semi Critical

Data Source: *State Ground Water Unit, GoP & CGWB, Ministry Water Resources, Chennai.*

Assessment year

Graph Showing the year wise availability of Ground water Potential in Dam

RECHARGE SHAFT

PLAN

900mm DIA NP₂ RCC PIPE

1400mm DIA NP₂ RCC PIPE

PCC 1:3:6 FILLING

8mm SIZE PEBBLES

200mm DIA UPVC PLAIN CASING PIPE

200mm DIA UPVC SLOTTED CASING PIPE

COARSE SANDY LAYER (DEEPER ACQUIFIER)

SECTIONAL ELEVATION ON "AA"

SEATING ARRANGEMENT OF NP2 PIPES
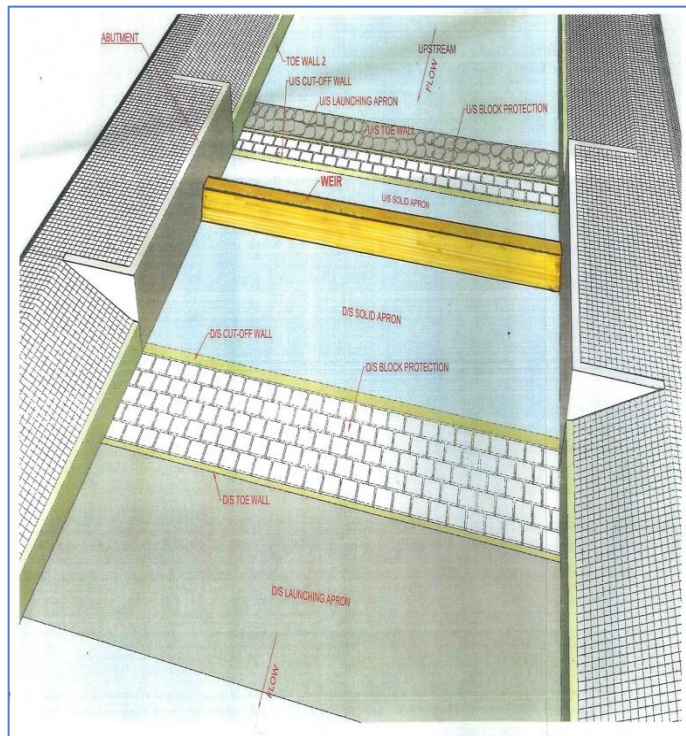
Success of water recharge project implemented

The Central Ground Water Authority classified Puducherry as Over exploited Territory in 2004 (179%)". The above mentioned interventions from 2003 resulted in significant compensatory water recharging as wells as considerable improvement in quantity and quality of ground water. The recent report by same Central Ground Water Authority has placed Puducherry now with 86.34% - a whooping jump of positive results (92.66% decrease) which resulted in change in status of Puducherry from "Over exploited" to "Semi Critical".

Chunnambar Bed Dam-
Sankaraparani River

Enhanced Current Water Scenario

By the way of implementation of effective construction of check dams and innovative method of re-charge structures, it is encountered a complete change in enhancement of ground water source and enable to promoting the Agricultural productivity and bridge the gap of water budgeting.

This will also promote Government of Puducherry's own programme which will improve Government ownership and long term sustainability of water resource management.

Integrated Water Budget and continuous efforts

To find an effective solution to resolve the challenges of potable water supply with the permissible quality and quantity to meet the present and future water demand for Puducherry, an approach on integrated water source management is absolutely needed. In that aspect conjunctive available water source practice is being executed which has resulted in good results by enhancing the water table. Also it is a need of the hour to identify additional sustainable water source by means of providing desalination plant is inevitable for which 01 MLD desalination plant is also in pipeline with the help of CSIR.

SANYASIKUPPM BED DAM – PAMBIAYAR -2003

SITHERI BED DAM - THENPENNAIYAR – 2020

CHETTIPET BED DAM – SANKARAPARANI RIVER-2020

Technology Initiative – Unified Data Hub (UDH)

1. Name of the UT: **Puducherry**

2. Name of the District / Village/Block: **All the districts of the UT**

3. Name of intervention: **Unified Data Hub**

4. Name of the sector in which implemented -**Welfare Schemes Departments**

5. Overview of the project initiative being implemented

The Government of Puducherry UT has various welfare schemes through Central and State Government for citizens, ensuring that these benefits reach the intended beneficiaries without any pilferages or leakages. The departments are having their own list of schemes and beneficiaries with the eligible criteria. They often **work in silos** with no convergence of efforts. The de-duplication of beneficiaries is done by comparing the welfare scheme beneficiaries with the PDS database of Civil Supplies department. But, the Civil Supplies in turn looks for Government Employees, Fishermen, Differently abled, SC/ST beneficiaries data which are owned by different departments.

The **Unified Data Hub (UDH),** designed and developed by NIC, Puducherry and implemented by IT department, Govt. of Puducherry, seeks to intervene in this situation by providing a platform for the departments for auto cross-reference their data. So far, **23 departments and 150 schemes are on-boarded**. The week-long process of identifying eligible beneficiaries has been reduced to few hours through this effort. It would result in administrative efficiency and departmental collaboration in ensuring seamless benefit transfers and public service delivery. In addition, the Online validation, de-duplication and cross-referencing facilities are made available which will help the department to onboard their schemes and utilize the facilities to cleanse the data and find the eligible beneficiaries using their inclusion and exclusion criteria.

The Aadhaar numbers are made safe and secured by uploading all the Aadhaar numbers in Aadhaar data vault. The API facility is provided to check the details of the beneficiary from the live database of UDH. The 360 degree view of beneficiaries helps the departments to know the beneficiaries and their households with the benefitted schemes. The NPCI look-up facility is also provided for checking the Aadhaar linking Bank account of a beneficiary. The UDH certificate can be generated for a beneficiary as a single proof with the welfare scheme details and the details of the proof of certificates.

Also through UDH, the Government will move closer to public by providing all support to know about a scheme, the eligibility and the benefits. The hassle-free submission of Digital Life Certificate to State Social Security Pension schemes enable presence-less, paper-less administration. The introduction of BCT in the UDH as well as in areas such as, Certificates / other Documents issuance, property management. etc will help the delivery of benefits directly to the public with lesser or no document of proofs for claiming their entitlement and will enable automatic benefit transfer. It would, going ahead, allow the **Government to proactively inform the potential beneficiaries**, about the welfare schemes that could be availed by them and as well as deliver them the desired benefits.

It is an Important **Digital India initiative** of Puducherry UT.

6. **Ground situation – Pre-implementation of the project /initiative**

The benefits of the majority of welfare schemes are recurring in nature and are transferred to beneficiaries mostly on monthly basis. For improved targeting of the beneficiaries, their identification and verification of the supporting documents thus become a mandatory exercise. This task poses a challenge to the implementing agencies and administrative departments as **there is no system for periodic updating** of the set of beneficiaries. In addition to this, eligibility conditions are also dynamic that varies with alterations in policy framework. The set of beneficiaries for a given scheme is a variable entity, and the departments lack the adequate and effective infrastructure to validate the identity of beneficiaries on a periodic basis. Further, another significant obstacle to the effective targeting is **duplicate entries, and other inclusion and exclusion errors.** Besides this, the routine issues such as lack of manpower to carry out **physical verifications, recording of erroneous data, invalidated Aadhaar ID cards, etc.** remain peculiar problems in the effective delivery of welfare schemes.

There is currently no system for data permeability across the departments, and the typical silos between the departments prevent any cross-referencing of data. There is a dearth of system for the departments to share data and find common or ineligible beneficiaries across their databases. For instance, some of the major eligibility criteria defined by most of the departments to extend scheme benefits is the kind of ration card owned by the person, exempting Government staffs, exempting expired beneficiaries etc., however, no department's data is linked to the ration card custodian department's database. **The lack of a collaborative mechanism between departments reduces the effectiveness of targeting the intended eligible beneficiaries**.

7. Achievement / Impact of the project /intervention

   a. **Aadhaar Data Vault integration**

   The Unified Data Hub also ensures safety and security to the Aadhaar data. For this purpose, the Aadhaar Data Vault has been created where all the Aadhaar numbers collected from the welfare schemes is stored in a secured manner as per the standards specified by UIDAI. Further, the reference key generated through Aadhaar Data vault mapped with a **5 character UDH code** will be utilized henceforth for sharing among the departments.

   The **Unified Data Hub has the Minimum Common Data Structure (MCDS)** to have Golden data of Beneficiaries of Puducherry Citizens and periodically synced with welfare departments Database with respect to Addition, Updation and Deletion of beneficiaries. A **SoP** has been provided to all the departments for this purpose. Also, the data uploading procedure is also provided.

   The UDH services are provided to the Government Departments to verify and validate the beneficiary's data by **cross-checking/cross referencing** of data both inter-department and intra department duplication through the Web services. It also helps the departments to identify any left out citizens who are not covered under the eligible schemes.

   b. Birth and Death registration and its integration with line departments

   For any schemes, the identification of the beneficiaries has been done by collecting the application and scrutinizing it with the help of nodal staffs, followed by field verification before recommendations for approval or rejection. With the help of UDH, the beneficiaries' details are identified in a pro-active method by collecting the data from sources.

   A BPR has been done by which the procedure a of **collection of Aadhaar number pertaining to Births and Deaths, Local Administration Department (LAD),** were started for uploading Birth and Death Registration details in UDH Portal. The process has been started from July'2023. Since then, the Deaths Registration updated till 3/11/2023 – 1491 which is matching with the scheme beneficiary list as follows:

Table : 1 Death registration matched with Beneficiaries data in UDH

S. No.	Department Name	Scheme Name	Beneficiaries to be excluded due to death particulars in UDH
1.	Department of Civil Supplies and Consumer Affairs	Ration Card Members	**518**
2.		Old Age Persons & Destitute Pension Scheme	**619**
3.	Department of Women and Child Development	Grant of Monthly Financial Assistance to Women head of BPL families	**311**
4.		Supply of free rice to differently abled persons	**70**
5.	Department of Social Welfare	Free supply of clothing items to the differently abled persons	**64**
6.	Department of Adi Dravidar and Welfare	Free Cloth Distribution to SC People	**63**
7.		Grant of Lean Relief Assistance to the fishermen	**44**
8.	Department of Fisheries and Fishermen Welfare	Grant of Ban Relief Assistance to the fishermen	**44**
9.		Grant of Old Age Pension to aged Fishers	**36**
10.	Department of Labour	Department of Labour	**36**
11.	Town and Country plan	Pradhan Mantri Awas Yojana (Urban)	**28**

C) Total Births Registration updated till 3/11/2023 – 1930 (from Jun 2023)

Total Male Child Registered: -966
Total Female Child Registered: -957

Table: 2: Birth registration uploaded in UDH from Local bodies

S. No	Local Body	No. of Registration
1	Oulgaret Municipality	1337
2	Karaikal Municipality	236
3	Pondicherry Municipality	217
4	Villianur Commune Panchayat	93
5	Bahour Commune Panchayat	18
6	Yanam Municipality	16
7	Mahe Municipality	12
8	Mannadipet Commune Panchayat	1
Total		**1930**

Women and Child Department can simply download the Birth details of Female infants from UDH and verify through Anganwadis for enrolment of Girl Child scheme of the UT.

d. Cost & Time savings in Integration of Birth and Death registration through UDH

The Department need not to depend on details pertaining to the new born Girl child by collecting from each hospital but utilise the LAD Births Registration of Girl Child directly downloaded from UDH for field verification by Anganwadi / ASHA workers and enrol them for the welfare schemes. This saves considerable effort of effective man power and efficient way of enrolling in the scheme.

The details of death registrations can be downloaded by departments from UDH for updating in the respective scheme databases. The **UDH generates scheme wise death particulars for the benefit of the welfare schemes officials.**

Table:3 Department/scheme wise Cost savings due to Death registration integration

S. No	Department Name	Scheme Name	Beneficiaries to be excluded	Periodicity	Cost saving (Approx) (Rs)
1.	Department of Civil Supplies and Consumer Affairs	Ration Card Members	518	Monthly	Rs.98,420
2.	Department of Women and Child Development	Old Age Persons & Destitute Pension Scheme	619	Monthly	More than 5Lakhs
3.		Grant of Monthly Financial Assistance to Women head of BPL families	311	Monthly	3 Lakhs
4.	Department of Social Welfare	Supply of free rice to differently abled persons	70	Monthly	Scheme based
5.		Free supply of clothing items to the differently - abled persons	64	Annual	Scheme based
6.	Department of Adi Dravidar and Welfare	Free Cloth Distribution to SC People	63	Annual	Scheme based
7.	Department of Fisheries and Fishermen Welfare	Grant of Lean Relief Assistance to the fishermen	44	Annual	More than a Lakh
8.		Grant of Ban Relief Assistance to the fishermen	44	Annual	More than 2.5 Lakhs
9.		Grant of Old Age Pension to aged Fishers	36	Monthly	1 Lakh
10.	Department of Labour	Gift Coupon	36	Annual	50,000
11.	Town and Country planning	Pradhan Mantri Awas Yojana (Urban)	28	Scheme Based	Scheme based

e. Auto enrolment of Beneficiaries for Pension/welfare schemes

State social security schemes also cover Pensions for various beneficiaries. The eligible beneficiaries need not wait for months for identification, verification and disbursement of benefits. Instead, UDH identifies eligible pension beneficiaries and can be downloaded by the departments. This **avoids collection of application forms, scrutiny and manual office procedures**. Already, the Auto enrolment of beneficiaries for various schemes is implemented.

Table: 4 Department /Scheme wise Auto-enrolment of beneficiaries through UDH

S. No	Department Name	Scheme Name	Methodology
1.	Department of Women and Child Development (WCD)	Financial assistance to the new born Girl Child of Rs 50,000/-	LAD data of Births Registration is being utilised. With Mother Aadhaar number, the particulars of Address, caste, Constituency and location are being matched and fetched. The list is made available to the WCD for further process.
2.	Department of Women and Child Development (WCD)	Old Age Pension Scheme	1. Eligible Male members from UDH portal with age crossing 55 years (3 / 6 months in advance) for field verification. 2. Female members Financial assistance to from Head of Family women members in the age group of 21 to 55 years, those who will be crossing 55 years.
3.	Department of Fisheries	Old Age Pension Scheme	Fishermen community members who will be crossing 50 years (3/6 months in advance).
4.	Department of Civil Supplies and Consumer Affairs	LPG Subsidy	The existing base data in UDH portal (of Civil Supplies) is being used for matching with Gas Consumer Data (which is not available in UDH) and utilized for State Scheme announced by Hon'ble CM.

As per the applicability, more schemes will come under proactive Governance which leads to Minimum Government and maximum Governance, by avoiding new registration, processing and approval.

f. Pro-Active Governance

a. BCT integration of certificates and UDH certificate

Blockchain technology helps the Unified Data hub to integrate the Beneficiary data with necessary certificates. These certificates are often required for proof of documents. The complete Ration card details are uploaded in Block Chain Server by utilising BCT Services. These ration card details can be fetched and verified by the welfare department with latest changes from UDH portal. **All the 3,80,732 ration cards, as on 23/11/2023,** of the UT are made available in Blockchain which are linked with UDH certificate.

Fig 1: Doc Chain dashboard showing integration of ration cards in Blockchain

Figure: 2: UDH certificate integrated with Block chain certificates

Government of Puducherry - UT
Unified Data Hub - Puducherry
UDH Certificate

Ration Card No	324790	Card Type	AAY
Gas Agency	Not Known	Gas Consumer No	0
Address	1, Main Road		
Last Update On			
Block Chain Id:	PY-FCSD-RC-20230822-RC340000176430		

Sl.No.	Name	Occupation	Relationship	DOB	Gender	UDH Code	Mobile Number	Last Update On
1	Selvarasu	Agriculture Labour	Self	05-12-1962	Male	3HY4P	7871839462	
2	Anchalai	Not Available	Wife	14-07-1966	Female	QME9A	-	

Sl.No.	Scheme Name	Beneficiary Name	Reference Number	UDH Code	Bank Details	Last Update On
1	Free Cloth Distribution to SC People (Deepavali & Pongal Festival)	Selvarasu	19826	3HY4P	4995012 69	17-08-2022
2	Housing Subsidy Scheme	Selvarasu M	PMAYP00231	3HY4P	4995012 69	21-03-2023
3	The Puducherry State Old Age Persons & Destitute Pension Scheme	Anjalai	220405	QME9A		06-07-2023
4	The Puducherry State Old Age Persons & Destitute Pension Scheme	Selvarasu	229032	3HY4P		06-07-2023
5	(GMFAWHBPL) - Grant of Monthly Financial Assistance to Women head of BPL families in the UT of Puducherry	Anchalai	324790P	QME9A		20-03-2023
6	Pradhan Mantri Awas Yojana (Urban)	Selvarasu M	3480403629370000741	3HY4P	4995012 69	25-10-2022

25-08-2023 09:59

Government of Puducherry - UT
Unified Data Hub - Puducherry
UDH Certificate

Certifying Authority

Ration Card Certificate: PY-FCSD-RC-20230822-RC340000176430
(Block Chain Id)

g. Cross referencing

Cross referencing is an automated mechanism **where the departments can match their scheme beneficiary list with any number of scheme beneficiary lists of other departments** with a simple user interface. With this facility, the department saves enormous time in identifying the eligible beneficiaries. This facility is very useful for disaster management particularly for relief measures.

A compiled table of cross-referencing departments and schemes are given below:

Figure: 3: Number of departments/schemes benefitted by UDH Cross referencing

Number of Welfare Schemes & Reference Departments for Cross Referencing

S. No	Welfare Department	Scheme	Reference Department	Scheme
1	Civil Supplies	Central DBT State DBT LPG Subsidy	Directorate of Accounts and Treasuries (**DAT**)	Government Employees
2	Women Child Development (WCD) **10 Schemes**	Old Age Pension Scheme (above 55 years)	Fisheries	OAPS
			Civil Supplies	1. Residents of Puducherry 2. Age Criteria
			Social Welfare	OAPS
			DAT	Government Employees
		Rs 1000/- (Women Head of Family Age between 25 to 55 years)	Civil Supplies	1. AAY + PHH Category 2. Eldest Female Members 3. Age Criteria
			DAT	Government Employees
			All welfare Departments	Not recipient of any welfare benefits
			WCD	including own Department Schemes (AIDS, OAPS, etc)
			Revenue	Income Criteria
		Rs 50000/- (Girl Child)	LAD	New Born Girl Child
		Free clothing Scheme	Civil Supplies	1. Residents of Puducherry 2. AAY + PHH Family 3. Single Member family 4. SC / ST 5. Weavers 6. Fishermen
3	Fisheries **14 Schemes**	13 Schemes	Civil Supplies	Resident of Puducherry
			DAT	Government Employees
		OAPS	WCD, Social Welfare	Non recipient of OAPS
			DAT	Government Employees
4	Agriculture (82 Schemes)	All Schemes	Civil Supplies	Resident of Puducherry
5	Adi Dravidar Welfare **20 Schemes**	18 Schemes	Civil Supplies	Residents of Puducherry
			DAT	Government Employees
		Free Cloth Distribution to SC People	Civil Supplies	1. Residents of Puducherry 2. SC Category
			DAT	Government Employees
		Stipend	Civil Supplies	Residents of Puducherry
			Education	Students Community
6	Health and Family Welfare	6 Schemes	Civil Supplies	1. Residents of Puducherry 2. AAY + PHH Category 3. No. of Family members
7	Animal Husbandry	4 Schemes	Civil Supplies	1. Residents of Puducherry
8	Backward Classes and Minorities	11 Schemes	Civil Supplies	1. Residents of Puducherry 2. Caste Category
			Education	1. Eligible Students
9	Social Welfare	13 Schemes	Civil Supplies	1. Residents of Puducherry 2. Caste Category
			Health	1. Physically Challenged 2. Donor Details

The table comprises the departments and the total cross reference made till date is given below. It shows how it has been utilized by the departments.

Figure: 4: Summary of Cross referencing done by various welfare departments

Department	CrossReference
Department of Women and Child Development	39
Department of Labour	30
Department of Fisheries and Fishermen Welfare	20
Department of Social Welfare	15
Department of Higher Education	11
Department of Adi Dravidar and Welfare	8
Town and Country Planning Department	8
Department of Agriculture	3
Department of Animal Husbandry	1
Department of Revenue and Disaster Management	1

h. 360 degree

UDH Portal is providing all departments with **360^0 view to know the complete details of the Beneficiary along with**

- ➤ Basic details - Ration card Number, Ration Card type, Family members
- ➤ Additional details – Occupation, Gas details, Relationship, Mobile Number and UDH Code.
- ➤ Number of schemes availed by all family members across all welfare schemes.

This facility is useful for verification in service counters, field verifications by departments.

Figure: 9

Ration Card No	324790	Card Type	AAY
Gas Agency	Not Known	Gas Consumer No	0
Address	1, Main Road		
Last Update On			

Sl.No.	Name	Occupation	Relationship	DOB	Gender	UDH Code	Mobile Number	Last Update On
1	Selvarasu	Agriculture Labour	Self	05-12-1962	Male	3HY4P	7871839462	
2	Anchalai	Not Available	Wife	14-07-1966	Female	QME9A	-	

Sl.No.	Scheme Name	Beneficiary Name	Reference Number	UDH Code	Bank Details	Last Update On
1	Free Cloth Distribution to SC People (Deepavali & Pongal Festival)	Selvarasu	19826	3HY4P	499501269	17-08-2022
2	Housing Subsidy Scheme	Selvarasu M	PMAYP00231	3HY4P	499501269	21-03-2023
3	The Puducherry State Old Age Persons & Destitute Pension Scheme	Anjalai	220405	QME9A		06-07-2023
4	The Puducherry State Old Age Persons & Destitute Pension Scheme	Selvarasu	229032	3HY4P		06-07-2023
5	(GMFAWHBPL) - Grant of Monthly Financial Assistance to Women head of BPL families in the UT of Puducherry	Anchalai	324790P	QME9A		20-03-2023
6	Pradhan Mantri Awas Yojana (Urban)	Selvarasu M	3480403629370000741	3HY4P	499501269	25-10-2022

i. API integration

The **Application programming Interface(API) helps the departments to connect the external databases of departments with UDH** for accessing the UDH particulars. The API facility is mainly provided for the following purposes:

➢ To fetch the beneficiary details by providing District and Ration Card Number
  o Provided to all welfare Departments
➢ For addition/ updation / deletion of beneficiaries by the welfare departments towards automation by avoiding manual utilization of service templates
  o Implemented by LAD and will be extended to all welfare departments.
➢ To get the aggregator value from UDH is made available in NAPIX / API Setu, which can be consumed after authorisation and authentication.
➢ To get the beneficiary details
  o Implemented by Civil Supplies, WCD and Fisheries.
➢ Aadhaar Data Vault to get the Reference number and hence UDH Code
➢ To get UDH code by providing Aadhaar number and vice versa

8. **Role of technology, if any:**
   - UDH uses secured and safe storage of Aadhaar numbers using Aadhaar Data vault and generates reference keys with 5 character UDH code for all inter-dependencies.
   - A web based **single point portal**.
   - UDH uses national cloud with Block chain as Service for integration of all certificates.
   - All the departments are provided with
     - User logins for HODs and Nodal officers of Schemes.
     - SoP for uploading the beneficiary data
     - De-duplication, Online dashboard and Dashboard facilities
     - Error and discrepancies reports
     - Service template to upload the Addition, Modification and Deletion of beneficiaries
     - Web APIs for accessing real time data for integrating with any web based application owned by the departments.
     - **BCT based certificates integration**
     - NPCI mapper for verifying the Aadhaar link status of bank account.
     - User manuals and training videos.
     - Site admin with configurable parameters.

9. **Challenges faced in implementation, if any**

   a. **Data inconsistencies** – Beneficiary data are not maintained in single database by the departments. Data has been compiled in multiple text files with no aadhaar validation.
   b. **Outdated details of Beneficiaries**- Beneficiary data contain obsolete which are not updated periodically. This led to errors and omissions during exemption and inclusion processes.
   c. **Interdependencies**: Departments require real-time comparison of the beneficiary data
   d. Reports & Search Modules: Most of the departments lack scheme wise beneficiaries' reports, Searching a beneficiary details, Aadhaar de-duplication reports and aggregate details.
   e. No online de-duplication and online validation facilities available with departments.
   f. Non-availability of single platform for sharing the details to identify eligible beneficiaries.
   g. No arrangements for linking Birth and Death registrations.
   h. No arrangements for linking Government staff data.

**10. Future plans and way forward – to sustain the project /initiate over time :**

The UDH is evolving as an **eco system** for beneficiary management to all welfare departments and the technologies like Data Analytics, Artificial Intelligence can further make the system more powerful with new advancements. A **Helpdesk** will be provided for the needy departments to resolve their technical issues and also to monitor their regular updation. The UDH will also enable the state to manage the UT beneficiaries' data in a digitized, centralized and secured manner. Further, it has made a paradigm shift in the service delivery achieved through Technology and ensuring quality of service delivery.The UDH also use UDH code to uniquely identify the beneficiaries of different schemes implemented by Government and can integrate with any national/state portal data with departmental utility databases on a real time basis. API integration help the departments to access the beneficiary data from UDH in a secured manner. UDH will provide seamless integration of any field survey process to retrieve and update the real time data of beneficiaries. The BCT integrated certificates with UDH generates a single UDH summary certificate with BCT details which avoids multiple copies of documents for proofs. UDH helps to **achieve paperless and presence less beneficiary system.**

Training and Handholding Support to Welfare Departments

Total Training session organised – 9 including Sensitisation Program

Hand holding session and On-Boarding in the respective Welfare Departments
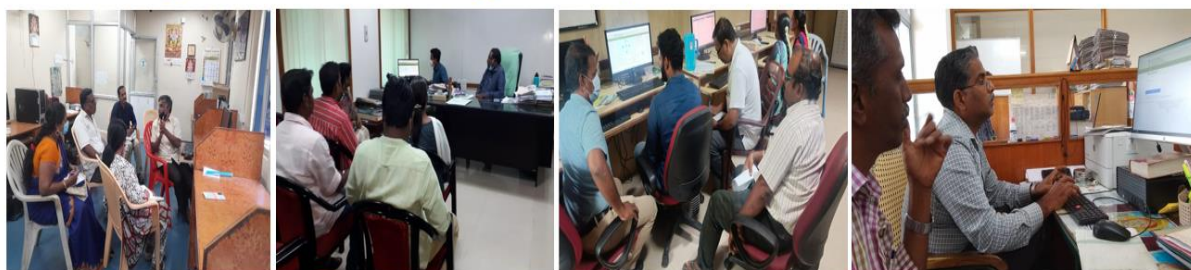
Training programs conducted for various welfare departments of the UT and handholding support giving to the respective departments

Review meetings of UDH with LAD for integration of Birth and Death records

Secretary Planning giving a presentation on UDH during UT conference held in Dec2022

Workshop on UDH for welfare departments in Feb 2023

Presentation of UDH during the launch of UDH 2.0

Honourable Lt. Governor launches UDH 2.0 in Aug'2023. Hon'ourable Chief Minister, Honourable Minister for Home, Honourable Speaker also graced the occasion.