Impact Assessment of CSR Education Programs of Tata Chemicals

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Executive Summary – Assessment of the CSR Education Portfolio of Tata Chemicals

Context

The CSR Education initiatives of Tata Chemicals, implemented through the Tata Chemicals Society for Rural Development (TCSRD), span eight interventions. These include six small-scale initiatives, focused on communities surrounding its Mithapur plant in Devbhoomi Dwarka district of Gujarat, and two large-scale programs run in partnership: The Foundational Literacy & Numeracy (FLN) program with Coastal Salinity Prevention Cell (CSPC), covering the entire Okhamandal block, and the Learning and Migration Program (LAMP) with the American India Foundation (AIF) reaching multiple districts of Gujarat- This assessment aims to understand the extent to which these programs have met their stated objectives, and offer recommendations for the future, through in-depth assessment of the six smaller programs and high-level assessment of the two larger programs. The process included site visits, interviews, focus group discussions, document review, and student assessment in the Science Program.

Assessment of the Six Smaller Programs

The six CSR programs operating in the vicinity of Mithapur plant of Tata Chemicals, can be seen as enrichment programs, addressing multiple and highly relevant aspects of education. They span the upper primary and secondary levels of schooling, promote Science learning, support those aspiring for college education, help students to enter the highly regarded Jawahar Navodaya schools. re-integrate drop-outs back into education through open schooling, and connect children in remote, access-less parts of the block with schooling.

Most of these programs are focused on the post-primary level. Hence their outcomes are dependent on strong FLN and primary level competencies developed in students in earlier grades. That however Is not the case. A significant proportion of students lack basic reading, writing and math abilities. Project teachers express their dilemma about how they can teach Science and Math of upper primary or secondary level to students if they do not have even the basics of reading writing and math? An overarching observation of the assessment, hence, is that inadequate FLN competencies in students is pulling back the outcomes of these programs; and strengthening the basics, will automatically raise their outcomes. The recommendations are as follows:

1. Increase the scope and scale of the 10th Coaching Program
   Begin coaching from Grade 8, cover all 16 secondary schools, and aim for 100% pass rate, with a significant share of students scoring first division.
2. Intensify and expand the Science Bus Initiative
   a. Integrate Math alongside Science
   b. Align content with school curricula and schedules
   c. For intensification and scale:
      i. Increase engagement frequency (monthly to weekly) using lighter vehicles for physical engagement and laptops / tablets for online.
      ii. Better use of STEM kits and smart boards

    d. Make learning outcome evidence-based and measurable.
    e. Motivate government teachers to adopt
3. Expand the NIOS Program
   Differentiated classes for older, longer drop-outs vs younger, recent drop outs may increase efficiency. May create hub-and-spoke clusters for village accessibility. Learn from the SNDT model to strengthen design.
4. Pause Navodaya Coaching
   Pause and re-initiate after foundational competencies improve across primary levels.
5. Sustain the Scholarship Program
   Continue long-term support to aspiring students, especially girls, to foster generational change and community role models.

Assessment of the Two Larger Programs

1. Strengthening Foundational Literacy & Numeracy (FLN) in Primary Schools in Okhamandal

Context

The FLN program, operating in the underdeveloped Okhamandal block, has evolved over three phases since 2015, with the aim to address the persistent gaps in foundational literacy and numeracy (FLN) in primary schools, train government teachers in a new pedagogy, and bring systemic change. The program expanded from a pilot in 20 schools to all 94 schools in the block, with significant investment of ₹11.67 crore.

Despite positive steps such as widespread school coverage, community engagement through School Management Committees (SMCs), and teacher professional development initiatives, the core objective—ensuring foundational literacy and numeracy—remains unfulfilled for a significant proportion of students. Program evaluations and student assessments over the three program phases uncovered widespread deficits. Classroom observations as part of the current assessment also showed that many students across grades 3–8 lacked basic math concepts and displayed limited writing skills that are preventing them to learn at age-appropriate levels, as well as minimal exposure to broader educational content or real-world knowledge. The assessment also reveals mixed outcomes with respect to pedagogy adoption, systemic integration, and sustainability.

The program's design, particularly its sub-optimal targets of 60% students achieving FLN in one year or 70% over an entire phase, emerged as a structural shortcoming. Such modest goals allow a significant proportion of children to progress higher grades without the necessary competencies, compounding learning deficits over time. Furthermore, the uptake of the program's pedagogy by government teachers was less than satisfactory, as many viewed the intervention as the responsibility of project staff. The role of SMCs, though engaged in school upkeep, lacked strategic advocacy or influence on broader education issues, suggesting an area for capacity building.

Observations

Field visits and stakeholder discussions underscore the following:
- Students of grades 3-8 struggled with basic concepts like place value. Writing tasks revealed repetitive sentence structures and limited thinking, indicating surface-level learning.
- Lack of general awareness (current affairs, key national leaders, map of India or Gujarat) signals limited engagement beyond textbooks.
- Government teachers view CSPC's pedagogy as external, showing no inclination to adopt it.
- Frequency of classroom visits by CSPC staff has declined due to altered program design and staffing structure (1 facilitator per 20–25 schools).
- SMCs, though engaged in school upkeep, lacked strategic influence on broader education issues
- Key measures to influence the system like the Teacher Resource Centres in Dwarka and DIET Jamnagar are no longer functional
- The district has an alarming 1,800 out-of-school children, mainly migrants, at Rupen Bandar.

Analysis

The program's low targets—60% FLN achievement in one year or 70% over a phase—reflect a fundamental design flaw. They permit widespread grade progression despite unresolved learning gaps, compounding deficits, preventing age-appropriate learning, and driving failure and dropout. As a result, foundational learning shortfalls persist across primary, upper primary, and secondary levels even in Year 11, undermining the program's core objective.

Negligible pedagogical uptake by government teachers poses a risk to sustainability.

The lack of longitudinal impact tracking and sustainability benchmarks, clouds outcome accountability. Current strategies do not address transversal skills or real-world awareness, leaving children underprepared beyond the classroom context.

Recommendations

The report recommends a strategic redesign to address these challenges within the remaining year of Phase-3. This includes:

- Setting a 100% annual achievement targets for foundational learning: All children to achieve all FLN competencies by year-end, before they progress to the next grade.
- Adopting a two-tiered Learning Strategy:
  - Level 1: Target FLN gaps (Grades 1–2).
  - Level 2: Build grade-appropriate competencies (Grades 3–5).
  - Deliver L1 and L2 consecutively to address the entire primary cohort effectively.
- Integrating this pedagogy into government classrooms: Empowerment of government teachers and hands-on training
- Building Strategic SMCs: Train in advocacy, data interpretation, and strategic school development planning.
- Reactivate collaboration with DIET and district resource centres.

- Integrate Digital Learning: Guide children toward educational use of mobile devices to unlock their learning potential.
- Addressing Out-of-School Children: Design a targeted re-enrollment program for 1,800+ out-of-school children in Rupen Bandar.

The Foundational Learning Project holds immense potential, but realization requires urgent redesign. Moving beyond low-impact benchmarks and integrating deeper systemic engagement—especially through government teachers and SMCs—can lay the groundwork for sustained change. Achieving 100% FLN in one academic year and enabling teachers to carry the approach forward can finally fulfill the program's vision of quality education for all children in Okhamandal.

2. Learning And Migration Program (LAMP)

Context

The Learning and Migration Program (LAMP), launched by the American India Foundation (AIF) in 2005, aimed to tackle the overlooked issue of seasonal distress migration. Each year, impoverished families migrate for eight months after the monsoon to work at salt pans, sugarcane fields, brick kilns, and construction sites. Children often join the labor force, losing access to education and becoming trapped in cycles of child labor and poverty.

In its first decade (2005–2014), LAMP pioneered seasonal hostels to keep children in school in their villages or supported their learning at worksite schools if they migrated. Operating in four states and reaching over 10,000 migrant children per state, LAMP influenced national policy, prompting the central government to direct states to adopt its model under Sarva Shiksha Abhiyan (SSA). Its second pillar, the Learning Enrichment Program (LEP), aimed to address learning deficits and strengthen foundational skills across thousands of government schools. The third pillar focused on empowering School Management Committees under the RTE Act (2009). TCSRD joined as a key funding partner in Gujarat in 2012.

In its second decade (2015–2025), LAMP moved away from its migration focus by phasing out seasonal hostels—the core strategy to prevent child migration. LEP weakened with the hub-and-spoke model, which concentrated resources in hub schools, leaving spoke schools under-supported. Systemic advocacy also declined sharply.

In the latest phase, LAMP operated in nine Gujarat districts but was reduced mid-phase to five—Amreli, Bhavnagar, Mahisagar, Kutch, and Morbi—due to external constraints.

Observations

1. Shift Away from Core Mission: Migration Mitigation

The assessment finds that LAMP has deviated from its original mission. Funding for seasonal hostels and site schools—once central to migration prevention—has been withdrawn. AIF's current strategy of encouraging children to stay with caregivers during migration has yielded limited success, as these

families often lack the means to retain children. Migration continues unabated in LAMP geographies, and no budget or strategy exists to mitigate it.

2. Learning Enrichment Program (LEP) – Structural Weaknesses
LEP operates in 167 schools but runs full-time only in 25 hub schools. Spoke schools receive sessions only once a week. Key issues include low adoption by government teachers, absence of sustainability benchmarks, and inconsistent monitoring. The 25 hub schools, and their spoke schools, are spread over 5 districts, making the coverage in each district too miniscule to have any impact on the system.

3. Minimal and Ineffective Teacher Training
Teacher training occurs only for one day per year, with negligible long-term impact.

4. Questionable Coverage and Reporting
Despite claims of reaching 28,055 children in 2024-25, only about 2,000 receive intensive engagement, those in hub schools.

5. Strategic Uncertainty and Funding Shifts
AIF plans to exit the current districts and shift operations to Narmada. This decision appears unilateral and misaligned with TCSRD's objectives. TCSRD funding has also moved from the original 40% to the current 100%.

Recommendations

1. Re-center Migration Focus: Redefine LAMP's mission to prevent migration of children and ensure their education, with requisite strategic and funding reconfiguration, and renewed emphasis on systemic advocacy.
2. Enhance LEP Sustainability: Set goals for 100% FLN achievement by all children, and invest in sustained teacher development, and establish sustainability parameters.
3. Rationalize Coverage and Reporting: Focus on depth over breadth and report only sustained engagements.
4. Partner Realignment: TCSRD may consider engaging directly with a high-performing LAMP partner like Unnati, focused on the education of children of salt workers in Bhachau, Kutchh, and create an impactful program incorporating all of the above elements.

LAMP's evolution from a bold migration-centric initiative to a diluted FLN intervention raises serious questions of purpose and efficacy. While LEP continues to offer value, the absence of targeted migration strategies weakens the program's foundational intent. With recalibration, clear metrics, and strategic partnerships, TCSRD can reclaim the program's original mission—ensuring no child

Cross-Cutting Recommendations Across the Education Portfolio

- Sharpen Goal Articulation
  Every project must state a measurable, time-bound outcome, with built-in accountability across all levels—field, partner, leadership.

- Be Data-Driven
  Prioritize granular, real-time data for program design, monitoring, and improvement. Address gaps in baseline-endline tracking and partner-level performance analysis.
- Strengthen Monitoring and Oversight
  Implement a more robust partner monitoring framework to ensure outcomes and efficient use of funds.
- Address Migration Hotspots around Mithapur
  Design an education intervention specifically for Rupen Bandar, which has over 1,800 out-of-school migrant children.
- Commission in-depth studies of the two larger programs, that have received decadal support from TCSRD: FLN for design inputs towards meeting the stated goal; and LAMP for partnership realignment.

Strategic Direction

- Re-center the Portfolio Around a Bold Vision for Education

  Aim to '*Universalize Quality K–10 Education in Okhamandal by 2030'*, aligning with Samagra Shiksha Abhiyan and UN Sustainable Development Goal 4.

- Redesign with Scale and Saturation
  Prioritize deeper impact in fewer geographies, and set ambitious, time-bound outcome targets across all programs.

Full Report

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Context

Tata Chemicals is a global company known for its focus on sustainability, innovation, and science-led solutions. The company operates in the sectors of basic chemistry and specialty chemistry encompassing performance materials, health and nutritional ingredients, aa well as agrochemicals. Tata Chemicals' CSR activities focus on community development, environmental conservation and social inclusion. The company's CSR activities are carried out in the communities around its manufacturing plants through Tata Chemicals Society for Rural Development (TCSRD). The company is looking to do an Impact Assessment of the CSR Education Programs around its largest manufacturing set up in Mithapur, Gujarat, to provide them information on the current status and necessary direction for the future.

CSR Education Programs

TCSRD has eight education interventions, seven in the Mithapur area, and one across several districts of Gujarat. They cover the entire spectrum of school education - pre-primary, elementary and secondary – and have a strong social inclusion focus. Six programs are are small-scale and run directly run by TCSRD, while two are larger in scale and run in partnerships.:

	Program	**Objective**	**Budget** FY23-24 (L)
1	NIOS	Re-enrolment of dropout students through NIOS board	13.46
2	Navodaya Coaching	Preparation for selection exam for admission in Navodaya School	2.50
3	Science Bus	Science and STEM activities classes for upper primary students	7.24
4	Scholarships	Scholarship for further studies for students – 5 different types	33.28
5	Coaching 10th	Increase in academic performance of students in Math and Science in grade 10th (50% increase of the base)	13.5
6	LEP	Cover students in LEP in remote locations of the block	3.72
7	FLN by CSPC	• Enhance FLN skills at pre-primary and primary grades & mainstreaming of Children. • Improve Teaching and Learning practices in the Classrooms and enhance learning environment in schools and Aganwadi centers. • Building effective community connect, towards Education Ownership	100.00
8	LAMP by AIF	Improve learning and ensure schooling for children of migrant communities from pre-primary till secondary and strengthen SMCs	70.00

Assessment Objectives

- Study the programs across locations to understand the depth of engagement, the alignment with community needs, and the level to which their key objectives have been met
- Programwise assessment
    - In-depth assessment of six smaller programs around Mithapur
    - Cursory assessment of the two larger programs with reach in other districts
- Overall assessment of the Education portfolio with future directions and strategic road map

The assessment has been envisaged in two stages:

1. Stage 1: In-depth assessment of the six smaller scale programs, and cursory assessment of the two larger scale programs.
2. Stage 2: In-depth assessment of the two larger scale programs (*to be decided post the stage-1 assessment*).

The assessment has involved:

- Study of the relevant documents and data:
- Site visits of all 8 projects
- Focus group discussions with beneficiaries, teachers, community and stakeholders
- Administering of a learning assessment tool on a sample of students where coverage is large
- In-depth interviews with partner heads, community leaders, key stakeholders
- Interaction with TCSRD team and CSR leadership.

The programwise assessment is presented below in the following sequence:

The Six Smaller Programs

1. Coaching for 10th Board
2. National Institute of Open Schooling (NIOS)
3. Science ''World on Wheels" Bus
4. Navodaya Coaching
5. Learning Enhancement Program (LAP) Wadi Area
6. Scholarships

The Two Larger Programs

7. Foundational Literacy & Numeracy (FLN) in Primary Schools in Okhamandal Block, in partnership with Coastal Salinity Prevention Centre (CSPC)
8. Learning And Migration Program (LAMP), in partnership with American India Foundation (AIF)

The remit was to do a cursory assessment of FLN and LAMP, given paucity of time. But since these are mature programs have run in decadal time-frames, they could not be treated the same as more recent, small-scale programs. Therefore, while keeping the focus on the assessment period, i.e. the current phase, to get the perspective documents and data were studied since program inception. While both are learning programs, the decision was to put away learning assessment for a probable second round.

ASSESSMENT OF THE SIX SMALLER PROGRAMS

1. Coaching for 10th Board Exams

Objective: Prepare students for their board exams by covering the syllabus comprehensively, focusing on key topics, and conducting regular assessments to track progress

Sub Objective: School result to improve, student attendance and individual score to also improve, student interest in science and math to improve.

Coverage

The 10th Coaching program was initiated in FY24, and has completed two years. The TCSRD focus is mainly in rural Okhamandal, hence all four rural secondary schools were covered in the first year, and 118 students of grade 10 were provided coaching to pass 10th board exams. In the second year one grant-in-aid school was added on the principal's request, and 136 students were reached in 5 schools.

Operationalisation

Coaching takes place from July till March and classes run beyond school hours. Each coach covers two schools, and runs a class for 2 hours per day in each school, teaching both Science and Math. The coaches are paid Rs 125 per hour. They earn Rs 500 per day on an average, for 4 hours of coaching. The program goes on for 6 days a week. Coaches make Rs 10,000 – 12,000 per month.

Two coaches were hired in year-1. A third coach was hired in year-2. In one school, going against the program design, the coach taught during school hours. This was on the principal's request, citing teacher shortage. The coach essentially replaced the govt teacher. This is not a desirable or sustainable practice (as discussed later).

Outcomes

In FY23, the year prior to the intervention, the pass percentage of 4 schools was 36.88 (total students 96). In FY24 with the coaching intervention, the pass percentage rose to 50.42 (total students 106). Two students got first division. A significant number of students, however, did not appear for the exam. One document says 40. (Data varies across different documents.) Recently announced 10th board results show TCSRD supported school achieving 74.98 pass percentage. This performance improvement shows that a target of 100% is eminently possible.

Coaches meet for monthly review in the TCSRD office. They are provided with additional study materials, specially designed for the students, as well as mock tests.

ASSESSMENT OBSERVATIONS

- All people met agreed that the intervention is important as it serves a felt need of supporting students to clear their 10th board exams, which is critical for their future.

- Student attendance is a challenge. A coach said that his class started with 35 students, but gradually dropped to 27-28. Many students stopped coming. According to him, “A lot of engagement is required with parents to send their children to school. Even prior to starting the classes, counselling is required for parents”.
- Students’ learning levels are an issue. There were some students in class 10th who cannot even read and write properly, or do subtraction and multiplication. The understanding of Science and Math concepts is weak for most students, hence their level of engagement in class is low. That is why the board results of Okhamandal are so poor. The above points were shared in their own ways by a school principal, schools teachers and a coach.
- According to the coach, with limited time to prepare all children of his class for the board exams, he divides his students into three level-based groups. With A-level group which has the best students, he covers all chapters of the course; with B-level group he does about 60-70% of the course; and with the C-level group, he does just a few selected chapters, focusing on memorizing the answers of questions that will help them scrape through.
- The coach said that TCSRD team gave them a target of achieving a pass percentage of 50% (perhaps in conversation, not as a KPI). And that is what they achieved. It appeared from the conversation that clearing exams was the main target of the program. Performance was not the focus. Even the results were presented in two categories – ‘pass’ and ‘fail’. Student scores were not presented.
- Girls do significantly better than boys. This remarkable point was endorsed by every single stakeholder met during the field visit. The Baradiya School principal said emphatically, “Girls show greater sincerity, and work harder. Boys while away hours on their phones playing games”.
- In an FGD with secondary students in a school post their board exams, it was evident that boys had less focus on their studies or their futures, compared to girls. To a question about how they performed in their exams, girls gave far more concrete answers than boys. And to a question on what the children planned to in their summer vacations, boys had very little to say. Girls on the other hand, showed keenness to know how to learn new skills, and how to improve themselves.
- The program does not currently have a mechanism for tracking the students post completion of 10th. The coach tracks his students at his own level. He said most of the students who fail do not want to come back to school. But some girls have joined NIOS.

TCSRD’s Plan for The Coming Year

Based on interview with the TCSRD leadership, the future plan being discussed is as follows:

- New aspects have been added in the program such as a student baseline prior to start of the new academic session
- Conducting coaching for two years, covering 9th and 10th grades, is being planned to achieve better results.
- Five rural elementary schools have been upgraded to secondary in FY25. Next year these schools will have grade 9. Including these schools in the program is being discussed.

ASSESSMENT ANALYSIS & RECOMMENDATIONS

This is a high-need program for a block like Okhamandal, towards improving its education indicators. The program is in its early days, and is already showing results. The team is on an improvement journey, adding new elements to the program. The expectation is that the second-year results will go well above the first year. As the program picks up, it will add significant value to students, schools and community. in addition, it will also make a substantial contribution to the education scenario of the block.

Assessment recommendations are follows:

Goal Setting

To make the intervention truly impactful, TCSRD may consider, defining a more audacious, measurable and time-bound goal, one aligned with the larger picture, that includes the national policy and the SDGs. Both the GOI through *Samagra Shiksha Abhiyan*, and the UN through SDG 4 on Quality Education, aim to universalize secondary educationeby 2030.

Rural Okhamandal has 16 secondary schools – 13 government and 3 government-aided. In addition, the block has 2 senior secondary schools. TCSRD may consider defining its goal along the lines: 'Ensure, that by 2030, all rural secondary schools in Okhamandal will produce 100% results in 10^{th} board exams, with a targetted number of students (e.g. 75%) achieving first divisions. This transformative performance will make Okhamandal spike at the district level, and come up among the top-performing blocks in Gujarat State.

A parallel objective of the program could be to strengthen secondary schools during the 5-year period, such that these results sustain post program exit, and in the longer run.

Ambitious and clearly defined goals and objectives serve to galvanize the organisation, the community, and the administration. Such a goal is more likely to enable TCSRD to get a stronger commitment from the community towards their children's schooling, and a more effective response from the administration towards strengthening secondary schools.

Program Design:

An enlarged goal will necessitate shifts in the program design. Suggestions are as follows:

- Give the intervention a longer run-up. Intervening in 10^{th} is not effective, given the enormous learning deficit that has accumulated by this grade. TCSRD has already realised this and looking at intervening from grade 9 onwards. It is recommended, however, that the intervention be started from grade 8, allowing students three years to overcome accumulated learning gaps, and be up to speed for 10^{th} board exams. The duration may look long but the likelihood of 100% children passing will become far higher, and the scores too will rise significantly. *In Tata Steel, the Pre-Matric Coaching program adopted this design a few years ago, and has been giving close to 100% board results every year. One unit gave 100% first divisions a couple of years back, which caught the attention of Jharkhand government and they wanted to study the model.*
- Focus on concept formation rather than the rote-based cram-and-clear approach. Towards this end, enriching the training of coaches, and supporting them with STEM kits will improve their classroom transactions.

- Curate quality online content, such as Khan Academy, to strengthen conceptual understanding of coaches and students, leading to more effective transaction of content in the classroom.
- Focus on learning for ALL students, and not just a few bright students. Systematic instructional planning and effective pedagogy is key to a classroom that ensures every child learns.

Data-Centricity

The more data-oriented the team is, the sharper the program design will be and the more effective the program monitoring. This will lead to superior program outcomes.

For instance: Students pass % is important basic data. But more granular data is required, such as:

- School-wise data on 1st, 2nd and 3rd divisions
- Individual student scores, overall and subject-wise
- Inter-school comparative data
- A comparative of the program result, with the block, district and state results

This data will throw up action points for program improvement. It will keep the team in touch with school performance and coach performance, and will lead to constructive feedback and improvement action in monthly review meetings. Granular data will also inform which subjects need more resources and better teaching strategies. In short data-centricity will put the program on a continuous improvement journey. A comparative of program performance with system performance (once the program has picked up well) will yield powerful material for advocacy with the government, and influencing government schools for the better.

An analysis of the student baseline conducted at the start of the second year would inform:

- The topics/concepts in Science & Math that need special focus at grades 8, 9 and 10 levels.
- The children who could be grouped according to their levels and type of support they need.

Training of Coaches

What coaches do in the classroom determines how effectively the program pursues its goal. Hence KPI setting for coaches is important. For example, 100% children passing 10th board should be a non-negotiable. Equally important would be their capacity building plan. Coaches need training and academic support, and well as regular monitoring and review to stay on track. Analysis of their performance of the last two years, in terms of student attendance, class performance and final exam scores will be the basis to plan further. In addition, a review of their workload, as well as their own competence in their subjects will be of help. Online content like Khan Academy and other similar platforms can be very useful for coaches to polish their own knowledge, and could be part of their capacity building plan.

Academic Monitoring & Review:

An instructional plan created for the entire year, broken into weekly / monthly /quarterly units could be basis for regular monitoring and review.

Post 10Th Tracking:

A system to track the students after the 10 board is complete, will help in the following ways:

- Support with further education
- Re-admission of those who could not clear board exam
- Guidance for entering the world-of-work
- Volunteering for 10th coaching

Government Collaboration

This proposal could be discussed with the government before the start of the program. It could contain explicit inputs to be provided by TCSRD, and those expected from the administration. It could include a component of joint review by TCSRD and representatives of the administration, to increase their engagement. Hence, an underlying objective of the program could to enable TCSRD investment to unlock increased government response towards secondary school strengthening.

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2. National Institute of Open Schooling (NIOS)

Objective

Implementing a mainstreaming project to Okhamandal block dropout students into education through NIOS board, fostering academic re-engagement and empowering their future trajectories

Coverage

The program was initiated in FY24 with three centres and 115 dropout students (94% AA, 89 women). Most students were studying for grade 10. In FY25, a total of 265 students were enrolled of which 61 have continued from previous year for grade 12. Three coaches run the classes.

ASSESSMENT OBSERVATIONS

Two NIOS classes were visited, FGDs were held with students and three NIOS teachers. The observations follow:

- The first impression of NIOS classes is that they are dominated by women.
- The second observation is that it is a place where students love to come. There is a positive and cheerful atmosphere.
- NIOS classes see almost full attendance, and almost all students pass the exams.
- The younger women, who left school a few of years back, some of them just short of completing their 10th or 12th board, describe the agony they faced sitting at home. They felt that their lives have come to a halt, confined to home chores of cooking and cleaning. They also met the derision of visitors and neighbours for having fallen out of school. Now back in school and doing well, they have found their feet and are moving ahead.

- The older women who had left education a decade or two ago, with some having forgotten to form letters with a pen, have picked up remarkably. They have done well in exams, and are hoping to learn a new skill, like computers, or find a job or get a promotion.
- Most students are keen to share their stories of transformation – their regaining of self-esteem, new-found respect in the family and community, the benefits of becoming part of a peer group, independence of going out on their own, freedom of planning for themselves, the joy of making breakthroughs with their learning, and looking forward to a likely future of work and earning. NIOS classes are like a new lease of life for women.
- The types of jobs/ training the students have joined post NIOS, or are aspiring towards are – ITI, computer courses, apprenticeship with Tata Chemicals, nursing, anganwadi supervisor, etc.
- The three coaches who ran the three NIOS classes were quite experienced with competitive coaching. They had to reconfigure their teaching for NIOS students. But they did it effectively given all the students endorsed their teaching. They themselves also shared how they had to go about adjusting to a new system.
- The NIOS curriculum is much tougher than that of Gujarat 10th board and far more extensive (16 chapters vs 40) as per the coaches.
- In the coming year, however, NIOS classes are being shifted from urban areas to rural, hence new coaches have been hired.

ASSESSMENT RECOMMENDATIONS**:**

- NIOS will benefit from becoming more data-centric. Data of the range of students attending the in terms of age-brackets, social background, length of drop out, grade of drop out, etc, was not readily available with the program team. Such data needs to be studied, and analysed to sharpen the program design. For, example, data can tell if it would help to have separate classes for younger students who are short drop out, and older students who are long drop outs?
- One of the TCSRD team members observed that students of 10th coaching study as a burden, while those who failed to clear board and ended up sitting at home for a couple of years come back to NIOS and study most willingly! This is a sharp observation and brings of several important aspects to light:
    - It points to some intangible lacunae in the education system. The same students who failed to complete 10th in the first place, are producing great results in NIOS (which has a far more extensive syllabus).
    - Whereas 10th coaching has 50% results, NIOS had 100% results.
    - It points to the need for pedagogy improvement in 10th coaching.
    - Mentoring and counselling may need to be stepped up for 10th coaching, aimed towards building student aspiration.
    - Some elements of teaching in NIOS may be adapted for 10th coaching.
- The field observations have shown that NIOS program is not just an education program, but one of the finest interventions for women empowerment.
- From all standpoints, budget permitting, NIOS would on top of the list for scale-up. It is clearly transformative in nature, especially for women.
- It would be helpful to study the documentation of the parent SNDT program, which achieved such heights that it was talked about the Tata Group level. It may provide tried and tested inputs to add value to this program.

3. Science World On Wheels Bus

Objective:
Empowering rural students through hands-on science education delivered directly to their doorstep, fostering curiosity and critical thinking for future STEM leaders

KPI:

- Number of students who participate in activities or interact with the mobile van.
- Learning outcomes or knowledge gained by students through pre- and post-visit assessments

Coverage: 24 Schools 1595 Students of upper primary (Boys: 907, Girls: 688)

Budget: Rs 7.24 Lakh

FY22 was the starting year of this initiative. 24 upper primary schools were selected in close proximity of the plant. The initiative is directed at students of grades 6-8. The bus visits each school once a month. One science concept is delivered per month. On each visit, the bus stays at the campus for the full duration of the school. During this period, children of grades 6, 7 and 8 come into the bus turn by turn for two hours each. Over 8 working months, 8 concepts are delivered. A social animator takes a class with the children on the bus through demonstrations, ppt and STEM models. The content is linked with the relevant chapter in the text book. After the session Is over, children are given practice material in form of paper cut-outs and work sheets that they can to use to understand the concept better.

But in reality, these concepts do not get discussed in the school after the Science bus has left. The school teachers do not create time to support the process. Science Clubs have been started in these 24 schools, comprising children active in Science. They are also supposed to pursue the Science concepts. STEM kits have also been given to the schools related to the 8 science concepts. Besides, almost all schools have smart boards with all the content available in form of videos, etc. Yet in absence of a motivated and passionate adults to guide and support the learning of children, these resources do not get utilised, Teachers have no time to engage with children.

During the field visit, Padli school was visited. The teacher showed enthusiasm for the Science Bus initiative. But she also said that while children understand, they cannot express themselves in writing. The topic of 'Digestion' had been covered by the Science Bus recently. During the visit, this same topic was discussed with 16-17 children of grade 6. The children took immense interest in the discussion, as they broke out of their shyness to participate. Step by step they were able to connect with the digestion process, and they were quite willing to write and draw what they had discussed. A couple of children were quite sharp and knew much more than others. But overall their knowledge of the digestive system was below grade-6 level.

It was learnt that a STEM lab had been established in a government model school in Dwarka in FY 19 by TCSRD. In this lab Science teachers are provided training. But its use is infrequent.

LEARNING ASSESSMENT

Assessment Process

As part of the assessment process, a learning assessment was conducted on sample basis, of the students who are part of the Science Bus initiative. The following process was followed:

- School selection: A 30% sample was taken of the 24 schools. Through a random selection process 8 schools were identified.
- Student selection: A 10% student sample was taken in each sample school. Through a random selection process 150 students were identified for the learning assessment.
- An assessment tool had questions from the 8 concepts covered. Minor adjustments were made in the difficulty level of the questions, in discussion with the program head. The tool was translated to Gujarati. And answer key was prepared.
- Volunteers were trained to run the assessment.
- The assessment could be was undertaken only in 7 out of the 8 sample schools. One school refused permission to run the assessment due to exams. Hence the 10% sample of 150 students was covered from the 7 schools - Hamsaur, Positra Primary, Positra Wadi, Padli, Mulvasar, Batisa, Khatumba.
- The papers were checked by another set of volunteers using the answer key.
- Data was cleaned up. One school (with a sample of 28 students) had to be disqualified as most of the papers had exactly the same answers in exactly the same sequence, which indicated copying. The volunteer for this schools, apparently was not allowed to be present in the classroom at the time of the test, hence it was not clear how tis happenned.
- After completion of the assessment, the data was consolidated and analysed.

Quartile Analysis

The assessment paper was for 50 marks. 122 students of grades 6-8 appeared for the assessment. The highest score was 27.5 and the lowest 3.

Students were ranked from lowest to highest scores for the quartile analysis. The bottom 25% percent of the students who fell into Quartile 1 (Q1) were 33 in number, and their score distribution was between 3 and 15.5. Quartile 2 (Q2) had 32 students, with scores between 16 and 19.5. Q3 had 33 students in the score bracket 20 to 24.5. And the top quartile (Q1) had 24 students with scores between 25 and 27.5.

As can be seen, the top quartile students have scored between 50% and 55%. And students in the lowest quartile have scored between 6% and 31%.

Quartiles	**Student ranking**	**No of Students**	**Score bracket**
Q1	1-33	33	3 to 15.5
Q2	34-65	32	16 to 19.5
Q3	66-98	33	20 to 24.5
Q4	99-122	24	25 to 27.5

Grade-wise Analysis

Grade	Total Children	Q4 (55%- 50%)	Q3 (49% - 40%)	Q2 (39% – 32%)	Q1 (31% - 6%)
8th	39	10	14	7	8
7th	43	7	12	11	13
6th	40	2	11	13	14
	122	**19 15%**	**37 30%**	**31 25%**	**35 29%**

- Top quartile with a score bracket of 50-55% has only 15% children. Rest of the 85% children are about equally distributed in the three lower quartiles.

- Grade 8 children have performed better than grades 7 and 8 but not substantially. 60% are in Q4 and Q3, as compared to 44% of grade 7 and 32% of grade 6.

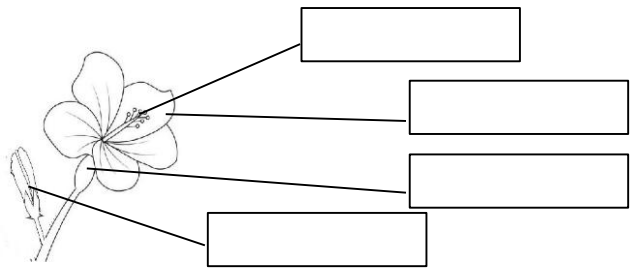
- Grade 7 shows marginal improvement over grade 6.

Qualitative Analysis

Below are three questions from the assessment paper:

There were 10 questions in all, of which:
- 4 required only reading and rearranging
- 4 required one-word answers
- 1 required two-line answers
- 1 required a paragraph

Write the names of the parts of the flower in the box [2]



This straightforward 2-mark question with picture support could be attempted by very few children.

This shows the inability to write. It also shows the inability to read and comprehend the question.

Children can easily answer such a question orally. Even if they do not give technical terms, they can still name the part of the flower.

Match items in column (A) with those in Column(B) [4]

A	B
Book	Glass
Tyre	Wood
Pencil	Paper
Mirror	Rubber

Almost all children picked up 4 marks in this question. This did require reading, but its level is much below upper primary, and it is straightforward.

Write a paragraph (10 lines) on the topics below, and draw a diagram. [5X2 - 4 text/1 diagram)

(a) Digestion (c) Food Chain

This question was blank in almost all papers. Some children had scrawled a line, which was garbled and illegible. No one had attempted a diagram.

This shows an utter lack of science communication between teachers and children, despite the availability of STEM kits, smart board, manipulatives, TLM, slides, etc.

It also points to children's inability to write and draw.

ASSESSMENT OBSERVATIONS

- Most of the answer sheets showed that children are unable to read and comprehend the question paper. If a question is verbally explained to them, they may engage with it, If two or three children try to solve the paper together, they may have greater success. But most children are not at the stage of reading the question paper independently and solving it. When it comes to writing, children are again stuck. Science, or any other subject, can be learnt only through language. If language skills are missing, children are unable to learn Science. Therefore, what is termed as failure in Science in upper primary grades, could well be a failure of language.
- Things do not automatically improve as children go to higher grades. As can be seen, in the assessment, there is no material difference between the answer papers of children of grade 6 and grade 8.
- Having said that, imbibing concepts of Science through power points, conversations, films, and other activities that are done with children on the Science bus, has happened to a fair extent. The interaction with children in Padli school, was heartening indeed. All children in class were actively taking interest in the discussion on the digestion process. Those who were not talking were also keenly listening. Science, done properly, has the power to engage young minds. Therefore, despite the language lacunae, Science Bus activities have had an impact. But one touch point a month is too little for any meaningful learning.
- The assessment, also shows that one-time class on the science bus is not making the concepts stick with children. If that content is not taken forward in the school later on, it

will be washed out. And one month later the bus will arrive with a new concept. At the end of the year very little would have been retained, as is evident in the assessment.
- At least weekly engagement is essential – discussion, reading, writing, drawing, making - will enable every child to imbibe and enjoy Science

ASSESSMENT RECOMMENDATIONS

- The Science Bus should engage once a week with each school. For that if materials have to be taken in a smaller vehicle to the schools, that should be considered.
- Follow up at school level of the content transacted on the bus is essential. Without that this would be wasted input.
- The program should also be intensified in terms of adding more concepts.
- Math should be included alongside Science.
- Resource permitting, the reach of this program should be increased over the next 3 years to reaxch all upper primary schools pf Okhamandal. The program has to be seen in a saturation mode, for real and lasting impact.

4. Learning Enhancement Program (LEP), Wadi Area

Objective: Decrease in the drop-out rate of students

Coverage**:** 66 children of Khatumba, Batisa, and Poshitra villages in the wadi area of Okhamandal

The wadi area is remote and no schools nearby and poor transport and road connectivity. As a result, children in these villages were losing out on their education. The LEP program was initiated in August 2018. Three LEP classes were initiated and *bal mitras* appointed to teach the children. Children stated taking interest in their studies. Parents and the community also found hope and supported the initiative fully. As children progressed in their studies, they were encouraged to join the nearest schools. Transportation remained a challenge as the family members had to ferry the students back and forth.

Last year saw a major development. TCSRD's persistent advocacy with the government yielded results. Three buses were made available to ply on the routes connecting these villages to the schools. The bus timing was also coordinated with school timings. This has enabled all children in these villages to access schools. In addition, these public buses have brought a great advantage to the communities living in the wadi areas.

With this success, the program has reached a sustainability level, and TCSRD has withdrawn its education initiative from the area. But they remain in touch with the communities and the children.

Assessment Recommendations

- This is a commendable closure to an education initiative. It is also an example of how the administration can be impressed upon to take responsibility for basic services such as public transportation in remote area to enable children to attend school.

- TCSRD should continue to remain actively in touch with these villages to make sure that all children continue to attend school, and after completing elementary, join secondary school.
- Special focus should be on girls with respect to continuity of schooling.
- TCSRD should be in touch with the schools that children from the wadi area are attending.
- If these government schools can be enriched with LEP methods that brought about an improvement in children's learning levels in wadi centres, both children and the schools will benefit.

5. Navodaya Coaching

Objective: Preparation for Navodaya exam for selection in Navodaya School.

KPI: To achieve a success rate of 25% Affirmative community schools' students for the Competitive exam preparation 2023-24.

Coverage: Preparation of 25 students from AA background, for Navodaya Exam from 9 villages - Khatumba , Batisha , Poshitra, Goriyari , Mota Bhavada, Rajpara, Mulvashar, Tupani , Padli. Three teachers were hired for coaching. Students who were high performing in their classes were selected for coaching.

Outcome: So far, the Navodaya initiative has not enabled any students to clear the entrance exam.

ASSESSMENT OBSERVATIONS**:**

Interactions were held with students, teachers and parents in a common meeting. Talking with **students**, it was clear that students had worked hard for Navodaya entrance preparation, studying up to 3-4 hours per day in the weeks closer to the exams. They had improved in their skills, and also built consistency and rigour of studying. These are all important abilities that children had imbibed in the preparation process, which not many children manage to build in the regular schooling process. These will stand them in good stead in their future studies. And it is likely that their results improved significantly in school exams.

Many **parents** said that they had supported their children to study for Navodaya entrance exams, by creating extra time for them in the household daily schedule, and also providing them the materials they needed. They expressed their hopes for their children. But many parents were not very well aware of the significance of Navodaya or what their children stood to gain if they got in. Awareness building and constant dialogue with parents and community would also contribute to the end outcomes.

The three **teachers** had worked hard on the coaching. Navodaya curriculum is very challenging. Besides, the additional section on 'Reasoning' is something entirely new and unfamiliar for the children, and needs an enormous amount of practice. Teachers, however, said that many children did not have the basics of reading, writing and math (FLN) in place, which made their task of coaching them quite difficult. In the limited time available, they faced the dilemma whether to go down to the basics, or address the Navodaya curriculum. This was a serious disadvantage. The teachers also did not seem to have much experience of Navodaya coaching in the past.

The benefit that **Navodaya coaching has yielded** is the general improvement in the learning levels of these 25 children, through the consistent hard work and their increased focus on studies. The preparation process had also given children and their parents higher aspirations. These are the gains of the coaching, irrespective of the fact that the initiative has not yielded admissions in Navodaya so far. The current year's results are awaited.

ASSESSMENT RECOMMENDATIONS:

- Getting admission in the prestigious Navodaya schools is potentially life-changing for a student from a deprived background. Navodaya students, by and large, go many levels higher in their future education and career. Cracking the Navodaya entrance test, however, is not easy. It needs extreme dedication and focus on part of students, teachers and parents.
- Clearing Navodaya exams requires a set of conditions to be fulfilled:
    - Typically, teachers who have long years of experience in Navodaya coaching, and a strong track record of enabling significant number of students to clear the entrance exam are the best suited to be engaged for a coaching initiative. It is a specialisation. Teachers who are otherwise good, but lack the Navodaya experience, find it hard to show results.
    - Students who aim to appear for the Navodaya entrance exam also need to demonstrate a solid academic foundation and a consistency of performance in their primary grades, as well as commitment to the coaching program.
    - Parents' role is important, in that, they need to be aware and committed to the goal of Navodaya for their child, and ready to give the requisite support during the year long preparation process (if not longer). Parents may come from a background of illiteracy and deprivation, but their awareness and commitment is key.
- TCSRD may have to increase the elements of parent and community dialogue, student counselling and motivation, and most of all, getting experienced teachers who have worked as Navodaya coaches.
- The point that teachers raised, about the foundational literacy and numeracy skills of children not being strong, however, is a challenge. Especially, since these 25 children were specially selected for this coaching from different schools, based on their performance and abilities.
- TCSRD may consider taking up Navodaya Coaching a few years from now, after FLN and primary education has been strengthened, and the ground has been prepared for a higher success rate.

6. Scholarships

Overview:

TCSRD Education Assistance Programs aims to empower deserving students, with a special focus on individuals from Okhamandal and Kalyanpur, including students with disabilities, SC, ST Community's and girls, by providing financial support for their education. This initiative, managed by TCSRD, intends to promote inclusivity, gender equality, and social progress through education.

- To provide financial assistance to deserving students who demonstrate academic potential but lack the means to pursue higher education.

- To promote equitable access to education and ensure that talented individuals from disadvantaged backgrounds have equal opportunities to achieve their educational goals.

To support students in their pursuit of knowledge, skills, and personal development, ultimately contributing to their future success and positive impact on society

There are 5 types of scholarships:

- 9^{th} to 12^{th} Scholarship
- Diploma Scholarship (technical courses)
- Higher education Scholarship (UG, PG, medical courses)
- Shri Darbari Seth Scholarship
- Special Scholarship

ASSESSMENT OBSERVATIONS & RECOMMENDATIONS

A focus group discussion was done with 6 scholarship students doing their diploma and higher education. All happened to be women. One was a young man who was representing his sister who could not come. A couple of the young women were accompanied by their mother or family member.

It was heartening to note that these scholarships had put these young people on a powerful future track. Some of them had going through their bachelors. One was pursuing her masters. Each one had future plans, most to do with further studies. They were not thinking of working yet. Marriage was nowhere on the cards – the young women were totally focused on their academics. Even the family members supportive of their daughters' decisions.

On being asked if the scholarship money was sufficient for them, none had any complaints. Their families had also pitched in for the extra expenses involved.

One of the girls lived alone with her mother. She had to now move to a nearby city for her masters. The mother was proud and determined to support her daughter, saying she would manage well without her. The daughter was positive about facing the challenges involved in this move to a new college and ecosystem. The idea of living alone, without family, and the frequent travel that would be involved between her college and home, none of these things deterred her.

All the women spoke with confidence. They wanted to get more tech savvy. They wanted to learn English. It was a huge empowerment that was taking place steadily, in the life of the girl who was supported with the scholarship to pursue her studies. This was leading to a transformation in the family and the community.

The only recommendation for this long-standing, high value initiative is that funds permitting, it should be enlarged. And it should deepen its focus on women from AA communities.

7. Strengthening Foundational Literacy & Numeracy (FLN) in Primary Schools in Okhamandal Block, Gujarat,

In partnership with Coastal Salinity Prevention Cell (CSPC)

This assessment is based on study of documents of the three phases of the project, a field visit to the schools in Okhamandal, interaction with key functionaries of CSPC and TCSRD, and FGDs with students and community. This is a brief assessment, qualitative in nature, given the short time frame. It is focused on primary and upper primary schools (and not on pre-primary).

Coastal Salinity Prevention Cell (CSPC) works in Devbhoomi Dwarka district of Gujarat under the aegis of Tata Trusts and with support from Tata Chemicals Rural Development Society (TCSRD). Their main focus is on Okhamandal block in the district.

The Foundational Learning project was initiated with the objective of improving foundational literacy and numeracy (FLN) in Okhamandal, the lowest ranking block in the district on socio-economic and education indicators.

The project has gone through three phases – Phase-1 FY15-18; Phase-2 FY19-22 and Phase-3 FY23-26, (ongoing). The first phase constituted a pilot, covering 20 schools (in D category as per Gunotsav ranking of the state). From the second phase onwards, the program has been operating in all 94 primary schools of the block. The intervention is now in its 11th year.

PHASE-1 (FY15-18)

Objective

- **Developing foundational literacy and numeracy skills in Okhamandal taluka. Use of computers and internet to improve learning outcomes at upper primary level in Math & Science**
- **An activity-based science lab to be set up at Dwarka, and a resource centre at DIET, Jamnagar, for teacher professional development**

Program Operationalization (in brief):

The program started in 20 primary schools (out of 94) and 35 pre-primary centres (out of 148) in Okhanmandal block. Learning Centres were set up in these 20 primary schools. Children of grades 2-5 were put through a learning baseline assessment, and 35-50 children, lowest ranked in the baseline were covered in the Learning Centres. These centres focused on FLN and ran for 2.5 hours each day before school. Learning Assistants (LA) were hired and trained for this purpose. A set of effective teaching learning methods and materials were specially curated for these centres to improve classroom transaction and learning outcomes.

A year later, grades 6-8 were also taken for Science and Math inputs. 20 schools equipped with computers were selected, and 40 students per school went through these classes. The targeted coverage of children in the Learning Centres was 1800[1], about 50% of the total enrolment.

Budget (FY15-18): Rs 1,56,36,257 (Shared equally between Tata Trusts and TCSRD)

Two external evaluations were conducted at the end of Phase-1:

- *The Grant Evaluation*
- *Assessment of Student Learning* by Swara Pandya

Key Observations from the Grant Evaluation Report

This exhaustive report presented sharp analysis and recommendations:

- The intervention demonstrated the positive impact on the learning levels of children.
- Teachers were happy that because of the Learning Centres, they no longer had to focus on children lagging behind. Besides, the Learning Assistants (LA) were seen to be filling the math and science teacher vacancies in schools. Parents found these free 'tuition centres', a big help.
- For the project, finding qualified maths and science LAs and retaining them was a challenge. By the end of phase-1 only 40% LA's remained.
- Student attendance was an issue, often dropping to 50%
- Primary classes focused more on phonics. Oral language development, higher order comprehension and independent writing needed greater attention, because they are vitalor language and literacy development.
- Upper primary classes would benefit from a clearly laid down curriculum and road map for teaching of science and math.
- More investment was required in LAs given the classroom complexities, children at multiple levels of learning, and the new pedagogy.
- Establishment of the Resource Centre at the DIET was still in its initial stage by phase-end.

Key Observations from the Student Learning Assessment Report by Swara Pandya

Finding -1 The program schools were performing consistently higher than control schools
Finding-2 A few students achieved high scores, but majority got moderate to low scores.
Finding -3 If specific learning gaps of children are not addressed, they persist even in higher grades.
Finding-4: More children can answer direct questions or practical, daily life questions, but fall behind in conceptual, non-straightforward ones.
Finding-5: "As students move up the grade overall average scores are declining."

[1] This number is later mentioned as 1500

ASSESSMENT OBSERVATIONS OF PHASE-1 (FY15-18):

Based on study of the proposal and other documents of phase-1 and the two evaluation reports, the key observations are as follows:

The project began as a pilot in Okhamandal, a highly backward block of Dwarka district. It was implemented in 20 primary schools graded at D-level by Gunotsav. In each school, in grades 2-5 about 35-50 children, who were lagging behind the most, were covered in the project (identified through a baseline). The idea was, presumably, to create a model of strengthening foundational numeracy literacy (FLN) for children facing the maximum challenge in government schools, and bringing them to age-appropriate levels. The coverage strategy shows that the program was aiming to reach the last mile block, the last mile schools and the last mile children. This proof of concept, once established, would be expanded across all 94 schools to lift learning levels of Okhamandal block. One of the documents also mentions addressing the issue of school drop-outs. The vision was transformative indeed. Through training government teachers and setting up a resource centre in DIET, the project also envisaged change at the systemic level.

If the above articulation appropriately captures the project goal, then its outcomes have to be seen in accordance with this laudable goal – both in the first phase, and over the entire 10+ year journey.

The phase-1 of the program was a pilot that ran for three years. After factoring in delays, the effective implementation period was of two years for the 20 primary schools and one year for 20 upper primary schools. Total coverage was 845 children in primary and 955 in upper primary. Effective pedagogic inputs and learning materials were provided to the classrooms. Learning Assistants (LA) were given training and on-job support. Additional daily classes of 2.5 hours were provided to children lagging behind. The program received several expert visits, and LAs travelled to other cities for the best of exposure.

The two evaluation reports, while acknowledging the positive impact of phase-1, also spell out the design and implementation lacunae. The Grant Evaluation Report points out the need for:

- A clearly laid down curriculum for Science & Math
- A professional development plan for LAs
- More comprehensive classroom processes
- Addressing irregular attendance of children
- Difficulty in finding qualified LAs for Science and Math, and retaining them.

The third set of objectives were to do with teacher professional development, perspective building of the community and influencing the education department to ensure sustainability. Not much has been said about these.

PHASE-2 (FY19 – 22)

Project Title**:** Adopting a school-wide change approach and strengthening teacher capacity for enhancing learning standards in primary grade schools of Devbhoomi Dwarka in Gujarat.

Objective:

To strengthen the capacity of school head masters and teachers to create suitable conditions and processes within schools, that enable effective learning of children accessing public schools

Strategy:

- Strengthening of the capacity of the school as a whole to deliver quality teaching-learning outcomes. This would be undertaken by working with the school head masters
- Need for strengthening teacher professional development, considering that 'no education system can be stronger than the quality of its teachers'

Implementation:

Lever 1: Working with the government institutions

- Integrate the training practices within the departmental processes
- Demonstrate the effective usage of teacher resource centers
- Bring academic discourse into the departmental monitoring processes

Lever 2**:** Multi-pronged approach

Since the program is aiming to realize change at a large scale, it is crucial to get the department to own the change at all levels. Four levels of engagement with the system was planned – DIET, Block Education Office, schools and community

Key Interventions:

- Strengthening the DIET in-service teacher preparation for FLN
- Orientation of Head Masters towards whole school improvement
- Communities of Practice of Head Masters and Teachers
- Enabling of resource centers at two blocks
- Community Engagement

Targets:

- At least 60% of the primary grade students in the intervention schools to demonstrate grade appropriate learning levels.
- At least 60% of the HMs to demonstrate improvement along the specified indicators
- At least 50% of the SMCs able to function without support in the block

Operationalisation:

In this phase the program expanded to cover all 93 schools of the block.

The pandemic hit the country in March 2020. CSPC aligned with educational efforts of the government and developed worksheets and ran small classes through 150 volunteers. About 1500 children were covered each year of the pandemic. 185 government teachers were trained in reading & math in 2020, and another 81 in 2021.

Budget (FY19-22): Rs 4.11 crore (75% TCSRD; 12% Tata Trusts, local contribution 13%)

Total spend over three phases: Rs 1.56 cr + 4.11 cr + 6.00 cr = 11.67 cr

With TCSRD share: Rs 0.78 cr + 3 cr + 4.6 cr = 8.3 cr

Evaluation by Janvi Contractor – Key Findings:

- Impact on Learning Levels

A baseline (BL) assessment for language and math was conducted across 25 schools for 2500 students in the in grades 2,3,4 and 5 in October 2020, which indicated that only 40% children were at grade level. An endline (EL) assessment was conducted in 23 schools covering 1715 students of grades 2,3,4,5,6 at the end of phase -2. However, due to lack of comparative data, it was not possible to understand the qualitative aspects of intervention's impact on students learning outcomes.

- Impact on SMCs:

In 14 schools SMCs members attend meetings, take decisions and ensure implementation;
In 35 schools SMCs meet regularly, take decisions but unable to implement changes yet;
In 22 schools SMCs meet regularly, but no decisions are taken yet;
In 5 schools SMCs members are aware of their role but have never done anything substantial yet.
In most schools CSPC had to push SMCs for meetings. The process is not self-led and self-sustained

- Teacher Resource Centre (TRC):

The TRC was set up in the Dwarka and inaugurated on 15th December 2021 by the District Primary Education Officer (DPEO). However, currently the TRC is not actively used by the CRCs and teachers and the planned objective is not met.

Key Recommendations by Janvi Contractor:

- Focus on ECCE to achieve FLN outcomes in primary grades
- Short term bridge courses or remedial classes for children who score below grade level: Endline assessment shows that an average 40% children across grades are not at grade level in language and mathematics. The average scores are also on the lower side.
- Almost all teachers of grades 3, 4 and 5 said that the 18 months of online learning during school closure failed to show impact on the children's FLN. These children must be provided with short-term bridge course, to achieve FLN. It is also important to seek active participation of school teachers in the remedial classroom work so that it is at least partly owned by the system.
- NIOS support for school drop-outs: There are many children 14 years and above, who have dropped out after grade 8. The CSPC can identify them and put them through NIOS.

The second phase was extended by one year to cover up for the impact of the pandemic.

PHASE-3 (FY23-26)

Project Title – Strengthening Foundational learning in Anganwadis and Primary schools in Okhamandal Block

Objective

- **Enhance FLN skills of children in the pre-primary and primary grades and work towards effective mainstreaming of children**
- **Improve teaching and learning practices in the classrooms and enhance learning environment in schools and Aganwadi centers.**
- **Building effective community connect, towards education ownership**

Targets FY 23-26

25% improvement in the school readiness of children in the ECCE Program.

Children will achieve competencies in FLN and enhance reading writing skills as expected till grade 5 by 70%.
Community able to have independent dialogue with the schools over various aspects of schooling process.
Continual professional development, teachers will show improvement in understanding of pedagogy of first language and mathematics and improved classroom interactions.

Program Components

1. Pre-schooling and school readiness programme with Anganwadis centers
2. Foundational Literacy and Numeracy intervention at primary school level (1-5)
3. Mainstreaming / Regularize Out of School Children
4. Development of BRCs as a hub of teacher's capacity building

Budget (FY23-26): Rs 6,00,49,880 (TCSRD 4,59,48,060 (77%) Tata Trusts 1,41,01,820 (73%)

Learning Assessment by Covi Genius Insights, 2024

Covi Genius Insights (CGI) undertook a multi-state baseline study of children's learning levels to understand the impact of COVID. The Okhamandal FLN program was also covered in this assessment.

Evaluation Objectives

Assess and track student learning across grades for Baseline assessments which would be administered across 8 states.

- Evaluating and tracking changes in the performance of FLN competencies of students in grades 3-8 by testing their performance in Numeracy and literacy.
- Evaluating and tracking change in the performance of the students on grade 5 level competencies, Grades 6-8 by testing their performance in Math and language.

Evaluation Tools

- Evaluating and tracking changes in the performance of FLN competencies of students in grades 3-8 by testing their performance in Numeracy and literacy.
- Evaluating and tracking change in the performance of the students on grade 5 level competencies, Grades 6-8 by testing their performance in Math and language.

Results of the baseline:

- 44% to 54% of students have cleared benchmark cut-offs in Literacy
- 31% to 39% of students have cleared benchmark cut-offs in Numeracy.
- 19% to 55% of students across grades have cleared the FLN benchmark for language.
- In writing task, 85% to 95% of students across grades are in the lowest-scoring bands. (Performance increases as expected from Grades 3 to 5 on a similar paper given for Grades 3-5)

LITERACY

Performance ranges from 46% to 60%

A large percentage of students (50% to 60%) in grades 3 and 4 have performed below 50% score.

High Performing Questions (Grade 3 / Grade 4 / Grade 5)

- Recognises parts of body based on a given picture 73% / 81% / 84%
- Identify the first letter of given picture 73% / 78% / 81%
- Identifies the action phrase (verb) to describe a given picture 69% / 76% / 79%

NUMERACY

Performance ranges from 39% to 51% in the Intensive group.

A large percentage of students (50% to 72%) students have performed below 50% across grades.

High Performing Questions Grade 3 Grade 4 Grade 5

- Count the number of objects in a picture - 79% 86% 88%
- Identify the number that comes right after the given number 72% 77% 83%
- Find the heaviest object from the given objects 68% 72% 78%

CSPC results on an FLN assessment tool (grade 1-2 level)

46% Grade 3 / 53% Grade 4 / 60% Grade 5

Budget (FY23-26): Rs 6,00,49,880 (TCSRD 4,59,48,060 (77%) Tata Trusts 1,41,01,820 (73%)

Total spend over three phases: Rs 0.78 cr + 3 cr + 4.6 cr = 8.3 cr

ASSESSMENT OBSERVATIONS

As part of this assessment field visits were made to four primary schools, focus group discussions were held with students and SMC members, and in-depth interviews were conducted with school principals and key program functionaries of CSPC and TCSRD. Inputs were also drawn from field visits to upper primary and secondary schools where TCSRD has its other CSR interventions. The observations are as below:

- Field visits made to four schools – Rajapara, Tupuni, Padli and Khatumba. The first two were the state government designated Schools of Excellence, with well-endowed campuses and sufficient teachers. Some teachers had taken transfers in December 24 though. Exams were going on in schools.
- Interactions were held with two groups of students – one group of about 12 children of grades 3-5, and another group of about 60 children of grades 6-7. As part of the interaction children were asked to do the following:
    - *Write the number 'one thousand and thirty-five'*.
        - About 7-8 primary children out of 12 wrote 100035. This reveals children have not understood the core FLN concept of place value. Lack of grasp of place value becomes an entry barrier to further learning in math.
        - About 12-14 children out of 60 of upper primary also wrote 100035. Which means they continue to carry this deficit, and are most likely not grasping grade level math.
    - *Write 5 lines on the topic 'My Mother'* (primary): Children used just one sentence structure – my mother cooks food, my mother washes clothes, my mother cleans … . Their content was limited despite the subject being so close to them. Their spelling and hand writing indicated that they we struggling writers.
    - *Write 5 lines on 'Wind Mills'* (upper primary): Wind mills can be seen all around Okhamandal. Like the primary children, these older children also used the same sentence structure, and had the same limited content … Windmills have wings, windmills are tall, windmills make electricity ...
    - A lot of children of both primary and upper primary looked into each other note books to complete their tasks, displaying a lack of self-confidence. It may also indicate that such types of tasks were new for them. They have never been engaged in such activities in class.

This points to lacunae in children's FLN right through primary and upper primary grades. The concept of transversal skills also comes into play here. While we learn something in one context, deep learning implies that we can translate that learning into other contexts as well. If children are adept at thinking and writing, they should be able to turn out write-ups on a variety of familiar topics. And they should be able to write in paras, which indicates ability to structure and present their thoughts. That ability has clearly not been advanced under the program or by the school. When it comes to math, place value is like a litmus test. It captures effectively where a child is on the learning curve. If children have not been enabled to grasp core concepts, learning in higher grades all they way up to secondary will

be limited and mechanical. Hence the importance of Foundational Literacy and Numeracy (FLN) is so critical to ensure for every child.

Looking at students' education / exposure in a bit larger perspective, through some free-flowing interactions:

- *Name the president of India, the Chief Minister of Gujarat*. Children could not say the correct names. (They only knew one name - Narendra Modi)
- *Name ten big cities of India*: Their familiarity with the map of India and map of Gujarat was *very* limited. They couldn't go beyond four cities, or name a city outside Gujarat. They were confused between state and city.
- *Draw the map of India*. They were free to look at the map on the wall or on the phone screen. Each child drew with enthusiasm. None got the shape right, but they enjoyed themselves. When asked to come close and look at the wall map, their curiosity was unparalleled! IT was as if they were looking at it for the first time!
- *Recall any big news in the past week or month.* None were aware. Only one child spoke about Sunita Williams' return to earth.

This indicates that neither the primary, not the upper primary students are engaged in any content or conversation or activity outside of the text book. Hence their larger awareness never has a chance of building up.

- All students spend two hours or more on their phones daily – boys play games, girls watch reels. The learning potential of the smart phone is not a part of their awareness.
- Teachers of government schools, have not adopted this alternate pedagogy of the project. They show no motivation or interest in imbibing it. For them, it is the job of the CSPC staff to come and teach their students.
- In the first phase of the project there was one TA per school. In phases 2&3, there has been only one staff anchoring 20-25 schools, hence the frequency of school visits has dropped.
- In an **SMC interaction** at the Tupuni school, 5-6 members were present. They were quite active. They were concerned about the huge teacher transfer that took place in December 2024, which had impacted their school as well. They were wondering whether new teachers would be appointed before the next academic session in June or not. On being asked whether as members of SMC, a highly empowered body, they came together and oppose the teacher transfer? Did they put up a representation to the block officials? They said they had not thought in that direction. But one SMC member gave the example of how SMCs had united in Kutchh district and prevented the teachers from leaving until their replacements were in place. The administration had relented. It was a powerful example of what SMCs can achieve if they come together. ON being asked what SMCs in Okhamandal do for the school, they said they had worked on things like supervising MDM, upkeep of the school premises, and so on.

  The above are important activities, but SMCs have the power to do much more. Continuous dialogue and training will help them enlarge their thought process. Training them in strategic thinking in real life situations, equipping them with technical inputs, helping them understand and interpret data, and giving them advocacy skills will take SMCs up the maturity curve.

- CSPC team said that School Development Plans (SDP) have been made by SMCs. But it was not clear how many have been made and what the outcomes have been. (I requested to see some SDPs, but have not received any.)
- The Teacher Resource Centre at Dwarka, apparently, no longer exists, as informed by a senior CSPC staff. Nor does the team have any interaction with resource centre at DIET, Jamnagar. IT is not a part of this phase.
- On asking how many children are out-of-school in Okhamandal, the startling figure of 1800 was shared by CPSE colleagues.. These children are at Rupen Bandar, as per their survey, and are most likely migrant.

Field visits to **other TCSRD programs** also reflected the learning challenges of children at upper primary and secondary level, which go down to lacunae at the FLN level.

- 10th Coaching Program: Two secondary schools were visited. Interviews with one school principal and one project coach revealed that many students of grade 10 struggled with basic arithmetic such as subtraction and multiplication. Comprehending Science topics was a challenge for them. But a more basic challenge was of reading comprehension and writing with proper expression. The coach said that had to handle these basic lacunae before he could focus on Science. He had resorted to dividing students into level-based groups (A,B,C). He gave maximum attention to the highest level group A, while scaling down his efforts with groups B and letting group C. just mug up answers to questions from keys. The school principal said in context of the board results that hardly 2-3% students get 1st division and 2-3% second division, the rest barely passing the exams. These numbers were mentioned verbally, and as estimates. Not out of any school record.
- Science Bus Program: All Science Bus schools are upper primary and overlap with the FLN program. Two Science Bus schools were visited. In one school called Paldi, the teacher explained that the children can understand the Science concepts, but they cannot write. Interaction with children in class 6 revealed that they had a lot of interest in Science topics, and looked forward to the bus visit. But their ability to comprehend and articulate Science concepts was being held hostage by their lacuna in reading and writing. Their language abilities needed to be honed much more, before they could fully engage with science topics.

  A science learning assessment was later run on 150 children from 8 schools. The assessment results coincided the class observations.

- Navodaya Coaching: This program was focused on training grade 5 students to appear for Navodaya Vidyalaya exams. It is to be noted that the most meritorious students are selected for this coaching. The three program coaches, however, voiced the same issues – many of their students had difficulty in reading, writing and math. Hence, they had to start with basic competencies of the FLN stage and this did not allow them to reach the level of language, math and reasoning that is the benchmark of Navodaya.

This goes to show that interventions at higher levels of schooling are bound to be dragged down by lacunae at primary level, and in particular at the foundational level of reading, writing and basic math. Unless children have a grasp of numbers, number operations and basic math concepts, and they can read fluently and comprehend the meaning of what they read, curriculum of higher grades

will be out of their reach. This is precisely the dilemma that teachers of higher grades face – do they teach at their grade level or do they go down and teach at the foundational level? Since the latter is not possible, they take recourse to rote memorization, to somehow make students pass exams. Learning and concept formation is the casualty.

In a discussion**, CSPC leadership** reiterated that students of higher grades are still struggling with grade 1-2 competencies. According to them, the reason for low learning outcomes of children is the challenge that the region of Okhamandal faces:

- Socio-economic backwardness
- Educational backwardness
- Government schools short on teachers (and en masse transfers in Dec 2024)
- Difficulty in attracting qualified staff for the project, and their high attrition

These in fact are the very challenges for which Okhamandal was chosen for this intervention in 2015.

To the question, about the end goal of this program, and how long it will take to reach that destination, the view expressed was that the goal is that 70% children achieve FLN outcomes, and the time frame is five more years. The reason for this is the new cohorts of children keep coming with learning deficit and they need support.

The children definitely need support, but the second, equally important objective of the program is **"To strengthen the capacity of school head masters and teachers to create suitable conditions and processes within schools, that enable effective learning of children accessing public schools" (Phase -2 Objective).** Without this the program cannot become sustainable.

ASSESSMENT ANALYSIS

It would be pertinent to note at the start, that this program is now it is 11th year.

In 2015 the program was launched in Okhamandal, the most backward block of Devbhumi Dwarka district, in 20 schools that were ranked lowest in Gujarat government's Gunotsav, with children whose learning levels were found to be the lowest in the baseline conducted. Clearly the education program's focus was the last mile block, the last mile schools and the last mile children. The twin objectives of the program were to develop Foundational Literacy and Numeracy (FLN) in children, bringing them to age-appropriate levels, and training of school teachers to enable effective teaching-learning of children accessing public schools.

By 2025, the students of the 20 schools of the first phase would be in secondary grades (and aanganwadi students in upper primary); students of the second phase of all 94 schools would be in upper primary grades; and the students of the ongoing third phase are in primary grades. Hence, it is expected that at the end of a decade, the impact of this program would be evident across all schools of Okhamandal, and at all three levels of primary, upper primary and secondary. Further, the capacity building of teachers would be evident in more effective teaching methods being followed in primary and upper primary classrooms. The schools would be enriched through active use of libraries, computers, and Science & Math TLM. This comprehensive set of interventions would have solved the problem of

FLN deficit, with students learning at age-appropriate levels in primary and upper primary, if not secondary.

It is laudable that the program has consistently undertaken external assessments at the end of each phase, which help draw out the trajectory of the last 10 years. The learning assessments at the end of each of the three phases show less than satisfactory learning outcomes of grade 1-2 competencies at grades 3-8 levels. This is the case even in the CGI assessment of 2024, which shows that even in the middle of the third phase, a substantial number of children upper primary grades (6-8) have not attained foundational literacy and numeracy competencies.

Phase-on-phase assessments reveal that a large proportion of children were failing to pick up the FLN competencies, which was becoming an entry-barrier in age-appropriate learning as they progressed to higher grades. Today the learning gaps persist at upper primary and secondary levels all across Okhamandal. This is reflected in the data of the public system, notably, the low outcomes in 10th board exams. Consequently, the objectives of each successive project phase have gone back to fixing the original problem – the FLN gap.

As of now, the goal and objectives of phase-3, are identical to those of phase-1. Program components are also the same. CGI assessment in the middle of this phase is already showing that learning outcomes are not up to the mark. Performance in FLN for children of grades 3,4,5 ranges from 46% to 60% in literacy and from 39% to 51% in numeracy.

This is hard to justify, given that 11 years and Rs 11.67 crore have already been invested in this program. It also brings up the question, that what is the differentiator this time that will enable the breakthrough in the remaining one year of phase-3?

ASSESSMENT RECOMMENDATIOS

The CPSE program has one year to go before the completion of phase-3. This recommendation tries to address the best possible course to achieve the objective with this year. It starts with pointing out an issue in the program design:

The project has been setting set low annual targets for student achievement – for example, 60% students to achieve FLN by the end of the year. This means that 40% children will still carry FLN deficit, as they get promoted to the next grade, with tougher curriculum. They will lag behind even more. This also implies that the problem of deficit will linger on in the school in every grade and keep intensifying, impacting learning all the way till secondary. Many children will drop out along the way.

Low annual targets of student achievement create adverse repercussions.

<u>The program has to necessarily ensure that 100% children overcome FLN deficit within a year</u>, and they all to move to the next academic year on a firm footing. In the next year third graders merge smoothly with grade 4. Fourth and fifth graders, will still need additional support to connect with advanced competencies in their grade 5 and 6 respectively. Hence, two learning programs would be required – Level-1 for foundational (FLN) and Level -2 for next level competencies. Together L1 and L2

will enable all children to learn at age-appropriate levels as they move up grade by grade till the end of primary, and this will also give them a firm foundation for upper primary.

In parallel, building capacities of government teachers to adopt the new pedagogy in their classes, will ensure effective learning for the incoming cohort of grade 1. And as the new cohorts move up year on year, they will continue to learn at age/grade level with no accumulation of deficit. With the learning process streamlined in this fashion, the problem of FLN deficit would be eliminated.

This 2-step design shift:

- **100% children overcoming learning deficit within a year**
- **Level 1 program for FLN competencies (of grades 1-2), followed by Level 2 program for next level competencies (of grades 3-5) delivered back to back.**

Executed effectively, within defined time frames, this can yield powerful outcomes in one year:

- **L1 (FLN competencies) with enable younger children to engage with their grade 3 content**
- **L1+L2 (FLN + higher competencies) which enable older children to engage with their grades 4 and 5 level content.**
- **Primary grades of the school will be streamlined, with all children learning at age-appropriate levels.**

In parallel, within this year, the government teachers have to be encouraged to imbibe this pedagogy, through training and classroom observation. They may also be encouraged to participate in the running of these classrooms, which will provide them live experience. If they are ready to use this pedagogy with the incoming cohorts of grade 1 and 2, there will be no more need for FLN deficit filling in the years to follow, because the effective pedagogy in grades 1-2 will do away with the problem of learning deficit. This is no rocket science. This is exactly what happens in any decent private school.

8. Learning And Migration Program (LAMP)

In partnership with American India Foundation (AIF)

THE CONTEXT

The First Decade of LAMP (FY05 -FY14)

LAMP was initiated in 2014 with the purpose of understanding and addressing the deeply neglected phenomenon of distress seasonal migration in the country. This was family migration, undertaken by the most impoverished populations, largely from tribal and agrarian distress regions, moving out of their homes for 8 months of the year to work on brick kilns, salt pans, sugarcane fields, fisheries, construction etc, and returning to their homes for the four monsoon months. This annual cycle involved the children as well, who went with their families, and by the time they were 11-12 years old, ended up joining the labour force at the work sites. Away from home and their village, these children had no opportunity for proper schooling, and an entire generation of migrant children would get entrenched in labour

AIF did in-depth work in this field for many years, uncovering the complexities and challenges of this issue and evolving a model of education for these children. AIF initiated schools at work sites, and then went on to stress on seasonal hostels in the villages, so that children do not migrate but stay the year round in the village and attend school, while their parents went for work. AIF established interventions in multiple states and sectors to learn about the nuances of different types of migrations, and assess their scale and spread across the regions. AIF reached coverage numbers of 10,000 to 12,000 migrant children in each intervention state through seasonal hostels and work site schools, and ensured full-time formal schooling for them. This scale, once reached, drew the attention of each state government, and also the central government. AIF's LAMP not only altered the lives of large numbers of children, families and migrant communities, but raised the profile of this neglected issue in the media, with development agencies, and with the government. AIF went on to influence policy, with the central government asking all Sarva Shiksha Abhiyan (SSA) states to conduct migration surveys, and adopt the AIF model of education intervention for migrant children.

The condition of schooling, and in particular learning outcomes that schools were delivering, was sub-par in most migration prone regions. Bringing children back to a poorly functional school where no learning took place, was not enough. Hence the **Learning Enrichment Program (LEP**) was created. LEP brought in some of the most effective pedagogic techniques to help children learn reading, writing and basic math, and go on to achieve age-appropriate learning levels. At that time the term FLN was not in vogue, but the concept was the same. Close to 50,000 children across 4-5 states benefitted tremendously from LEP. Government schools and their teachers joined hands and classrooms transformed across hundreds of villages.

The RTE Act had been legislated in 2009, and it powered the issue of distress seasonal migration as well. AIF began active engagement with School Management Committees (SMCs) mandated under the Act to take up the agenda of migrant children. AIF advocated the idea of migration free villages, which caught the imagination of communities. Many villages were made child migration-free-zones through community efforts.

The Second Decade of LAMP (FY15 – 25)

In this section the focus is on Gujarat. This state is a hub of migrations, and many districts are afflicted. Migrations sectors are also numerous. AIF worked with salt, fisheries, charcoal, and sugarcane migrations, reaching about 10,000 children. To expand the LAMP footprint, AIF decided to partner with NGOs who had presence in different migration-prone districts of Gujarat. The process of on-boarding NGOs began in 2011-12. Tata Chemicals became a funding partner in 2012 for LAMP in Gujarat.

2015 onwards, LAMP continued, but gradually changed its shape. The number of AIF-funded seasonal hostels and site schools reduced. Focus shifted to supporting the government-run seasonal hostels that had come up over time (but were few in number, and hardly enough to cover the need).

During the 2019-21 phase AIF had stopped running seasonal hostels (or site schools) altogether, and were only supporting government hostels. These were simply not enough to meet the huge need for residential facilities to prevent children from migrating and ensure their schooling. The idea of retaining migrant children with caregivers in the village had its limitations. The families that could potentially be

the care givers did not have the financial means to do so. With no financial investment, AIF's migration agenda was substantially diluted. Simultaneously the LEP had changed its form to become a hub-and-spoke model. LEP was run daily in the hub school, and for one day a week in five spoke schools. LEP in spoke schools was restricted to only Language. Math had been dropped. Learning Resource Centres (LRC) were set up in the hub school for upper primary children with focuse, h on Science.

LAMP Phase 2022-25

Purpose : To create a conducive environment for children from migrant community, and support them to overcome challenges posed by pandemic-induced school closure, by addressing issues pertaining to access, enrolment, learning deficits, and ensuring continuity of learning by enhancing the quality of delivery and governance.

Objective

- Enhance school readiness among children in Anganwadis and early primary grades to, with improved pre-literacy and pre-numeracy skills.
- To maximize educational opportunities for 20,000 children from migrant communities, receive quality education, leading to successful transitions to secondary and subsequently school completion in the identified geographies.
- To collaborate with Government schools and for integration of the intervention, for a lasting and sustainable impact.
- To train SMCs & PRIs on micro-planning and using School Development Plans (SDP) as a tool for planning and improving schools.
- To facilitate federation of SMCs, at different levels, for sensitization, and realization of communities into collective bargaining with the government and other agencies.
- To empower SMCs, to create a demand for and monitoring of government-funded seasonal hostels, thus ensuring quality standards, for retention and continuation of migrant children, in the mainstream education.

Coverage

This phase of LAMP started with a coverage of 9 districts – Amreli, Bhavnagar, Mahisnagar, Kutch, Morbi, Banaskantha, Surat and Dang. By FY 24-25, however, the coverage was reduced to 5 blocks in 5 districts with 5 partners – Morbi (AKRSP), Kutch (Unnati), Amreli (SSKK), Mahisnagar (Sarthi) and Bhavnagar (Swadeep).

The Assessment Process

The assessment of LAMP is qualitative and brief, given the short time frame available. The assessment included:

- Study of documents of the last two phases.
- Site visits to two out of five partners – AKRSP in Wakaner block (Morbi district) and SSKK in Babra block (Amreli district)
- In-depth telephonic conversations with two partners – Unnati in Bhachau block (Kutchh district) and Swadeep in Mahuwa block (Bhavnagar distt)
- In-depth discussion with AIF team currently running LAMP

The assessment did not include an in-depth study of the LEP and LRC content and processes.

ASSESSMENT OBSERVATIONS & ANALYSIS

Mitigation of Children's Migration and Ensuring their School Completion

The overarching observation of the assessment is that LAMP is no longer invested in migration. Funding for seasonal hostels and site schools, which constituted the primary strategy of LAMP for keeping migrant children out of work and in school, was discontinued in the last two phases (FY 19 - 21 and FY22-25). In the current phase FY22-25, which is the focus of the assessment, no concrete action is envisaged to mitigate migration of children and ensure their schooling. AIF talks of encouraging children to stay back with care givers while parents migrate, but this has shown minimal results. LAMP geographies, and their hub-spoke clusters, continue to witness distress migration in large numbers of families, and children continue to fall out of school. Families in villages targetted as care-givers are themselves impoverished, and cannot be expected to retain children for long periods of 7-8 months. Besides, the care giver idea can apply only to out-migration from hub-spoke villages. AIF cannot stop in-migration of children into project areas through care givers. There is no line item in the budget related to prevention of children's migration.

Proposals mention that migration-prone villages will be selected for hub schools where Learning Enrichment Program (LEP) would be run. But migration of children continues unabated in the very areas and villages where LAMP is running. AKRSP and Swadeep geographies, in Morbi and Bhavnagar districts respectively, see a lot of out-migration of children, for agriculture. Unnati's area in Bhachau, Kutchh, sees high in-migration of children to the salt pans. Partners are not able to prevent this. Unnati is running a site school at a salt pan for 35 children through some fund adjustment, but over 50 children work at the salt pan who cannot be covered. Swadeep has managed to retain about 40 children through caregivers, but another 100 have migrated out of its villages. Hence the core intent of the LAMP – to mitigate child migration and ensure schooling for them - is no longer the focus of the program in the FY23-25 phase, and the previous several years. There is no evidence of advocacy with the state government to increase facilities like seasonal hostels to achieve universal coverage of migrant children. This was envisaged as the core element of the program to achieve sustainability, The letter M in LAMP has lost its meaning.

Learning Enrichment Program (LEP)

In migration-prone villages, the Learning Enrichment Program (LEP) is aimed at helping children of primary grades to overcome their foundational literacy and numeracy (FLN) deficit, and learn at age-appropriate levels. LEP employs an effective pedagogy to enable this. The children who are ranked the lowest in the baseline are brought into LEP classes. The objective of LEP is that all children overcome their FLN deficit. The parallel objective is that, LEP pedagogy is embedded in regular primary classes, specially grades 1-2, so that teaching-learning is more effective, and no more deficit is generated in the future. The field observations revealed:

- LEP is running in 167 schools across five districts as per the report. But the hub and spoke model implies that it is running full-fledged only in the 25 hub schools, and in a much-diluted form in the 122 spoke schools. In hub schools LEP classes are run daily for 2 hours, while in spoke schools they are run for just one day a week. Government teachers give time to the LAMP facilitators for the LEP classes, but take no interest in imbibing this pedagogy and using it themselves in their classes. Without government teachers adopting LEP methods, the program cannot become sustainable, hence when it closes, the schools will go back to square one.
- The hub-spoke clusters change every 3 years, i.e. with every program phase. There are no defined sustainability parameters that ought to be met as a phase comes to an end (for example, status of FLN deficit, student learning outcomes, teacher capacities). There no tracking or support mechanism for outgoing clusters, hence the program has no data on its long-term qualitative impact in the geographies it served.
- As per partner interview, the curriculum in hub schools is same as that in spoke schools (for 32 weeks). The BL-EL tools for both hub and spoke schools are also the same. Since spoke schools receive one-fifth the time and input as compared to hub schools, the learning progress in hub is expected to be far ahead of spoke. The data in annual reports, however, is hard to decipher. TCSRD 2023-24 Assessment Report BL-ML-EL says shows hub schools achieving less than spoke schools.
    - For hub schools (overall) "*The mean percentage language marks is approximately 64.3952%. This represents the average performance across"*
    - For spoke schools (overall) *"The mean percentage language marks is approximately 72.4727%.*

    TCSRD 2023-24 Assessment Report BL-ML-EL indicates hub and spoke schools performing on par with each other:

    - *Partner A: 15% to 83% in hub schools and 17% to 82% in spoke school.*
    - *Partner B: 25% to 55% in hub schools and 21% to 50% in spoke schools.*

    Since the remit was that of a cursory assessment, in-depth analysis of learning was not undertaken, not a learning outcome assessment.

- It is observed in the above two assessment reports, that the partner performance pattern remains the same year on year. The partners doing well continues to do well, and those falling behind, continue to fall behind. This indicates that the BL-EL data is not discussed, with a view to helping low-performing partners level-up in performance. There is an outlier case of a partner that has been selecting year on year better endowed, better performing schools as hub-spoke

schools. Their BL is matching with EL of some other partners who are working with more needy schools. Yet their progress is hardly 10% as compared to 60-80% progress made by others. This partner has not been advised to shape up. This is a reflection on program monitoring.

- Does FLN deficit get eliminated from a hub school cohort in one academic year? And fully from the school in the 3-year period? BL-EL assessments show that this is not the case. *TCSRD 2023-24 Assessment Report BL-ML-EL* shows that the EL data of 6 partners falls between 54% and 63% and that of the remaining two is at 83%. This shows that while outcomes vary from partner to partner, on the whole a substantial number of children continue to carry deficit. What is the future of these children? Will they go through another year of deficit filling? It is to be noted that children in LEP are from grades 3-5, and even after 32 weeks the intervention has not ensured that every child achieves FLN (grade 1-2) competencies. 100% achievement in end-line should be a non-negotiable for a FLN program. Low achievement levels mean unsustainable outcome for the child as well as the school. The question also arises, that do spoke schools with their limited inputs even aim to clear FLN deficit of children?
- In a partner interview it was pointed out that FLN cannot be eliminated completely in a school, as the children who migrate come back to the school with huge learning gaps. LAMP should have a strategy to address this. For instance, the first few months of the academic year, before migration begins, could be effectively utilized for these children. This too raises a question on sustainability.
- The MOU 2022-25 mentions coverage of 9 districts, namely, Amreli, Banaskantha, Bhavnagar, Dang, Kachchh, Mahisagar, Morbi, Surat, and Sabarkantha. through 8 partnerships. Till FY24 all 9 districts were covered, but in FY25 the number of districts came down to five, with Dang, Surat, Banaskantha and Sabarkantha dropped mid-phase. The concern this raises is that was there any alternative considered for them, and was there a process to bring the work in the schools to a logical closure? This is not mentioned in any of the reports.

Teacher Training

- Teacher training takes place for only one day in a year. Clearly this is not likely to have any impact at all on the schools or the classrooms. The partners mentioned that none of the teachers continue with LEP or LRC methods after the program is withdrawn from the school. This goes against a core program objective "To collaborate with government schools and for intergration of the intervention for a lasting and sustainable impact".
- Similarly, in the anganwadi program, workers and helpers are trained for one day in a year. This is not likely to add any value to the functioning of the anganwadis.
- Yet the full enrolment numbers of the schools and anganwadis become part of LAMP coverage cum achievement numbers.

Operational Aspects

- In the half yearly report of FY25 (Apr-Sept), the coverage table shows that by September only 78% of the targeted villages and 70% of the schools had been reached. Child coverage was 60% in the hub villages (LRC+LEP). Merely 43% children were doing LEP in hub schools (360 children out of the targetted 840). This reflects that even in the hub schools which are the only site of intensive engagement, a large proportion of the children get less than half a year for LEP and LRC. Ideally the program should reach full coverage in the first month. Such low reach by

September – three months into the academic year - has serious implications for program deliverables. Partner-wise and geography-wise data would bring clarity on the ground level picture, which should be part of progress reports. This also has implications for program monitoring by TCSRD.

- In the two partner visits undertaken, it was learnt that both partners had changed, hub schools mid-session. This is not an insignificant issue. Changing hub schools implies a disruption of learning process of the students, and the cluster approach itself. Is this done in a consultative manner with AIF and TCSRD? These matters do not figure in the monitoring reports.
- The spread of LAMP in 219 villages (161 in FY23) and 25 hub schools across 9 districts, makes the intervention in each district miniscule. This small coverage is not likely to be noticed by the system, and any change would be hard to sustain. Larger and more intensive coverage in fewer geographies would be more meaningful.

LAMP Achievement Numbers

In FY 25 LAMP coverage target for the learning program is 28,055 children.
This breaks down as follows:

Activity	No. of Children
Hub Schools - LRCs (25)	1180
Hub Schools - LEP	840
Spoke schools (122)	5805
Training of Anganwadi workers	2910
Secondary Support (Transition)	330
Teachers Training/Balmela	16550
Care Givers	440
TOTAL	**28055**

In the above table – LRC and LEP in hub schools – are the only intensive engagement activities in LAMP, and they reach about 2000 children. Spoke schools drop to much lower engagement. The rest of the activities, such as bal-mela, teacher training, anganwadi training have 1-2 day engagement in a year. Yet all these numbers have been aggregated, to reach an impressive figure of 28,055 as LAMP coverage. Of this the only meaningful engagement is with 2000 children in the 25 hub villages. The coverage data is hard to justify.

LAMP Funding and Future Plans

- In the first phase of LAMP collaboration with TCSRD in 2012, the funding was shared between AIF and TCSRD in the ratio of 60:40. That ratio has changed over time to 100% funding from TCSRD. The funding for the current phase is Rs 189,00,000 over three years.
- LAMP has completed 20 years, rare for any development program. In the first decade, as mentioned in the beginning, LAMP's core focus was mitigating the impact of distress seasonal migration on children, and ensuring their continued education. LAMP engagement dropped

from intensive to thin in the second decade. The shift of focus from migration went against TCSRD's purpose of this partnership - which was education of migrant children in Gujarat.

- Further, AIF has decided to close work in the current five districts, and shift to Narmada district. They are also dropping the five partners and moving to self-implementation mode. This decision seems to have been more unilateral rather than consultative, in particular with TCSRD. Tata Chemicals may not have interest in deploying its CSR funds in Narmada district.
- TCSRD, may alternatively consider, working directly with existing partner(s). The criteria for selection may be geography, performance, and approach to work. Unnati, that runs the program with the salt workers children in Bhachau, Kutchh, ranks highest amongst partners in terms of quality of work, coverage, and leadership. Despite fund challenges, Unnati continued to focus on schooling of migrant children at salt pans, and had more intensive engagement with their spoke schools. Their teacher training has also been more intensive. TCSRD may consider creating a program of meaningful quality and scale in this region, in partnership with Unnati, so that its engagement with migration continues.

OVERALL RECOMMENDATIONS FOR THE EDUCATION PORTFOLIO

The total budget of the Education portfolio of Tata Chemicals for FY25 is in the vicinity of Rs 2.7 cr:

- 0.5 cr Six Smaller Programs
- 1.5 cr CSPC (4.6 cr over the phase)
- 0.7 cr LAMP

Each Education project assessed has its own recommendations in the respective project section. In this section of attempt is to pull together overarching portfolio recommendations, as below:

The Portfolio:

- **The Education programs of TCSRD are laudable in their intent of effecting change across all schools of Okhamandal block, and at all levels of the schooling system – pre-primary, primary, upper primary and secondary.**
- **TCSRD also aims to intervene in the education scenario of the block from multiple angles, all highly relevant – strengthening Foundational Literacy & Numeracy (FLN), promoting Science learning, supporting students to clear 10th Board, bringing drop-outs back to education through NIOS, reaching out to communities in remote parts of the block through the wadi intervention, helping students excel through Navodaya coaching, and supporting students to reach higher levels of education through scholarships.**
- **The portfolio also goes beyond Okhamandal block, its core business area, to nine other districts of Gujarat, to address the critical issue of distress seasonal migration, and its impact on children's education.**
- **The education programs have a strong Affirmative Action (AA) as well as rural focus. IT is particularly heartening to note the emphasis on girls' education.**
- **It is also worth highlighting that Tata Chemicals has provided long term support in critical need areas, extending up to even a decade or more. This demonstrates a commitment that is hard to find across CSR or the development sector**

The Six Smaller Programs

- **The newly launched programs, as already mentioned, are addressing relevant areas of education. Those just about two years old are still on a learning curve.**
- **Three of the programs - 10th Coaching, Science Bus and Navodaya – are struggling with respect to outcomes, because a significant proportion of children lack FLN competencies. This becomes a barrier for board exam preparation at secondary level, imbibing ience inputs at upper primary level; and in Navodaya entrance exam preparation at primary level. Children's basics of reading, writing and math have to be strengthened first, before these initiatives will fully blossom.**
- **TCSRD may consider halting Navodaya coaching for a couple of years, given the highly challenging entrance exam for these coveted schools, and resume it after the basic language and math at primary level has been strengthened.**
- **The scholarship program that has been running for many years by Tata Chemicals, is showing consistent value add in furthering education of aspiring students, especially girls, up to college level. This is bringing about fundamental shifts in families and creating role models in the community.**
- **The Wadi program is above all an advocacy success story. Having achieved its objectives of ensuring every child is going to school, through the buses started by the government on these remote routes, the program has been closed in FY25.**
- **To get a bigger bang-for-the-buck from these programs, TCSRD could consider adding elements of scale and saturation in its coverage strategy and making achievement targets more ambitious. For example:**

    - **<u>The 10th coaching</u> can become a stand-out program if all 16 secondary schools of Okhamandal block are covered, coaching is initiated from grade 8, and project targets are made more ambitious – for example, 100% students clearing board, and a significant number of students getting first divisions. This program can be seen in a 3-year time frame, with a year-on-year target build-up.**
    - **<u>The Science Bus</u> initiative could be enlarged in scope and scale:**
        - **Along with Science, Math should be introduced.**
        - **The Science and Math topics to be covered could be planned in consultation with the school principals and teachers, so they feel involved.**
        - **The schedule of Science Bus classes could be aligned with the school's science & math teaching schedule to build integration and collaboration.**
        - **The frequency of science bus touching a school could be increased from monthly to weekly for meaningful engagement to happen. The bus could be supplemented with smaller vehicles like an auto rickshaw or a scooter. Alternatively, Science & Math kits could be given to schools, and the facilitator could just move with a laptop or tablet. The bus could be accessed by schools in a hub-spoke model.**
        - **Over a three-year period, the program could be expanded stage by stage till it achieves universal coverage at upper primary level.**
    - **<u>The NIOS program</u> could benefit women in rural areas considerably, providing them a platform for education and empowerment. Depending on the geography and logistics,**

NIOS centres could service clusters of villages. Ideal would be for every village to be able to access an NIOS centre. It is strongly recommended that the highly successful SNDT program be studied, and lessons drawn from that to improve and strengthen the current version of the same program.

- **Navodaya Coaching, it is suggested be put on hold for a couple of years. And this time be invested in beefing up primary education.**

The Two Larger Programs:

- **Learning And Migration Program (LAMP)**

  - **The partnership American India Foundation (AIF) on LAMP, began in 2012, with the goal to focus on the neglected phenomenon of distress seasonal migration and its impact on children's education; demonstrate a strategy to keep the migrant children in school, and advocate with the government for universal coverage of migrant children. The program ran powerfully in the initial phase, but became diluted over the years, and as of now has withdrawn all investment from the migration agenda. Child migration for labour goes on unabated in LAMP geographies. The M in LAMP has lost its relevance.**
  - **The second major component of LAMP, the Learning Enrichment Program (LEP), which was meant to address the foundational learning deficit of children, has also become thin. Year on year learning assessments have shown that large proportions of children in LEP have not been enabled to overcome their FLN deficit. Besides, there is little evidence of schools having adopted the LEP pedagogy, and the classroom transformation that was envisaged to eliminate FLN deficit and foster age-appropriate learning from grade-1 onwards, which was a core objective and key sustainability measure of the program.**
  - **LAMP's There are issues with data presentation in LAMP reports, and the high numbers that are claimed as LAMP achievement.**
  - **LAMP is thus in something of a drift from its original mission.**
  - **AIF has now decided to close is work in the current 5 districts, and move to Narmada district in the coming phase. Tata Chemicals may not have interest in deploying its CSR funds in Narmada district.**
  - **TCSRD may not wish to completely drop the migration agenda, but consider working directly with existing LAMP partner(s). Unnati, a credible NGO with a strong track record, runs the program with children of salt workers in Bhachau, Kutchh, which may gel with TCSRD's overall focus. This partnership may be worth exploring.**

  (Details in LAMP section of the report)

- **Strengthening Foundational Literacy & Numeracy in primary schools (CSPC)**

  - **The partnership with CSPC on the FLN program began as a pilot in 2015, to tackle the critical issue of children's foundational learning deficit (reading, writing & math) that**

becomes an entry barrier to further learning in higher grades. The pilot expanded to cover all schools of Okhamandal in the second phase, and is now in its third phase.

- **Despite progress, the learning assessments at the end of each phase showed that a substantial proportion of children continued to carry FLN deficit. The latest CGI assessment of 2024 also shows that 39%-60% children of grades 3,4,5 carry FLN deficit (of grade 1-2).**
- **Children of the first two phases are now in upper primary and secondary school, yet many find it hard to engage with grade level curriculum. A significant proportion still struggle with FLN competencies.**
- **The parallel objective of the program was to train government teachers to adopt the new pedagogy, so that and right from grade-1 children learn at age-appropriate levels, and no more deficit gets generated. This paradigm shift is also not evident in government schools.**
- **As of now, the goal and objectives of phase-3, are identical to those of phase-1, and program components are also the same. This is hard to justify, given that 10 years and Rs 11.5 crore have already been invested in this program. The question also arises as to what will bring the program to its goal in the remaining year of phase-3?**
- **This recommendation tries to address the best possible course of action to achieve the program objective within this year. It starts with pointing out a design issue:**

The low annual targets for student achievement – example 60% students to achieve FLN by the end of first year - create adverse repercussions. This means 40% children will carry deficit to the next grade, and struggle even more with tougher curriculum. Even by the final year of the phase, the target is only 70%. This is the reason why FLN deficit is pushed to higher grades year on year, and it has not been eliminated from schools even after 10 years.

Any FLN program has to necessarily ensure that 100% children overcome FLN deficit within a year. This alone will enable all children to move to the next grade on a firm footing.

In parallel, building capacities of government teachers to adopt the new pedagogy, will ensure effective learning for incoming cohort of grade 1. As these cohorts move up year on year, learning at age-appropriate levels, with no build-up of deficit, the learning process will be streamlined (as is the case with any good private school).

Tata Steel's 1000 Schools Program, that was initiated in 2015, is now running in 6500 schools across 4 tribal states in the East of India, is a clear demonstration of FLN deficit being stemmed in a majority of the schools, the LEP pedagogy being followed by a very high proportion of teachers, and learning levels having improved markedly at upper primary and secondary levels. Jharkhand's West Singbhum district is one of the lowest ranked in the country on socio-economic and educational indicators. Despite 71% adivasi and dalit population, enormous terrain challenges, naxal activity, and very low school infrastructure and resources, teachers have widely accepted the new pedagogy and are

doing their best within the given circumstances, showing remarkable progress in learning baseline-endline assessments (measurable and evidence-based).

(Details in CSPC section of the report).

- **This report contains findings from a cursory assessment of LAMP and FLN. Tata Chemicals may wish to undertake an in-depth assessment of these two important programs on its portfolio.**

CROSS CUTTING RECOMMENDATIONS ACROSS EDUCATION PORTFOLIO

- **The projects will benefit from smarter articulation of goals. The goal has to state the envisaged project outcomes in measurable and time-bound terms. The goal statement itself should have accountability built into it for all levels of functionaries from leadership to the field personnel.**
- **Data-centricity has to be paramount. Data can sharpen program design. Data is the basis of program monitoring. In the end, data gaps lead to outcome gaps. TCSRD projects can reach the next level simply with greater focus on data.**
- **TCSRD needs to strengthen its program monitoring system, especially with respect to external / partner driven programs. Effective delivery of outcomes and judicious utilization of funds will be enhanced with a more comprehensive program monitoring framework.**
- **Rupen Bandar draws large numbers of migrant children. Connecting these children to education, could be considered by TCSRD as a potential project, as this is a dire situation.**
- **TCSRD's overall vision of the Education Portfolio should powerfully align with the national goals as stated in Samagra Shiksha Abhiyan as well as SDG4 of the UN Sustainable Development Goals. In simple terms TCSRD may aim to "*Achieve universalisation of quality K-10 education in Okhamandal block by 2030*".**
- **This is eminently possible, because the current education portfolio of TCSRD already contains all elements of the above. With some strategic and design shifts, and within a reasonable financial investment, this goal would be within reach.**