Upholding the components of HDI:

"Development of Model School and SMART PHC's in Sangli District - 2021-23"

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The COVID-19 epidemic put India in serious risk between March 2020 and February 2022. Millions of people's lives have been significantly impacted by it. The educational system was shuttered and the healthcare system was overworked. This situation served as a powerful reminder to us to give health and education, two necessities for human development, first priority. Although the administration made every effort to recover from the epidemic, fundamental improvements in these sectors are required to ensure that such emergencies are handled with readiness.

When the COVID-19 impact was assessed for the health and education sectors, it addressed the key gaps that required extra care, such as unhygienic conditions, inadequate and outdated infrastructure, digital isolation, and a lack of training for new technologies among educators and healthcare professionals. During this period ZP Sangli, decided to do a deep dive to overcome the issue of improving healthcare facility and educational learning quality.

The district administration, led by the CEO, had launched an initiative to restructure government schools into The Model Schools as per new education policy and the primary healthcare system into SMART PHC's. Total 313 Model schools work is completed till 2023, and 690 villages will covered in next 2 year. Total 64 PHC's are being transformed into SMART PHC.

The details of both the projects are sequentially mentioned below.

"Model School - Mazhi Shala Adarsh Shala"

The uniqueness of the program "Model School - Mazhi Shala Adarsh Shala" which means My School-Model School lies in its holistic and multifaceted approach to educational enhancement. Unlike a simple replication of existing initiatives, this program addresses various challenges within the education system through a combination of infrastructure improvement, innovative pedagogy, ICT integration, and extensive community mobilization. The initiative collaborates with organizations like CREDAI, Pratham NGO, and BYJUs, showcasing a strategic and tailored partnership approach to leverage expertise and resources.

Model School program, spanning a saturation model of 313 schools ZP schools, showcased improved infrastructure and innovative pedagogy, directly benefiting 1,23,000 students in classes 1 to 8th and 5900 teachers of zilla parishad Sangli. The BYJUs app provided digital learning resources. Government bodies, subject expert committees, and NGOs contributed to evidence-based policy-making. Gram Panchayats and Sarpanchs actively supported model schools, while school management committees and educators, following capacity-building initiatives, became stakeholders and beneficiaries.

Stakeholder's requirements and process change:

The impetus for the initiation of the Model School stemmed from a myriad of stakeholder and beneficiary requirements, quantified through the identified challenges. The pressing need for enhanced infrastructure and improved quality, addressing issues such as overcrowded classrooms, dysfunctional libraries, and inadequate hygiene facilities, poor learning outcomes of children in language, English and math directly quantifying the scope of the problem. The reluctance of teachers towards routine training programs, quantified by the inadequacies in design, relevance, and contextual specificity, underscored the necessity for a paradigm shift in educational interventions.

Existing processes requiring improvement encompassed diverse facets, including the standardization and enhancement of school infrastructure. There was a need for a transformative shift in teacher training programs, necessitating a redesign to be more tailored, contextspecific, and engaging to mitigate teacher's apathy. The Model School also emphasized the imperative of

community involvement, striving to overcome political barriers, instill a sense of importance in primary education, and foster heightened participation through Jan Bhagidari.

Applied Innovation:

The Model School program, dedicated to delivering quality education within an equitable and inclusive classroom environment, has undertaken a multifaceted approach to fulfill stakeholder requirements. The project has meticulously pursued three overarching goals-

1. The creation of an enabling environment through enhanced infrastructure,
2. The augmentation of learning experiences via innovative pedagogy and ICT integration
3. Community mobilization for enhanced monitoring and school functioning.

A comprehensive baseline assessment was conducted for all classes from 1st to 8th, covering subjects such as Mathematics, English, and Marathi. Following this, a third-party evaluation was carried out to ensure a thorough examination of academic performance. The execution stage involving 313 schools witnessed a substantial transformation in school infrastructure, facilitated by CREDAI, leading to the standardization of facilities. The provision of 20 types of infrastructure, including playgrounds, computers, science labs, and solar power systems, not only improved the physical learning environment but also aligned with the stakeholders vision for quality education. Total Rs. 280 Crore budget was allocated for the Model School through convergence of various schemes. The establishment of a subject expert committee chaired by the District Education Officer (DEO) exemplifies the commitment to periodic review and planning, reflecting a data-driven and adaptive approach. The engagement of DIETs in teacher capacity building, facilitated by expert-developed training modules and performance appraisal forms, addresses the stakeholders concern for an empowered teaching faculty. The introduction of digital applications for E-learning and a BYJUs app subion for over 21,000 students, supported by NGOs, ensures that technological advancements are harnessed for inclusive education, fulfilling stakeholder's expectations. Innovative interventions like the Happiness Program and No Bag Day contribute to a joyful schooling experience, aligning with the stakeholder's emphasis on holistic development.

Community Engagement:

A comprehensive awareness campaign for the was executed through a comprehensive strategy, with Jan Bhagidari (Peoples Participation) at its core. At the heart of the districts strategy is involving the local community in decision-making through Jan Bhagidari. The Summer Campaign engaged over 400 villages and 4000+ children, fostering community participation through volunteers given orientation on the campaigns approach. The transmedia Radio Program, spanning 160 episodes, utilized SMS/WhatsApp alongside radio broadcasts, ensuring a unique learning experience. School Readiness Melas facilitated the school-to-community connection, aiding parents in supporting their child's development.

The program actively engages various community stakeholders, including Gram Panchayats, subject expert committees, School Management Committees (SMCs), and local residents. Gram Panchayats have been oriented to actively support Model Schools in their respective areas, showcasing a community-driven approach. The communities' substantial contributions, both in cash and material (about Rs. 9 crore), highlight the tangible impact of Jan Andolan in creating new facilities and supporting the programs goals.

Strengthening public delivery system:

The Model School program has significantly improved the responsiveness, transparency, and efficiency of the public delivery system through an evidence-based and tailored approach. Commencing with a needs assessment, the initiative identified specific challenges in infrastructure, teacher capacity, and community engagement. This led to customized interventions, such as the establishment of subject expert committees and capacity-building initiatives for teachers, creating a more targeted and effective system. The inclusion of Gram Panchayats, a peoples movement, and active public participation not only enhanced transparency but also instilled a sense of community ownership.

Technology and Digital Connect:

In tandem with the development of a digital application for E-learning and the provision of BYJUs app subion, the Model School took further steps to bolster digital capacity among stakeholders and beneficiaries. The transmedia Radio Program, utilizing SMS/ WhatsApp

alongside radio broadcasts showcased a unique and technologically integrated approach for engaging students. This approach not only expanded digital reach but also promoted digital engagement through multiple platforms. Moreover, the initiative conducted School Readiness Melas, incorporating a digital component to enhance parent's digital literacy.

The innovation in the Model School program leveraged technology as a pivotal tool for fostering a responsive, transparent, and efficient public delivery system. The program incorporated a digital application for E-learning, providing students with access to educational resources in a technologically advanced format. The subion to the BYJUs app for over 21,000 students further enhanced the learning experience through digital platforms. These technological interventions facilitated real-time access to educational content.

Impact:

The perceptible improvements in processes, systems, and institution building within the Model School are manifested in various quantifiable metrics. The substantial enhancement of infrastructure in 313 schools, coupled with a commendable increase of 5991 students in enrollment for the academic year 2021-22 and 7890 in academic year 2022-23, speaks volumes about the programs impact on accessible and improved learning environments. Furthermore, the establishment of a subject expert committee and the integration of digital applications and BYJUs app subion for over 21,000 students substantiate the programs commitment to effective governance and technology-driven quality learning experiences. Notably, the success of the Learning Improvement Program by Pratham Education Foundation is underscored by the State Educational Ratings remarkable ascent from 25th to 9th position and the ASER Test Report indicating a leap from 10th to 4th position in 2022. This success is mirrored in significant improvements of 28% in language, 9% in mathematics, and 16% in English among 1,23,091 students from 1st to 8th standard during the academic year 2021-22, exemplifying the Model School Programs profound impact on educational outcomes and institution building.

The Program, observed through the lens of the National Achievement Survey (NAS) 2021 and the Performance Grading Index for Sangli, showcases a positive impact. In NAS, the average scores for Class 3rd, 5th, and 8th at the district, state, and national levels reveal commendable academic performance. Concurrently, the Performance Grading Index for Sangli reflects outcomes in Effective Classroom Transactions, Infrastructure, Facilities, Student

Entitlements, School Safety, Child Protection, Digital Learning, and Governance Processes, earning the grade "Uttam" with an Evaluation Grading of 10. In distant locations like Atpadi, Jath, and Shirala talukas, Program has led to increased enrollment.

Assessment:

Third-party evaluations indicate positive impacts on learning outcomes in Sangli district. According to the National Achievement Survey (NAS), class-wise rankings for classes 3rd, 5th, 8th, and 10th have improved, showing increased learning outcomes compared to the previous year. The Learning Improvement Programme by Pratham Education Foundation further supports this, reporting improvements in language (28%), mathematics (9%), and English (16%) study levels for 1,23,091 students in 2021-22. ASER test results also show progress from 10th to 4th position in the state for language and mathematics subjects from 2018 to 2022. Performance Grading Index indicates a increase in the district.

Sustainability:

The sustainability of the Model School Program is underscored by its integration within existing government structures and budgets, leveraging resources from within the system, and converging funds from schemes like District Planning Committee, 15th Finance Commission, MGNREGA, and local development funds, ensuring financial sustainability. Active engagement of Gram Panchayats, subject expert committees, and School Management Committees fosters community participation, cultivating a sense of ownership and long-term commitment. Continuous capacity building of teachers, innovative teaching methodologies, and the introduction of digital applications signify a forward-looking strategy to adapt.

Grievance redressal and feedback mechanism:

The grievance redressal and feedback mechanism within the Program is structured hierarchically, starting at the school level with the School Management Committee (SMC). Citizens, including parents and teachers, can express concerns or provide feedback during SMC meetings. If issues persist, they can be escalated through the district education hierarchy, involving the Education Officer (Primary), Deputy Education Officer, and Block Education Officer. Additionally, subject-specific committees, such as Language, English, Maths, Science,

Social Science, Art, and Physical Education Committees, provide avenues for addressing specialized concerns.

Replication:

Post-implementation, the Model School Program, renowned for its collaborative initiatives with CREDAI, DIETs, and innovative teacher training approaches, emphasizes community involvement. The active participation of Gram Panchayats and Gram Sabhas in enhancing the quality of primary education reflects the programs commitment to localized decision-making. Additionally, the program adopts a unique saturation model, embodying the "One Village, One Model School" approach. This approach ensures that each village is comprehensively covered, aligning with the new education policy guidelines. The convergence of funds from diverse sources, including the District Planning Committee Fund, MLA MP LADS, ZP Cess funds had created a financial sustainability. The core of this Model School programs JAN BHAGIDARI. Having owned this program there was peoples contribution to the worth of almost 9 crore rupees in both cash and kind. Many people believed the noble intention and donated cash and sponsored things like computers, books, playground preparation etc. to their school in their village thus fostering peoples trust in govt system resulting in community ownership and sustainability. The vibrant school management committee which had open discussions and constructive feedback had ensured that the interventions are designed with bottom up approach.

A comprehensive toolkit was indeed prepared as part of the Model School Programs post-implementation strategy for replicating the innovation in other districts, states, and central government departments. The toolkit encapsulates a wealth of valuable information, including checklists and qualitative monitoring tools. This toolkit, a compendium of best practices, serves as a practical guide for other districts looking to replicate the success of the Model School Program. This toolkit, consisting of checklists and qualitative monitoring tools, served as a guide for districts aiming to adopt the successful practices of the program. The significance of the toolkit was officially endorsed by the state government, which issued a circular acknowledging its importance and encouraging districts to allocate funds for the development of model schools.

The Program, recognized for its collaborative initiatives and innovative approaches to teacher training, places a significant emphasis on disseminating best practices to districts, states,

and central government entities. It ensures that the knowledge gained from the initiative is systematically organized and easily accessible, fostering a more streamlined adoption process. The state government played a pivotal role in endorsing the toolkits significance. A circular was issued, directing districts to allocate a maximum amount of funds from the District Planning Committee for the development of model schools. This official recognition underscores the states commitment to promoting and replicating the successful practices pioneered by the Model School Program. It creates a structured framework for financial support, making it feasible for other districts to embark on similar initiatives. The dissemination strategy also extends to active participation in conferences and events. The program strategically presented its achievements at the Maharashtra Education Departments conference, held in April 2023. This platform facilitated the sharing of success stories, attracting the attention of districts such as Pune, Satara, Dharashiv, and Chatrapati Sambhaji Nagar.

The Model School Program acted as a catalyst, sparking interest and encouraging other districts to study and replicate the model.

"Improvements in the primary health care system through SMART PHC"

This unique innovation consists of improvements in the primary health care system through smart PHC where physical infrastructure and service delivery are upgraded as per current demand. Second component consists of upgrading the referral system of tertiary healthcare (GMCH, Miraj) and procurement of latest various diagnostic & surgical equipment. The Smart PHC initiative has significantly benefited the rural population of the district, providing services to a total of 2,102,786 individuals.

Stakeholder requirements:

Dwindling patient numbers to government healthcare centers (both primary and tertiary) and rising private healthcare costs. Public trust in government health facilities gradually eroding due to challenges faced by primary health centres, including outdated infrastructure, inadequate training, and poor communication skills among health personnel. Also the lack of modern diagnostic and clinical equipment in govt. tertiary healthcare centers is posing public health challenges.

Innovation:

Primary Health care: The SMART PHC initiative adopts a saturation model of detailed comprehensive three-pronged approach to elevate healthcare standards in Sangli. The 1st focus is on physical infrastructure, involving the overhaul of hospital buildings, wards, laboratories, maternity homes, and drug stores etc. This also includes innovative measures like rainwater harvesting, solar net metering, Ayush Herbal Gardens, and establishment of the breastfeeding center(Hirakani Kaksh). The second aspect on service quality enhancement is through technological integration. This involves the implementation of e-OPD and SMART HEALTH CARDS, deployment of modern machinery such as automatic hemoglobin diagnostic machines, and specialized training for AWS, ANM, ward boys, doctors, and nurses. The training emphasizes primary healthcare, antenatal care, and immunization. The third element, crucial for community engagement, establishes a JAN BHAGIDARI, creating community ownership & a feedback mechanism. Public participation is encouraged, involving local representatives and local grassroots communities in decision-making processes.

Budget Planning:

The funds used in this process are through convergence of regular funds available every year from DPC (district plannig committee), ZP Cess funds, MP MLA funds etc. As these funding pattern is available in every district of Maharashtra, we belive that this is a scaleable, replicabe and sustainable model. This unique model includes bottom up approach wherein grass root communities are involved right from the beginning which results in community ownership and JAN BHAGIDARI. Total Rs. 90 Crore was allocated for the SMART PHC program through convergence of various schemes.

Awareness and community engagement:

Apart from traditional practices like the beating of drums, extensive use of print, electronic and social media along with dissemination through panchayat raj institutions like Gram Panchayat sabha, Gram Sabha coupled with house-to-house visits by ASHA workers, awareness through village health sanitation committee meetings have resulted in making this event community owned, bottom up approach thus resulting in JAN BHAGIDARI movement. Also awareness campaigns of tertiary care up gradation and skill lab were taken by GMC Miraj authorities. District information office had helped in dissemination of the innovation on regular basis through various channels.

ASHA Meetings have been organized to emphasize mother and child care services. The initiative extended to the organization of village health fairs, promoting community engagement and healthcare awareness. Regular meetings of the RUGNA KALYAN SAMITI further facilitated collaborative efforts in healthcare planning and implementation. These gatherings served as vital platforms for disseminating information, fostering community participation, and addressing healthcare needs at the grassroots level. This instilled a sense of pride and the holistic approach ensured comprehensive healthcare services, community involvement, and effective communication in the pursuit of improved health outcomes.

Technology and digital uses:

The outpatient department in PHCs undergone a digital transformation with e-OPD, smart health cards, and unique patient IDs, including past visits. SMS notifications and online patient

registration streamlined the processes. Also emphasis was given on online training nd digital record keeping tools. This comprehensive strategy empowered stakeholders on both sides of the spectrum, fostering a technologically enhanced healthcare landscape in Sangli.

These innovative strategies have harnessed technology to build a responsive, transparent & efficient public healthcare system. The Smart Primary Health Centers (PHCs) equipped with modern diagnostics and telemedicine capabilities, exemplifies the systems responsiveness and extended accessibility. Overhauling the outpatient department with technologies like E-OPD, e token system, and smart health cards streamlined processes, enhancing user-friendliness. The transparent approach extends to knowledge transfer with E-OPD and digital resources, fostering digital literacy.

Impact:

The health care innovation has profoundly impacted healthcare and education, bridging demographic and geographical gaps. The initiative strategically enhanced accessibility in urban and rural areas throughout the entire district. The Skills Lab stands out as a central hub for practical training, significantly improving healthcare education for diverse stakeholders in tertiary set up. In the remote areas of districts like Aatpadi, Jath, and Shirala, there was a notable increase in institutional deliveries, OPD, IPD thus showcasing the innovations reach into remote locations. Community ownership is created and people take pride in SMART PHC being in their village as a JAN BHAGIDAI- sustainable model.

Third party evaluation:

Smart PHC: There is a commitment to objective and transparent evaluation of primary health centers (PHCs) in Sangli through collaboration with UNICEF/WHO. This evaluation encompassed an objective evaluation of 200-mark-based scoring system of PHCs like technical facilities, infrastructure, and the growth of key health indicators. Average Monthly patient numbers per PHC increased from 800 to an impressive 1700. A remarkable reduction is observed in the Maternal Mortality Rate (MMR) from 79 to 41 and Infant Mortality Rate (IMR) from 5.1 to 3.3. Yearly institutional delivery increased from 7226 to 9443.

Sustainability

Steps taken for sustainability included continued evaluation of each PHC on 200 mark score sheet with providing the interventions whenever needed and then evaluation after intervention. Building institutional memory through e-record keeping through e-OPD coupled with vibrant people participation and community ownership along with robust Rogi Kalyan Samiti of the PHCs to address the challenges at grass root level. A need based dynamic funding system through DPC, ZP Cess funds etc every year will also ensure the financial sustainability

Redressal and feedback mechanism:

At the PHC level, a grievance redressal system is implemented through a complaint box, known as "Takrar Peti." and Rogi Kalyan samiti. Patients can voice concerns, and the Taluka Health Officers (THO) address grievances at the Taluka level. The system extends to district levels, where the District Medical Officer , CEO ZP and DC/DM resolves issues. Additionally, an e-ticket raising option is available for efficient handling of applications, enhancing transparency and ensuring timely resolution of healthcare-related concerns at both local and district levels. This multi-tiered approach promotes accountability and responsiveness in addressing patient grievances within the healthcare system.

Replication:

The innovation is based upon evidence-based policy making which included a robust three step process consisting of needs gap analysis, targeted and custom made interventions and effective post implementation evaluation which included feedback. This model is easily replicable in any area. The best practices included grading/rating of PHCs on a scale of 200 marks which consists of almost 20 parameters (details in ppt). This fostered a positive competition amongst the PHCs wherein each PHC strived to be the best in terms of three cardinal components: physical infrastructure, best patient care and effective training.

The smart PHC project consists of a standardized base line assessment of each PHC on physical infrastructure, service delivery and challenges. This assessment shows the area of interventions like physical infra improvement, training, procurement of drugs, consumables through transparent process etc. The post implementation evaluation includes regular reviews whose formats are standardized templates. Streamlining all these into an institutional memory

created through various online tools will make the system person neutral, evidence based and result oriented. Standard training modules and tools shall also familiarize any new comers into the system thus making this a replicable model.

The district administration is in the process of documenting all these innovations and dissemination to state government. This innovation is based on evidence based policy making made on three cardinal principles of need gap assessment, planning targeted custom made interventions and effective post implementation evaluation with continuous feedback. The funds used in this process are through convergence of regular funds available every year from DPC (district planning committee), ZP Cess funds, MP MLA funds etc. As these funding patterns are available in every district of Maharashtra, we believe that this is a saleable, replicable and sustainable model. This unique model includes bottom up approach wherein grass root communities are involved right from the beginning which results in community ownership and JAN BHAGIDARI. Similarly attempt is being made to document and disseminate the idea of up gradation of Tertiary hospitals with state of art latest equipment and well equipped skill lab. Wherever govt. medical college is there, NMC mandates for a skill lab. It can be funded through DPC innovation scheme. Thus this innovation of enhancing and upgrading both primary and tertiary health care systems with community participation through convergence at the district level results in a well documented model which is scalable, replicable and sustainable in any district.