



IMPACT REPORT

FY 22-23



MENTERRA
Impacting India

FOREWORD

We are pleased to share our Impact Report for FY 2022-2023. This report summarizes the impact achievements of our bold, investee companies. This report also marks the beginning of our 8th year of investing in outstanding entrepreneurs building a new India, changing lives and contributing to sustainable change.

Menterra Social Impact Fund is a venture capital fund that addresses the biggest issues facing agriculture, healthcare, and education in India through private investments that target commercial returns and sustainable, social impact. Our impact thesis seeks to (1) align our investments to the UN Sustainable Development Goals and create sustainable change in agriculture, health and education sectors, (2) serve the underserved, low-income, aspirer households with annual incomes ranging from Rs 1.5-8 lakhs per annum, (3) align to the 2X gender challenge that aims to strengthen women entrepreneurship, leadership, workforce diversity and create more products/services intentionally for women and girls, and (4) aspire to create greater impact in underserved geographies across India.

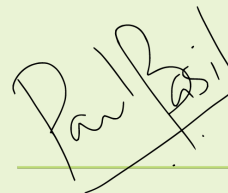
Over the last 2 years, we have sharpened our investment strategy to maximise impact. Our current portfolio covers 12 investee companies and a total of Rs 53 crores is the total investment amount. 57% of the invested capital is into companies that are aligned to the 2X gender criteria, and an inspiring 67% of the investee companies have a woman founder. More than half the impacted lives are of women and girls; 53% of the lives impacted are from low-income households, and 52% are from lower performing states in the NITI Aayog poverty index. In terms of scale, more than 900k students, 1.5k patients and 179 small farmers have received services and products from our current portfolio companies. We have allocated part of our investment capital to invest in select “impactful challenges” such as in cancer and digital health where we feel there is a dearth of solutions. We have also piloted creating companies where entrepreneurial activity is limited and this led to the formation of Iron Kettle, a small tea grower focussed tea company. We believe that both these efforts will go a long way in maximising impact.

Measuring impact across the portfolio is a complex task. It's more complex for early stage enterprises as business models pivot and the end impact changes. Our partner companies have committed themselves to having clear and specific impact goals and relentlessly measuring them.

This year, Menterra undertook a self assessment of our impact practices in comparison to global good practices using the BlueMark benchmark report⁽¹⁾ for impact investing. This report identifies 20 good practices. We are extremely pleased to share that 10 of these practices are fully implemented at Menterra while 8 of them have been initiated. We have done well in assessing each investee using all five dimensions of impact - Who, What, How Much, Contribution and Risk. We also have a consistent approach to compare and aggregate impact performance across investments and a composite scoring methodology. However, we need to do more, to align incentive systems at Menterra and our investee companies with impact performance. We also need to strengthen Menterra's contribution to impact being created by our investee companies and measure our contribution with more systematic evidence.

This report was made possible with active contribution from the founders and team members at our investee companies. At Menterra, Anju Jayprakash led the project, Parool Agarwal provided able support and Sayujya contributed to creative design. Thank you!

Me along with my partners George Thomas, Mukesh Sharma and other colleagues, wish you all a great reading. We would be delighted to hear your feedback and thoughts on this report.



Paul Basil, Co-Founder of Menterra

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SPOTLIGHT

CHRYSALIS

Building an education system which brings out the extraordinary human potential in every child

Student enrollment rate into schools in India has increased impressively over the last 30 years. According to the ASER 2022 report⁽²⁾, the enrollment rate for the 6 to 14 age group has been above 95% for the past 15 years. However, qualitative educational outcomes have a long way to go. According to the same report, children's basic reading ability has dropped to pre-2012 levels, and this is visible in both government and private schools in most states.

According to a UNICEF study⁽³⁾, learning assessments show that many of those children who are in school are not learning the basics of literacy and numeracy or the additional knowledge and skills necessary for their all-round development. Children are exposed to rote memorization techniques in early years and then struggle to cope with primary education.

Recognizing these problems, one of the main goals of the Indian government's New Education Policy, 2020 is to move away from the outdated focus on rote learning and instead, promote critical thinking, creativity and problem solving skills in the children.

With a passion and goal to radically change the way children learn at school, Chrysalis was founded by Chitra Ravi in 2001 to create "an educational system which awakens the human potential in every child."

In a survey conducted by the company, covering the principals and teachers of 2512 schools across India, 82% of the respondents admitted that students have a low attention span in the classroom and 85% of the teachers felt that most of the students were "slow learners".

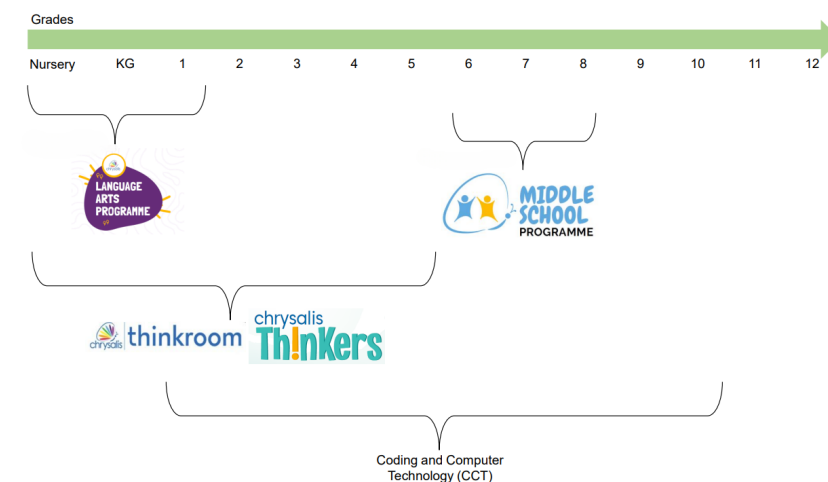
Chrysalis brings to the schooling system a range of curriculum and delivery innovations that transforms the classroom experience and brings out the true potential in every child. Owing to two decades of sustained research on education and pedagogy by the company's

internal R&D team and the transformation witnessed in the schools it worked with, it was awarded South-Asia's most innovative curriculum award and the coveted ET-NOW "Game Changer" Award from over 63,000 organizations.

An accumulating body of knowledge shows that early childhood interventions for disadvantaged young children are more effective than interventions that come later in life. Menterra's investments in the education sector focuses on delivering affordable education that creates a level playing field for the underserved through improved learning outcomes and better linkage to skills required in the rapidly changing world. Chrysalis's work on the wholesome development of children and making them future ready aligns very well with Menterra's impact objectives.

PRODUCT AND OPERATING MODEL

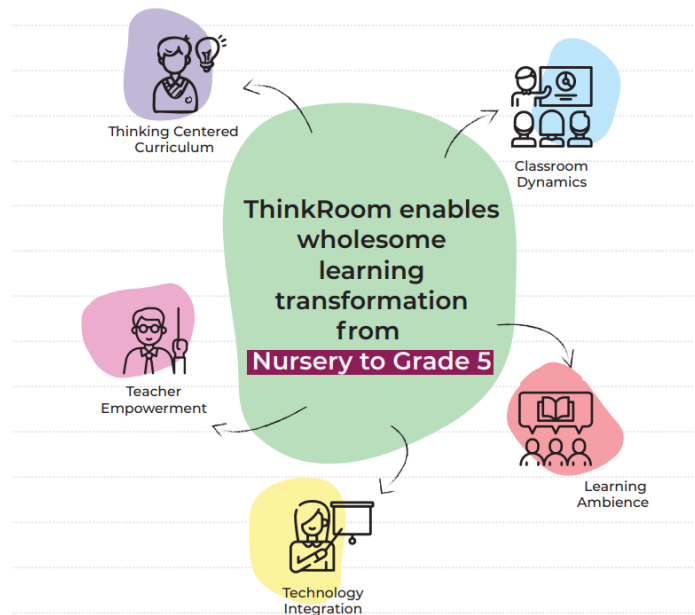
Chrysalis has a B2B product portfolio that serves to improve the critical and creative thinking skills in students across pre-primary, primary and secondary grades.



Chrysalis Thinkroom and Thinkers are the flagship products that were born out of a very pressing need in the Indian schooling system to move out of an archaic, rote learning, factory-model way of teaching, to one which brings out the true human potential of every child. Chrysalis calls this the transformation of classrooms to Thinkrooms. Launched in 2012, Chrysalis Thinkroom is a deeply researched pedagogy for students from nursery to grade five.

Every child is unique, and these products bring together a set of key components into the child's school environment that encourages a holistic development of the child. Thinkers is a variant of Thinkroom that is fine tuned to be easily accessible for affordable schools.

The key components of Thinkroom are described below.



Thinking Centered Curriculum called Studios are learning and activity books that engages the students and encourages them to think deeply about subject matters, rather than just learning facts from regular textbooks. While covering the requisite syllabus, Studios make learning a participatory experience which is essential for holding the students' attention and absorbing the concepts. Children also become more inquisitive and active in the class. A strong foundation of "skill-based" pedagogy is integrated into the content and woven into characters, stories and activities with designed opportunities for visible learning and thinking. The key differences between this approach and the traditional textbook approach are described below.

Traditional approach	Chrysalis' approach
Encourages rote learning	Incorporates constructivist pedagogy, where concepts are derived through dialogue and experiences
Minimal interactive content	The Studios books are written in a conversational tone and the teacher guides the child to interact with it. Hence the name Studio - a place where children explore and create
Text books are filled with chunks of information	Studios use minimal text, and instead use mind-maps and graphics to present content
Minimal scope for thinking	Every lesson incorporates the 4 facets of thinking (Look Deep, Look Around, Look Within and Look Beyond) by which students are habituated to thinking in different ways



"The students are excited before and after the class. I have never seen that before, even for a physical training class."

S Ramesh, Principal,
Sri Narayani Vidyalaya school, Vellore



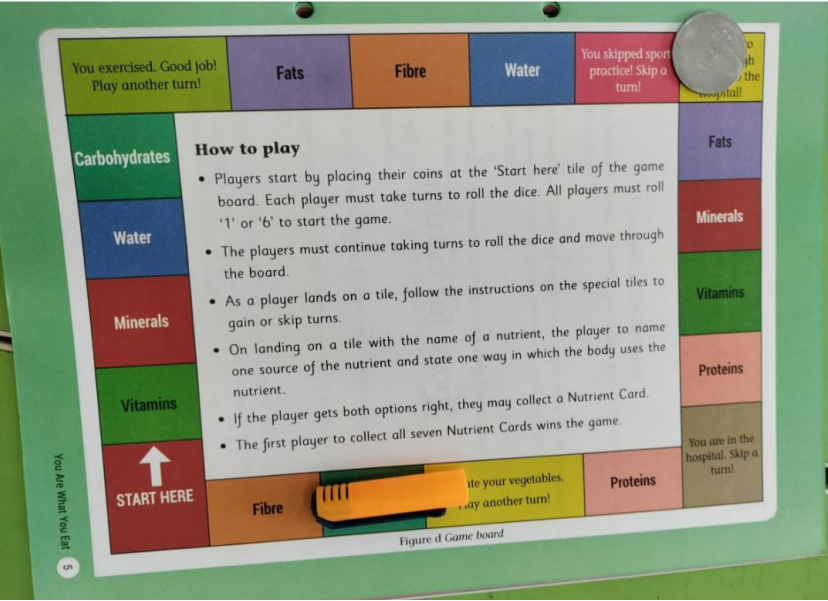
“We used to try to anticipate what 10-15 questions the children will ask and prepare for it for the next day’s class. But now the children surprise us with such different questions apart from what we expected. “

S Lalitha, Teacher,
Vedavalli Vidyalaya school, Bagaveli



Some responses to a question in one of the English subject Studio activity page: “ Draw or paste a picture of your favorite cartoon character. How do they make you laugh ?”

Learning ambience and classroom dynamics: Well thought out teaching aids and classroom props create a learning-by-having-fun element in the classroom. Appropriate aids and props are used to help students learn concepts through gamification.



A wall game board that gamifies the learning about nutrients.



A mood meter that displays different moods for every child to freely express how they fee.

The ambience in the classroom is also made supportive of how the child is feeling and keeping it stress free. One of the key purposes of these elements is to effectively manage the learners and the learning process in the classroom environment.

Teachers are provide with well-defined learning outcomes, as well as guidelines on conducting different activities using these props and teaching aids. Facilitation Handbooks are designed to assist the teachers in these aspects.

Teacher empowerment: Chrysalis believes in the continuous professional development of teachers through training and support. It enables teachers to upskill themselves regularly through videos, webinars, curriculum and pedagogy on the product portal that they can access and learn from at their own pace. The portal contains more than 25 hours of professional development content. The topics covered are listed below.

Know students and how they learn	Know content and how to teach it	Keeping a supportive and safe learning environment
Understanding the brain and how learning happens	Content selection and organization	Using inclusive practices
Understanding students	Curriculum, assessment and reporting	Support student participation
Differentiated teaching to meet learning needs	Literacy and numeracy strategies	Manage classroom activities
Understand theories of education and content	Computer technology	Provide feedback to students on their learning
Know teaching strategies for the teaching area		Maintain student safety

All of this helps the teachers adopt the best practices in managing the class dynamics and setting the class routines. A skillful teacher with a great attitude can dramatically improve the quality of learning.



“I could find my teachers becoming more creative in their teaching methods and they think of new ideas”

Banu, Principal,
Vedavalli Vidyalaya school, Bagaveli

And very importantly, empowered teachers can establish a positive and safe learning environment for the children.

Technology integration: Chrysalis’s technology platform helps students, teachers and the school administration perform better and achieve better outcomes.



The curriculum is revitalized with storybooks (fun and exciting narratives that complement the core learning concepts), self-study digital lessons, engaging animation videos and educational songs. Students can watch videos, complete assignments, partake in activities and revise concepts at home. Its diverse templates make in-person and remote lessons interactive. Students grow through these tactile activities that heighten engagement and encourage a holistic development.

Teachers can access facilitation handbooks that have demonstrative videos that help them take better classes. They can also use the lesson guides to get the most out of their learners and this helps simplify the teaching process.

The technology platform has a Learning Management System (LMS) that provide the school management with the necessary help to run the school and stay organized about teacher and student management.

Other Products: Apart from Thinkroom, the Chrysalis product portfolio consists of various non-curriculum based products. To make learning languages more effective, Chrysalis introduced the Language Arts Program - LAP. LAP is a research-based, learner centric language acquisition programme for students from Nursery to Grade 1. In this program, children learn from a full range of multiple sounds, words, concepts, images, stories, exposure to print, literacy materials, and just plain talk.

The Middle School Programme is a platform for teachers and students of grade 6 to 8 that facilitates learning through digital resources. It promotes working in groups and building social skills and ensures presence and self awareness amongst students.

The Coding & Computer Technology (CCT) program for students of grades 1 to 10 is pedagogically designed to enable schools to teach the latest technology to students using skill modules. It is designed to be in line with the NEP 2020 and the skill modules include Coding, Artificial Intelligence, Java & Python.

Operating model: Chrysalis primarily operates in the private schools market with a focus on affordable private schools. In India, families highly value their children's education and send their children to private schools as soon as they can afford it. This has created a large market for affordable private schools (APSS) and an estimated 160,000 such schools exist in urban areas alone. However, they are highly informal and lack innovative learning environments.

Schools that sign up for products such as Thinkroom and Thinkers receive the material, services, support and the technology to enable the transformation in their pedagogical approach. The flexible, play-

based approach supports a holistic development of the students and improves learning outcomes in these schools.

Changes in the school and classroom environment are regularly reviewed by Chrysalis team members who visit the schools and observe the classroom activities. A school transformation report and score is generated to keep track of the impact created. This is described in the IMPACT MEASUREMENT AND MANAGEMENT (IMM) section.

| IMPACT CREATED



Chrysalis improves learning outcomes in schools from nursery to grade 10. This directly aligns with SDG 4 (Quality Education). It also aligns to SDG 8 (Decent Work and Economic Work) because in the current times, learning by rote is increasingly irrelevant and it is far more meaningful to understand concepts, be able to apply it and be creative. Since inception, Chrysalis has transformed more than 1,800 schools in India, trained more than 5,500 teachers and impacted almost 1 million students. It's programs have achieved the best in class retention rates of more than 80%. At the 7th National Award for Excellence in Education, Chrysalis was recognized as the "Best Academic Innovative Curriculum". Detailed below is the impact created by Chrysalis at various levels in line with Menterra's investment thesis.



1,178,832 students reached

23,496 teachers trained

Low-Income Households: In FY 22-23, Chrysalis worked with 721 schools and 257,125 students across India. More than 26% of the students belonged to the low-income category as they studied in schools with annual fees of less than Rs 18 thousand.

The Chrysalis Thinkers product is inspired by, and incorporates the key pedagogic elements of Thinkroom. However, a lot of the content, situations, characters used and the activities to be conducted in the classes are contextualized keeping in mind the affordable private schools students and teachers. In this way, and by more accessible pricing for Thinkers, Chrysalis is able to reach out to and create impact in schools of low-income household students.

26% of students are from schools paying less than Rs 18,000 annual fees

Underserved Geographies: Chrysalis has deployed its programs in 20 states of India and 56% of the students impacted are from underserved geographies. Its curriculum is mapped to both the central and the state syllabi so that it is accessible to schools and students across a wide range of geographies in the country.

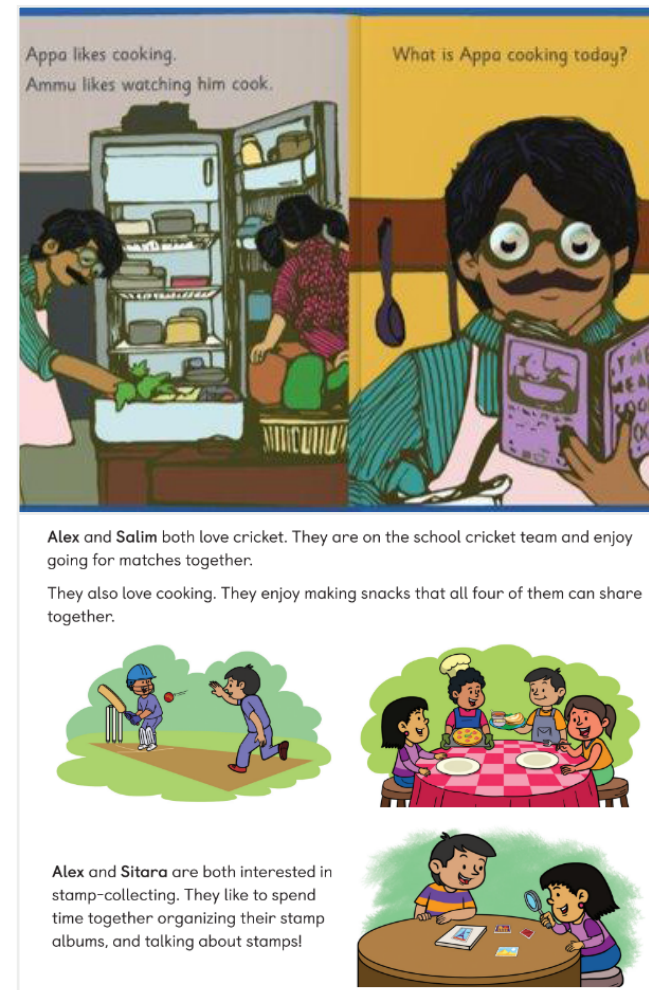
56% of the students are from lower performing states in the poverty index

Gender Equity: Menterra is committed to being an equal opportunity employer and investor. And in this endeavor, it tracks the 2X Gender* criteria on all its investments. Chrysalis performs well on the 2X Gender criteria and is a clear example of a company that promotes women's entrepreneurship. It also fulfills the criteria based on the business being led by women in active roles as one third of senior management at Chrysalis are women. Chitra Ravi, the founder and CEO of Chrysalis has been called the unstoppable educator by an education publication and was conferred the Game Changer Award of the Economic Times in 2013.

50% girl students impacted

Approximately half the students impacted are girls and 90% of the teachers trained through the work of Chrysalis in FY 22-23 are women. 43% of the Chrysalis employees are also women.

Gender equity is advocated in all aspects of the programs at Chrysalis. In the content material such as the Studios books, icons of both the genders are used for different facets of thinking activities. It is ensured that there is equal representation of central characters of lessons across the gender lines. Also, gender-neutral words are used, such as "police officer" instead of "policeman", "fire fighter" instead of "fireman", and so on. All this is done so as to ensure that unconscious biases do not get built into the children's minds.



Sample picturaization of unbiased material in the Studios activity books

*The 2X Gender criteria is described in Annexure C.

Case study

Sai Geetanjali School, Musunuru



Sai Geetanjali School is located in the Musunuru village of Andhra Pradesh. The Thinkers program is implemented in nursery to grade 5 in this school. There are 10 teachers in the school across kindergarten and primary sections.

Initially, it was observed that given their lack of exposure, most teachers were implementing traditional, rote-based methodologies. During early interactions, they believed that implementing Chrysalis Thinkers would be difficult and would not work with rural students. Over time, the teachers have become confident in implementing the program owing to the ongoing teacher empowerment sessions. The program has received good feedback from the parents and improvement in the students' reading skills have been observed after implementing the reading strategies. An increase in a transformation score* of 20% has been observed over time.

Case study

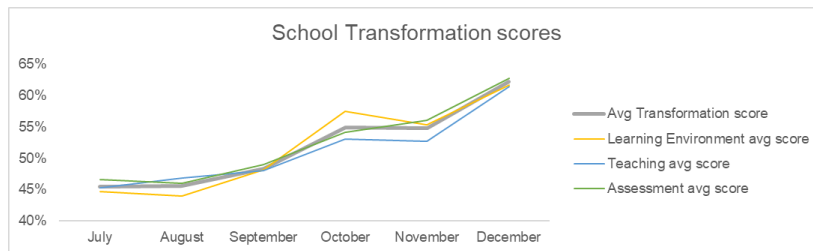
Sri Vasavi Metriculation School, Dindigul



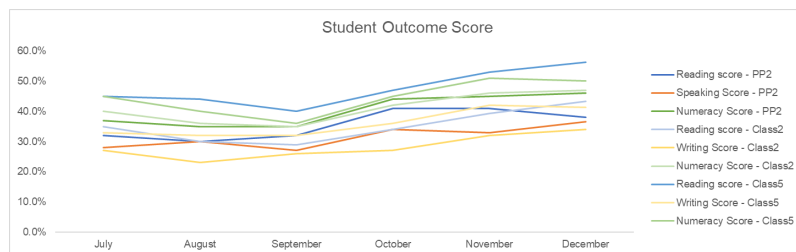
The Thinkers Program is being deployed at the Sri Vasavi Matriculation school in Dindigul, Tamil Nadu for the past two years. The teachers felt that the students' writing abilities needed improvement. Various strategies were suggested by Chrysalis during the professional development sessions. The teachers and school management showed good co-ownership of the program. The strategies were followed in the second and third terms and the transformation witnessed from grade 1 to grade 3 in terms of ambience and student outcome was very high. Student outcome was found to improve and increase in a transformation score* of 122% was observed.

*The transformation score reflects the change in the learning ambience of the students and is described further in the Impact Measurement and Management section below.

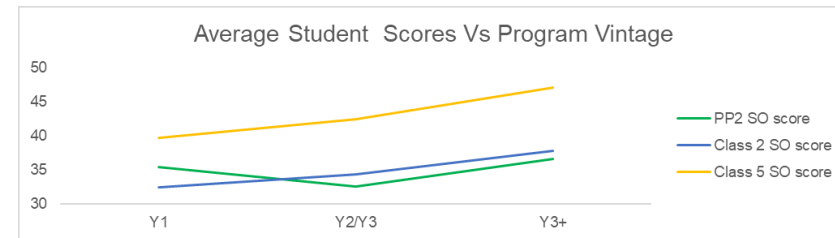
Learning Outcomes: In order to monitor the change in the learning outcomes experienced by the students, Chrysalis has developed an impact assessment framework and this is described in the next IMM section. Essentially, the inputs to the school ecosystem is measured based on the learning environment, teaching quality, assessment process and the school system; and the Student Learning Outcome is also assessed based on the speaking, reading, writing and numeracy skills of the students. The following are some of the key findings from the assessment done in FY 22-23.



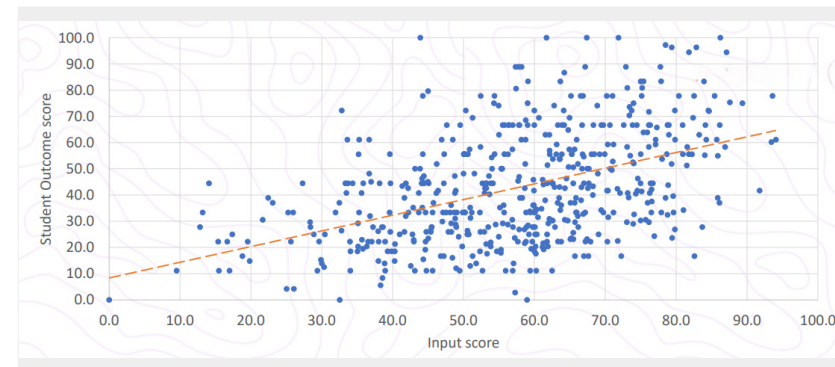
Monthly assessments were done across more than 2500 schools (of which approximately 40% are affordable private schools) and more than 25,000 classrooms from July '22 to December '22 . The results show an improvement in the quality of the school environment based on learning environment, teaching and assessment process. A 38% improvement is seen in the average score during this period.



For the same time period, the sampled students assessments were conducted in pre-primary, class 2 and class 5 grades of the school. The pattern of change in the student learning is charted above.



The graph above shows that schools that have continued with the Thinkroom program for a longer period are showing a higher degree of change in the student outcomes.



In the above chart, the x axis is the transformation score of the various schools where Chrysalis projects were implemented. The transformation score, as described earlier, is a reflection of the change in the learning ambience in these schools. The y axis is the average student outcome score which is the change in the learning outcomes that are observed in the students. The chart shows that as the transformation score increases, the student outcome score also increases, that is, there is a positive correlation between the two. This broadly shows that the steps taken to improve the learning ambience is leading to better learning outcomes.

IMPACT MEASUREMENT AND MANAGEMENT (IMM)

The Theory of Change followed by Chrysalis can be stated as follows.






Based on deep research into the best learning practices, when the pedagogy and the learning environment of students is transformed with better curriculum/content, classroom activities and ambience, teacher training and school assessments, then the result is a holistic development of the children. They become more engaged in class, they think and understand concepts better, become good at problem solving and creativity, and develop better social and emotional skills.

At Chrysalis, it is believed that to act on the learning crisis, it is not sufficient to just collect learning outcome data, but also process-oriented data that serves educators and policymakers by helping them understand why the crisis exists and develop pathways to improve the system. Based on this, an impact measurement framework is developed and it works at two levels - a) the input level that assesses the changes made to the student's environment and b) the outcome level that assesses the student's learning outcome.





Thinkroom Participation (TRP) assessment: Changes in the school and classroom environment is regularly reviewed by the Chrysalis team members who visit the schools and participate in a few classroom activities. A questionnaire based on the various indicators is updated by the reviewer. A school transformation report is generated and a transformation score (t-score) is calculated based on a pre-defined rubrics. By aggregating the scores, a transformation score for the entire grade is calculated and used to keep track of the impact created. After every assessment, actionable items for the teachers, management and the Chrysalis team are identified and

then executed. The following are the main components of the school transformation assessment and report.






Learning environment: An observer sits in the classroom and records certain parameters with respect to classroom routines practiced by teachers and students. A set of indicators are recorded such as the level of interaction between the teacher and the students, student engagement, and so on. The assessment on this section in one of the Chrysalis schools is shown below.

Learning Ambience	
a. Family Words - Focuses on Phonics learning methodology	
b. Sight Words/WordWalls - Stimulates thinking in students and helps in recall of key concepts learnt. promote reading and vocabulary development.	
c. Emotional Safety Helps students to feel safe and free from negative emotions and stress, thereby creating an atmosphere conducive to learning.	
d. Routines Helps student manage themselves in meaningful ways and leads to self-directed learners.	
e. Involvement in task Indicates that students are engaged in the learning experiences. Engagement leads to better learning.	

Teaching: The teaching activity is assessed based on a set of predefined parameters, such as usage of inbuilt pedagogy, clarity of instructions, and so on. The assessment on this section in one of the Chrysalis schools is shown below.

Teaching a. Inbuilt Pedagogy - ThinkRoom Lessonss are carefully constructed to ensure achievement of Learning Outcome as well as opportunities to develop Social, Emotional and Metacognitive skills. b. Instructional Clarity Focuses on clear & specific instructions by the teachers, to ensure students understand and perform the intended tasks to achieve the learning outcomes. c. Inquiry based Learning Concepts are derived from student responses to open-ended questions posed by the teacher. d. Co-operative Learning Clear roles for each member of a team helps in promoting peer-learning and develops self-confidence in each child.	
	
	
	

Assessment: This is an assessment of how the school and the teachers assess the students and give feedback. The assessment on this section in one of the Chrysalis schools is shown below.

Assessment a. Awareness of Outcomes Teacher's awareness of the learning outcomes is critical for her to reflect on the effectiveness of her classes. b. Formative Assessment Formative process includes observations, effective evaluations and immediate course correction by the teacher. c. Visible Thinking (Writing) Indicates students are thinking independently and effectively expressing through their own writing. d. Visible Thinking (Communication) Indicates students are thinking independently and effectively communicating their own thoughts. e. Review of Student's work Timely review and feedback on written expressions promotes learning and motivates children to express more.	
	
	
	
	

Feedback and action items: Based on the review, key takeaways and action items wrap up the Thinkroom Participation assessment. A snapshot of the action items from one of the Chrysalis schools assessments is shown below.

Continuing professional development session

The session on instructional clarity focused on the importance of instructional clarity, and the ways in which words used can affect student understanding. Teachers explored the usage of specific action words, such as those highlighted in the Studio and companion and the need to gauge understanding in the context of determining the efficacy of instructions

Actionable for school

Display actual student's work instead of random projects like cut paste from sheets available in stores.

Recommended teachers to watch the interactive videos from thinkers digital platform whenever free so that they can have an idea about the flow of the lesson and also having an opportunity to develop their language skills.

Students Learning Outcome: The intended impact from all the activities is finally to improve the learning outcomes of the students. To assess this impact, randomly sampled students in classrooms are administered a skills-based test on speaking, reading, writing and numeracy. The student outcome score is calculated as the average of these scores. These are then tracked across many months to understand trends and how outcomes can be improved.

BEFORE AND AFTER MENTERRA

Menterra invested in Chrysalis in June 2018. The following is a snapshot of the changes at Chrysalis.

	Indicators	FY17-18 (Before Menterra)	FY22-23 (After Menterra)
Business Operations	No of students impacted	2,25,141	2,57,125
	No of schools working with	399	721
	No of employees	184	174
	No of teachers trained	3,300	5,500
	Revenue (in Rs. cr)	18.75	31.96
Impact Created	% of students from states with MPI score higher than 0.52	NA	56%
	% of schools with annual fees less than Rs 18,000 per annum	7%	26%
	% of girl students*	50%	50%
	Gender sensitization	NA	Content and delivery has been sensitized to ensure no conscious or unconscious gender bias percolates to the students.
IMM	ToC status	NA	In place and operational.
	M&E process and system	Available	Systematic rubrics to track Student Learning outcomes and School Transformation outcomes are in place and tracked regularly.
	Impact reporting	No	Yes
	Tracking 2X Challenge framework	No	Yes

* Approximate value provided by the company

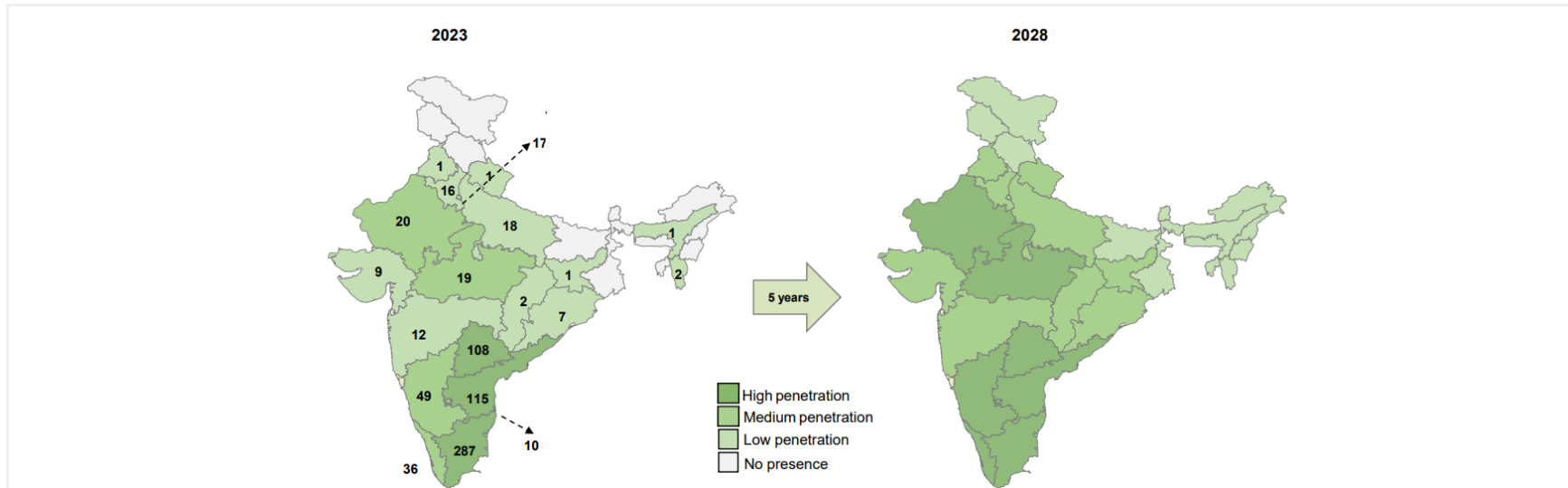
JOURNEY FORWARD

Product expansion: In the next five years, Chrysalis is looking to deepen its reach across India through existing tried and tested products as well as new innovative product and project launches. A significant part of this expansion will be through the increase in the scope of Chrysalis Thinkroom to cater to newer grades. This can lead to an average increase in number of students impacted per school by 35% in 5 years.

Chrysalis has and continues to specialize in asynchronised, synchronised and offline instruction modes. It is believed that in future, every school is going to have a form of blended learning, and the Chrysalis products are designed to adapt to these changes.

Geographic expansion: Chrysalis targets having a foothold in every state of India, alongside aggressively building depth in impact and operations. A 450% increase in the number of schools impacted and 700% increase in number of students impacted is planned for in the next five years.

Impact expansion: Better understanding of strengths and gaps leads to higher impact. Through regular tracking of school transformation scores and the student outcome scores, Chrysalis will be closely monitoring the impact performance, and using this as a feedback loop to improve the outcomes even further. A comprehensive tool to maintain developmental data of teachers and systems is being worked on. And so too a framework to benchmark performance against other schools.



Planned geographic expansion at Chrysalis.



HOW MENTERRA DRIVES IMPACT

₹ 53cr Total Investments

12 Investee Companies

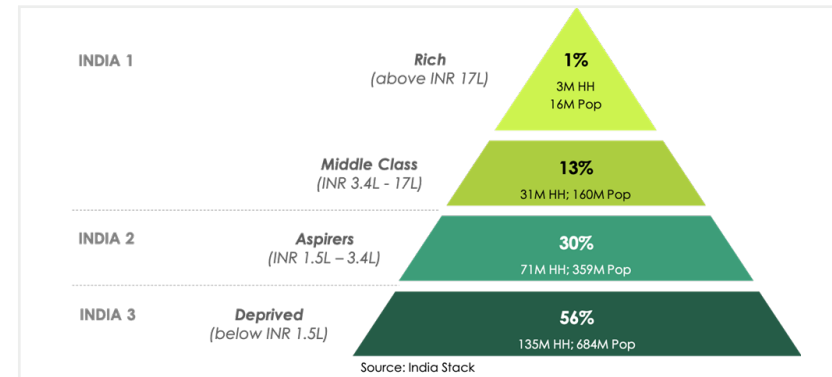
57% Capital aligned to 2X Gender Criteria

Menterra Social Impact Fund is a venture capital fund that addresses the biggest issues facing agriculture, healthcare, and education in India through private investments that target commercial returns and big sectoral impact. In Fund 1, the portfolio was diverse and reached stakeholders across 27 states and 127 districts across India. In Fund 2, the overarching criteria for the targeted underserved population is based on household income and described in the investment thesis below.

To effectively implement the thesis, Menterra has put in place an Impact Measurement and Management (IMM) process based on the best practices in the industry. Details about this is presented in Annexure B.

Menterra's impact thesis is to align its investments to the following four pillars.

Low-Income Household: To serve the underserved households with annual income ranging from Rs 1.5 - 8 lakhs per annum. India's population can be seen to fall under four levels based on household income levels - the rich, the middle class, the aspirers and the deprived. Based on experience and learnings, Menterra believes that market-based, impact investment models that are seeking competitive financial returns, thrive when they focus on the aspirers and the lower middle class. The lower middle class is defined here as households with income between Rs 3.4 - 8 lakhs. This is in line with the 103rd Constitutional Amendment Act of 2019 that sets General Category reservations in government jobs and educational institutions to households with a maximum of Rs 8 lakhs per annum.



Segmentation of India's population by household income
Source: Wharton Finmart Research Report (2017)

Gender Equity: To align investments to the 2X Challenge. Unequal power relations at the household level render women more vulnerable than men to food insecurity. Access to skilled birth attendance is strongly associated with wealth and urban residence. As per the World Economic Forum's Global Gender Gap Report 2018, India ranks 108th out of 149 countries. And less than 14% of entrepreneurs in India's fast growing startup ecosystem are women.

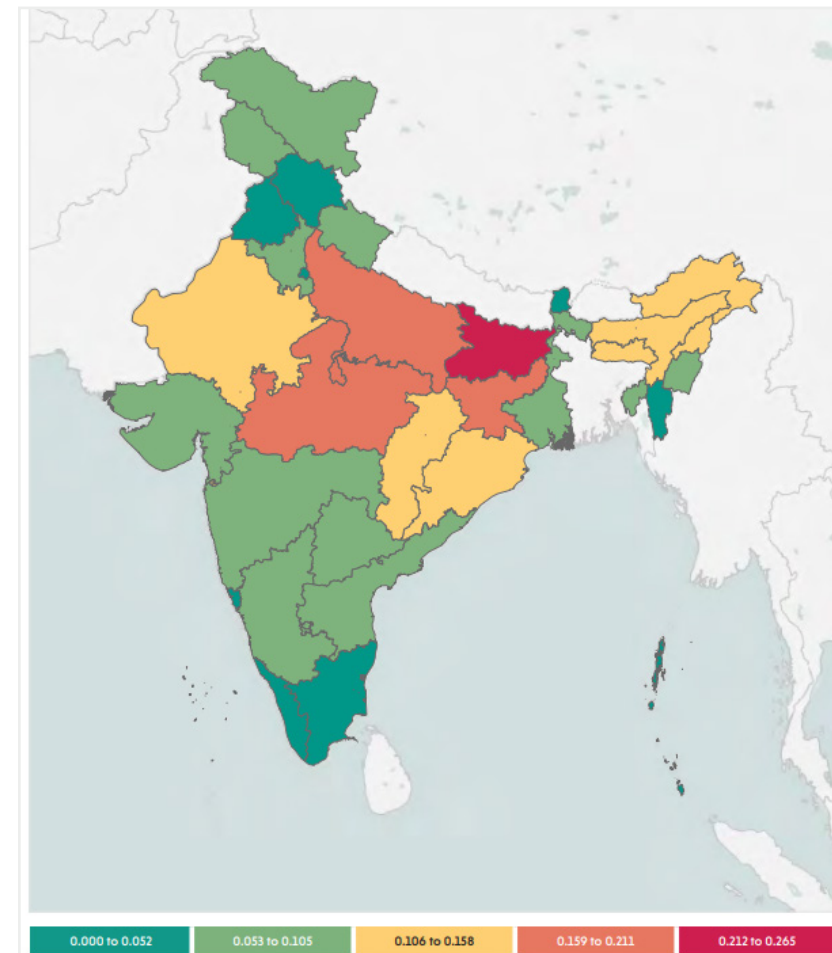
For all these reasons and more, Menterra applies a gender lens to its investments by aligning its portfolio to the 2X challenge. The 2X Challenge* was launched in the G7 summit in 2018 as a bold commitment to aspire investors to invest in the world's women. By incorporating this framework into the investment thesis, Menterra strengthens women entrepreneurship, leadership, workforce diversity and creates more products and services that are intentionally meant for women and girls.

Underserved Geographies: To create greater impact in underserved geographies of India defined by those states having an MPI of greater than 0.052. The Multidimensional Poverty Index (MPI) has been used by the United Nations Development Programme in its flagship Human Development Report since 2010 and is the most widely employed non-monetary poverty index in the world. It captures overlapping deprivations in health, education and living standards and complements income poverty measurements because it measures and compares deprivations directly.

The national MPI for India, evaluated by NITI Aayog in its 2021 report, enables state-wise and district-wise estimation of multidimensional poverty across the country.

Menterra believes that the greatest inequalities exist in the states with MPI scores greater than 0.052. By investing in companies that impact people in these states, it aspires to reduce poverty levels there and encourage portfolio companies to serve lower performer states.

Sectoral Impact: To align investments with specific SDG targets. The world is falling well short of raising the USD 5-7 trillion in annual investments needed to achieve the UN's 17 different SDGs. As an impact investor in India, Menterra believes its investments will address this gap by directly contributing to realise these SDG targets. The focus of its investments will primarily contribute to the SDGs shown on the right side.



The colour represents the MPI score of a State/UT. The colour moves from green, through yellow, to red as the MPI score increases. Green represents areas with the lowest MPI scores while red represents areas with the highest MPI scores. The legend provides the range of MPI scores represented by a colour.

*Described in Annexure C

In pursuing these SDG targets, the primary focus of Menterra's investments will be in the following sectors.

HEALTHCARE

Access to good healthcare improves the quality of life and helps the underprivileged avoid the vicious debt and poverty cycle. Menterra's investments will be focused on increasing access to affordable healthcare and improving health outcomes for underserved communities while addressing the changing disease burden and emerging global health priorities.

AGRICULTURE

Agriculture provides sustenance to the largest percentage of India's low-income households. Menterra's investments will focus on improving the efficiency of this production system, addressing the inherent diseconomies of scale, poorer access to quality resources, markets, credit and the disproportionately severe impact of climate change on smallholder farmers.

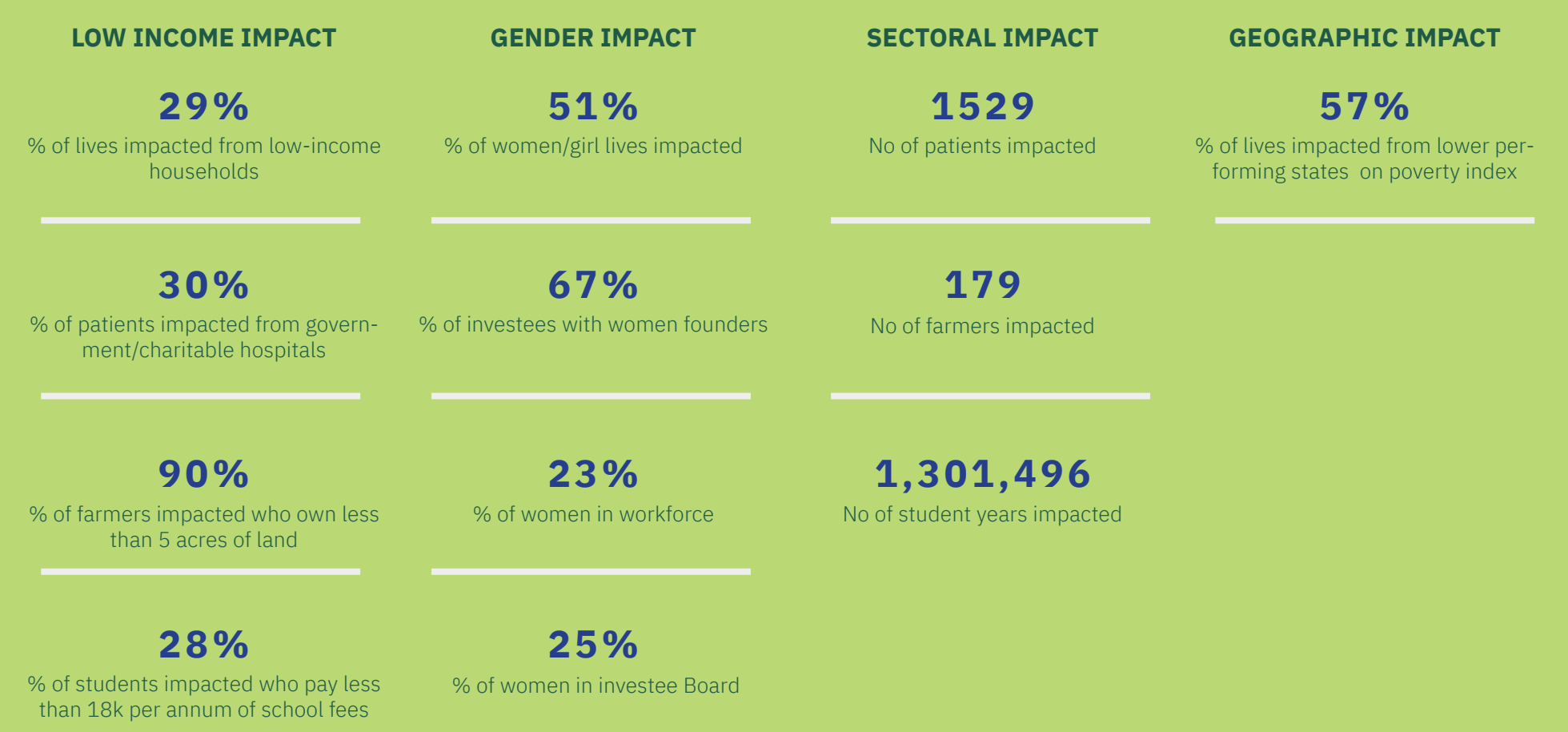
EDUCATION & SKILLING

Access to high-quality education can have a transformative impact on the underprivileged. Menterra's investments will be focused on delivering affordable education that creates a level playing field for the underserved through improved learning outcomes and better linkage to skills required for jobs in a rapidly changing economy.



| Menterra's Key Impact Indicators

The following metric values pertain to Menterra's active portfolio as at 31st March 2023. It does not include values from exited companies.





AGRICULTURE

IRON KETTLE

On a journey to make the Small Tea Grower
a respected Special Tea Grower

More than 75 million households in India are those of small and marginal farmers who own less than 2 hectares of land holdings. These households have a fragmented heterogeneity driven by geography, water access, crops, regional development, and access to urban centers. Small and marginal farmers in India face various challenges, such as, low participation in the value chain, poor market access for end produce, poor post-farm value addition, resource constraints regarding water, seed, etc, and perishability of the produce.

The tea industry in India employs more than 3.5 million people and 52% of the tea is cultivated by Small Tea Growers (STGs) who own an average land holding of less than 1 hectare. An estimated 1300 million kgs of tea is manufactured in the country annually and this comes almost entirely from large factories, either plantation factories or bought leaf factories that source their green leaf mainly from STGs. The STGs, as a supplier to large factories, are cut out from the full production value chain. Their price realization is that of a basic raw material supplier. They are also scattered across remote and rural areas of India and in general, lack organized power and bargaining capacity, leading to poor pricing when they sell their tea leaves. In general, they do not have access to good farming inputs, know-how about best practices in tea cultivation and the organizational power to negotiate with their buyers.

Menterra's investments in the agriculture space is focused on improving efficiency of the production system, addressing the inherent dis-economies of scale, poorer access to quality resources, markets, credit and the disproportionately severe impact of climate change on smallholder farmers. It is focused on creating viable business models to resolve or mitigate some of the big problems confronting sizable segments of the small grower universe. This creates pathways to improve the economic situation of selected clusters within this large universe of small growers, and will demonstrate models of equitable value creation and thereby attract larger follow-on capital.

In this endeavor, Menterra invested in and founded Iron Kettle (IK), an innovative tea manufacturer and brand in 2022. Iron Kettle is a key investment in the agricultural space that aims to create a high impact on the small tea growers by achieving higher price realization, improved agronomic practices, better quality of produce and increased household income. The company procures its tea leaves exclusively from STGs while training the STGs on best practices of tea cultivation. It processes the tea in dedicated tea factories near the farm locations to produce the highest quality teas that is also traceable to the farmer and the microlot.



A small tea grower in the Nilgiris filling bags with tea leaves.

PRODUCT AND OPERATING MODEL

Iron Kettle manufactures high quality tea that is procured exclusively from Small Tea Growers in India and Nepal. The tea produced is made traceable to the location and the farmers, and buyers can choose to buy tea from Iron Kettle based on the tea type and the location of the farm.

Consumer Range: Basics



Assam, Nilgiris and Nepal Teas available in Tea Bags and in Mono-Cartons

Consumer Range: Herbal



Specially formulated range of herbs with Ayurvedic properties, blended with STG sourced teas
Available in Tea Bags, Mono-Cartons and Tins
10 Blends



Small tea growers being trained by the Iron Kettle's agronomy team

Iron Kettle engages with clusters of STGs from Assam, Nilgiris and Nepal to procure tea leaves. Each cluster is provided with structured agronomic support to improve their yield, leaf quality, and manage their inputs for delivering safe tea. Typically within 3 to 5 months of engagement, leaf quality starts showing a significant improvement.

As an example of this, as per the Tea Board of India, a Fine Leaf is classified based on pluckings that consist of 1 leaf and a bud or 2 leaves and a bud. Based on recent pricings, with a Fine Leaf Count (FLC) of 60-69%, prices per kilo of green leaf can be about Rs 35-40. At 70% or higher FLC, the price will go above Rs 40. The Iron Kettle tea agronomists guide the STGs about the ideal plucking method and frequency for plucking in order to optimize the leaf quality (FLC) and thereby earn a higher rate.

The Iron Kettle agronomists engage with the STGs in a structured manner to guide them on management of input chemicals so that the safety of produced tea is ensured, and over time, input costs for the STGs are also reduced. A longer-term R&D program has been initiated with the Centre for Cellular And Molecular Platforms

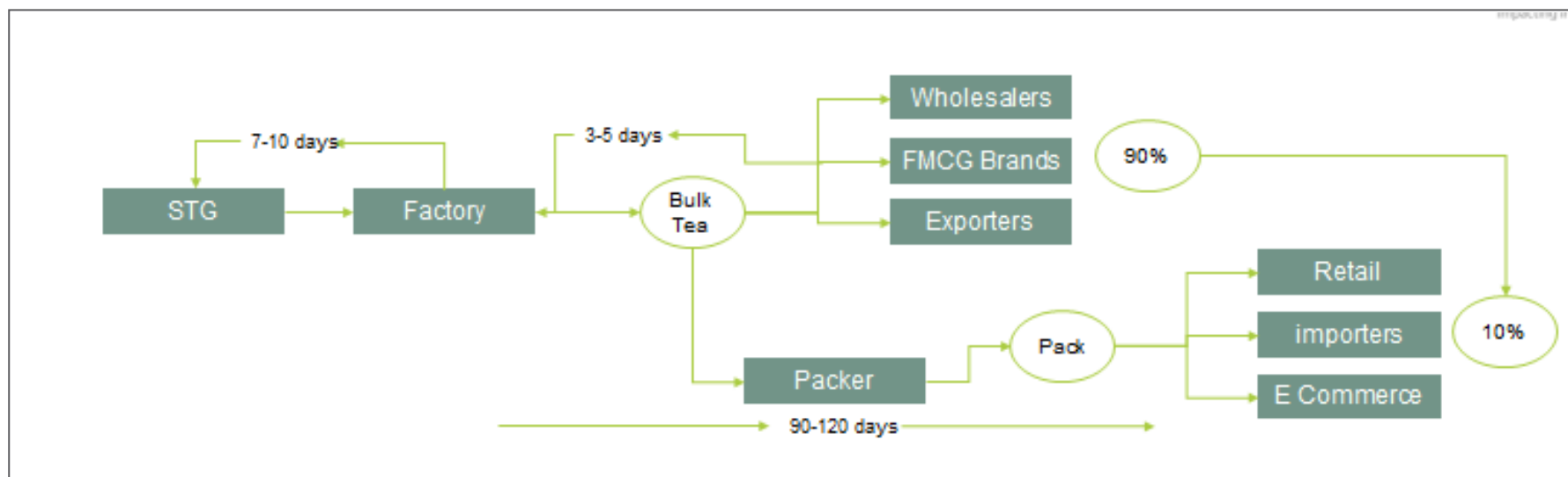
(CCAMP), Government of India, for a microbiology solution to deal with pest and disease management in tea crops.

The procured tea leaves are then processed in dedicated tea factories located near the farmer clusters. The end produce is mainly sold to wholesalers, FMCG brands and exporters. 10% is sold on a retail basis, including through their website.

Iron Kettle's agronomy interventions help the STGs to improve their yield and quality, and it rewards quality with premium prices. It is important for the STGs to have efficient payment cash flow cycles that align with the cash flow requirements of their farming operations. A large component of the cost for small farmers is labor (paid daily) and input costs (paid without any access to credit). Iron Kettle recognizes this and has incorporated prompt, timely payments to the farmers as a salient feature of its operations, and this is enabled by selling 90% of its production to bulk customers who pay promptly.



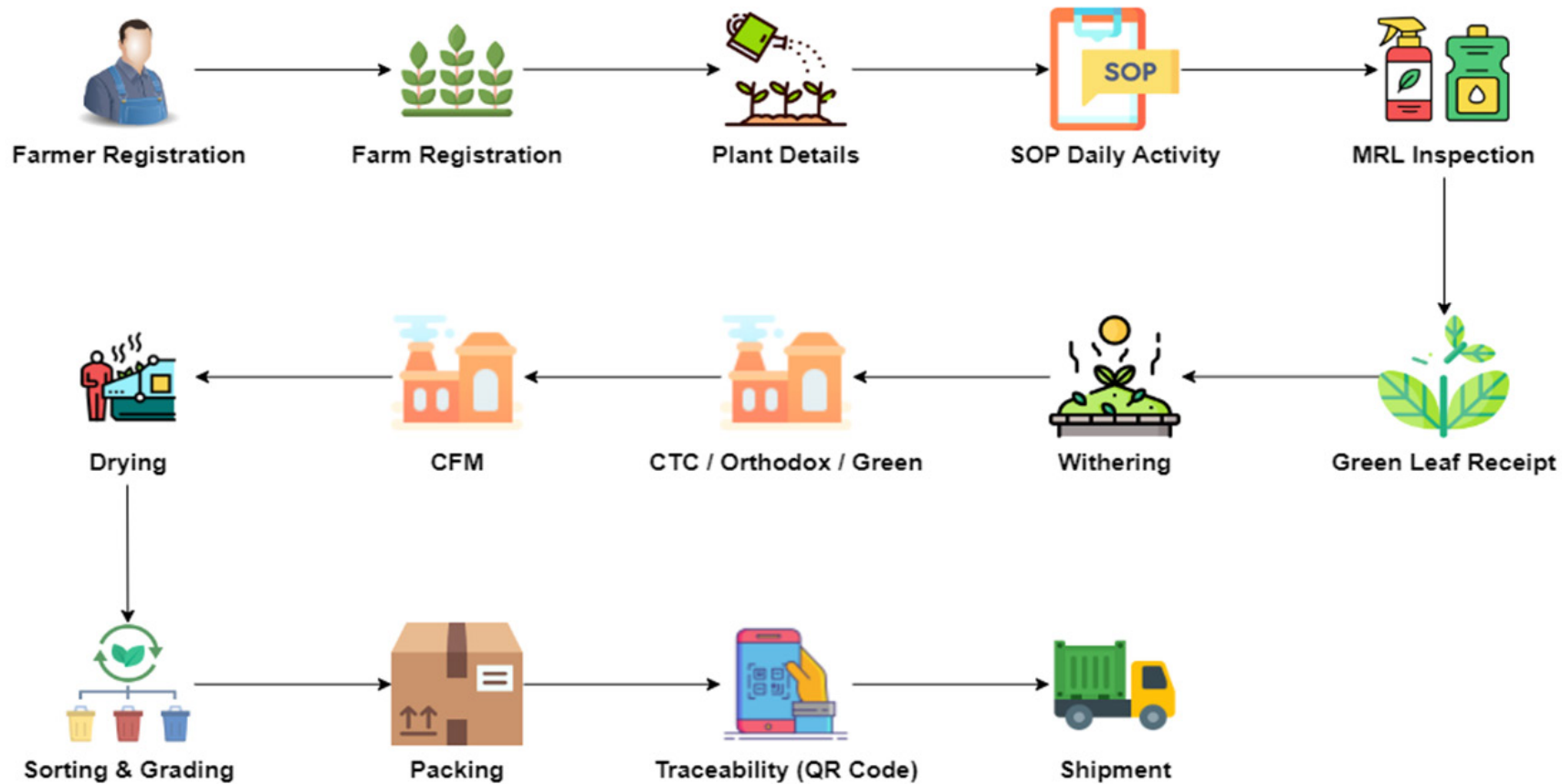
Farmers bringing in tea leaves to the Borno factory in Assam.



The Iron Kettle Sourcing Management System, backed by Source Trace (a SAAS based agri-value chain management software), keeps record of each STG and farm lot location from where Iron Kettle sources tea leaves, and tracks the produce across the manufacturing

and packaging process. This ensures traceability of each lot of sold tea back to the farm location and the STGs from where the tea originated.

IRON KETTLE PROCESS FLOW



| IMPACT CREATED



Impact creation is at the core of Iron Kettle's operations and brand value. The SDG that it primarily works towards is SDG 2 (Zero Hunger), in particular, the target of ensuring sustainable food production systems and implementing resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.

Since the founding of the company in 2022, Iron Kettle has sourced 225 tonnes of green leaf from 179 STGs across India and Nepal.

Low-Income Households: The majority of the farmers Iron Kettle procures tea leaves from are from low-income households. 57% of the farmer households earn less than 3.4 lakhs per annum and 90% own less than 5 acres of farmland.

Most of these farmers have not had much exposure to formal education. 64% of the farmers have not studied beyond 10th grade and 18% have not gone to school at all. However, all the children in the farmer households who are of school going age are attending school. All the farmers live in concrete houses with electricity, water supply and in-house toilets.

57% farmers are from low-income households

90% of farmers farm on less than 5 acres of land



A small tea grower in Udalguri, Assam from whom Iron Kettle procures tea leaves

Underserved Geographies: STGs in India are typically scattered across remote and rural areas. Iron Kettle currently procures from and engages with farmers in the Nilgiris in Tamil Nadu, Udalgiri district in Assam and Illam district in Nepal.

34% of the farmers are from Indian states with Multidimensional Poverty Index score higher than 0.052 based on NITI Aayog's 2021 report.

34% of the farmers are from lower performing states on the poverty index

Gender Equity: Iron Kettle's mode of operations and its impact is mapped to the 2X Challenge framework by Menterra. Based on this framework, Iron Kettle has a lot of scope of improvement from the gender lens. Neither ownership nor senior management has any women members. Only one of its 11 employees are women and of course, tea drinkers are well spread across gender lines.

Within the STG household and farm operations, the primary farmers and the farm owners are almost entirely male. In these households, daughters typically get married and move to their husband's households, while the sons inherit the farmland and continue the farming tradition. 95% of the primary tea farmers working with Iron Kettle are men.

Though the farmland ownership is mostly held by men, their wives and children participate in farming activities, particularly leaf plucking. Men typically manage the temporary labourers (if any) and do other activities like pruning, fertilizing, etc. Non-plucking farm activities are considered to require more manpower. STG households with slightly larger farm lots employ temporary laborers to do part of the farm work, and these labourers are predominantly women. 74.7% of the labourers in the baseline study were women.

5% of the tea farmers are women

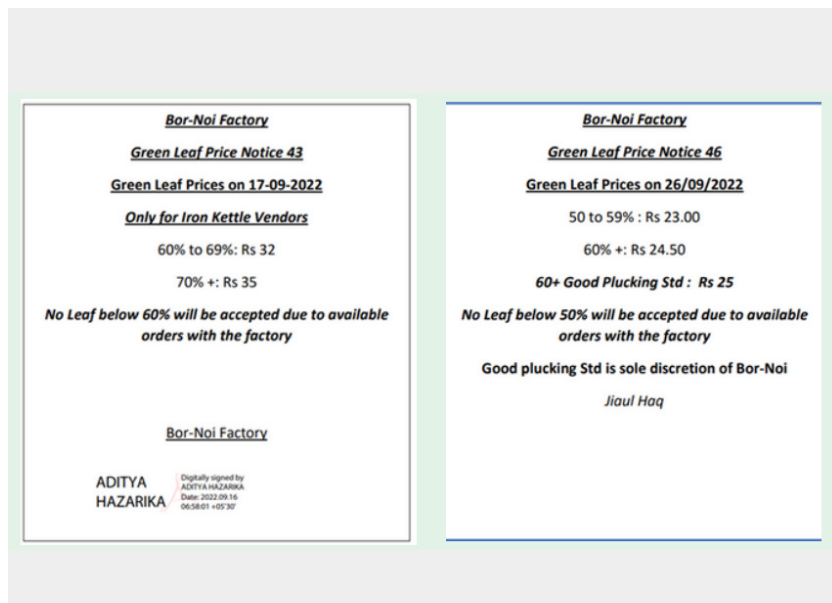


Tea farmer plucking along with the women workers

Agricultural Outcomes:

Better price realization for better quality leaves: Iron Kettle's tea agronomists work closely with the STGs to guide them towards best practices in tea cultivation that lead to better yield and leaf quality. Better leaf quality results in higher price realization for the farmers.

As a result of these advisory activities and changes in farm practices, in the last 4 months, the STGs have earned on average, prices that ranged between 30% to 50% higher than the prevailing price for green leaf. Below are digital copies of notices put outside the Bor-noi factory in Udalgiri, which is one of the tea manufacturing factories that Iron Kettle works with. It can be seen that STGs selling to Iron Kettle get higher rates (notice on the left) based on higher quality ranges (higher FLC%) compared to other buyers (notice on the right).



Movement to better quality leaves: Awareness about the concept of fine leaf count (FLC) and the market price implications of higher FLCs has improved amongst the STGs. In the baseline survey, when asked what the FLC count for their produce last year was, 93% of the farmers said that they had no idea. However at present, because of their engagement with Iron Kettle as a advisor and buyer, they are keenly aware that their leaf quality is getting tested at the factories, what FLC they have achieved and the consequential prices that they are getting. This awareness results in creating more agency amongst the STGs to improve their farm produce quality. 47% of the procured tea in FY 22-23 has an FLC% between 60% and 70% and 13% is greater than 70%. These FLC% levels reflect a high quality of tea produced.

"Earlier we didnt make much profit. From last year, we started getting training from Iron Kettle on things like proper tipping techniques, frequency to apply insecticides. Earlier we were applying every week. Now we reduced it to once in 2 weeks and pluck only after 15 days after that. We didnt know that was important. So we broke our earlier pattern. Also we now use only branded, good medicines. Now we make more profits."



Kamal Upreti,
 STG in Udalgiri, Assam

Improvement in soil quality: Apart from produce quality, the best practices that are being advised are also environmentally sustainable practices that lead to less chemical usage, making the tea safer for consumers and the soil healthier. However this change can be quantified only after a longer period of time.

30%-50% price premium over prevailing prices

"When I started farming in 2005, I just looked around and did what people around me were doing. Iron Kettle people have now come and they give us practical training on plucking, what medicine to use, how to maintain the garden, what interval to apply medicine. Now I know about the quality of tea and selling rates."

Biswajit Debnath,
STG in Udalgiri, Assam





Traceability and improves tea safety: Traceability of the end product to the farmers and the farm has been implemented in the operations of the tea production at Iron Kettle. This has led to a high degree of transparency, not just regarding sourcing but also on the safety of the tea based on safe harvest intervals.

Below is a sample traceability report that a buyer can access.


Apart from where, when and whom the tea is sourced from, it also contains information on the FLC % and percentage of any insecticide, herbicide or pesticide that may be detected in the lot. Iron Kettle ensures that these are within very high standards of safety, however in addition, information on these parameters are shared with the buyer.

General Information




Nakul Sarkar 

107025 | Bornai , Guwahati




Tea | Mixed Jat | Sarkar STG




Cultivation Area (Bhiga)

17.0788



Cultivation Area (Hectare)

4.2834



MRL inspection

Date	↑Category	↕ Chemical	↕ Pest/Disease	↕ Harvest Interval	Estimated Harvest Date
10/09/2022	Herbicide	GLYPHOSATE 41 SL	Weedicide, total killer, mainly grassy	0	10/09/2022
15/03/2023	Insecticide	THIAMETHOXAM 25 WG	Helopeltis/Red Spider Mite	10	25/03/2023

Iron Kettle's impact thesis is to a) achieve a price premium of 2X for STGs over 3 years, b) deploy an Iron Kettle cares program funded out of the balance sheet of the company that will address issues such as poor quality education and healthcare among the STGs, and c) achieve gender diversity in the company leadership, workforce and STGs aligned to the 2X Challenge framework.

For the traceability to the farmer and the farm location, a QR code on the tea package provides the consumer with details of the STGs who have contributed to that lot of tea. In order to implement this, each STG is mapped to the Iron Kettle Sourcing Management System and each lot of tea being procured from an STG can be traced to the farm and STG from whom the tea originated.

In order to effectively design and execute the Iron Kettle cares program in the near future, a baseline study of the farmers in



Based on these findings, considerations for Iron Kettle cares program in the area of livelihood support, health and education, financial access and gender based interventions were made in the report.

BEFORE AND AFTER MENTERRA

As Iron Kettle was founded in 2022 by Menterra, the following metrics are applicable only for the FY 22-23.

	Indicators	FY20-21 (Before Menterra)	FY22-23 (After Menterra)
Business Operations	No of farmers registered procured from	NA	179
	Total Revenues		Rs 90 lakhs
	No of full time employees		11
Impact Created	Low Income Household % of farmers from low-income households		57%*
	% of farmers on less than 5 acres of land		90%
	Underserved Geographies % of farmers from states with MPI score higher than 0.52		34%
	Gender Equity % of women farmers		9%
	No of women in the worforce		1
	Woman founder		No
IMM	Theory of Change		Functioning ToC in place
	Monitoring and Evaluation process and system		In place through Sourcing Management System, backed by Source Trace (a SAAS based agri-value chain management software)
	Impact reporting		Yes
	Tracking 2X Challenge framework		Yes
	Size of impact team		3 people with part role in impact management.

*From the baseline study done in 2022.

JOURNEY FORWARD

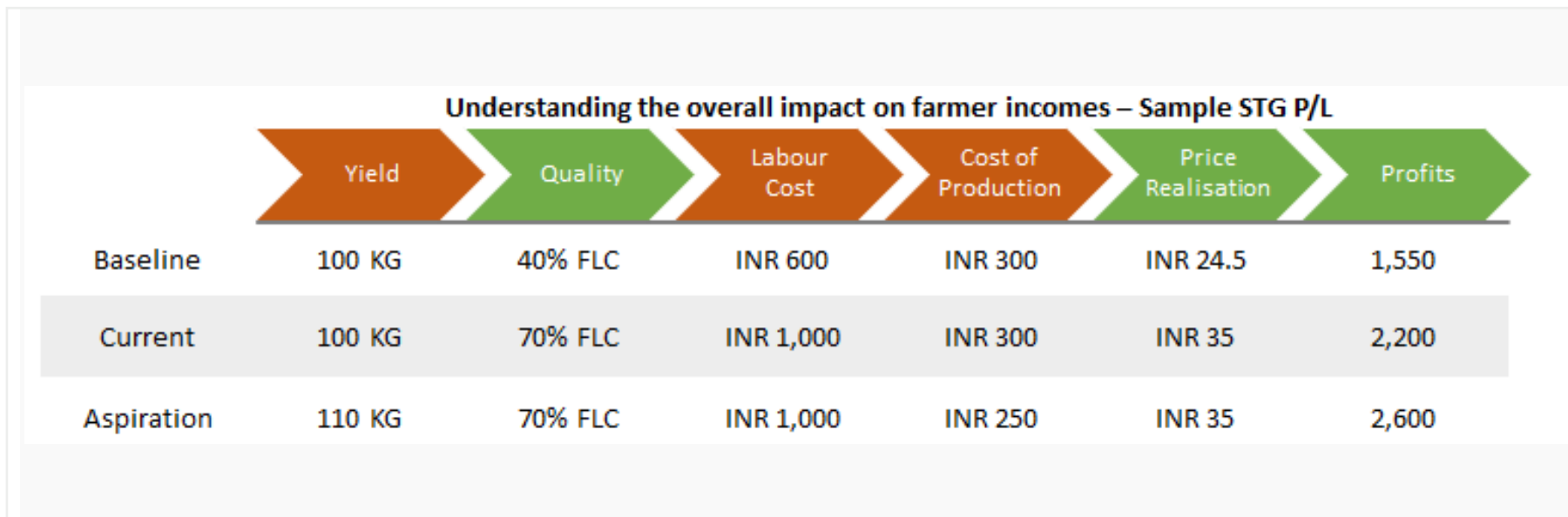
Product Expansion: The Iron Kettle brand of tea is characterized by high quality, traceability and the fact that it is sourced solely from STGs. Apart from increasing the range of the basic and Sanjeevani (Ayurvedic) ranges, Iron Kettle plans to aggressively expand its flavour range to include flavours like spearmint, turmeric, pomegranate and many more.

Geographic Expansion: Iron Kettle plans to focus on Assam, Tamil Nadu and Nepal for the medium term future while reaching out to more STGs, spread across various tea farming zones in these locations.

Impact Expansion:

Net income improvement: Initially Iron Kettle's impact thesis is to offer a "price premium". Over the next year, Iron Kettle will move to helping farmers realise a "profit premium". This will be achieved through not just by offering them a premium price because of improved tea quality/FLC, but also by a) reducing cost of production through optimised use of agricultural inputs and b) improvement in total yield of the crop. These aspects will be studied deeply to design the STG engagements in order to maximize their net income.

Making tea safer and tea farming climate resilient: Climate change (especially in North-East India) has led to increasing temperatures,



Factors that lead up to increase in income and profits for the tea farmers.

change in pattern of precipitation, and increase in atmospheric carbon dioxide levels. These abiotic stresses are affecting tea farming in various ways.

There has been a rise in the population of tea pests such as tea mosquito bug, red spider mite and looper caterpillar which are responsible for the most crop loss. In the past, pests did not survive in winters due to lower minimum temperatures, but now they increasingly do because of the warming of winters. A 100 year trend analyses reveals that the rainfall in North-East India has declined by more than 200 mm. Abundant rainfall and adequate humidity are essential factors for tea production. Unfavorable shifts in rainfall pattern causes water deficit and creates stress. Erratic rainfall also helps certain pests stay longer at their peak population.

These factors have contributed to indiscriminate use of chemicals to stimulate growth and stop pest damage, leading to high chemical residue in tea. Iron Kettle plans to combat this trend and work towards developing novel antimicrobial agents that work against bacterial and fungal pathogens in tea plantations in India. These can then be used instead of chemical pesticides and will make tea farming more resilient and the tea safer for the consumer. Iron Kettle is working on this Tea Science Program in collaboration with the Centre for Cellular And Molecular Platforms (a Government of India body).

Increase small farmer's organized power: Over the next 12 months, Iron Kettle plans to source 5500 tonnes of green leaf from 450 STGs. Iron Kettle also intends to organize and strengthen the STGs by organizing them into Farmer Producer Organisations (FPOs). The objective of the FPOs is to ensure the passing on of economic benefits to the farmers. The benefits would be achieved because of collective purchase of inputs to ensure quality and reduced prices, engaging farming as a service for deploying labor for operations, common sourcing of technologies for improving agronomy, shared

collection and logistics systems and securing low-cost financial services to ensure that STGs are paid as and when they deliver their produce.

Over time, Iron Kettle aspires to have the FPOs manage their own factories with assured buy back. To this end, Iron Kettle has started the design process for a small factory in Tamil Nadu that will use the tea sourced from its STG base to produce world class teas. This is planned for commercialization in 2023. Once this is operational, Iron Kettle will help the FPOs to forward integrate into manufacturing of high-quality teas, building small factories similar to this prototype. All this ultimately will lead to STGs producing better quality tea, moving up the value chain by owning processing and have access to much better paying markets. This collectivisation will move STGs from being Small Tea Growers to “Special” Tea Growers.

Iron Kettle Cares program: The Iron Kettle Cares program being developed will involve activities to facilitate a developmental agenda along with partners for the STGs, their households and their ecosystem. A baseline study has been conducted to evaluate their condition and to assess best design and execution plan for this program.



Healthcare

ADIUVO

Revolutionizing diagnostics for a more accessible future

Two years of the COVID pandemic has highlighted the paramount importance of having a good-quality, cost-effective healthcare system that is accessible across the wide spectrum of our population. But the reality is that despite significant progress in healthcare over several decades, the world is falling behind on the SDG 3 targets. In India, the healthcare expenditure remains low with only 2.1% of GDP⁽⁴⁾ being allocated to the sector in FY22-23. In comparison, the OECD countries allocated approximately 9.6% of their GDP to healthcare⁽⁵⁾.

In the context of such limited public spending and enormous healthcare challenges, it is an important priority for India to focus on cost-effective and equitable healthcare solutions. To this end, Menterra's investments in this sector focuses on increasing access to affordable healthcare and improving health outcomes for underserved communities, while addressing the changing disease burden and emerging global health priorities. Technological innovations play a major role in this endeavour with the convergence of artificial intelligence, machine and augmented learning, robotics and big data paving the way for hitherto unaffordable treatments.

It is estimated that around 6.7 million people in the world suffer from chronic wounds⁽⁶⁾. One in four diabetes patients develop ulceration in the foot, and 70% of these wounds do not get healed because of mismanaged infections.

The traditional ways in which an infected wound is diagnosed is by doing a microbiological culture test, doppler test, CT angiograph or biopsy. Reports of these tests typically take a few days to be prepared.

Despite being home to more than 70% of Indians, rural and non-metro areas face a significant shortage of good-quality diagnostic services. This is due to a severe shortage of qualified pathologists, technicians, biochemists and pathology laboratories in the

ecosystem. The average doctor to patient ratio in India stands at 0.62:1000 compared to the WHO recommendation of 1:1000⁽⁷⁾. In this context, digitization and a triaged healthcare ecosystem can pave the way to more equitable access to reliable diagnostics services.

Adiuvio Diagnostics was founded in 2015 by Geethanjali Radhakrishnan, a biomedical engineer. Their flagship product, Illuminate is a rapid, point of care, handheld device that diagnoses wound infections and does pathogen classification in 100x less time than the gold standard microbiology culture test.

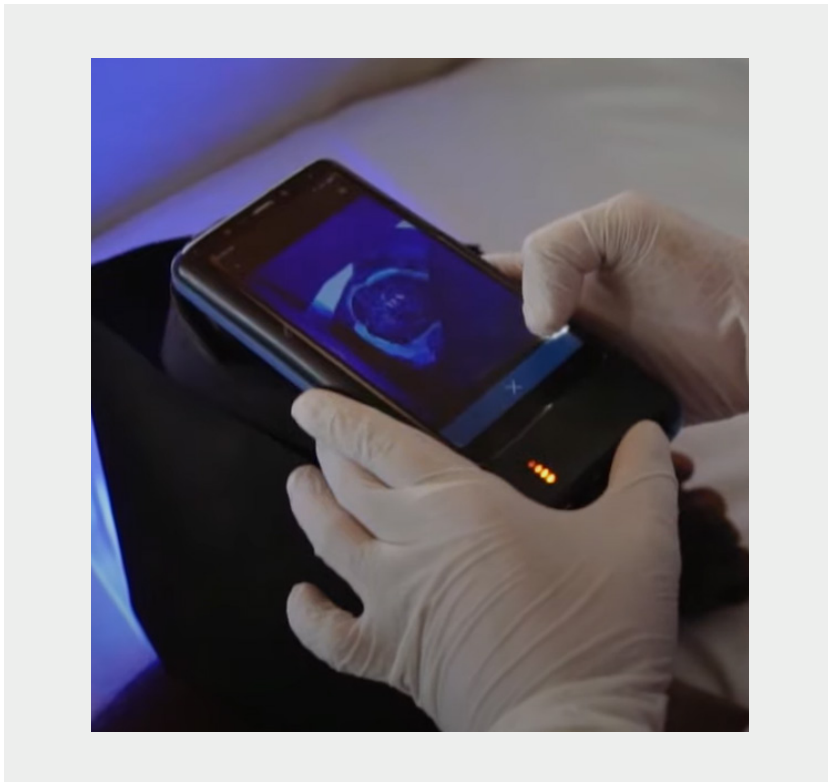
Point of care technology (POCT) devices have been in use for some time now. However, affordable and portable diagnostic devices, backed by innovative technologies are now complementing the conventional lab diagnostic procedures as never before. According to a Ken Research report ⁽⁸⁾, the POCT market in India is expanding as a result of its affordability, accuracy, and convenience, as well as rising rates of infectious illnesses.

| PRODUCT AND OPERATING MODEL

Illuminate is a user-friendly, point-of-contact device that wound care providers (surgeons, nurses, podiatrists) can easily start using with minimal training in order to generate a wound culture report.

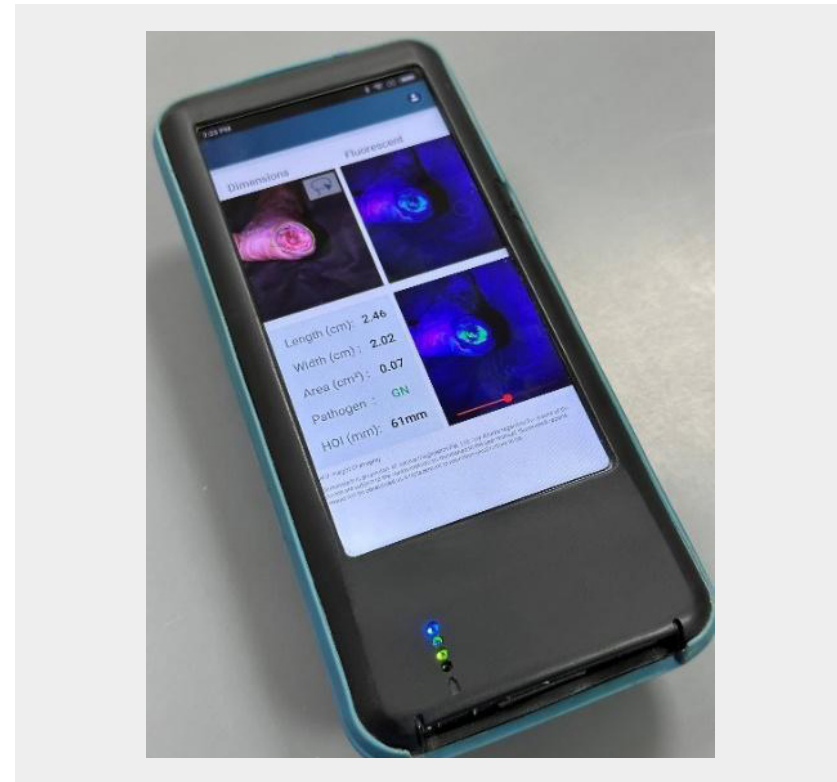
Living bacteria have an autofluorescence property and it emits light in response to appropriate stimuli. Illuminate creates multi-spectral images of an infected wound based on the light emitted by the pathogens. These images are then assessed by Illuminate using AI and deep learning, and it detects, diagnoses and classifies the pathogen in less than two minutes. Because the pathogens are detected early, a healthcare professional is able to administer the appropriate treatment quickly, leading to faster recovery and lower healthcare costs for the patient.

Illuminate's dual-database system which operates in offline and online/cloud mode helps in maintaining a systematic documentation of the diagnosed wounds and the reports can be made accessible to the right professionals to assess and take action. Aduvo has patented the label free device and algorithm to detect and classify pathogens in India and the US. In 2021, Aduvo won the Design in India challenge organized by Qualcomm.



Illuminate being used to assess a wound.

Other than wound diagnostics and management, Illuminate has the potential to be used in other applications, such as water quality monitoring, antibiotic susceptibility testing, cancer detection and veterinary applications. The steps to bring these to application stage is under progress. As a medical device developer and manufacturer, Aduvo follows a stringent and extensive process of product testing and regulatory compliance clearance prior to taking the product to market.



Illuminate displaying various parameters of a wound that was assessed.

Operating model: After the initial product design stage, regulatory clearances on all components used in the device, which pertain to electromagnetic compatibility and interference (EMI/EMC) testing, optical property testing and bio-compatibility are obtained. Once the clearances are obtained, trials are run in order to conduct studies on the efficacy of the device.

Clearances for conducting the trials is obtained from the validation center's Ethics Committee team. This phase also marks the statutory need to register the list of trials and studies to be conducted with Clinical Trial Registry of India (CTRI). After the fulfilment of trials, appropriate publication manuscripts are developed for journals and these publications serve as proof of validation of the product.

A marketing strategy is developed to identify and stratify end-users based on geography, specialization, appetite to adopt new technology and aspiration levels. A marketing campaign is then launched with in-person and digital streams that use the publication proof to highlight the value propositions provided by the device to an early set of potential customers. Marketing collaterals for the device are prepared in this stage.

Based on the response, live demonstration sessions and pilot studies with a small sample of patients are conducted with early responders. Key players in the industry, who respond positively to the product are identified. With the publications and series of pilot studies, prominent (nation-wide) or region-specific medical conferences are targeted for showcasing the product. This also involves utilizing the experience and opinions of the key players to demonstrate the value propositions offered by the product.

Pricing models are developed for the commercialization stage. To cater to users across all tiers, a direct purchase model, rental model and pay-per-use model are developed. After successful

demonstrations and pilots, leads are classified for revenue model finalization and sale completion.

Upon successful sale conversion, an elaborate training session is scheduled with the staff of the care centre. Continuous Medical Education (CMEs) and region-specific camps are also planned to enable better understanding and usage of the product. Users interested in extensive research and conference presentations are identified and case studies for highlighting niche value propositions of the device are developed for future use.



A doctor using Illuminate to diagnose a patient's wound.

| IMPACT CREATED



Adiuvo impacts the problem of wound morbidity in rural low-resource settings where access to high-quality and quick diagnostics is not available. The salient features of Illuminate that creates high impact are baked into the product from the design stage. Because the pathogens and hence the infections are detected early, there are many medical and financial benefits for the patient and the ecosystem. These outcomes map to SDG 3 - Ensure healthy lives and promote well-being for all at all ages.

In total, approximately 1500 patients have been diagnosed using Illuminate across 23 hospital and healthcare centers, of which 7 are government/trust run. Detailed below is how Adiuvo has created impact at various levels, ranging from low-income patients, underserved geographies, gender and better clinical outcomes.

~1500* Number of patients diagnosed using illuminate device

Low-Income Households: Illuminate has been deployed in 23 hospital and healthcare centers, of which 7 are government/charitable trust based hospitals.

30% of the installations are in govt/charitable trust hospitals

Underserved Geographies: Illuminate has currently been deployed in 23 locations across Tamil Nadu, Maharashtra, Karnataka, West Bengal, Andhra Pradesh, Gujarat, Punjab and Delhi. 52% of the deployed locations are in states and union territories that have a multidimensional poverty index score of higher than 0.052 based on the 2021 NITI Aayog report.

52% installations are in lower performing states on the poverty index

Gender Equity: Menterra is committed to being an equal opportunity employer and investor. And in this endeavor, it tracks the 2X Gender** criteria on all its investments. Adiuvo performs well on this criteria and is a clear example of a company that promotes equal opportunities. It fulfills the criteria based on the Entrepreneurship criteria as it is founded and led actively by a woman founder and the employment criteria with 4 of its 21 employees being women. The framework's leadership criteria is met with as half its senior management and one thirds of its Board being women. 24% of the patients treated were women.

24% % of female patients diagnosed ***

20% of the employees are women

* Due to patient data confidentiality, the data on patient count and gender is not available. The gender percentage was calculated during the testing phase. And the total count is an estimation based on known data subsets.

** Described in Annexure C.

*** Due to patient data confidentiality, the gender of patients is not available. This percentage was calculated during the testing phase.

Case Study

Omandurar Government Hospital, Chennai

Patient profile: Female, 50, Highly Diabetic, Patient is the sole breadwinner in a family of three, living in the suburban part of North Chennai. She works as a housekeeper/maid in multiple households during the day.

Background and nature of injury: During her work, she had a small incisional injury on her left foot whilst walking barefoot. Without realizing the magnitude of the injury, she had self-medicated with store-grade turmeric and had not managed the wound for a period of 10 days. After 2 weeks, she started noticing significant swelling in the left foot and developed fever, which prevented her from working the day job and prompted a visit to Omandurar Hospital.

Chronology of wound care:

Day 1 of visit – Specialist imaged wound with Illuminate to discover extensive infection proliferation. Wound was debrided and procedure was re-validated with Illuminate after debridement to show infection reduction. Admission was advised for 7 days, with constant monitoring with Illuminate

Day 2 – Patient was imaged twice every day to monitor the progression of infection. Specialist performed targeted debridement and acquired targeted swabs to understand bacteriological milieu in the wound. Without Illuminate, debridement and wound cleaning would be done only once in two days.

Day 4 – Culture results matched with Illuminate's reports and constant wound cleaning and redressing for the past three days enabled significant reduction of infected regions. Specialist prescribed an accurate antibiotic regimen. Patient discharged on the end of Day 4.

Outcome from using Illuminate

- Debridement and wound cleaning was done twice a day instead of once in two days
- Illuminates reports matched culture results
- Specialist prescribed an accurate antibiotic regimen
- 3 days to heal the wound after 14 days of non-healing



Omandurar Government Hospital, Chennai

Case Study

Voluntary Health Services, Chennai

Patient profile: Male, 55, Highly Diabetic, Patient is a farmer, who developed an extensive venous ulcer on the right leg. Hailing from a tier-2 town near Chennai.

Background and nature of injury: Patient developed an extensive venous ulcer on the right leg. He had no means of attending to the wound, and was focussed only on harvesting seasonal crops. The ulcer developed an infection promptly and patient was forced to visit the local healthcare centre for management. Doctors in the healthcare centre performed an inexperienced wound cleaning regime, and took a swab for bacterial identification. After 4 days, the patient developed severe complications – fever, intense pain and uncontrollable blood pressure. He was then rushed to VHS, Chennai.

Chronology of wound care:

Day 1 – Upon presentation, the wound was imaged with Illuminate to identify deep infection with colonizing gram-positive and gram-negative bacteria. Surgical Debridement was performed immediately and patient was informed to be admitted for 10 days.

Day 2 – Specialists suspected bone infection and felt that an amputation might be required. As a result the wound was imaged again. However Illuminate reported only minor infection levels, which prompted the specialists to not opt for amputation.

Day 3 to Day 5 – Patient was frequently monitored with Illuminate and the wound was cleaned and dressed accordingly. Based on the frequent diagnosis, at the end of day-5, the patient was deemed fit for grafting. On the day prior to grafting, Illuminate imaging was performed on the wound to confirm the absence of infection and thus giving the confidence to the specialist to perform the grafting procedure. If not for Illuminate, the specialist would have had to rely on his experience or obtain another swab test report.

Outcome from using Illuminate

- Illuminate identified deep infection with colonizing gram-positive and gram-negative bacteria
- Illuminate report indicates minor infection levels, which prompted the specialists to not opt for amputation
- Patient was extensively monitored with Illuminate and the wound was cleaned and dressed frequently
- After treatment, Illuminate imaging was performed on the wound to confirm no presence of infection – thus, giving the confidence to the specialist to perform the grafting procedure
- Number of admission days reduced from the planned 10 to 5



Voluntary Health Services (VHS), Chennai

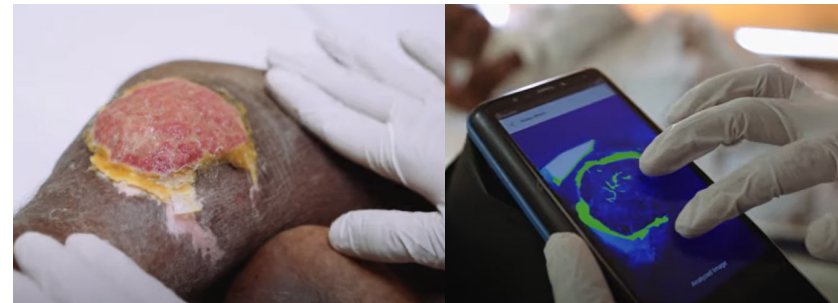
Healthcare Impact: The consequence of non-healing wounds is three-fold for the patient. One is the physical aspect - the pain that the patient experiences, increased possibility of amputation and consequent obesity and other complications that arise from restricted movement. The second is the psychological impact- the stress, the social isolation and the reduced quality of life that arise because of the wound. And third is the financial impact of diagnosis, treatment, medication, cost of care and income loss because of hospitalization.

All of these aspects are improved when the diagnosis is a) rapid, b) accurate and c) cost effective; and these are the aspects that the usage of Illuminate addresses. In addition, faster diagnosis also leads to better antibiotic stewardship as described below.

23 hospitals in which Illuminate has been installed

Rapid diagnostics: The severity of wounds can be reduced significantly through early detection and diagnosis, and being provided with quick, routine care. Illuminate reduces wound diagnosis time exponentially from a few days to a few minutes.

About 60% of wounds take more than three months to heal. The longer the duration of the wound, the more clinical visits and application of wound products are required; and the prolonged presence of infection significantly delays wound healing (7). For example, it is relatively common for patients with type 2 diabetes to get foot ulceration. Many experience disability even to the point of leg amputation. If diagnosed on time and treated quickly, the risk of amputation is highly reduced.



A wound being diagnosed with Illuminate

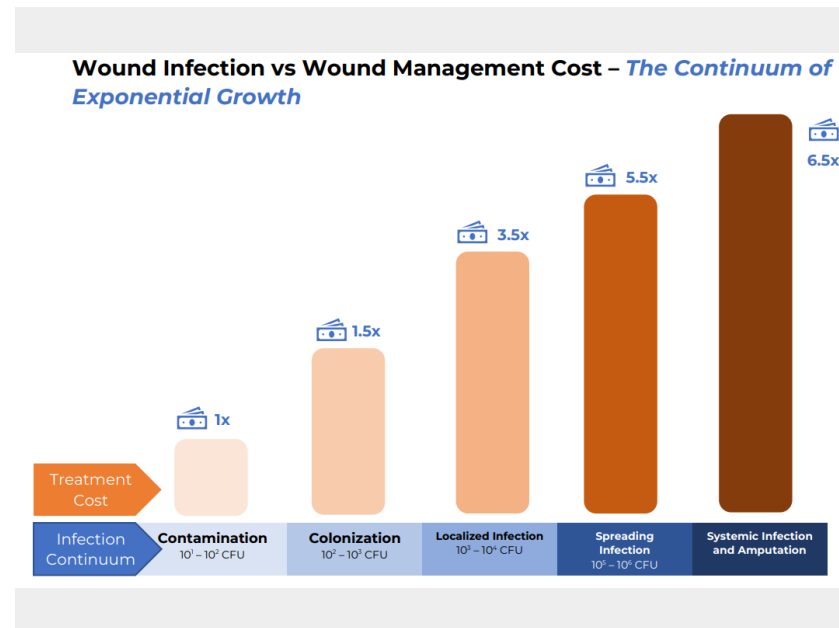


“This is a treated leprosy patient who has developed a hypertrophic foot ulcer which is not healing despite multiple courses of antibiotics. Before this device, we would have to take a biopsy which takes around 7 days and during this time the slow growing bacteria grows further. Illuminate takes a minute [to diagnose].”

Dr Aayush Gupta, Senior dermatologist,
DY Patil Hospital

High precision: Aduvo closely monitors the sensitivity and specificity of the diagnostic tests conducted using Illuminate. Accurate wound sampling also resulted in detection of higher bacterial loads from Illuminate report-driven sampling, thus, reducing false negative rates. Traditionally, wound culture is done using a swab. If the swab samples are taken from wrong part of wound, the culture test can come back with incorrect results. With Illuminate, the full area of the wound is checked, and this reduces the chances of incorrect diagnosis due to improper swabbing.

Reduced healthcare cost: Reduction in costs is a result of two factors. (1) Illuminate images the wound at a cost of Rs 100-300/report. This is far lower than the cost of typical culture tests. (2) The longer that it takes for the wound to be treated, the wound management costs such as dressing costs, costs to visit the hospital etc increase exponentially. Therefore, quick diagnosis by Illuminate leads to less wound management costs. Both these factors combined make wound management far more affordable as a result of using Illuminate.



Better antibiotic stewardship: The traditional microbial-based culture testing methods typically take a few days for diagnosis, and very often this leads to an inappropriate usage of antibiotics leading to the development of bacterial resistance. According to a Lancet report⁽⁹⁾, antimicrobial resistance is a serious public health threat to progress achieved against infectious diseases, cancer therapy, organ transplant, and intensive care. Globally, drug-resistant infections caused due to antimicrobial resistance contribute to about 700,000 deaths annually.

Point-of-care diagnostic devices like Illuminate can substantially aid the evaluation of wounds and help institute appropriate treatment promptly by instant confirmation of infective etiology. This reduces indiscriminate usage of antibiotics, especially in resource-poor settings where facilities for microbiological evaluation may not be available.



"I am a Pancreatic Transplant surgeon who deals with the patient's transplantation journey with special interest in biofilm - a layer of bacteria that prevents wounds from healing. The answer is obviously not the inappropriate use of antibiotics which may lead to a global pandemic of antibiotic resistance. The goal on the contrary, is to understand the bacteriological milieu that constitutes his biofilm, preferably at the 'point of care' and allow for local treatment rather than systemic antibiotics if the patient is not unwell"

Dr Anil Vaidya, CLMT

IMPACT MEASUREMENT AND MANAGEMENT (IMM)

As part of Menterra's commitment towards applying effective Impact Measurement and Management practices in its investee companies, a Theory of Change (ToC) statement was prepared with Adiuvo that is summarized below. The ToC metrics were identified and is used for impact tracking.

If doctors use 'Illuminate' as a screening device on all open wounds, infections will be diagnosed accurately, wound care providers will clean effectively and treatment will be targeted. This will lead to faster wound healing and cheaper treatment costs.

Due to patient data confidentiality and privacy constraints, various contextual information about the patients cannot be tracked at an operational level. Therefore, as may be noted in the Impact Created section above, the categorization of impact stakeholders under low-income and geographic lens has been done using the information on the hospitals and healthcare centers where the device is deployed, rather than individual patient information. However, the depth of the impact on health outcomes by using Illuminate can be studied by conducting a cross-sectional study across impacted patients in various locations. Such a study has been designed and is currently in progress.

Under this Monitoring and Evaluation (M&E) study plan set up by Adiuvo, a detailed protocol for measuring 12 indicators at the chosen hospital locations has been set up. Some of these indicators are: Percentage of first-line protocol changes done based on Illuminate reports, Average expenditure on antimicrobial dressings and prescriptions, Average expenditure on hospital stay for patients with wounds, Average expenditure on wound-related tests, Percentage

of patients who follow-up as directed, Percentage of patients who do not pose secondary complications, Percentage of patients with wounds who undergo amputation and so on. The efficacy of using Illuminate will be brought out by setting up control and test groups of patients and a randomized selection of participants based on certain pre-set conditions.

Being a medical diagnostic device manufacturer, there are also various regulatory compliances and clearances that Adiuvo undertakes that ensures the quality of the device. These include the Quality Management System certification (ISO 13485:2016) and the electronic, electric and software device compliances (IEC 60601-1 and -20). With respect to these standards, and as a part of device testing prior to sales, Adiuvo follows certain mandatory processes such as: Lot sampling of components and inspection prior to manufacturing, Supplier audit for process conformance, Device inspection in assembly process, Software checks and Durability tests.

BEFORE AND AFTER MENTERRA

Menterra invested in Adiuvio in December 2018 and has been an avid supporter of both the business development and the impact creation.

	Indicators	FY20-21 (Before Menterra)	FY22-23 (After Menterra)
Operations and financial expansion	AI capability accuracy	NA	90%
	Prototype status	Incomplete	Complete
	Patent status	Not filed	Filed and acquired
	Use cases identified	1	4
	No of clinical studies	0	4
	No of distributors	0	4
	No of market pilots	0	3
	No of hospitals/healthcare centers	0	23
	Status on product certification / regulatory approval	NA	Certified: ISO 13485: 2016
	Team strength	5	21
	No of patients tested		Approximately 1500
Impact created	Low Income household % of govt/trust hospitals and healthcare centers impacted	NA	7/23
	Underserved Geographies % of deployed locations in states/UTs with MPI score higher than 0.53	NA	52%
	Gender Equity % of women patients	NA	24%
IMM	Theory of Change	NA	Functioning ToC in place
	M&E process and system	NA	Cross sectional M&E study in progress
	Impact reporting	NA	Impact reporting to Menterra in place
	Tracking 2X Challenge framework	No	Yes
	Size of impact team	0	1 employee and a consultanting firm

| JOURNEY FORWARD

At Adiuvo, product expansion is a key area of research and innovation.

Product expansion: Currently in beta stage, Woundtele.AI is a remote monitoring application that users can install in their smart phones to help them manage wounds. Photos of the wound can be taken and uploaded into the app, which then provides a risk score. Based on this information a doctor is able to analyze the situation and provide advisement on further treatment and if there is a need to come to a healthcare center, say for dressing change, removing the dead tissues, etc. The app also identifies the nearest wound care professional that the patient can go to for treatment if that is the need. This way of medical triaging makes it possible for patients in low-resource locations manage their wounds effectively.

Wounds can cause disruptions in blood flow, and this is traditionally diagnosed by injecting a dye and doing an angiogram or a doppler test. Delayed access to these tests can lead to reduced blood flow and sometimes to amputation. One of the applications being tested using Illuminate is to be able to detect areas of reduced blood in and around a wound. Using Illuminate reduces the time to get the report from an average of 2 days to 2 minutes.

Other future applications being tested are around water quality monitoring, antibiotic susceptibility testing, cancer detection and certain veterinary application.

Market and Operational Expansion: In terms of market expansion, the company is looking at entering Europe, Americas, ASEAN and MENA markets. In order to enter these markets and expand in current markets, the company reaches out to potential buyers through Adiuvo's direct sales team and a dealer/distributor network for region-specific or sector-specific sales. They are also

looking at binding Illuminate into insurance schemes. Hiring is under progress for an extensive software team, a set of AI engineers and data scientists, and also a sales team network with regional, zonal and channel heads.

SKILLING AND EDUCATION

IDREAMCAREER.COM

End-to-end support through career the journey

With the advent of technology and the emergence of new sectors, there has been an explosion of career options for students. Many lucrative careers of today did not exist 10 years ago. However, due to lack of relevant information and guidance, students often make career choices that don't suit them. In a survey conducted by an online platform, of the 10,000 students in the age group of 14-21 years, 93% ⁽¹⁰⁾ were aware of just 7 career options. Likewise, parents too lack awareness about options available to their children.

In India, the Gross Enrollment Ratio (GER) for higher education (beyond 12th grade) for the 18-23 age band is only 27.3% according to the Economic Survey (2022-23) ⁽¹¹⁾. This is because of a lack of awareness of opportunities, the cumbersome nature of college applications and not having the financial resources to pursue them. 93% ⁽¹²⁾ of schools in India do not have a dedicated professional counsellor and consequently, students, especially from middle and low-income households do not get the help they need.

Even those who do pursue higher education and various careers are often dissatisfied with their choices. India's decline in the 2022 Happiness Index ⁽¹³⁾ reported by the UN is partly attributed to the inability of more than 40 million youngsters in the country to secure employment opportunities that are suitable for them.

Looking ahead, between 2020 and 2030, India will add 101 million people to the working age group according to a CII report⁽¹⁴⁾. A key enabler to utilize this enormous demographic dividend is industry-relevant higher education and skill development, and an effective mapping of talent to the demand. Good career counselling not only helps students become aware of their options, but also helps them make the right choices, and helps them prepare to join suitable educational courses and programs, and become career ready. This is also a vital cog in building a better skilled and more satisfied workforce.

Menterra recognizes these realities and holds a keen focus on investing in the education and skilling sector. It's investments in this space focuses on delivering affordable education that creates a level playing field for the underserved populations through improved learning outcomes and better linkages to skills required in the rapidly changing world.

Founded in 2013 by Ayush Bansal and Pravesh Dudani, iDreamCareer.com (iDC) is an education and career counselling company that guides students towards their best suited careers. Unlike other career counselling providers, iDC has a clear focus on reaching the underserved population. They actively reach out to students from low-income households, government schools, low-fees private schools and girl students.

| PRODUCT AND OPERATING MODEL

iDC's market and product segmentation is based on the unique needs of the students at each stage. For the 9th and 10th graders, self-awareness, awareness about subject combinations and being cognizant of career paths suitable for them are important in order to select the right stream. 11th and 12th graders are guided to identify the right courses, colleges and career pathways. They are also made aware of the financial requirements involved and the preparatory steps to be taken for entrance exams and the application process. Students in under-graduate programs are counselled on post-graduation options, various career paths and stream switching. These segment-appropriate approaches are executed through a combination of the following well-researched steps.

Career discovery: The student's awareness is enriched with a database of well-researched content on more than 570 career pathways, 25,000 colleges from 16 countries, 1,175 entrance exams

and 1,100 scholarships. Students (and their parents) are exposed to a comprehensive array of career options that are relevant in today's evolving sectors and information on what it means to pursue these paths. The iDC online portal has more than 1047 hours of career content and the iDC app provides personalized content based on the student's context and aspirations.

Self awareness and exploration: A psychometric assessment leads the student through a self-exploration process that makes them aware of their aptitude, personality type and interest areas. This makes them cognizant of their strengths and weaknesses and sets up the framework to assess various career options. A 16-page career assessment report at the end of the test lists out the top 10 career clusters that best suit the student. Since inception, more than 2.1 million students have undergone the psychometric assessment that is conducted online or offline based on the circumstances. In 2022-23 alone, more than 36 thousand school students took the assessment to start their self-exploration journey.

Ankur is currently pursuing an integrated management program from IIM Lucknow. He is the son of a milkman in Ayodhya. Ankur was confused about which course or college he should go for. Guided and mentored by iDC counsellors, Ankur joined IIM Lucknow. "I'll be able to uplift my family condition greatly and I think I'll be able to achieve what I aim for.", says Ankur.

Ankur Yadav, BML Munjal University



Career counselling: One-on-one and group counselling sessions with certified career counsellors guides the student through a right career, course and college fitment process. This is a very critical

component of providing career guidance. iDC has trained and certified more than 1750 career counsellors from 140+ districts in India. A community of more than 140 certified counsellors are currently actively supporting iDC projects across India.



"Because of getting married and change of place and having children, I took a sabbatical from work and now I have come back to work as a counsellor. One very good thing for the counsellors is that iDC gives us a platform that is all ready. 75% of the work is done by iDC on its platform"

Jasmine Singh, iDC career counsellor

Since 2013, more than 180 thousand students across the socio-economic spectrum have undergone the counselling program. 90% of iDC's counsellors are freelance women professionals and all of them have undergone a 90-hours Certification in Career Counselling (CCC) from iDC. Many of these women who have come back to a career after taking breaks, and they find job satisfaction, work-life balance and financial independence by becoming career counsellors.



"After retiring if you come back to this, it is only because it is a passion. 18 years ago it took a lot of effort from the counsellor's side to get information to the student and to find it yourself too, because these kind of resources were not there. At iDC there is always someone to help the counsellors. There is nothing more satisfying than a student who comes back saying - 'I followed your advice and today I am set in life!' "

Varsha Rebello, iDC career counsellor

College application program: Students are supported through the steps needed to get admission into their chosen college and course. This includes application assistance (for both domestic and international colleges), profile building, entrance exam and scholarship information, helpline support on colleges, and live counselling on the best approach. This program was started in 2020-21 and has so far supported 768 students. 67% of the students have received some form of scholarship/financial support.

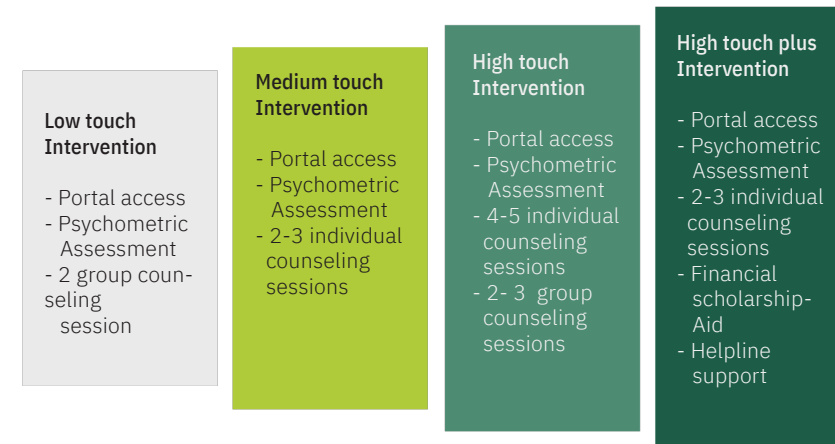


No one from Tapan's school or his family had ever gone overseas to study. In 11th grade he started getting counselling from an iDC counsellor. This helped him with getting admission and scholarship into various US colleges. He accepted Depauw University with a Rs 1.3 crore scholarship for a course on Finance and Psychology.

Tapan Mondal

Operating Model: iDC has three main business models to reach the students - B2C, B2B and B2CSR. In the B2C model, students directly reach out to iDC and avail of their services. On their website, idreamcareer.com, enrolled students can log in and access the information relevant to them and connect with their counsellors. In the B2B model, iDC works with private schools and take in a cohort of students who study there and provide guidance services. The third, B2CSR model is currently the most impactful model, both in terms of scale as well as reaching the underserved populations. In this model, funders (typically corporate CSR funds) who are keen on making deep impact on the education and skilling sectors sponsor iDC's counselling programs across various underserved schools and student groups. In FY 22-23, iDC has worked with 21 such CSR/NGO partners.

In order to straddle effectively between a wide range of schools and CSR funders, iDC has tailored its project offerings to cater to specific contexts. iDC has developed four distinct types of engagements described below in order to be flexible with their offerings to potential funders while being able to scale up in reach and depth of impact.



For every B2B and B2CSR project, an impact report is created based on a baseline and endline survey of the students that is conducted. In this report, the impact created is assessed and the context of the students (such as household income, school fees, etc) is brought out. This process is described more in the IMM section below and essentially helps iDC improve their reach and quality of outcomes through a constant feedback loop.

| IMPACT CREATED



The operating model of iDC as described in the previous section is focused towards improving education and career outcomes of students who otherwise do not have access to counselling services. iDC's students are typically from low-income households and marginalized communities.

These outcomes map to SDG 4 - Quality education. In particular, towards a) equal access to affordable and quality technical, vocational, and tertiary education, including university, b) increase the number of youth and adults who have relevant technical and vocational skills, for employment, decent jobs and entrepreneurship and c) eliminate gender disparities in education and access to all levels of education and vocational training. iDC's work also contributes to SDG 8 (Decent work and economic work) and SDG 5 (Gender equality).

More than 2 million students have gone through the iDC psychometric assessment since inception. And 35,168 students from grades 9th to 12th underwent the psychometric assessment in FY 22-23. The college admission program started in 2020-21 has so far supported more than 768 students and 67% have received some form of scholarship/financial support. The following impact criteria bring to light the type of students who are impacted by iDC's work towards achieving the SDG objectives.

Low-Income Households: Though the need for more career counselling is across the board in India, being accessible to students from underserved communities is a key priority for iDC. Through its social impact projects, iDC focusses on reaching students from economically weaker sections. 97% of the students who attend the iDC's programs are from low-income households with an income between Rs 1.4 and 3.4 lakhs per annum. 80% of the students attend schools that charge less than Rs 18k per year as fees. Students that iDC reaches through social impact projects receive the counselling and guidance services free of cost. 98% of the students impacted are through such social impact projects wherein they don't have to pay for the counselling.

97% students from low-income households

90% of school students impacted pay less than Rs 18k as annual school fees

Because the target students are from such a spectrum of socio-economic backgrounds, it is ensured that the counselling guidance is relevant and accessible. For example, information on what it takes to become a plumber is available in ten regional languages apart from English. Guidance provided is personalized based on expenses, number of years of education needed, job opportunities, growth prospects and scholarship options. For students with special abilities, the guidance provided takes this factor into account and provides a suitable pathway.

Case Study

United Way Bangalore (UWB)

With an objective to identify and promote girl students suitable for STEM courses and careers, the UWB program was a medium touch intervention across Bangalore, Gurugram, Pune, Ahmedabad, Haridwar and Mysore impacting 520, 10th grade girl students.

Touch type: Medium touch

Time period: Jul 2022 to Jan 2023

Student context:

- Bangalore | Gurugram | Ahmedabad
Pune | Haridwar | Mysore
- All 520 participants are female students from class 10th coming from a household with annual income of less than 3.4L per year.
- Key occupations of the family members - Daily wage Labour, Farmer, Auto driver, Shopkeeper etc.
- 100% of the participants are living in states with a multidimensional poverty index score of 0.053 and above, based on the latest data from NITI Aayog.

Impact

- 37.5% increase in the self-awareness level of the students using scientific tools like SWOT analysis and psychometric assessment.
- 62% increase in choosing backup careers
- 24.4% increase in the awareness level about the expenditure & planning it's source.
- 57.5% increase in the students who decided on a career after the intervention



Case Study

Hero Fincorp(HFC)

More than 20k students across India from 9th to 12th grade underwent the low touch intervention to increase awareness on college education and career options.

Touch type: Low touch

Time period: Jul 2022 to Jan 2022

Student context:

- 20,613 students across India
- 75.2% are female
- 68.8% of these students comes in the fees range of below Rs18,000/year
- 97% of of students are from states with a multidimensional poverty index score of 0.053 and above, based on the latest data from NITI Aayog.

Impact

- 10% increase in career awareness levels
- 17% increase in students having back up careers
- 10% Increase in number of students who are aware of the time period of their primary option
- 5% increase in students awareness regarding expenditure to pursue their chosen careers etc



Case Study

Shiv Nadar Foundation

Shiv Nadar Foundation that supported VidyaGyan schools in UP worked with iDC since 2018-19 to provide career and college guidance program to their 9th to 12th grade students. Students undergo multiple group counselling sessions and as many as 13-15 one-on-one sessions over a period of 4 years. The objective was to make students future ready (Exposure to various Careers choices and help them make informed choices), have clarity in Long term Career Goals (beyond UG admissions) and make them University Ready.

Touch type: Medium and High Touch

Time period: 2019-2022

Student context:

- 258 LIS students
- 100% of students from households with annual income of less than 3 lakh
- 100% of students from high poverty states as per NITI Aayog report 2021
- 100% of students from affordable private schools

Impact

- 90.7% students got acceptance in Higher Education Colleges (from earlier 75%)
- 67.4 % students (153) received financing/scholarship to complete their higher education



Underserved Geographies: iDC works with students from 16 states and 91.4% of the students are from Indian states with a Multidimensional Poverty Index score higher than 0.52 based on NITI Aayog's 2021 report.

91% of the students are from lower performing states on the poverty index

Gender Equity: iDC's mode of operations and its impact is mapped to the 2X Challenge framework by Menterra. It fulfills the Employment criteria of the framework with 32% of its 82 full-time employees being women and therefore successfully demonstrates allegiance to gender equality. iDC actively promotes women's wellbeing in the workplace and recently launched a period leave provision for women employees. 90% of iDC's currently active 140 counsellors are women. These women are independent, freelancing career consellers, and many of them have restarted their career after a break.



Ruchi was a topper in her school. But she came from an orthodox family where girls got married right after graduating. She started getting counselling from iDC. "They are changing my personality day by day" says Ruchi.

Ruchi Sharma, BML Munjal University

Education and career counselling for girls is essential, especially for students from conservative or low-income backgrounds because they are more bound to stereotypical pathways than boys. To address this, iDC has a clear focus on reaching out to girl students. 64% of the students impacted by their programs are girls. It is also ensured that the guidance and counselling material that is provided to students is gender sensitive. Its research and content team identifies and mentions at least one famous woman who pursued the career in every career pathway suggested. The entire content was vetted by UNICEF gender experts to ensure that the material is gender sensitization.

iDC tracks gender-segregated data sets on portal and database usage and monitors any biases or trends that are relevant.

67% of the women in the workforce

72% of the students impacted are girls

IMPACT MEASUREMENT AND MANAGEMENT (IMM)

Creating social impact is an important cornerstone for iDC and it is inbuilt into the operating model of the company. A robust Theory of Change (ToC) framework has been put in place that help the management and investors track and improve its impact. The ToC is stated below.

“If students receive career guidance using our personalised curriculum, psychometric assessments, and counselling, as well as need-based financial assistance, they will enroll in and complete courses that are a good fit for them. This will lead to students entering the workforce in careers that are a good fit for them, and that they are satisfied with.”

As mentioned in a previous section, iDC primarily operates through social impact projects that are backed by funders who want to improve educational, skilling and employment outcomes through high-quality counselling programs across various underserved schools and student groups. Impact evaluation at iDC is executed at each project level; not only so that project funders are made aware of their specific impact, but also so that iDC’s management is able to assess various projects objectively and improve the impact quality over time. The sample case studies illustrated in a previous section are excerpts from some of the project evaluations done by iDC.

Project evaluations are conducted through baselines and endlines conducted before and after the project execution. Participating students are asked to fill in a questionnaire that draws out their level of awareness about their own strengths and weaknesses, their education and career options and awareness about the important parameters of these options. A comparative evaluation is then done

to understand what is the change in awareness that the students have undergone because of the project activities. The baseline also delves into the socio-economic background of the participants so that iDC can monitor its reach into disadvantaged communities.

The company undertakes baseline and endline surveys and converts that into impact reports for each of its CSR customer. Over the last one year, it has taken 6,804 baseline responses and 633 endlines that captures information around specific indicators.



BEFORE AND AFTER MENTERRA

Menterra invested in iDC in April 2021. The following is a snapshot of the changes at iDC during a financial year before and after the investment.

	Indicators	FY20-21 (Before Menterra)	FY22-23 (After Menterra)
Operations and financial expansion	No of CSR/NGO partners	7	21
	Total Revenues	Rs 44.7 Lakh	Rs 369 Lakh
	No of full time employees	24	129
Impact Created	Low Income Households % of students from low-income households	Not tracked	97%
	% of students from low fees schools 18K and less per annum	Not tracked	90.0%
	Underserved Geographies % of students from states with MPI score higher than 0.052	Not tracked	91%
	Gender Equity % of girl students counselled	Not tracked	72%
	No of students counselled	14,500	35,168
	No of students who received financial assistance	104	309
IMM	Theory of Change	Not formally set up and in practise	Functioning ToC in place
	Monitoring and Evaluation process and system	NA	Monitoring and Evaluation process and system in place. Capturing 44 indicators covering the metrics around career awareness, self-awareness, college admission, scholarships educational loans and career satisfaction. Introduced M&E in 23 projects this year and evaluated 4 projects.
	Impact reporting	NA	6 project based impact reports created
	Tracking 2X Challenge framework	No	Yes
	Size of impact team	3	7

| JOURNEY FORWARD

The path towards scale and deeper impact is an arduous, patient and iterative process. A few of the focus areas for iDC to achieve scale and deeper impact are described below.

Product Expansion: iDC is strategically positioning itself from a services led organisation to a product led organisation in the near future. In the last four years, iDC has researched, curated and customized career content and achieved an almost 8X growth in revenue and user count.

The standardized career content reduced human bias immensely in career guidance process. Going forward, the goal is to create a personalized user journey for each student based on the student's context. This is a transformation from being at the receiving end of the requirements (service led organisations) to defining the requirements (product led organisation) by creating various goals and milestones for students in their career and higher education journey. To achieve this, the product and engineering team is working on product-led user experiences, product-led marketing and sales, and many other product features. These are mostly in beta testing phase currently.

Another major product expansion that iDC is working on is the real-time counselling experience. To this end, the iDC app will have an online video calling platform integrated and a student or parent can get connected on a live call with a counsellor from anywhere and anytime.

These product features will help iDC expand into low-resource markets and geographies and thereby, reach students who otherwise would not have access to high-quality counselling.

Geographic Expansion: Currently operates across 16 states and 3 countries in the Middle East. Going forward, iDC's geographic expansion plan is linked to its business verticals. In the B2C model, iDC will continue to expand within India and the Middle East countries across students from English medium private schools. And in the B2CSR and NGO partnership model, in order to achieve better student outcomes, iDC will focus its operation in the worst performing 10 states based on the Multidimensional Poverty Index for the next 3 years. Every year iDC will aim to grow the direct beneficiaries by 3X from these states.

Team Expansion: iDC is looking to increase its team size by 10-20% in the next year. There would also be a concerted effort to increase the count of active freelance counsellors by almost 3X to build the capacity for various social impact projects.

Impact Expansion: Various strategies are planned for execution to lower the college enrolment barriers, improve the Gross Enrolment Ratio (GER) and increase access to financial aid for aspiring students from marginalized communities. iDC plans to identify and map various scholarship programs and strengthen the scholarship vertical. The parent engagement model will be incorporated into the social impact projects as that is seen to make a big difference to the outcome. There will also be an increased focus on creating better awareness on job readiness programs, in particular for girl students who are likely to drop out after 12th grade.



ANNEXURES

ANNEXURES A: PORTFOLIO COMPANIES AT A GLANCE

IDC*



97%

% of students from low income households

90%

% of students paying less than 18k annual fees

91%

% of students from lower performing states on poverty index

72%

% of female students impacted

67%

% of women in the workforce

35,168

Number of students received career guidance**

*Data presented is as of March 2023 unless otherwise specified.

** Pertaining to FY 22-23

CHRYsalis*



26%

% of students paying less than 18k annual fees

56%

% of students from lower performing states on poverty index

50%**

% of female students impacted

1,178,832

Total number of student years impacted

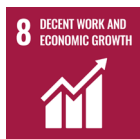
23,496

No. of teachers trained

*Data presented is as of March 2023 unless otherwise specified.

** Approxiate value provided by the company

LEAP SKILLS*



65%

% of students from low income households

12.6%

% of women in the workforce

62

Total number of institutions reached

25,268

Total number of student years impacted

*Data presented here is as of March 2020. Because of low movement in the recent past, this is kept as the latest metric values.

MATH BUDDY*



27%

% of students paying less than 18k annual fees

36%

% of women in the workforce

87,434

Total number of schools reached

281

Total number of students impacted

*Data presented here is as of March 2020. Because of low movement in the recent past, this is kept as the latest metric values.

OMIX*



14%

% of patients impacted in govt/charitable hospitals

17%

% of female patients impacted

28%

% of women in the workforce

7

Total no. of hospitals in which solution has been deployed

*Data presented is as of March 2020 unless otherwise specified.

ADIUVO*



30%

% of installations in govt/charitable trust hospitals

52%

% of installations in lower performing states on poverty index

24%

% of female patients diagnosed

20%

% of women in the workforce

1,500

Total number of patients diagnosed using illuminate device

23

Total no. of hospitals in which device has been installed

*Data presented is as of March 2023 unless otherwise specified.

IRON KETTLE*



57%

% of farmers from low income households

90%

% of farmers farming on less than 5 acres of land

34%

% of farmers from lower performing states on poverty index

5%

% of female farmers impacted

9%

% of women in the workforce

30%-50%

Avg price premium achieved over prevailing process

179

Total no of farmers procured tea leaves from

*Data presented is as of March 2023 unless otherwise specified.

ANNEXURES A: IMPACT MEASUREMENT AND MANAGEMENT (IMM)

Menterra's IMM process aligns to the 5 dimensions of the Impact Management Project. This framework is applied into each stage of investing in order to better measure, report, compare and improve impact across the portfolio.



Investee shortlisting: Each potential investee is evaluated for the 5 dimensions of impact and scored. The table below indicates the weights applied across the dimensions. This impact scoring helps in comparative assessment of companies on their likely impact performance.

Pre-approval evaluation: Every potential investee presented to the investment committee is taken through a detailed impact diligence. This diligence covers various aspects of each impact dimension and is described below

WHAT: What outcome(s) does the effect relate to, and how important are they to the people (or planet) experiencing it?

Impact Dimension	WHAT	WHO	HOW MUCH (Depth)	HOW MUCH (Scale)	CONTRIBUTION	RISK LEVEL	TOTAL RATING
WEIGHTAGE	5%	15%	25%	25%	5%	25%	100%

WHO: Who experiences the effect and how underserved are they in relation to the outcome?

HOW MUCH (Depth): What is the expected difference in outcomes between the baseline and ndline?

HOW MUCH (Scale): How many people are expected to be impacted?

CONTRIBUTION: How does the effect compare and contribute to what is likely to occur anyway?

RISK LEVEL: Which risk factors are material and how likely is the effect different from the expectation?

Based on the above analysis, an assessment of the likely impact against the expected financial returns is made. Menterra ideally seeks potential investees where impact and financial returns are maximised. However that is not always the case. This assessment allows us to map every potential investee on the impact-financial returns continuum and make an informed decision of investing in them. Impact diligence also makes an assessment of the alignment of the potential investee to the 2X Gender Challenge (Annexure C) and Menterra's ESG policy (Annexure D).

Post approval: Upon Investment Committee approval, Shareholder Agreements are written out which have an impact addendum and this comprises of an investee impact thesis, impact objectives and metrics, reporting and responsibility, mechanisms to align incentives of the execution team with the impact objective, and investor rights related to impact.

Post investment: A Theory of Change is developed with the investee which provides a strategy for the company to realize its impact objectives defined in the Shareholder Agreement. The Theory of Change lays out inputs that the company needs, activities that it will do, outputs that it will produce, outcomes and impact that it will realize. Each of these will have indicators, sources for data collection etc. The indicators will align with the 5 Dimensions framework in order to track all aspects of impact. From this, a Monitoring & Evaluation plan is set up and executed for regular data collection and progress evaluation.

Impact reporting: Internal-facing impact reports that assess impact progress of each investee company are prepared on regular basis primarily for the Board and the shareholders of each investee company.

ANNEXURES C: 2X CHALLENGE

The 2X Challenge is an ambitious target that calls on DFIs and investors to mobilise funds to unlock resources that will help advance women as entrepreneurs, as business leaders, as employees and as consumers of products and services that enhance their economic participation.

Within Menterra the following approach is set up to align its processes to the 2X Challenge.

- As part of diligence, the 2X framework will be applied. Every investee will need to meet at least one of the criteria. In investees where this is not the case, depending on the risk levels of achieving it in future, the investment decision will be made.

- Menterra will focus on the leadership criteria while strengthening employment criteria and being tactical about consumption and entrepreneurship criteria.

- Menterra will continue collecting and reporting gender-disaggregated data for each investee across the four 2X criteria. This will result in information across the portfolio to analyse gender impacts and how potentially it can be maximised.

2X Criteria



		Threshold
Direct Criteria	1 Entrepreneurship	1A. Share of women ownership 51% OR 1B. Business founded by a woman Y/N
	OR	
	2 Leadership	2A. Share of women in senior management 30% OR 2B. Share of women on the Board or IC 30%
	OR	
Indirect	3 Employment	3A. Share of women in the workforce 30 - 50%* AND 3B. One "quality" indicator beyond compliance Y/N
	OR	
	4 Consumption	4. Product or service specifically or disproportionately benefits women Y/N
	AND	
Indirect	5 Investments through Financial Intermediaries (FIs)	5A. On-Lending facilities: Percent of the Investor/FI loan proceeds or percent of FI's portfolio supporting businesses that meet direct criteria 30% OR 5B. Funds: Percent of portfolio companies that meet the direct criteria 30%

*sector-specific thresholds

Sector-Specific Thresholds

3.A. Women in the Workforce*		
Grp.	Sector	%
Low	Infrastructure, Power, Telecoms	30%
Mid	Financial Services, Manufacturing – Heavy, Agribusiness & Food, Professional Services	40%
High	Healthcare, Education, Consumer Services, Manufacturing – Light	50%

*Room for judgement: investees in unique sectors or geographies may require case-by-case consideration

ANNEXURES D: ESG POLICY

Menterra is committed to developing clear ESG objectives and integrate the ESG considerations within the fund management and as part of its investment process. The ESG policies, key metrics and reporting requirements shall be presented to the LPAC to better understand and address the LP expectations. The policy and the implementation plan will be approved by the Managing Director and Board of Menterra. The policy will be reviewed every year, though a significant part of the review & evaluation will happen at the end of the investing period of each fund, which roughly means, once every 4-5 years.

Menterra defines an ESG-compliant investment as one which has integrated environmental, social and corporate governance (ESG) considerations into investment management processes and ownership practices in the belief that these factors can have an impact on financial performance.

The ESG policy lists out a set of guidelines for assessment of investee companies based on the following aspects.

Environmental Guidelines	Social Guidelines	Governance Guideline
Energy consumption	Human rights	Board Structure & Diversity
Pollution	Child and forced labour	Board independence
Climate change	Community engagement	Conflicts of interest
Waste production	Health and safety	Quality of management
Natural resource preservation	Stakeholder relations	Executive compensation
Animal welfare	Employee relations	Transparency & disclosure
		Bribery & Corruption

ANNEXURES E: REFERENCES

1. Making the Mark 2021 - BlueMark (bluemarktideline.com)

<https://bluemarktideline.com/making-the-mark-2021/>

2. <http://www.asercentre.org/survey/p/418.html>

3. Quality education - Grade-appropriate education for all boys and girls.

<https://www.unicef.org/india/what-we-do/quality-education#:~:text=Poor%20quality%20education%20is%20leading,learning%2C%20corporal%20punishment%20and%20discrimination>

4. Live mint - Health expenditure at 2.1% of GDP in FY23: Economic Survey

<https://www.livemint.com/news/india/health-expenditure-at-2-1-of-gdp-in-fy23-economic-survey-11675160463795.html>

5. OECD Health Statistics 2022

<https://www.oecd.org/els/health-systems/health-data.htm>

6. Fortune Business Insights - The global chronic wound care market share and size

<https://www.fortunebusinessinsights.com/industry-reports/chronic-wound-care-market-100222>

7. The Economic Times: Less than one doctor for 1000 population in India: Government to Lok Sabha

<https://economictimes.indiatimes.com/industry/healthcare/biotech/healthcare/less-than-one-doctor-for-1000-population-in-india-government-to-lok-sabha/articleshow/59697608.cms>

8. Ken Research: India POCT Market is forecasted to grow further

<https://www.kenresearch.com/blog/2023/01/india-poct-sector/>

9. Lancet report: Rising anti-bacterial resistance: An evolving epidemic in a pandemic

[https://www.thelancet.com/journals/lanmic/article/PIIS2666-5247\(21\)00173-7/fulltext](https://www.thelancet.com/journals/lanmic/article/PIIS2666-5247(21)00173-7/fulltext)

10. India Today: 93% Indian students aware of just seven career options

<https://www.indiatoday.in/education-today/news/story/93-indian-students-aware-of-just-seven-career-options-what-are-parents-doing-wrong-1446205-2019-02-04>

11. Economic Survey 2022-23 – Statistical Appendix

<https://www.indiabudget.gov.in/economicsurvey/doc/stat/tab83.pdf>

12. Financial Express: Counselling trends in India

<https://www.financialexpress.com/education-2/counseling-trends-in-india-guiding-the-worlds-largest-youth-population/2361997/>

13. India Today: Wrong Career Choices Impacting Happiness Index

<https://www.indiatoday.in/education-today/featurephilia/story/are-wrong-career-choices-to-blame-for-the-low-happiness-index-in-india-2291127-2022-10-30>

14. Mint: Can India's demographic dividend turn into a liability?

<https://www.livemint.com/news/india/demographic-dividend-may-turn-into-liability-what-cii-report-highlights-read-here-11648978956897.html>

