COMMUNITY PERSPECTIVES ON
EDUCATION, HEALTH & LIVELIHOODS
IN TALLA RAMGARH, UTTARAKHAND
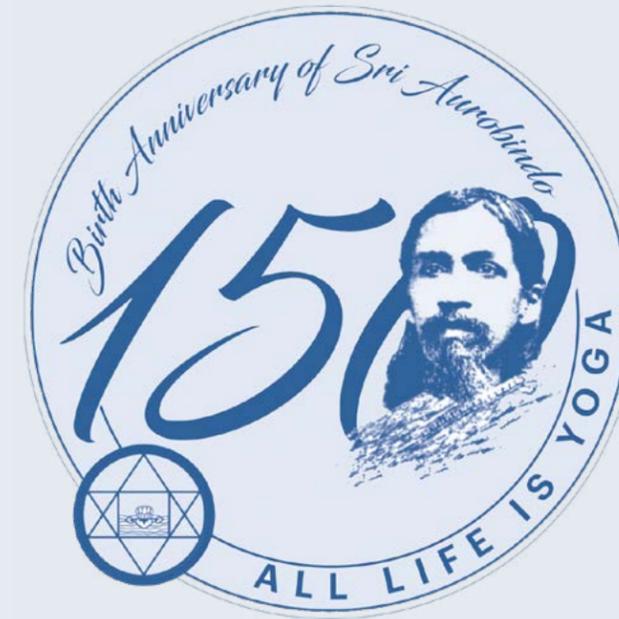
TEACHERS RESOURCE EDUCATION CENTRE

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PUBLISHED BY

SRI AUROBINDO ASHRAM – DELHI BRANCH

Sri Aurobindo's 150th birth year coincides with India's 75th year of Independence and this to us is no mere coincidence; it's an act of destiny and a clarion call for us to delve into the need for a new education as was envisioned by Sri Aurobindo and his spiritual collaborator The Mother.

This publication led by a team of Madhuban Sri Aurobindo Ashram - Delhi Branch is a tribute to Sri Aurobindo on his 150th birth anniversary as he is the protagonist of Integral Yoga, of which Integral Education is a seamless outflow

'A memory quivered in the heart of Time
As if a soul long dead were moved to live:
But the oblivion that succeeds the fall,
Had blotted the crowded tablets of the past,
And all that was destroyed must be rebuilt
And old experience laboured out once more.
All can be done if the God-touch is there.'

       - Savitri
       - Book I: The Book of Beginnings
       - Canto I -The Symbol Dawn

Disclaimer:

Data, opinions, statements contained in the book are provided exactly as the respondents of eight villages in Talla Ramgarh, Uttarakhand narrated to the 11 surveyors/ peer educators. No attempt has been made by the authors to alter or rectify anything especially the Hindi verbatim since it captures women's expression in their own idiom.

The first principle of true teaching is that nothing can be taught
- Sri Aurobindo

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Opening of the Sri Aurobindo Ashram
Delhi branch

Let this place be worthy
of its name and manifest
the true spirit of Sri Aurobindo's
teaching and message to
the world.
With my blessings

I

▌FOREWORD

"Let this place be worthy of its name and manifest the true spirit of Sri Aurobindo's Teachings and Mother's message to the world.

With my blessings,"

Mother

Sri Aurobindo Ashram - Delhi Branch was inaugurated with the purpose of creating a worthy space in the realm of man-making with Education at the centre.

The aspect of Integral Education has been our main focus since the inception of the Delhi Branch as the only Branch set by The Mother herself in 1956.

The Teachers Resource Education Centre (TREC) program of the Madhuban Sri Aurobindo Ashram - Delhi Branch is a step forward to our commitment for an education that is holistic in nature.

Bliss

Tara Jauhar

Tara Jauhar
Sri Aurobindo Ashram
Delhi Branch

ACKNOWLEDGEMENTS

EXECUTIVE SUMMARY

Madhuban Sri Aurobindo Ashram – Delhi Branch, located in the picturesque Kumaon hills of the Himalayas has been working in the spheres of education, livelihood and health; and to facilitate teacher education in the primary wings of village schools.

The Teachers Resource Education Centre (TREC) is an initiative of the Madhuban Sri Aurobindo Ashram - Delhi Branch, which was initially supported by Friends of Madhuban – a global, non-profit seva organization that provides collaborative, cross cultural educational opportunities. The framework of TREC is based on Integral Education pioneered by Sri Aurobindo and The Mother. TREC programs and training aim at opening up education and livelihood opportunities for the community people in villages around Talla Ramgarh and deepen their appreciation of traditional culture.

To have an in-depth understanding of the educational, socio-cultural, health and livelihood needs of larger community of eight villages (Table 1 below) in Talla Ramgarh and to cater to their sustained development, a Community Perspectives on Education, Health and Livelihood survey (CPEHL) was developed and conducted in the villages Jhutiya, Nathuakhan, Naikana, Bohrakot, Myora, Satkhol, Harinagar and Loshgyani of Ramgarh Block, Uttarakhand with the help of 11 peer educators during April 2020 – Sept 2020. The CPEHL was designed as a mixed methods survey and applied Participatory Action Research (PAR) approach to facilitate the face-to-face interview. The study was conducted in Hindi and the data analysis and report writing was done in English. When COVID-19 outbreak occurred, life during lockdown also became a part of the study.

Villages	Total Sample per Village
झुतिया (Jhutiya)	18
नथुआखान (Nathuakhan)	8
नैकाना (Naikana)	22
बोहराकोट (Bohrakot)	10
म्योरा (Myora)	13
सतखोल (Satkhol)	9
हरिनगर (Harinagar)	2
लोश्ज्ञानी (Loshgyani)	12
Total	**94**

Table 1: Villages surveyed with sample size from each

Mixed methods analysis (IBM SPSS software, MS Excel, Zygomatic's word cloud as well as thematic analysis) were used to analyze the data. The study findings showed that most of the community owned small parcels of land that they cultivated. There was no evidence of food shortages or lack of agricultural and dairy-farming occupations. Many women who were educated (12th class and beyond) were not employed. In essence, the overall scenario of women's education status as well as women's employment as reported by TREC-CPEHL data analysis was not encouraging. Out of total 170 women members in 94 households, only 29 are employed. That is, just 17% of women are employed or are in some kind of occupation. Only jobs where women supersede men are related to stitching, Anganwadi and Accredited Social Health Activist (ASHA) functionaries; women are more inclined to take up private jobs than any other - and that is around 38% of all the available occupations.

The disease profiles showed incidences of diabetes, arthritis, eye ailments and

non-communicable diseases. Presence of piped water and cooking gas in homes has made women's lives easier and more sedentary, which may be precursors of such illnesses. Treatment seeking varied (doctors and untrained professionals were consulted); many of the traditional foods and eating habits had been abandoned in favor of fast foods. Many conventional beliefs about menstruation in particular persist, although they are not universally practiced. Institutional delivery remained the norm.

TREC-CPEHL survey findings advocate the need for a redefined educational system; inclusion of some of the more beneficial traditional health and food-related practices, socio-cultural mélange in education and health and the inculcation of a more scientific view of illnesses, treatment and well-being.

A natural progression was to use TREC-CPEHL survey findings to create TREC modules for socio-cultural, health and vocational education programs as well as village-level interventions for improving the lives of communities. The report includes some suggested pathways for village development and creation of innovative employment opportunities, especially for younger people through the TREC curriculum. Relevant training and skill development methodologies are considered for two segments of women – educated and less educated - this has emerged from data as well as from personal interactions of TREC faculties with village people. Focus on women's education and skill building is critical for women to progress and contribute to school instruction, education for the community and generating livelihood options.

The report offers detailed framework about phase wise development and implementation of TREC curriculum based on the following aspects:

- Model of Integral Education of Sri Aurobindo and The Mother

- Comprehensive information about the TREC initiative

- Findings of the TREC-CPEHL survey

- Experiences of the TREC faculty interactions with the community members in terms of their specific needs and aspirations

- Promotion of local and traditional wisdom from the scientific and health education perspectives

- Various levels of stakeholder identification and involvement

- Re-engagement with donors, stakeholders and civil society following the COVID-19 pandemic

Overall, the TREC program shows immense promise for building the capacities of village women to participate in village development and become role models for the community.

▌INTRODUCTION

Teachers Resource Education Centre (TREC) in Madhuban Sri Aurobindo Ashram - Delhi Branch is an Integral Education Curriculum for community development customized for rural and peri-urban areas. It is based on Sri Aurobindo Ashram's focus on an education that supports growth of the inner and outer ecology of communities; an education system that facilitates rootedness in tradition and fosters a wider worldview concomitant to the teacher's role as facilitator and a mentor and role model for children.

The above aspiration needed a rigor of academic survey in aspects of villages around Talla Ramgarh areas of Uttarakhand towards understanding local issues of women's education, health, sanitation, nutrition, ecology, livelihoods, social and cultural practices and in essence developing a framework for an indigenous, experiential curricular that begins "from near to far" based on these traditions, culture and scientific principles. The curriculum framework is woven into the fabric of the community's needs and wishes and the sessions are designed to holistically address needs and aspirations of communities.

With the support of Madhuban Sri Aurobindo Ashram - Delhi Branch Team , we have filled this much needed gap through community level findings for understanding the context of local paradigm of knowledge building, local reality and needs of women, and the connect to their lives within a structure of society, culture, tradition, health and nutrition and prevalent myths and misconceptions as part of these. Their shifts in moorings of even basic architectural structure of their homes, aspects of women education (including married women) and equality with interconnectedness between women employment and societal status, its impact on woman's knowledge and overall perception are related in their own voices.

This report brings out pertinent questions for the community living in 8 villages of Talla Ramgarh such as - "what is education to village folk" and "what is the purpose of education for village folk"? Here with the answers, we propose blending the importance of local needs as also found through analysis while developing the curriculum framework for TREC. The report is a systematic tabulation of gaps and opportunities found as an outcome of TREC-CPEHL survey, the development and execution aspect of the TREC program, which is in sync with Sri Aurobindo's view on "a new education for a new consciousness", especially as we celebrate 150 years of Sri Aurobindo's birth and 75 years of India's Independence.

In offering this document to local and other teacher education institutes and government policy makers, one wishes for creating a sunlit path, one in which education is transformative and is akin to the geographical and biological aspects of culture, individual and community growth. Hopefully this survey document will be used to facilitate the need for contextual and experiential learning.

With warm good wishes,
Dr. Anjali Capila
Dr. Anju Khanna
Ms. Vijayluxmi Bose
Ruma Chakravarty

1.

TREC-CPEHL BACKGROUND

Friends of Madhuban Rachel Borsavage (left) and Kathy Brichto (right) with Dr. Anju Khanna (middle)

Madhuban Sri Aurobindo Ashram – Delhi Branch has been working in the realm of education, livelihood and health for many years, but as we looked into this synergy, we realized that something more is needed where the teacher in the local community can be in sync with the needs of communities and be empowered to develop an integral approach to life and schools in which she holistically aligns to community development - especially in the primary sections of village schools.

Teachers Resource Education Centre (TREC) under the aegis of Madhuban Sri Aurobindo Ashram was initially supported by an organization called the 'Friends of Madhuban', a global, non-profit 'Seva' organization with an aim to provide collaborative, cross cultural educational opportunities in the Kumaon foothills of the Himalayas. Rachel Borsavage, Connie Lobo, Cherryl Chaffer, Mathew and Kathy Brichto seeded the 'Friends of Madhuban' and the initial phase of the TREC project. Kathy Brichto, Dr. Kamala Menon and Dr. Anju Khanna subsequently created a curriculum framework that was in sync with World Core Curriculum and Integral Education.

Initial TREC meet at Madhuban Sri Aurobindo Ashram – Delhi Branch

TREC - Mission

TREC's mission is to establish a Teachers Resource Education Centre (TREC). The centre would focus on the integration of several innovative curricula that would be integral in the basic connect to life and needs of a community. Our focused mission is to facilitate an education system that is experiential and connected to the culture of the terrain and one which facilitates hands-on learning that is rooted to local art and craft, local customs, language, music, community needs of environment, health and livelihood.

TREC - Vision

This course would initially enable young girls and women in Ramgarh, Nainital district of Uttarakhand to enrich their skills (both educated and less-educated women). For educated women (TREC peer educators), this curriculum would broaden and deepen their understanding of Primary education in a manner that heightens the sense of interconnectedness across different aspects of life in the village and its impact on village education. We also aim to understand emerging gaps that exist within the curriculum quality that is being disseminated. This would be relevant for the village child, parent and school - as part of a community starting from real village needs to aspirations of parents and schools in areas of development, progress, market economies and modern education. Thus, the focus is on laying the foundation for an early baseline towards encouraging children to be useful and responsible members of the village society. Secondly, the curriculum would help in skill-building of less educated people in traditional art and craft forms in order to enable them to be self-reliant and find niche livelihood options.

TREC - Activities till Date

● Under the guidance of Madhuban Sri Aurobindo Ashram - Delhi Branch and a local coordinator, through a process of personal interactions and engagement by Dr. Kamala Menon and Dr. Anju Khanna, 11 girls were selected as peer educators from 8 villages. Four of them are graduates while seven completed class 12th standard.

● Dr. Kamala Menon and Dr. Anju Khanna started the Integral Education course with these 11 girls with support of other resource people.

● Integral Education tenets were put in with the 11 girls working on The Mother's 12 qualities by Veronika, a French devotee of the Ashram.

Selection of TREC peer educators

● In Van Niwas Sri Aurobindo Ashram - Delhi Branch, an annual Oneness program facilitated a two week residential immersion where the girls were introduced to an international community for living and understanding small and large group participation in aspects of integral yoga. Here, the girls met 60 other people from Delhi Ashram, Pondicherry and Auroville; this started their understanding of the outer world away from their village; also their bonding over treks in the mountains, circle time, group meditation, yoga, art and music sessions gave them a wider perspective of Integral Education. Jaya, Uma, Shiva Kumar, Jayanthi, Helgard, Anju and others led these girls into aspects of the "five dreams of Sri Aurobindo"; this experience opened doors for them to harness an ability to aspire beyond their class room school-led education and connect to the oneness within. This opening was much needed to stir in them an ability to aspire and dream yet give value to their traditions and heritage of music, art, food and the mountains in which they lived.

● Back in Madhuban, Dr. Kamlesh Batra from Mirambika - Free Progress School came for a mathematics workshop while Mrs. Saraswati Sharma, former MIS teacher, taught English. Vaibhav, an ex-Mirambika teacher, taught science and sports. Radhakant, also an ex-Mirambika teacher trainee and now Principal of Chirag School came to take social studies classes. Story telling was conducted by Aarohi faculty. Vaibhav, another former teacher from Mirambika came for sports and science work.

● The 11 girls continued to come to the TREC centre at Madhuban from morning 9 AM to 2.30 PM all 6 days a week, they followed a routine for cleaning and organizing the place, morning games and physical exercises, music and meditation with morning prayers, reading of the book on education by The Mother.

Meditation makes TREC peer educators ready and focused for the day's work

TREC peer educators at their routine studies

TREC peer educators Indra, Komal and Babita at Sri Aurobindo Ashram – Delhi Branch

● This would be followed by two hours of work related to a subject - Social Studies, English, Mathematics, Science, Montessori work, art and storytelling.

● Then they would have lunch and then write assignments, circle time and work out plans for the next day. Plans included village survey and visits to local schools and interactions with local village communities. As the young women were from different educational backgrounds it was mutually agreed to give them an exposure for further education with support of the Delhi Ashram team led by Dr. Kamala Menon and Dr. Anju Khanna.

● Hence, 6 of them - Hema, Deepa, Babita, Pooja, Sangeeta and Hansi were enrolled for Indira Gandhi National Open University (IGNOU), Diploma in Early Childhood Care and Education (DECE) course. Indra was enrolled for her B.A. through IGNOU. Komal and Suman were encouraged to sit for Bachelor of Education (B.Ed.) entrance exam. Sugandha was encouraged to see how she could support women enrolled in the DECE program and also do self-study. Kavita, one of them returned home for personal reasons while Nirmala joined the group.

● The Covid-19 pandemic affected the normal flow of classes however all efforts were put to streamline and take the peer educators through classes and help them to self-study.

● TREC looks forward to preparing peer educators with the Ashram ethos by facilitating residential training and week-long workshops for them.

● Babita, Komal and Indra came from Madhuban to Sri Aurobindo Ashram – Delhi Branch for vocational training. The goal of this cross-learning was to understand the rhythm of the Ashram; they have since undergone intense Yoga training both at physical and theory level. They were involved in shram daan, minor sports, exercises, painting, paper quilling, thematic songs and music. They further trained under the mentorship of Mirambika (Delhi) teachers to learn about early childhood and stages of growth of children. Psychic, mental and physical level developments were their core focus during the residential program.

9

10

Twig frames being developed by TREC peer educators for weaving

● On the other hand, eight peer educators (Nirmala, Hema, Sangeeta, Sugandha, Deepa, Suman, Pooja and Hansi) from the Madhuban Sri Aurobindo Ashram – Delhi Branch attended a week-long handloom weaving and crochet workshop.

● The peer educators in Madhuban also attended science and astronomy workshops conducted by expert resources focusing on psychic and mental level developments. Then there was knowledge exchange between the two groups of TREC peer educators in Madhuban.

● Another area TREC focuses on is to build the skills of local women (both educated women and women with less or no educational qualifications). Madhuban Sri Aurobindo Ashram exposed them to various programs that enabled them to match their skills and interests and then facilitated the development of that exact skill through respective training programs.

● Based on their potential, the Ashram facilitated basic training in stitching, knitting, food processing (pickle/ juice making), weaving with

Color coordinated weaved patterns are displayed by expert trainer and students

local twig frames & cardboard looms, crochet workshops etc. in order for these women to develop livelihood skills.

We present glimpses of these diverse workshops where TREC peer educators and other community women from the 8 villages can be seen learning with much enthusiasm from experts.

The trainer explains how crochet granny squares can be joined together to make different products

Two women being trained in knitting in one of village outreach programs at Madhuban
Sri Aurobindo Ashram – Delhi Branch

A crochet stole in the making in one of village outreach programs at Madhuban
Sri Aurobindo Ashram – Delhi Branch

A trainee develops a crochet pattern in one of village outreach programs at Madhuban
Sri Aurobindo Ashram – Delhi Branch
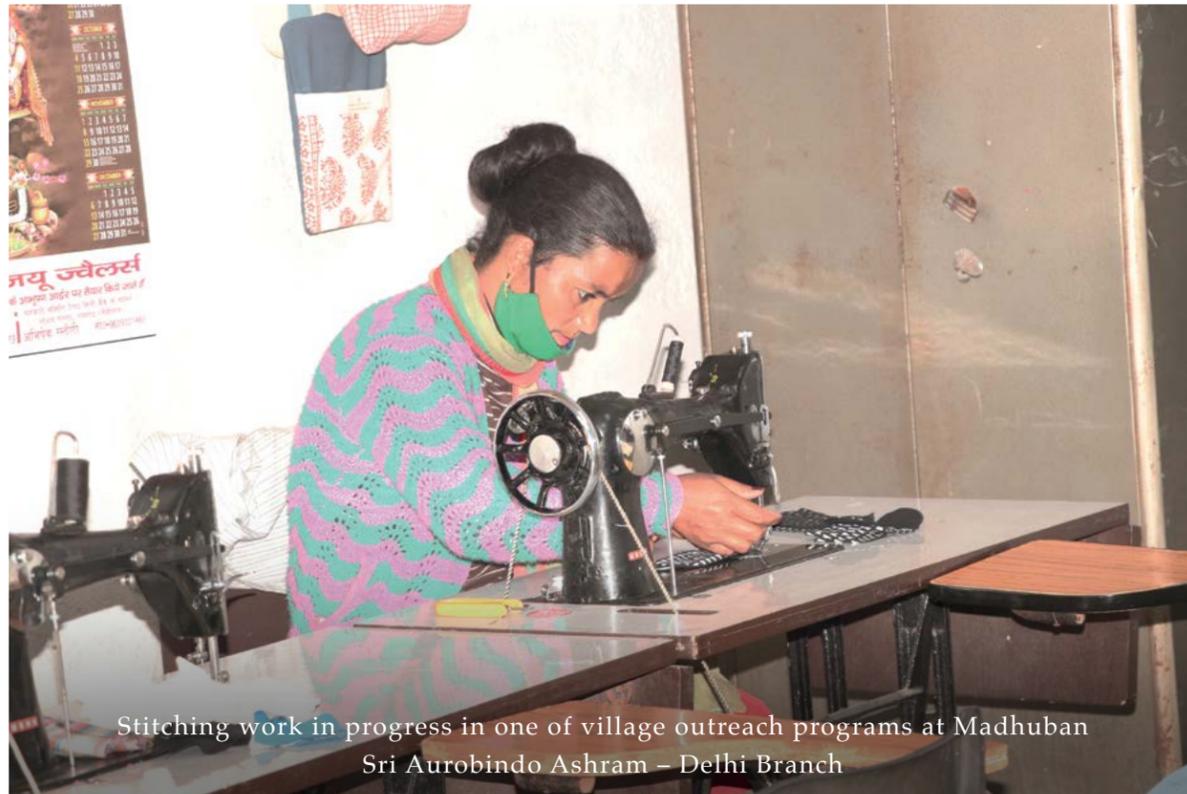
Stitching work in progress in one of village outreach programs at Madhuban
Sri Aurobindo Ashram – Delhi Branch

Community women preparing chilli pickle in village outreach program at
Madhuban Sri Aurobindo Ashram – Delhi Branch

Exposure trip of the women to Delhi Haat facilitated by Madhuban
Sri Aurobindo Ashram – Delhi Branch

● Further, Madhuban Sri Aurobindo Ashram facilitated exposure trips for the women to various exhibitions where the women could learn the nuances of how the marketing and selling processes take place. The Ashram tied up with local shop owners at Delhi Haat who offered some space to the women to exhibit their products in Delhi Haat. It was a very good exposure for them in terms of the complete end-to-end process of producing and marketing stitched materials.

● Then the women also got a chance to exhibit their products in some book festivals in Nainital and in other exhibitions in Delhi. They further had an exposure trip to Auroville. These trips literally opened up a whole new world of opportunities for them and they understood how the products can be targeted, developed and sold in melas and exhibitions.
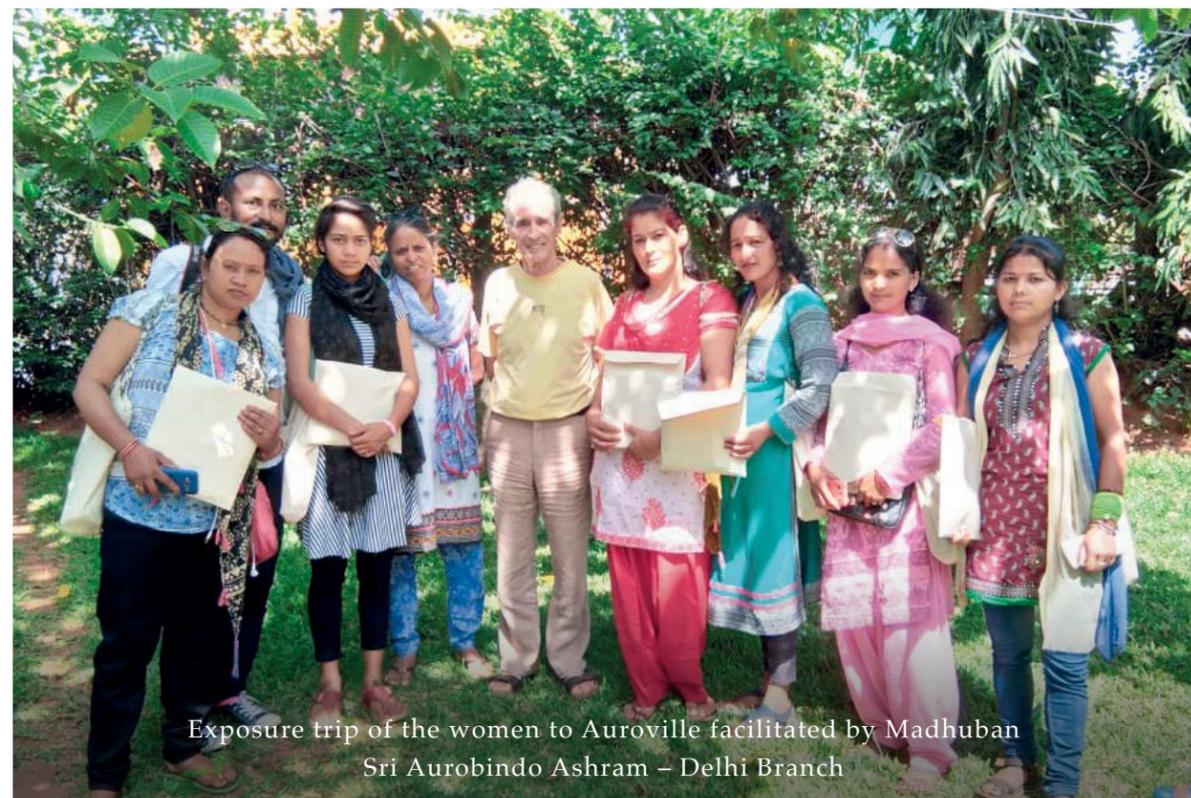
Exposure trip of the women to Auroville facilitated by Madhuban
Sri Aurobindo Ashram – Delhi Branch

Out of these women, some had picked up skills so well that they found a niche to start their own entrepreneurial ventures. We share one such heart-warming story here.

TREC - Case Study

Sonu has the only tailoring shop in and around Hodakhan, Nathuakhan

Sonu was trained in the Madhuban Sri Aurobindo Ashram – Delhi Branch

Sonu, a resident of Jhutiya village is a single mother of two children who came to Madhuban Sri Aurobindo Ashram when she was going through her own family issues. She is slightly educated. The Ashram gave her exposure to different areas such as knitting, stitching etc. to find out her skill set. She was not very comfortable with knitting but had a natural skill for stitching and thus the Ashram facilitated her training in stitching. During that time, Madhuban Sri Aurobindo Ashram - Delhi Branch was collaborating with a company called Usha Silai Machine and Sonu was involved in one of those batches for training. Sonu was good at it and picked up the skills of stitching very well. Later, Sonu became a teacher in Madhuban Sri Aurobindo Ashram stitching unit where she was getting a monthly stipend by making and selling a few products to meet her financial needs. Madhuban Sri Aurobindo Ashram, spotting her

Sonu at her tailoring shop in Hodakhan

potential, tried giving her exposure to different stitching units of Auroville and Pondicherry. Once back from the trip, Sonu and her peers suggested having their creations displayed in melas / exhibitions in Delhi.

Sonu was part of exposure trips to Delhi Haat and other exhibitions. E.g., Sonu and her peers got a chance to exhibit their products in some book festivals in Nainital and in other exhibitions in Delhi.

During Covid-19 pandemic, the Ashram was closed and that affected Sonu's livelihood too. With two children and her parents staying with her, she had to earn and thus she converted her needs to her determination and kept looking for opportunities to earn; and that is when she opened her own tailoring shop, which is the only tailoring shop in and around Hodakhan village. She travels around 11 km everyday by bus and 4 Km on foot one way from Jhutiya to Hodakhan. The practical experience Sonu gained from the trips to diverse exhibitions worked towards boosting her confidence and self- reliance.

Sonu was absorbed as a teacher in Madhuban Sri Aurobindo Ashram's project "Sashakt Ramgarh" (an extension of TREC project) for training village women in stitching during Feb – Mar 2021.

Sonu's journey from being a responsible mother, daughter, learner, to becoming an entrepreneur and then to becoming a trainer is an example of how the woman has grown systematically in all aspects - patience, confidence, skills, financial stability and most importantly liberation from her mental blocks. Her needs are now met and that is what makes her happiest. As Sonu very beautifully confided to Dr. Anju Khanna, Director Madhuban Sri Aurobindo Ashram – Delhi Branch that earlier she used to fight with her husband demanding necessary items. But now she does not feel the need to do so as she has everything that she wants. "देगा तो देगा नहीं तो कोई बात नहीं| मैं कमा लूंगी! (if he gives it, well and good, otherwise I will earn it!)". And this statement exudes confidence in her own ability and adequacy of her earning enough to meet her needs. When asked if she had any plans to move closer to her shop since she needs to travel quite a distance every day, she showed us the room adjacent to her shop that she had hired already and told that the family will move there during the summer of 2021.

We heard more stories of women who turned their struggles to financial freedom enabled by Madhuban Sri Aurobindo Ashram. The question was how to identify more such cases who can realize their own potential with proper guidance? And how the livelihood options can be enabled for them so that the women are self-reliant whether educated or not? TREC-CPEHL seemed to be a logical step forward to answer these questions.

CHAPTER

2.

TREC-CPEHL - THE BEGINNING

Literally, the ideation of TREC-CPEHL started in the dining hall of Madhuban Sri Aurobindo Ashram in September 2019 when Dr. Anju Khanna was in discussion with three women from completely diverse backgrounds about the TREC program, the need, the initiation and the vision. Then in March 2020, the Ashram initiated the TREC-CPEHL led by Dr. Anjali Capila - retired professor, Lady Irwin College; Vijayluxmi Bose – Senior Health Communication Consultant, WHO; Ruma Chakravarty - Leadership Executive Coach, Research & Analytics Consultant, Indian Music Therapist. The primary objective of TREC-CPEHL was village mapping of livelihood & occupation, health, customs, social practices, education, facilities and other aspects to create modules for further education programs with support from Dr. Kamala Menon and Dr. Anju Khanna of Madhuban Sri Aurobindo Ashram – Delhi Branch as the primary TREC facilitators.

TREC-CPEHL Team

TREC-CPEHL team consists of facilitators from Madhuban Sri Aurobindo Ashram – Delhi Branch, project leads and authors, peer educators, project associates and volunteers and many others whose contributions are greatly acknowledged.

Madhuban Sri Aurobindo Ashram – Delhi Ashram Facilitators

Dr. Kamala Menon and Dr. Anju Khanna started the Integral Education course with peer educators and with support of other resource people. They were the main facilitators for TREC-CPEHL from Madhuban Sri Aurobindo Ashram – Delhi Branch.

Dr. Kamala Menon advising TREC work

Dr. Anju Khanna guiding TREC work

TREC-CPEHL Leads at work

TREC - CPEHL Project Leads and Authors

Project Lead: Dr. Anjali Capila led the project for CPEHL survey starting with conceptualizing the survey, training the girls for interviewing, hand - holding and fielding.

Lead Integral Education: Dr. Anju Khanna, supported the documentation of grassroots work for the interlinkages between Education and Livelihood.

Lead CPEHL Strategist: Ms. Vijayluxmi Bose was instrumental in strategizing the complete process of TREC-CPEHL working as an interface with each distinct yet synergistic portion of CPEHL.

Data Analytics and Report Lead: Ruma Chakravarty was the lead for data management, training peer educators and associates in coding, data capture, data analysis and for developing the report including graphics and illustrations.

TREC-CPEHL core team line up

TREC and TREC-CPEHL Project Peer Educators

11 peer educators who worked very hard with instructions and training from the Madhuban Sri Aurobindo Ashram facilitators and TREC-CPEHL project leads:

Hansi   Hema   Suman   Sangeeta

Sugandha   Deepa   Puja   Babita

Indra   Komal   Nirmala

TREC-CPEHL interviewers/ surveyors/ peer educators

Peer educators Nirmala, Hema, Deepa, Babita, Pooja, Sangeeta, Hansi, Komal, Suman, Sugandha and Indra were very enthusiastic about the whole TREC-CPEHL Participatory Action Research (PAR) survey concept. They were trained to conduct the interviews with guidance from Dr. Anjali Capila, Dr. Anju Khanna, Vijayluxmi Bose and Ruma Chakravarty.

TREC- CPEHL Project Associates and Volunteers

Nirmala Bhandari from Madhuban Sri Aurobindo Ashram office, also a peer educator and Suraj Verma a volunteer from Sri Aurobindo Ashram – Delhi Branch along with two research scholars – Shruti Vinod and Bhavna Verma from Lady Irwin College significantly contributed to the TREC-CPEHL triage and coding process that was being methodically led by Dr. Anjali Capila and Ruma Chakravarty as main leads; Dr. Anju Khanna and Vijayluxmi Bose have anchored and supported this process with a deep understanding of the larger aim of this work.

Other volunteers of CPEHL include Anand Ji from MIS, Shashi Ji, Amit Agarwal Ji and Diwan ji. All of them contributed to TREC-CPEHL work in their capacity during peak Covid-19 pandemic lockdown while they were staying at Madhuban Sri Aurobindo Ashram.

We bring here a comprehensive report on the complete execution and results of TREC-CPEHL. We also discuss the findings through TREC-CPEHL in detail along with gaps, emerging trends, peer educator experiences and propose the TREC education curriculum based on those analytical outcomes to bridge the gaps. We further provide a blueprint for the way-forward to develop consciously self-reliant educators and eventually a self-reliant community.

3.

Uttarakhand Physical Features: Terrain

Uttarakhand, a state in the northern part of India was separated from Uttar Pradesh on 9th November 2000 and became the 27th state of India. The geographical area of the state is 53483 sq. km where the terrain and topography are predominantly hilly with steep slopes. Uttarakhand comprises 02 regions, 13 districts, 78 Tehsils and 95 community development blocks. Uttarakhand is majorly mountainous and is situated on the southern part of Himalayan Mountain. Himalayan ranges are one of the youngest mountain systems of the world (40 million years in age as compared to peninsular mountains of 1500-2500 million years old) and hence these are environmentally fragile. Further, these are relatively more susceptible to natural disasters such as earthquakes and landslides[1].

Regions: Kumaon and Garhwal

Uttarakhand is primarily a rural state with 16,826 rural settlements, of which 12,699 or 81% have a population of less than 500. In most of the districts, more than 75-85% of rural settlements have a population of less than 500[2]. The state is divided into two major regions namely, Kumaon and Garhwal. The Survey was conducted in the Kumaon region of the Uttarakhand state.

Number of Districts

There are 13 districts in Uttarakhand namely - Chamoli, Dehradun, Haridwar, Pauri Garhwal, Tehri Garhwal, Rudraprayag and Uttarkashi, which come under the Garhwal region whereas Almora, Champawat, Bageshwar, Pittoragarh, Udham Singh Nagar and Nainital come under the Kumaon region of the state. Out of the 13 districts of the State, 3 are plain districts and the remaining 10 are hill districts[3].”[5].

Locale

There has been a significant increase in the population of the state from the census 2001 to 2011. Uttarakhand had a population of 1.01 crores during the 2011 census, in 2001 the state population figure was 84.89 Lakh. The population of Uttarakhand was 0.83% of India in 2001, which remained constant in the 2011 census as well. As per Uttarakhand census data, 82.89% of houses are owned while 12.39% where rented. A majority of people (66.74%) lived in a single family. Out of the total population of Uttarakhand, 30.23% people live in urban regions. The total figure of the population living in urban areas is 3,049,338 of which 1,618,731 are males and the remaining 1,430,607 are females. The urban population in the last 10 years has increased by 30.23%[4].

Religion

Hinduism is the majority religion in the state of Uttarakhand with 82.97% followers. Islam is the second most popular religion in the state of Uttarakhand with approximately 13.95% following it. Other religions followed by the state population are Sikhism, Buddhism, Christianity, Jainism[4].

Education

In terms of education, Uttarakhand stands at rank 9th out of the 28 states of India. With a literacy rate of 79.63%, Uttarakhand is amongst the front runners of achieving the SDG 4 (SDG stands for Sustainable Development Goal), i.e., Quality Education. The average literacy rate of Uttarakhand is higher than the national average (74.04%) as per 2011 census[2]. The state has facilities for primary education, along with Secondary and Higher Education. There are 147 institutions for higher education in the state including degree, post-degree colleges, and universities as per the report "Uttarakhand at a Glance (2017-2018)"[5].

Picturesque hills of Uttarakhand

Employment

The majority of people are dependent on agriculture for their livelihoods. Another sector that engages the state population is tourism. As the literacy rate of the state is higher than the national average, modern technology with IT intervention can be used to boost the local resources, which in essence will surge the livelihoods of the youth; and thus improve overall economic positioning of the state.

Agriculture

Only 14% of the land of the state is currently being used for agriculture purposes since most of the area of the state is under forests and wastelands. The soil of the Terai region (foothills of the mountainous area of Himalayas) is very fertile; while the hilly region is prone to soil erosion because of the presence of steep slopes[6]. Major crops grown in Uttarakhand state include rice, wheat, berley, maze, various pulses, oilseeds, sugarcane, onion, different vegetables, fruits and other crops[5].

Health

State has allopathic, ayurvedic, homeopathy and Unani hospitals for the residents. Uttarakhand has specially dedicated hospitals for the patients of Leprosy and Tuberculosis. Uttarakhand Health & Family Welfare Society was constituted in the year 2002 with the aim to serve as an umbrella society for all national programs and effect health sector reforms with the help of other external funding agencies[7]. However, the incidence of non-communicable diseases (NCDs) is an area that requires urgent attention[8].

Status of Women's Health

The overall sex ratio of women is 963 over 1000 men in Uttarakhand but the child sex ratio (under 6 years of age) is declining as it stands at 886 girl children over 1000 boys as per census 2011 data. This is a significant ratio, which indicates that special attention is required for female children. National Family Health Survey (NFHS-4 - Uttarakhand) states that around 81% of women make decisions about their own health. A large section of women, i.e. 42% of women suffer from anaemia in Uttarakhand. Other factors like spacing between two pregnancies are not that adequate as a significant percentage of (57%) give birth to children within three years of a previous pregnancy. Around 23% of births are still assisted by the Traditional Birth Attendants[9].

CHAPTER

4.

BRIEF DESCRIPTION OF THE VILLAGES
THAT WERE SURVEYED

Village	Block	Distance from Main Road	Number of Houses	Gram Pradhan/ Sarpanch
Jhutiya	Talla Ramgarh	1-2 Km	300	Suresh Singh Mer
Nathuakhan	Talla Ramgarh	1-2 Km	270	Ramesh Singh Bisht
Naikana	Talla Ramgarh	4 Km	210	Trilok Singh Bisht
Bohrakot	Talla Ramgarh	1 Km	350	Basant Lal Sah
Myora	Talla Ramgarh	-	71	Nandu Pradhan
Satkhol	Talla Ramgarh	500 m	463	Harish Nayal
Harinagar	Talla Ramgarh	1-2 Km	200	Prema Devi
Loshgyani	Talla Ramgarh	3-4 Km	180	Manohar Lal Arya

Table 2: Brief introduction to the villages surveyed

Typical village home

Village Satkhol

5.

CONCEPTUALIZING THE SURVEY

The Community Perspectives on Education, Health & Livelihoods (CPEHL) survey in Talla Ramgarh, Uttarakhand replicates the work of Dr. Anjali Capila on adolescent health and also explores women education, livelihoods and other practices. Her book 'Traditional Health Practices of Kumaoni Women: Continuity and Change'[10] challenges the medicalization of life in the modern context and advocates for a holistic knowledge of traditional health practices. The study pioneers the concept of the interconnectedness of culture, health and development in the Nainital district of the Kumaon Hills. The study results informed the creation of an Adolescent Health Centre "Yuvati Shikshan Kendra' under the aegis of CHIRAG (Central Himalayan Rural Action Group).

The concept of Traditional and Modern and not the usual stance of Tradition vs. Modernity or modernization is seminal in the book. The concept of healthy living is a holistic one encompassing physical, social, mental and religious aspects. Lifestyle and living are a continuum. Dr. Capila studied health practices of women in the Kumaon hills and the knowledge related to these practices. She observes "there is a need to integrate voices of women who are the repositories of traditional knowledge for sustainability of health care interventions. Studies such as this provide the space for rethinking health education and promotive health care strategy that respects culture and traditions and focuses on women's health while promoting self-reliance." These traditional health practices are decreasing in importance in the face of "quick fixes" for the fast paced urbanized lifestyle habits and for easy availability of modern medicines even in the villages.

As Dr. Capila mentions *"My approach towards advocating for the integration of holistic health practices involves not merely documenting the practices, but also pointing out those that are beneficial to women, harmonious with nature and the life cycle, and others that are unscientific and obsolete... The research documents not only health practices but also the dynamics of reaching far-flung areas through education and training. The methodology (listening to women talking about health practices) brings alive the skill of listening to the "hum" behind the words as women articulate the lived experience of knowledge constructs."*

The CPEHL explored living and occupation, education, social and health practices of families in eight villages of Talla Ramgarh as well as related issues such as access to treatment, facilities available and practices that have survived the passage of time and were practiced at the time of the survey. Dr. Capila's study and its outcome informed the CPEHL insofar as it became the central document that planned the way forward for the Teachers Resource Education Centre (TREC) initiated by Madhuban Sri Aurobindo Ashram – Delhi Branch. Thus, CPEHL was conceptualized as a precursor to developing a training curriculum for a group of young women peer educators at the Madhuban Sri Aurobindo Ashram. The objectives of the CPEHL were to:

- Understand the occupation, living and food habits of the community residing in these villages

- Assess the social and cultural practices of the community

- Ascertain what the community residing in these villages mean by 'good health'

- Assess the education level of women including married women; health status of men, women, adolescents and infants in the community and to find out about the relationship between levels of access to healthcare, health-seeking behaviour, information, knowledge of facilities and current health practices

- Identify community leaders and opinion-makers

- Document the views of the trainees on the process of the CPEHL

6.

STUDY DESIGN AND METHODOLOGY

CPEHL was designed as a mixed mode (quantitative and qualitative) applied **Participatory Action Research (PAR)** based face-to-face survey. The Study was conducted in the villages Satkhol, Bohrakot, Myora, Nathuakhan, Jhutiya, Naikana, Harinagar and Loshgyani of Ramgarh Block, Uttarakhand. The fieldwork for the study was done between April 2020 and Sept 2020.

Operational definition: Participatory action research (PAR) is an approach where research is carried out in communities that emphasizes participation, engagement and action of the research participants. In the process of direct action, the participants become more informed and empowered. In a participatory action study, research participants take active roles in formulating, designing and carrying out the research. They collaborate with professional researchers in understanding the research purpose, understand what is happening around, reflect upon and cogenerate findings with the later. PAR emphasizes on collective inquiry and investigation rooted in experience and societal/cultural/village level history.

PAR is a kind of community- as well as self- investigation that once reflected upon, trained and skilled, enables one to design the action plans for both self-development and to help develop the community from the grassroots to the higher societal order.

Questionnaire/ Tool Development

The questionnaire was divided into six sections. Each section consisted of a mix of open and close-ended questions. The six sections aimed to seek information on key themes that the study focused on, namely:

- Composition, occupation and socio-economic status of the family
- Social, cultural practices, food habits and lifestyle
- Access to services
- Health and hygiene
- Education of married women, reproductive and child health
- Available facilities in the villages

Sampling

Convenience sampling, a subset of non-probability sampling, was used in the study. Convenience sampling is a sampling technique where the sample is chosen by the researchers as per suitability and from convenient sources available. Foremost reason for deciding on this method was the COVID-19 pandemic. Although the villages during the initial days were not affected, still as per research ethics, the safety of participants, interviewers and all others involved in the interviewing process was paramount. And Madhuban Sri Aurobindo Ashram facilitators as well as all research facilitators unanimously thought that convenience sampling for the TREC-CPEHL participation action research would be best suited. Secondly, since the training for questionnaire administration was being done remotely and lockdown in the villages pre-empted easy movement, therefore this sampling technique was deemed most suitable for prevailing conditions.

Language of Questionnaires

The language of questionnaires was simple and direct so that they could be administered verbally and in conversational mode. All the questions were translated into Hindi language so that it became an easy and comprehensible tool for the trainees. The objective was also to reduce language barriers that the trainees might face while recording the information in the questionnaires.

Hand-holding Trainees (Peer Educators)

As the questionnaires were being conducted by the trainees, regular feedback sessions were organised for the hand-holding. Due to the physical constraints posed by the pandemic, telephonic meetings were scheduled with the trainees to provide feedback and suggestions. The feedback was given as per the assessment done (on the basis of quality check of questionnaires). If there were any gaps found, the trainees were asked to re-collect the missing data. The trainees were informed about the relevance of questions and ways of using verbal probes. They were given adequate guidelines regarding the administration of the questions and significance of asking sub-questions for quality data generation. They were encouraged to look for the rationale behind prevalent social and health practices in their respective village communities. The questionnaires helped them in enhancing their interpersonal communication skills.

Pretest of Questionnaires

Before the questionnaires were administered in the field for the collection of responses, a pretest of the questionnaires was conducted. The pretest helped in understanding the community context. A total of 19 questionnaires were administered for the pretesting round. The feedback received was incorporated into the new questionnaires. Since the study was
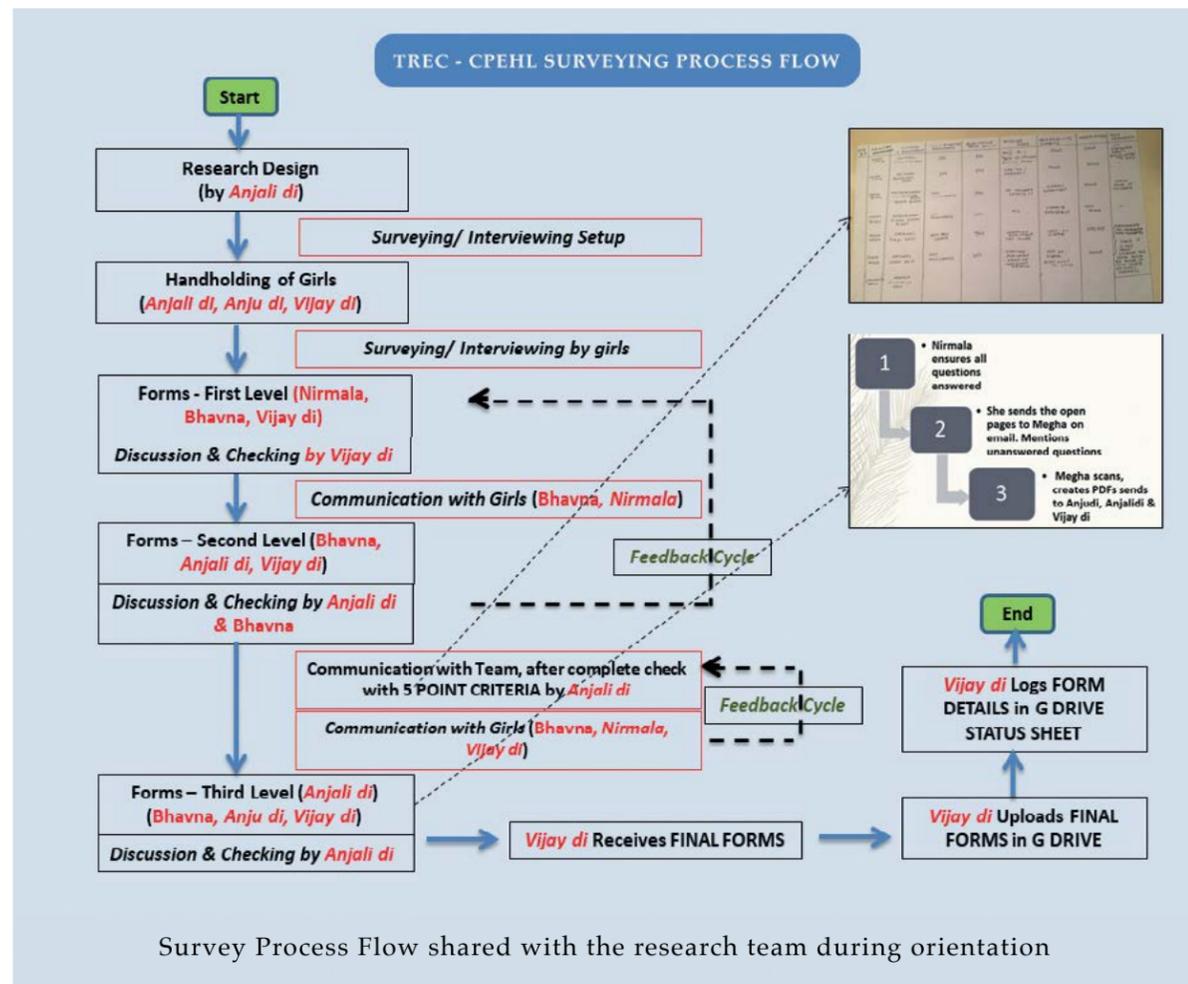

Pretest of TREC-CPEHL questionnaires

conducted during the COVID-19 pandemic, questions regarding implications of lockdown were also added to understand the difficulties faced by the communities of the Kumaon region of Uttarakhand.

Pretest of TREC-CPEHL questionnaires

51

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Survey Process Flow shared with the research team during orientation

Surveying / Fieldwork

When COVID-19 became an epidemic and the Ashram had to close, then the peer educators were trained to administer the survey in the households most proximal to their own homes and gradually moved towards other households.

Also since the study being a student-led exercise in the pandemic time, the trainees were instructed to go for convenience rather than taking many risks. Thus, in a few instances, the interviews were conducted by the trainees in their own household. This was done for the ease of participation in administration of the questionnaire.

Peer educators interviewing respondents during TREC-CPEHL survey

Peer educators interviewing respondents during TREC-CPEHL survey

Peer educators interviewing respondents during TREC-CPEHL survey

- a. Menstruating मासिक धर्म
- b. Pregnant गर्भवती

6. What are some of the *health practices* that are followed when women are? जब महिलाएं गर्भवती होती हैं, तो स्वास्थ्य संबंधी कुछ प्रथाएं क्या हैं?

  - a. Menstruating - मासिक धर्म
  - b. Pregnant - गर्भवती

7. Can you explain the reason for some of these practices? क्या आप इनमें से कुछ प्रथाओं का कारण बता सकते हैं?

8. Can you list some of the myths and misconceptions that are practiced? क्या आप कुछ ऐसे मिथकों और गलत धारणाओं को सूचीबद्ध कर सकते हैं जिनका अभ्यास किया जाता है?
  - a. When a woman is menstruating?
  - b. When a woman is pregnant

9. Can you explain the reasons behind some of these practices? क्या आप इनमें से कुछ प्रथाओं के पीछे के कारण बता सकते हैं?

10. Of the customs that you have described, have any changed in the last 5 years or so? Please describe. आपके द्वारा बताए गए रीति-रिवाजों में पिछले 5 सालों में कोई बदलाव आया है या नहीं? कृपया विस्तार से बताएं?

11. Please tell us what you mean by "good health". कृपया हमें बताएं कि "अच्छे स्वास्थ्य" से आपका क्या मतलब है।

E.g. "I am healthy because मैं स्वस्थ हूं क्योंकि मैं

Sample filled in TREC-CPEHL survey questionnaire

3. What are some special food items that are made: कुछ विशेष खाद्य पदार्थ कौन से हैं
  - a. During festivals?
  - b. During marriages?
  - c. What are some foods that are eaten when people are fasting? कुछ ऐसे खाद्य पदार्थ हैं जो लोगों द्वारा उपवास किए जाने पर खाए जाते हैं?

4. Are there any foods that are not eaten: क्या कोई खाद्य पदार्थ है जो खाया नहीं जाता है:
  - a When a woman is menstruating? जब एक महिला माहवारी होती है?
  - b When a woman is pregnant/lactating? जब एक महिला गर्भवती / स्तनपान कर रही है?

5. What are some of the *social practices* that are followed when women are? कुछ ऐसी सामाजिक प्रथाएं हैं जिनका पालन महिलाएं करती हैं?
  - a. Menstruating मासिक धर्म
  - b. Pregnant

6. What are some of the *health practices* that are followed when women are? जब महिलाएं होती हैं, तो स्वास्थ्य संबंधी कुछ प्रथाएं क्या हैं?
  - a. Menstruating
  - b. Pregnant

7. Can you explain the reason for some of these practices? क्या आप इनमें से कुछ प्रथाओं का कारण बता सकते हैं?

8. Can you list some of the myths and misconceptions that are practiced? क्या आप कुछ ऐसे मिथकों और गलत धारणाओं को सूचीबद्ध कर सकते हैं जिनका अभ्यास किया जाता है?
  - a. When a woman is menstruating?
  - b. When a woman is pregnant

9. Can you explain the reasons behind some of these practices? क्या आप इनमें से कुछ प्रथाओं के पीछे के कारण बता सकते हैं?

Sample filled in TREC-CPEHL survey questionnaire

The respondents comfortably answered the survey questions in Hindi and the interviewers neatly captured those responses as per the training and instructions of survey leads and supervisors.

A total of 109 interviews were conducted across eight villages in the study that constituted the pretest and then the subsequent questionnaire was adapted following the review; out of which 94 interviews were accepted for the data analysis. Both household and village level data were recorded.

Triage of Questionnaires

The questionnaire was checked at three levels for maintaining the reliability of the data.

● At Level 1, the questionnaires once administered in the field were scanned by the trainees and shared with the data manager. The data manager was responsible for reviewing the data for any missing gaps (absence of data, readability of handwriting, page numbers, pages of questionnaires in expected order), following which the questionnaires were sent to Level 2.

A sample five point criteria for quality checking of filled in questionnaires

● At Level 2, the questionnaires were checked on a 5 point criteria (readability, correct order of pages, full pages in the scanned questionnaires, all questions answered or not, and whether there were qualitative data details as expected or not). Gaps, if any, were recorded in an oversight sheet maintained by the Level 2 data manager and reported further.

● At Level 3, the gaps were assessed. Based on the nature of the gap in the data, they were discussed with the field trainees. With guidance and hand-holding, trainees were directed to record data accordingly. Once completed, the questionnaires were again sent to Level 1 for quality assessment of the revised questionnaire.

Overall, CPEHL is a community based PAR that aims at reconnecting education with community, social, health and village development; the finding of which is proposed to be used for developing the training model for peer educators participating in TREC for the said purpose.

7.

CODING AND DATA ANALYSIS

Coding

To interpret the responses received from the community members across 8 different villages, a systematic process of coding the questionnaires was adopted. Coders were identified to assist in the process of recording the data captured. Coders included Master degree interns experienced in social research, one peer educator of TREC and an Ashram intern. There were other occasional volunteers.

The coders were oriented about the study and the objectives behind it. They were also informed of their critical role in handling and managing the raw data that was being received from the team. This was followed by multiple training sessions on the coding process for the coders, conducted by the data analytics lead for CPEHL - Ruma Chakravarty to control the coder variance. A pre-set coding format was designed for ease of navigation. Coders received detailed information about the coding design, the step-by-step procedure and the rules to be followed while entering the data on the coding sheet.

Coding/ Data Capture Process Flow shared with the research team during orientation
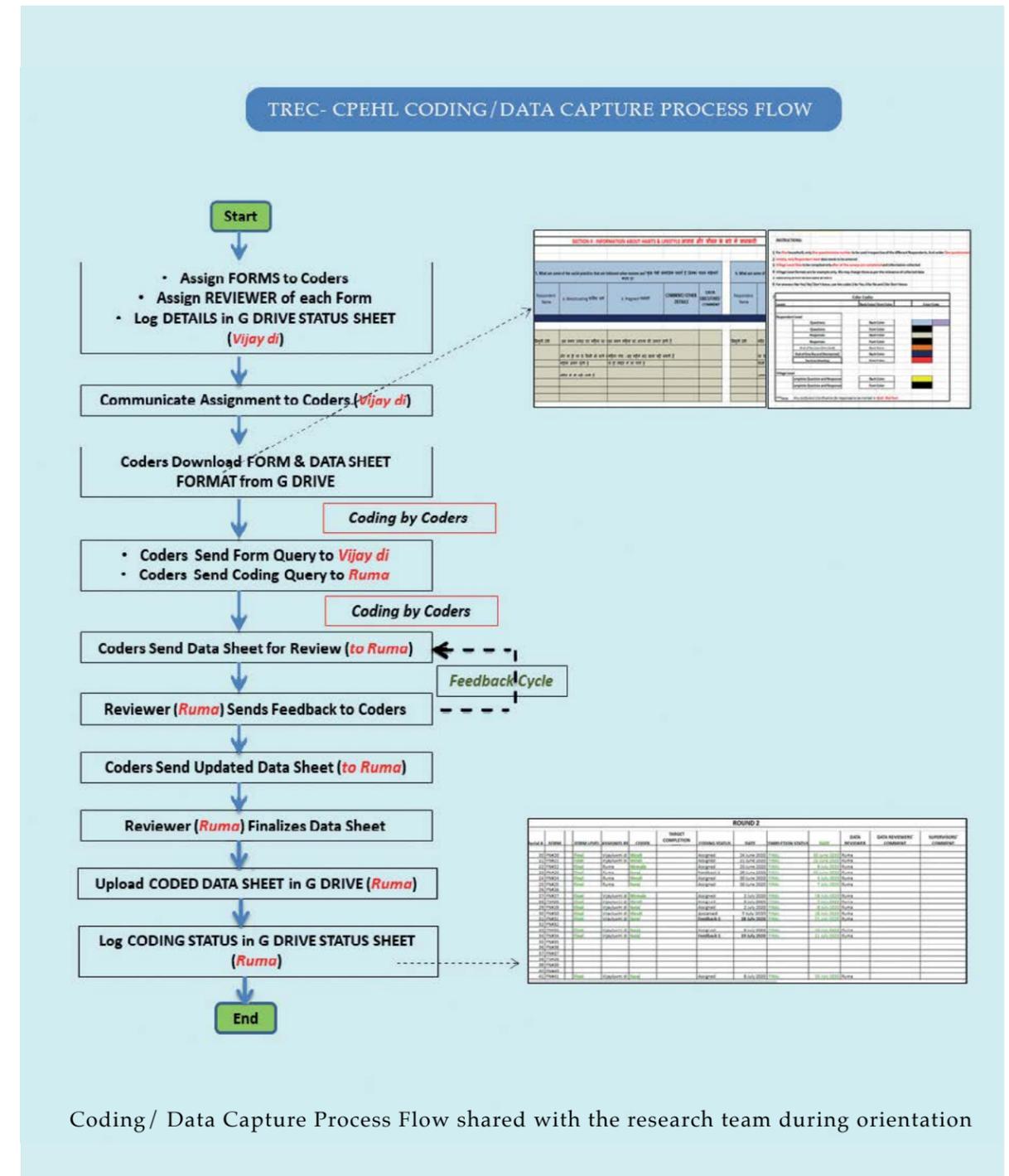
Coding procedure was done through a well-defined coding process. It was feasible with the well laid out coding plan, which all the team members followed.
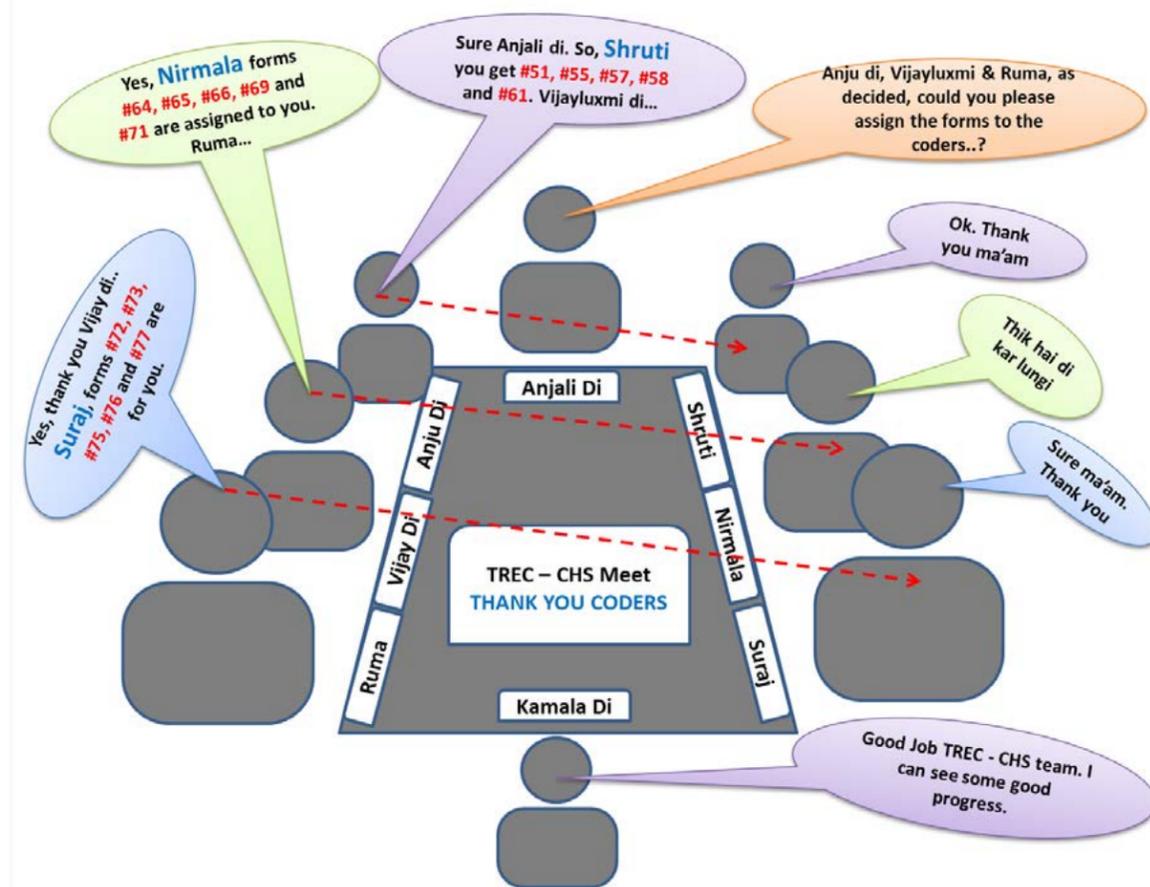
Representative process of coding work assignment for TREC-CPEHL

This was an amazing feat for the team of trainers, supervisors, facilitators and coders during a time when all could meet only virtually and then parted to do the individual tasks.
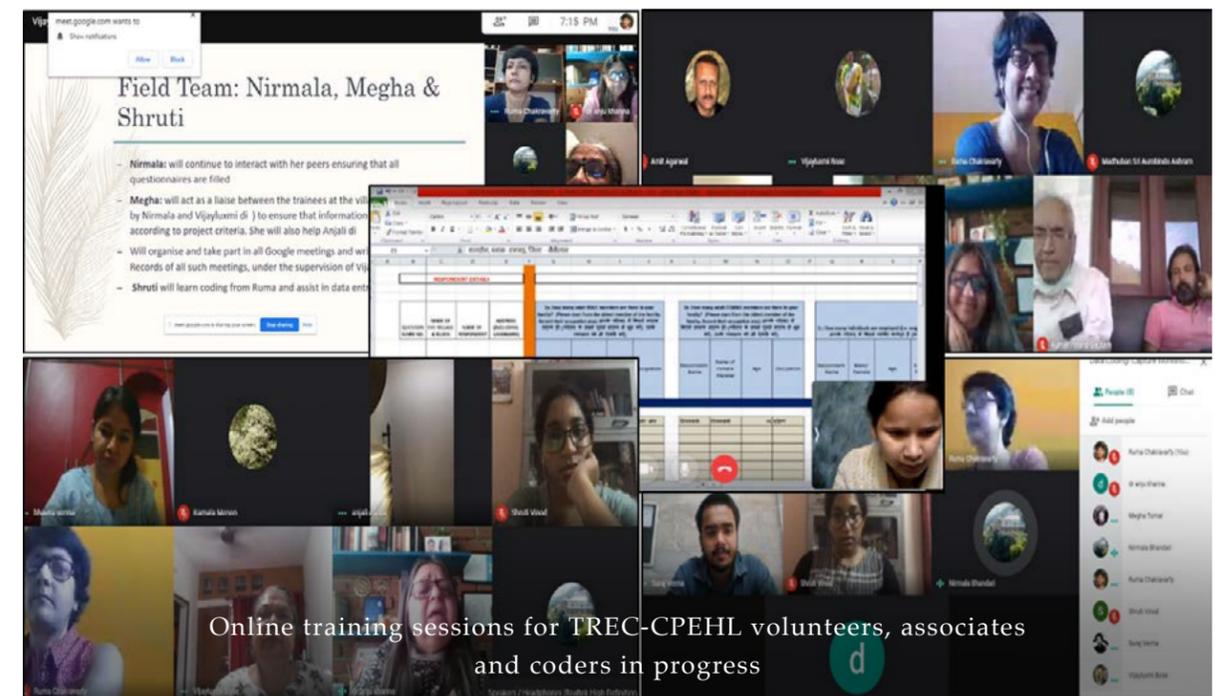
Remote/ Online Training

When the whole world was almost halted in every functional domain since March 2020 due to Covid-19 pandemic, the CPEHL team with facilitators from Madhuban Sri Aurobindo Ashram was brimming with ideas as to how this time could be productively utilized. This was the scheduled time when CPEHL faculties were supposed to be holding training workshops,

working with the peer educators and volunteers on the fields to equip them with adequate information about Participatory Action Research, surveying techniques, questionnaire basics, interviewing techniques in village setups, the sensitivities and best practices while conducting interviews, to collect good data and skills to compile the data in coded format to make those ready for analysis.

The team was determined that the work would not stop. And then, the technology and digital platforms came in handy. The complete training for surveying and coding of CPEHL was conducted through telephonic conversation and online platforms – for the peer educators as well as for other volunteers.

Online training sessions for TREC-CPEHL volunteers, associates and coders in progress

Training of the 11 interviewers had to be conducted telephonically because many of them did not have computers, laptops or a strong Internet connectivity. Thus for the coding and data capture digitally, only one peer educator (along with other volunteers and associates) could be trained as she had access to the required infrastructure. Thus, training the peer educators who were absolutely unaware about what surveying meant were trained and facilitated; then with some startup issues the whole team adjusted, learnt and completed fielding of all 109 survey forms from which 94 were accepted. That was also feasible since the

villages remained unaffected during the initial months of the pandemic. With Sri Aurobindo's and The Mother's blessings everything fell into place gradually.

Data Analysis

We used IBM Statistical Product and Service Solutions (IBM SPSS) software, MS Excel, Zygomatic's word cloud to analyze the data from the mixed mode participatory action research TREC-CPEHL. Analysis was conducted on demographics, respondent/ household level and village level data to gain holistic perspicacity about the occupation, lifestyle, women education, social-cultural-health & hygiene practices, food habits and village facilities etc. Analysis of both quantifiable and qualitative data captured from the respondents through a detailed questionnaire was carried out. Thematic analysis on the qualitative data offered an interpretive depiction about the various practices that correspond to the survey questions. Quantitative analysis offered an abridged portrayal of the meaning of data that enables optimal directions for the actions to be taken. It was a deductive process.

CPEHL qualitative data analytics helped in fuller understanding of the practices of the village community while quantitative analytics with facts and statistics helped in testing the assumptions developed from qualitative analysis. Indeed, a complementary mixed research design mode was thus employed towards obtaining more realistic narration. Further, insights on correlation between quantifiable parameters/ variables with qualitative inputs would aid in informed, measurable, relevant and actionable TREC curriculum development.

CHAPTER

8.

STUDY RESULTS

Demographic Data

All Villages	Sample Per Village	Adult Male Per Village	Adult Female Per Village	Boys <=17 Years Per Village	Girls <=17 Years Per Village
झुतिया (Jhutiya)	18	27	31	20	17
नथुआखान (Nathuakhan)	8	16	16	6	6
नैकाना (Naikana)	22	53	42	11	13
बोहराकोट (Bohrakot)	10	26	17	5	4
म्योरा (Myora)	13	27	22	16	7
सतखोल (Satkhol)	9	14	14	8	10
हरिनगर (Harinagar)	2	7	6	0	0
लोश्ज्ञानी (Loshgyani)	12	34	22	13	5
Total	**94**	**204**	**170**	**79**	**62**

Figure 1: Village - wise demographic data

Amongst the 94 households surveyed, average household members remain consistent (5-6) across all villages. 36 out of the 94 families are nuclear while the remaining 58 households are joint families as reported. There are 10 girls and 13 boys between the ages 0 and 5. No disabled child was reported. Interestingly, in 8 villages, the percentage of male and female population - whether adult or below 18 remains equivalent at about 55% (male) and 45% (female).

In this portion of the overall narrative building for the action research, we try to find a parallel between the changed status of women and village living in general in the past five years from the perspective of education, employment, social and health practices. Emphasis is given on the analogies between what the women recount (as their thoughts or aspirations) and the quantifiable measures through various data pointers.

Types of Houses
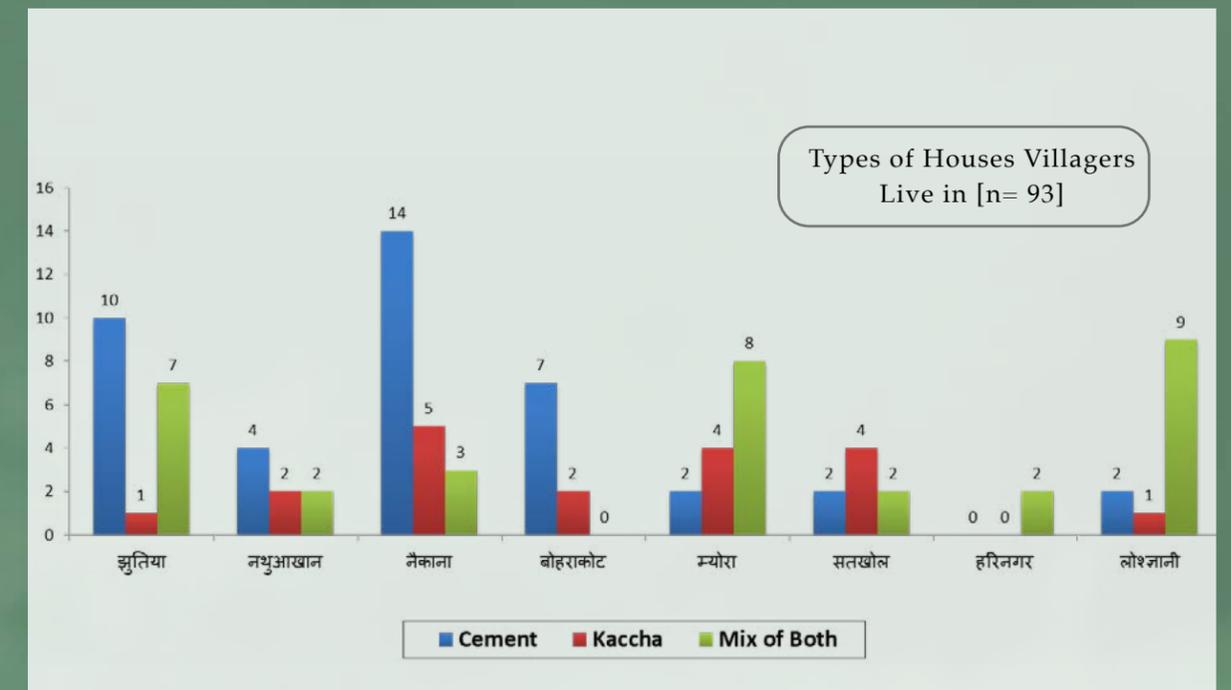
Figure 2: Village - wise details of types of houses they live in

Among 94 samples, 2 respondents - 1 each from Satkhol and Bohrakot did not answer this question while 1 from Myora reported living in both types of houses (kaccha & mix). From the data, we see that Naikana has the most number of cement houses followed by Jhutiya. Jhutiya (& Loshgyani) also have the least number of "kaccha" houses while Loshgyani, Myora & Jhutiya have the most number of mixed-built houses. No temporary houses reported from any of the 8 villages.

Some people (Jhutiya, Nathuakhan) feel that due to urbanization ("शहरीकरण") and with availability of modern amenities, people have started building cement houses:

समय के साथ साथ शहरीकरण व नए साधनों का प्रयोग बड़ता जा रहा है, पक्के सीमेंट के मकान बनते जा रहे हैं

Deepa Verma from Jhutiya mentioned that growing urbanization is casting an impact on the joint families, their traditional values are declining and the culture is at threat:

"पहले समय में लोग संयुक्त परिवार में रहते थे परन्तु धीरे धीरे पक्के व सीमेंट के मकान ज्यादा बन रहे हैं, शहरीकरण का विकास होता जा रहा है; जो पहले के घर की बनावट संस्कृति न के बराबर रह गयी है"

Keshar Singh Bist from Nathuakhan observes that the cement houses are warm while the old houses used to be cooler. Also, they mention that today's houses are just for showing off:

"पहले तो कच्चा मकान हुआ करता था लेकिन अब सीमेंट का बना दिया है, अब के मकानों में ज्यादा गर्मी होती है; पहले के मकानों में ठंडा भी होता है; अब मकान केवल शो के लिए बनाते है"

The coexistence of kaccha and pakka houses
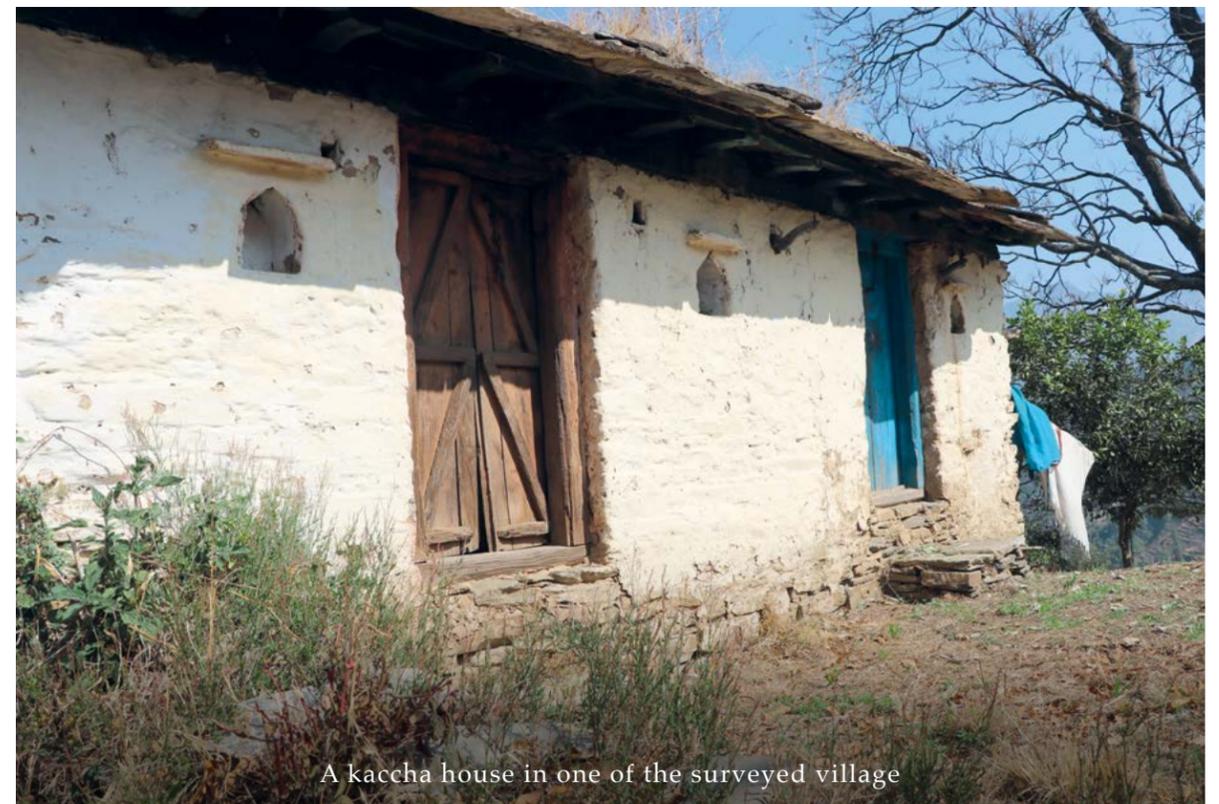
A kaccha house in one of the surveyed village

An example of *shaharikaran* ("urbanization") in one of these villages

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The same is narrated by a few other respondents from Loshgyani too when they say that their old houses used to be small and built with mud, which were naturally cool. Respondents also report that the building of the old houses is better and structurally stronger than the newly built counterparts:

"उस समय पत्थरों से बनाये गए घर भी काफी मजबूत होते थे"

At the same time, few respondents are happy to move into modernized houses with better facilities.

A village house with modern facilities (such as washing machine)

Interestingly, most of the villagers who live in cement or mixed-built houses report that they have converted their mud houses only recently ("हाल ही में"). As per one of the interviewers from Loshgyani:

"श्री शांति प्रसाद जी का घर सीमेंट का हाल ही में बना है"

Assets Owned – All Villages

Amongst 94 households across 8 villages, 81 use LPG gas for cooking and 78 use pressure cookers to cook their food.

Assets Owned - All Villages

स्कूटी, 11
बाइक, 23
एल पी जी गैस, 81
प्रेशर कुकर, 78
कार/ गाड़ी, 5

Figure 3: Overall assets owned – all villages
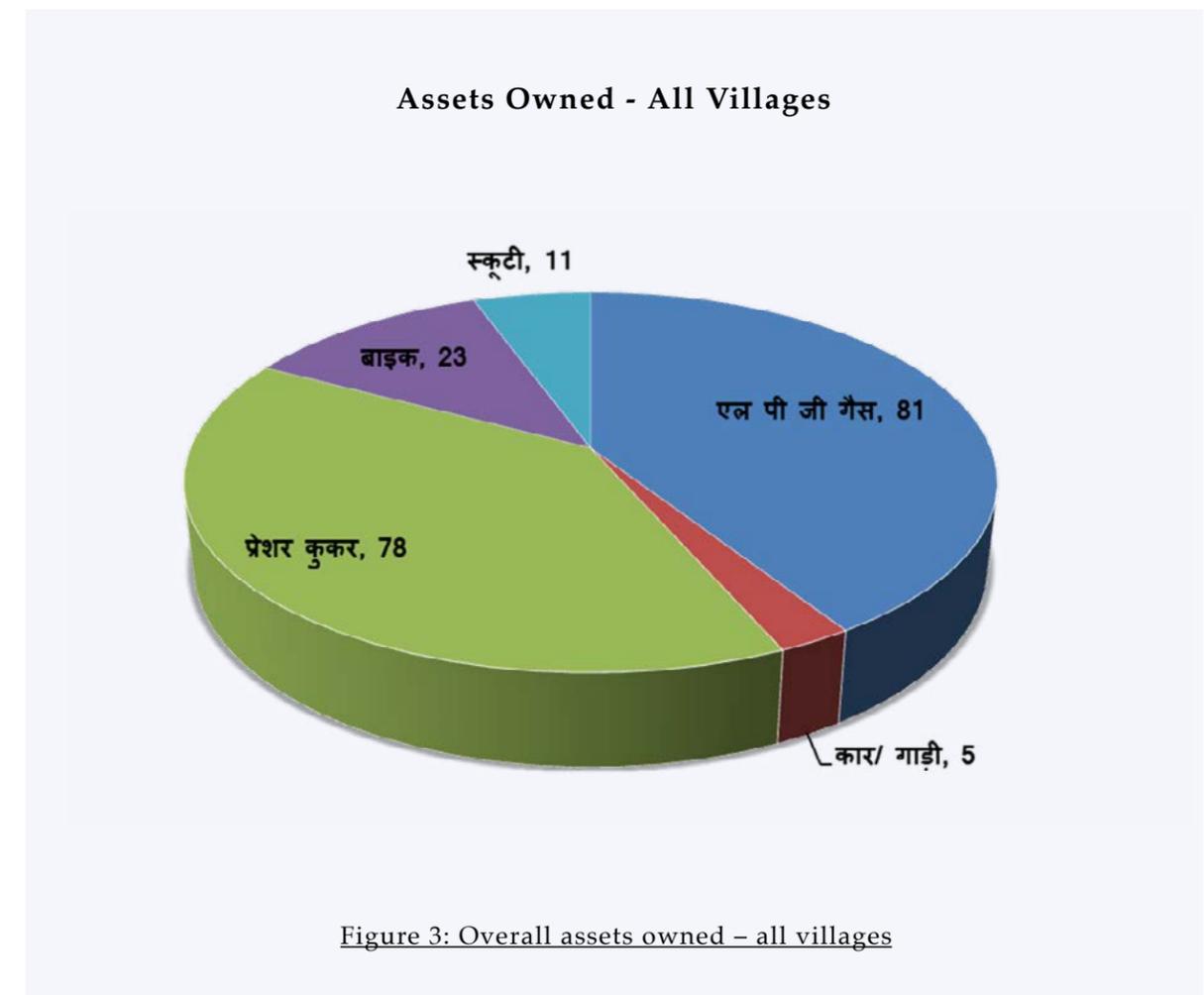
Among 5 cars and private vehicles, 2 cars and 1 private vehicle is from Bohrakot households (all joint families), one is from Jhutiya (large joint family where men and women are employed or having some occupation) and 1 from a Naikana household where father is retired government employee and the son is also a government employee.

A very traditional kitchen using LPG Gas is a common sight in the villages

Water Facilities – All Villages

All Villages	मटका (earthen pot)	उबला पानी (boiled)	नल का पानी (tap)	कुआँ या चश्मा (well)	खरीदा हुआ पानी (purchased)	नौला/स्रोत का पानी (stream)
झुतिया (Jhutiya)	0	13	9	0	0	5
नथुआखान (Nathuakhan)	0	7	0	1	0	0
नैकाना (Naikana)	0	1	11	10	0	0
बोहराकोट (Bohrakot)	2	3	5	0	0	0
म्योरा (Myora)	0	4	1	2	7	11
सतखोल (Satkhol)	2	6	2	1	3	5
हरिनगर (Harinagar)	2	1	0	2	0	0
लोशग्यानी (Loshgyani)	0	0	2	11	0	0
Total	**6**	**35**	**30**	**27**	**10**	**21**

Figure 4: Village - wise water facilities

Water facilities across villages remain diverse; while Jhutiya uses boiled water mostly, well-water is the prime source for Naikana and Loshgyani. Myora utilizes other water sources (naula/ srot meaning spring/ stream) mainly along with bought tanker water. It seems that they depend on naula/ srot during the rainy season and buy water during summers or in other seasons when rain water is scarce. Boiled water and water from 'naula' is predominantly used for drinking as per many respondents. They also use water from 'srot', another source of water on the hills. Bought tanker water is used for washing cloths and for other work:

"उबला पानी और नौले का पानी पीने के लिए"; "कपड़े धोने के लिए और अन्य काम के लिए नल का पानी और खरीदा हुआ पानी"

Buying water as a concept did not exist in the earlier study by Capila A.[10] in this region. A change in lifestyle pattern and women's work-roles is seen here.

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However, it is heartening to note that the use of spring/ stream water still continues. This demonstrates the need to preserve natural water sources within the ecosystem in the hills.

Few respondents in Jhutiya and Satkhol also mentioned using water from hand pumps for varied purposes – domestic animals, washing clothes or for cleaning utensils. For example, Sarla Nayal from Satkhol reports:

"गाय, जानवरों और कपड़े धोने बर्तन धोने के लिए हैंडपंप से लाते है"

Hand pump in one of the village localities

In Myora, few respondents mention getting water from others' houses (*"कभी कभी किसी दूसरे के घर से भी लाते है"*). Some households (in Loshgyani, Nathuakhan and Satkhol) have no water facilities at home and have to get that from far away sources. Shanti Prasad from Loshgyani reports:

"परिवार को पानी की असुविधा है तथा २ किलोमीटर दूर से पानी लाना पड़ता है"

Only one respondent from Satkhol (Divyanjali) mentions using rain water for plants *"बरसात के पानी जो हम पेड़ पौधों व सब्जियोंमें सिंचाई करते है"*.

Water scarcity in villages - even for regular chores

Overall Occupation – All Villages

The TREC-CPEHL 2020 survey revealed the following 14 areas where people in the surveyed households from 8 villages are working (employed/ in some occupation). We have reported each of those for further analysis as these forms the foundation for livelihood upliftment in the villages.

Villages	कृषि (farming)	नौकरी, जॉब, प्राइवेट जॉब, फैक्ट्री जॉब (private job)	सरकारी नौकरी (government job)	दुकान, दुकानदार (shop owner)	पंडितगिरी (hindu priest)	मजदूरि (labour work)	आंगनवाड़ी टीचर (Anganwadi teacher)	ड्राइविंग (driving)	सिलाई की दुकान, सिलाई, सिलाई टीचर (tailoring)	कन्स्ट्रक्शन, प्रॉपर्टी डीलर (property dealing)	बिज्नेस (business)	राजमिस्त्री, इलेक्ट्रीशियन (mason, electrician)	शिक्षिका, प्राइवेट टीचर (teacher)	आशा (ASHA worker)
झुतिया (Jhutiya)	21	6	0	2	0	0	0	1	2	1	1	0	0	0
नथुआखान (Nathuakhan)	7	11	0	0	0	0	0	0	0	0	0	0	0	0
नेकाना (Naikana)	10	12	1	7	1	4	2	5	1	1	4	0	3	1
बोहराकोट (Bohrakot)	20	3	0	0	0	0	0	0	0	0	0	0	0	0
म्योरा (Myora)	16	3	0	0	0	8	0	0	0	0	0	0	0	0
सतखोल (Satkhol)	3	8	0	2	2	0	0	1	0	0	0	0	0	0
हारिनगर (Harinagar)	7	0	0	0	0	0	0	0	0	0	0	0	0	0
लोश्ज़ानी (Loshgyani)	12	10	1	2	0	2	0	0	0	0	0	2	0	0
Total	96	53	2	13	3	14	2	7	3	2	5	2	3	1

Figure 5: Village - wise occupation details

Villages	Total Adult Members Per Village	Total Employed (in some occupation) Per Village
झुतिया (Jhutiya)	58	34
नथुआखान (Nathuakhan)	32	18
नेकाना (Naikana)	95	52
बोहराकोट (Bohrakot)	43	23
म्योरा (Myora)	49	27
सतखोल (Satkhol)	28	16
हारिनगर (Harinagar)	13	7
लोश्ज़ानी (Loshgyani)	56	29
Total	374	206
Overall %employed/ %in some occupation = 55%		

Figure 6: Village - wise occupation details (overall percentage)

Overall occupation rate (that is %employed or %in some occupation) for the households surveyed in the 8 villages is reported to be 55%. This is for men and women taken together. The report discusses women's occupations and employment in later sections.
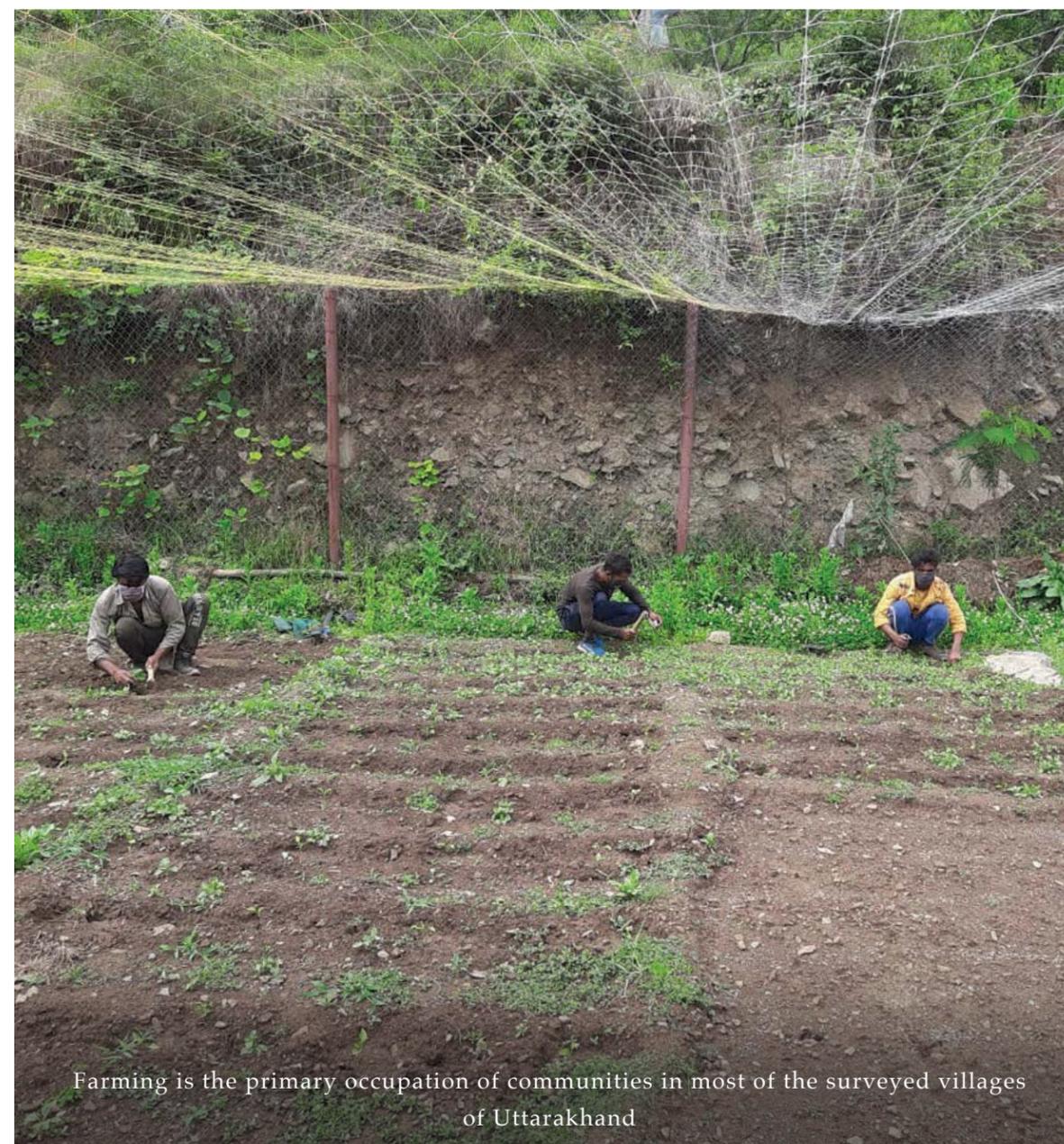
Farming is the primary occupation of communities in most of the surveyed villages of Uttarakhand

Most of the villages report farming as prime occupation except Satkhol and Nathuakhan where private jobs take precedence over farming. Naikana too reports higher private jobs than farming, however farming remains a strong secondary occupation in that village after jobs in private companies. There are 4 government job holders in all the villages combined including 2 Anganwadi teachers. In addition, there is one Accredited Social Health Activist (ASHA) volunteer reported among all villages.

Fruits	Vegetables		Pulses
अंगूर	आलू	बीन्स	भट्ट
अखरोट	ककड़ी	बैंगन	मक्का
आड़ू	सेम	भिन्डी	मटर
ख़ुमानि नाशपती	कद्दू	मटर	राजमा
नाशपती	करेले	मिर्च	सोयाबीन
पिनालू	खीरा	मूली	गहत
प्लम	गाजर	मेथी	गेंहू
बेर	गोबी	लहसन	चना
माल्टा	पत्ता गोभी	लाई	जो
सेब	टमाटर	लोकी	मडुआ
फल का बगीचा	धनिया	शिमला मिर्च	मसूर
	पालक	हल्दी	मूंग
	प्याज		रवि की फसल

Table 3: Fruits, vegetables and pulses grown by the respondents in villages

Many respondents across 8 villages mentioned that they have their own land that measures from 5 Nali to 60 Nali (Nali is the land measuring unit; predominantly used in Uttarakhand. 1 Nali = 2160 square feet). They grow fruits, vegetables and pulses in their land, which they sell in nearby markets and outside (Haldwani, Delhi and other places). They also consume the produce at home:

"अपने भूमि पर सब्जियां उगाते हैं, और फलो के पेड़ लगाये हैं" or *"परिवार अपनी जमीन में दाल व अनाज उगाते है"*

Villagers produce fruits, vegetables and pulses on their land

From the data on occupation, it is also evident that the majority of the villages depend heavily on farming and the produce. As recounted by one of the interviewers from Jhutiya,

"यह अपने पूरी खेती स्वयं से करते हैं और इनका जीवन पूरी तरह से कृषि पर ही निर्भर है"

Local produce: Plum

Another respondent Bhuban Sah from Jhutiya reports:

"अपनी भूमि पर हरी सब्ज़िया व फल उगाते हैं"; "परिवार अपनी जमीन में दाल व अनाज उगाते हैं"

Fruits, vegetables and pulses are produced in the villages

Local produce: Peach

Local produce: Pomegranate

Some respondent who are reliant of farming reported earning well from the produce whether fruits, vegetables or pulses:

"परिवार के पास बगीचा भी है जिससे अच्छी आमदनी होती है"

Or say *"फलों की उपज अच्छी होती है जिससे अच्छी आमदनी होती है"*

While some of the villagers who have smaller agricultural land report that their earning is less from whatever they can produce:

"बस फल के पेड़ है उनको हम मंडी में भेजते है, जिससे थोडा आमदनी प्राप्त होता है" **or say**

"कुछ फल के वृक्ष है लेकिन उनसे आमदनी अधिक नहीं होती"

Cloud representation of fruits and vegetables from actual data [cloud courtesy Zygomatic online publisher[111]]

A dried up 'Naula' with dumped plastic bottles (by locals and/ or tourists)

There is a water crisis in the hills as reported by respondents from different villages and that impacts farming. Some even say they have to walk more than a kilometer or two to fetch water:

"पानी की समस्या होने से यहाँ कुछ नहीं होता है"

Few respondents also observe since they have to grow fruits and vegetables for subsistence, they are not able to produce traditional crops like mandua and wheat:

"खेतो में पेड़ होने की वजह से गेहू, मंडुआ, जो जैसे फसले नही उगा पा रहे है"

This farming practice wherein traditional grains and millets (like mandua), which were rich in calcium, iron and micronutrients are not grown much; this may be responsible for the non-communicable diseases like diabetes, which are emerging in the surveyed population.

Domestic Animals, Milk Production and Distribution

Majority of the households own dairy animals (cows and buffaloes). Other animals are goats, poultry - chickens, a horse, pigeons, pets like dogs, cats, parrots etc.

Most of the households reported that they collect milk from the cows and buffaloes. Many of them mentioned that they consume milk and do not sell it:

"परिवार द्वारा दूध बाहार नही भेजा जाता"; "घर के ही उपयोग में लाते है" or *"दूध घर से बाहर नहीं भेजा जाता, घर पर ही दूध का सेवन किया जाता है"*

Respondents also mention that the milk they collect at home is enough for

Cows and buffaloes are part of most of the households in the hills

consumption and they do not need to buy from the market. Further, they use the cow dung as plant fertilizer:

"बाजार से दूध खरीदने की जरूरत नहीं पड़ती तथा तथा गाय के मल मूत्र से खेती के लिए खाद्य बन जाती है"

Some villagers sell milk in dairies:

"हम दूध डेयरी में भेजते है"

Chandra Devi from Satkhol observes that the money they get from selling milk is used for buying fodder for the cow(s):

"४ या ५ लीटर तक दूध देती है जिसको हम बेचते हैं, उससे हम गाय के लिए भूसा खरीदते हैं"
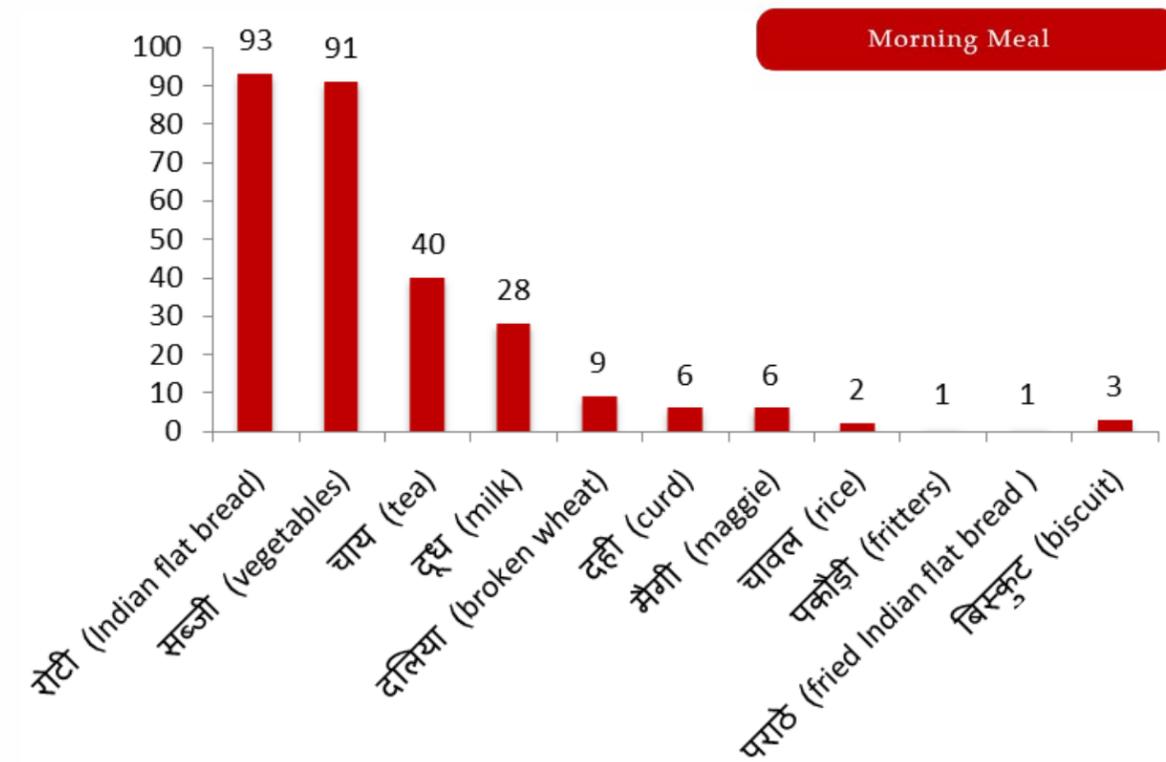
Mother's Diet

Morning Meal

Figure 7: Overall morning meal habits – all villages

As is evident from the data, roti (handmade Indian bread) and sabzi (vegetables) dominate the morning meal of the village people with tea and milk.

And many villagers mention that they use home grown vegetables:

"गेहू का आटा व सब्ज़ी घर की उगाई हुई.... ज्यादातर घर में उगाई हुई ताजा सब्जियां खाते हैं"
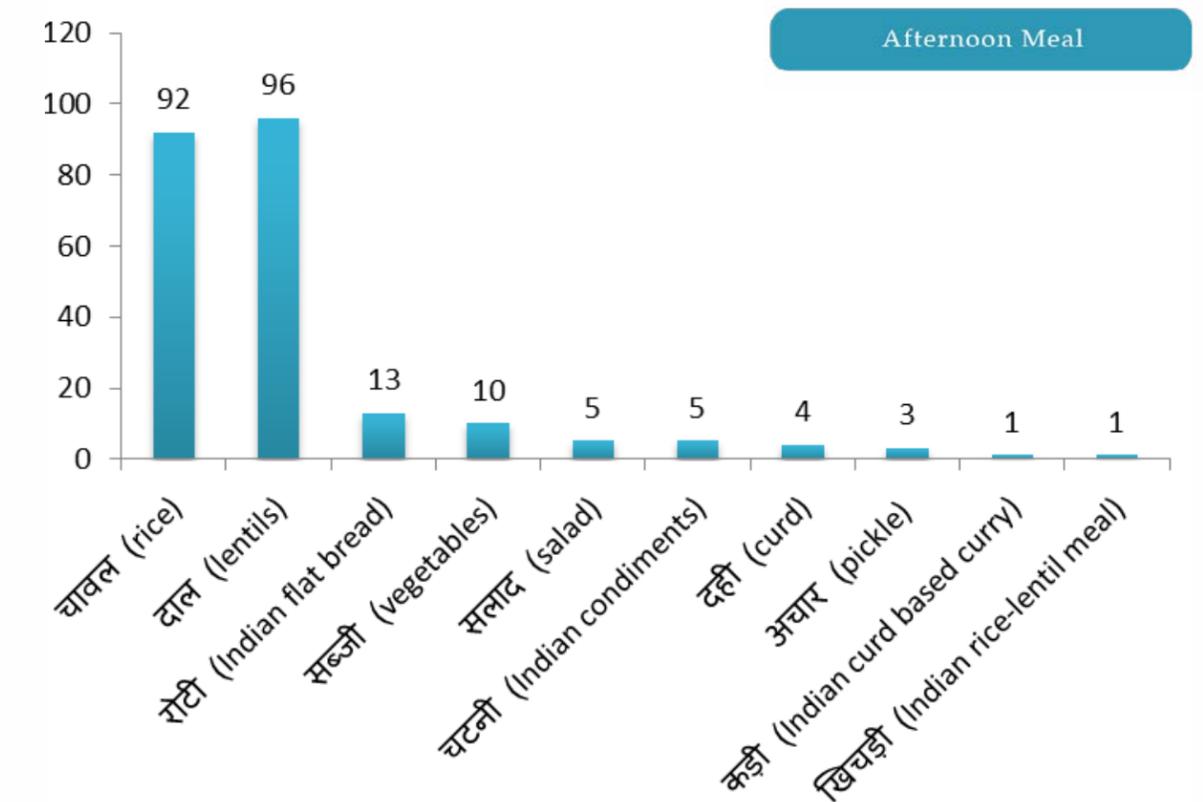
Afternoon Meal

Figure 8: Overall afternoon meal habits – all villages

Afternoon meal for people in the villages primarily comprises chawal (rice) and lentil (dal), which they report to be some home grown while some are store bought.

"दाल (घर में भी उगाई हुई जैसे- सिमी, राजमा, मटर, भट्ट, गौहत, सोयाबीन व बाजार की दाल)"

"दाल भिन्न भिन्न प्रकार की जिसमें कुछ घर में उगाई हुई व कुछ बाजार की"

A typical lunch served to the survey team in the village

Mid-Afternoon Meal

As mid-afternoon snacks, people have biscuits, fritters (पकोड़ी), chips, salted snacks (नमकीन) and samosa with tea.

"कभी कभी पकवान" or **"कभी कभी बिस्किट्स"**

Some people also consume milk.

Night meal is mainly rice and vegetables with curd ('दही'). Although curd is generally a day food, village people reported having it with night meal predominantly. Some people also like to have milk at night. They mostly consume home grown fresh vegetables:

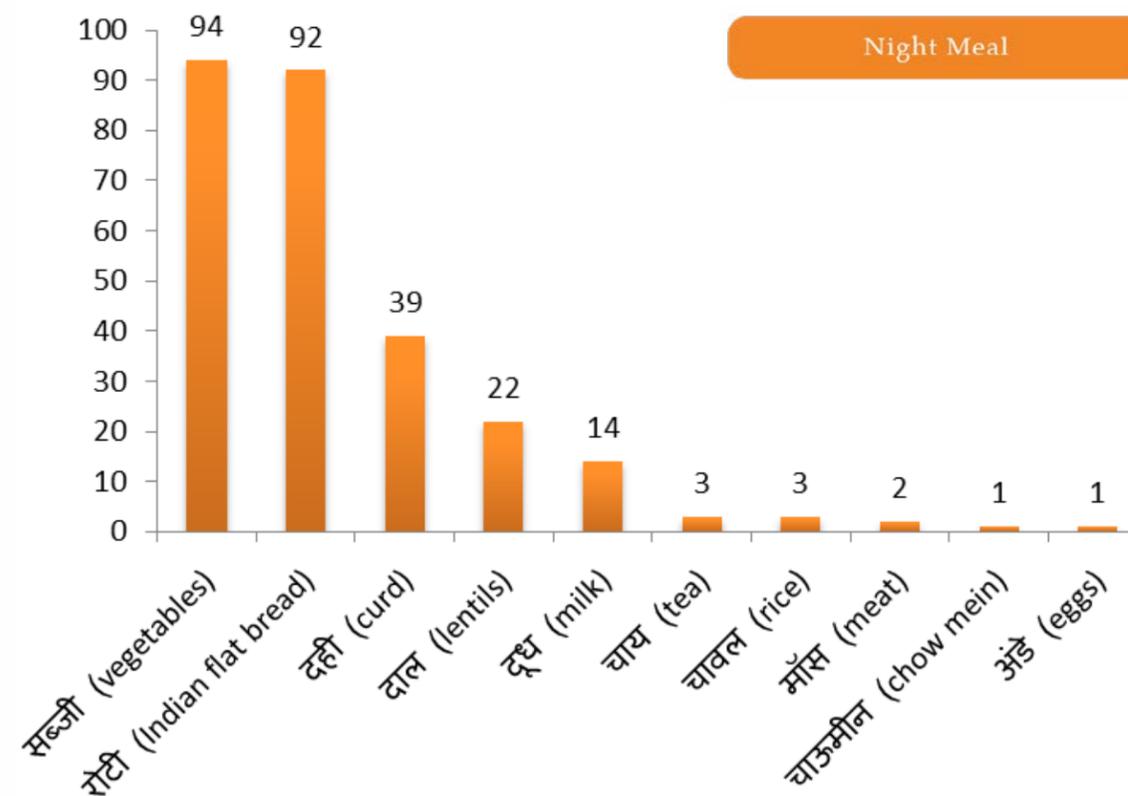**"घर की उगाई हुई ताज़ी सब्ज़ी (बथुआ, आलू, भिंडी)"**

Figure 9: Overall night meal habits – all villages

Home - grown vegetables

Food during Festivals

In all festivals, they prepare different types of traditional food such as *खीर, हलवा* (different types), *पुवे, मिठाई* (other sweets), *पूरी, पकोड़ी, आलू की सब्जी, बड़े, चावल, दाल| घुघुटे, पुआ, मीठी पूरी, खजूरें, दालों के बेड़ुवे* (savouries) are made during festivals such as *घुगुतिया* or *मकर संक्रांति.*

During the festival of 'Holi', 'Harela', 'Ogi', 'Shivratri' and 'Dipawali' they prepare different types of food items. Respondents mention:

"होली में गुटके, गुजिया बनाते हैं":::ओगी में बेड़ू की रोटी बनती है":::"हरेले में रोट बनाते हैं":::"कद्दू सकल गंजी, च्यु के लड्डू, हलवा शिवरात्रि में बनता है":::मिठाई बूंदी की, खिले, फूले दीपावली में बनाते है;

Other food items like *सूजी, गुटके, चावल का हलवा* (rice, wheat-based sweets) are also part of the main food items made during different festivals. Savitri Devi from Myora village quips people make number of food items in major festivals:

"बड़े बड़े त्योहारों में बनते हैं कई प्रकार के पकवान"

Food during Marriage

Special food items prepared during marriages remain consistent across villages. These are *पनीर* (cottage cheese) items, *चावल* (rice), *दाल* (lentils/ pulses), *सब्जी* (vegetables); *टिक्की, खीर, मिठाई, पुलाव, रसगुल्ले, पूरी, छोले- भट्टूरे, चाऊमीन, गुलब जामुन, हलवा* (different types), *पापड़, रायता* etc. Traditional food items are many, which include *तिल के लड्डू, आटे के लड्डू, सुगले, खोये की मिठाई* that they make at home:

"शादियों में घर में ही कई प्रकार के मिठाइयां बनते हैं":::"कुछ त्योहारों में कुछ खास पकवान बनते हैं"

Fast foods like chow mein and Maggie noodles are making an entry even in food choices during marriages indicating a big change in food consumption patterns.

During the 'Haldi' ceremony before marriage, they put *हल्दी* (turmeric) on the bride and the groom, then worship Ganesh ji and then prepare *लाड्डू– स्वाव* (a traditional marriage food):

"शादी में सबसे पहले दूल्हा दुल्हन को हल्दी लगाई जाती है, उसके बाद गणेश पूजा होती है तथा उसके बाद लद्दु स्वाव बनते हैं"

Mamta Mer from Jhutiya observes that during the making of laddu-swab, the women of the villages sing traditional marriage songs, which are considered as blessings for the bride and the groom:

"इन्हें बनाते समय महिलाएं गीत भी गाती है जो कि आशीष की तरह माने जाते हैं"

Other rituals during marriages include worshipping their presiding deity after taking bath, offering fruits and vegetables to the deity in temples and then share the prepared items with family and other people:

"हम सर्वप्रथम नाहा धो कर अपने इष्ट देवी की पूजा करते हैं...मंदिरों में जाते हैं...त्योहारों के समय पर होने वाले फल सब्जी को मंदिरों में चढ़ाते ते है.... परिवार में एक दूसरे को पैंचा बाटते हैं, जिसमे जो हमारे घर में बना होता है वो हम देते हैं"

Few respondents say that earlier, the food in marriages would be simple but now they follow the food trends of the urban areas and metros:

"पहले शादियों में आलू पिनालू की सब्जी व पूरी, दाल, चावल, आदि बनते थे लेकिन इस समय में ये सारी चीज़ें बनना बंद हो रही है।"

Tulsi Devi from Loshgyani mentions *"आजकल शादियों में पुराने समय के पकवान ना बना कर शहरों की तरह खाना बनाया जा रहा है"*

An old village temple

Food during Fasting

As with other regions of India, the inhabitants of the eight villages predominantly eat fruits during fasting along with specific food items. Most of the respondents mention that they keep fast from morning until evening:

"हम उपवास सुबह से शाम तक रखते हैं जिसमें मैं उपवास में फल लेते हैं"

During morning they have milk, tea and fruits while in the evening after breaking the fast they eat items that are plain:

"उपवास पूरा होने पर भोजन सादा बनाती हूँ जिसमें लहसुन प्याज न हों – पूरी, छोले, आलू की सब्जी"

Some of the food items include fruits such as banana, apple, plum, pear, peach etc.; other food such as *मिठाई, सादे आलू* or *उबले आलू - बिना नमक के, बिना प्याज और लहसुन के, शकरकंद, दूध, चाय, साबूदाने की खीर, सूखे चने, आलू के गुटके* (primarily sweets, plain boiled potato without salt, onion or garlic etc.).

Sarla Nayal from Satkhol reports *"उपवास किए जाने पर शाम को उपवास पूरे होने पर पूरी सूजी"*; while Kalavati Verma from Jhutiya mentions *"व्रत में यहाँ बड़े बुजुर्ग केवल चाय पीते हैं"*

They also keep day specific fast. For example, one respondent mentions that after breaking fast on Fridays she eats black chickpeas:

"शुक्रवार के व्रत के दिन उपवास पूरा होने पर रात को चना खाते है"

Tobacco Usage

Overall, 58 people out of total 374 villagers (15.5%) are reported to have some kind of tobacco products. 'Bidi' has the maximum usage across all villages and 37 out of 58 people use bidi. Gutkha, cigarette, paan and supari follow bidi usage.

Figure 10: Overall tobacco products usage – all villages
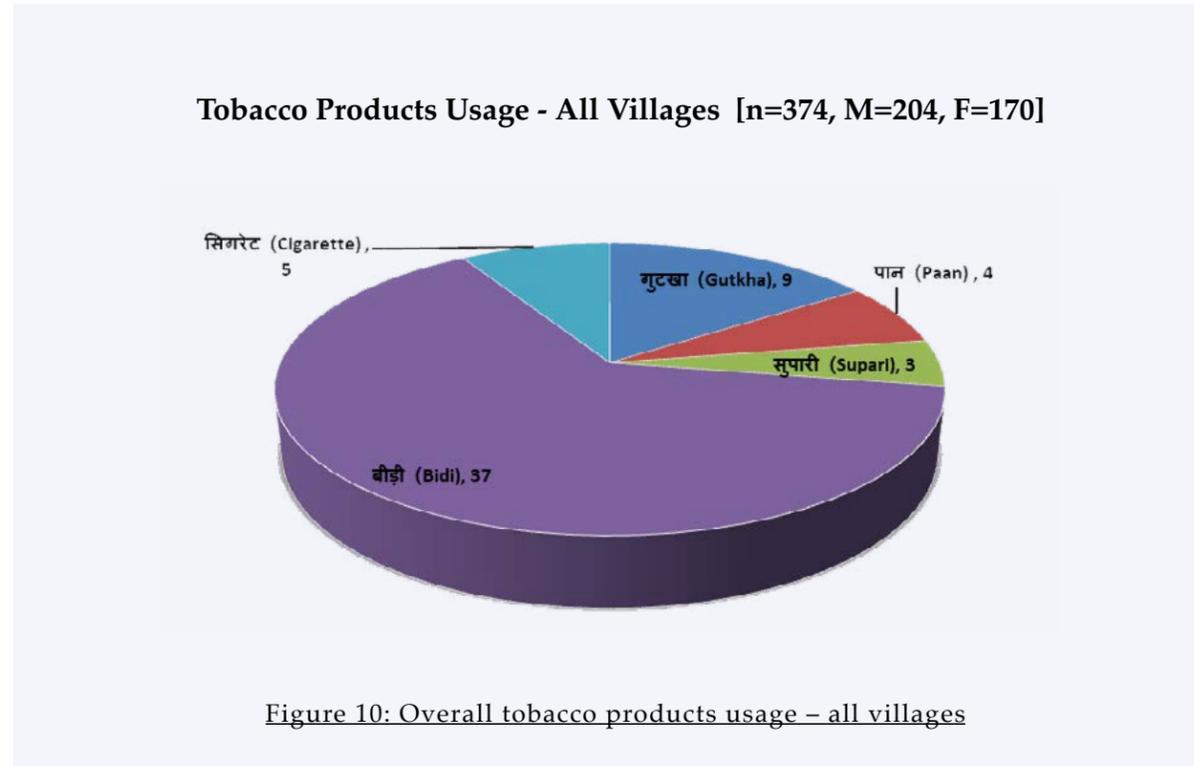
Majority of villagers mention that tobacco usage is harmful for health because it causes cancer, breathing issues, lungs related diseases, problems with blood circulation etc.

"इससे बीमारियां हो सकती हैं जैसे कैंसर, रक्त परिसंचरण में मुश्किल"

One respondent mentioned that it affects our immune system:

"इससे मनुष्य के प्रतिरक्षा प्रणाली पर बुरा असर पड़ता है और बहुत बीमारियां भी होती है जिससे फेफड़ों को हानि पहुँचती है"

Another respondent said that tobacco usage causes behaviour problems. It also affects overall health negatively and may even be fatal:

"इससे किसी भी अच्छे व्यक्ति के आचरण में परिवर्तन आ सकता है"

Another honest response from Ramesh Chandra from Loshgyani where he observes that yes tobacco is injurious to health however, he finds it difficult to quit since it became his habit:

"तंबाकू उत्पाद स्वास्थ्य के लिए हानिकारक है लेकिन आदत के कारण छोड़ना मुश्किल है"

Given the responses from the community, it is evident that inclusion of a tobacco control advocacy component will be important in the TREC curriculum.

Alcohol Consumption
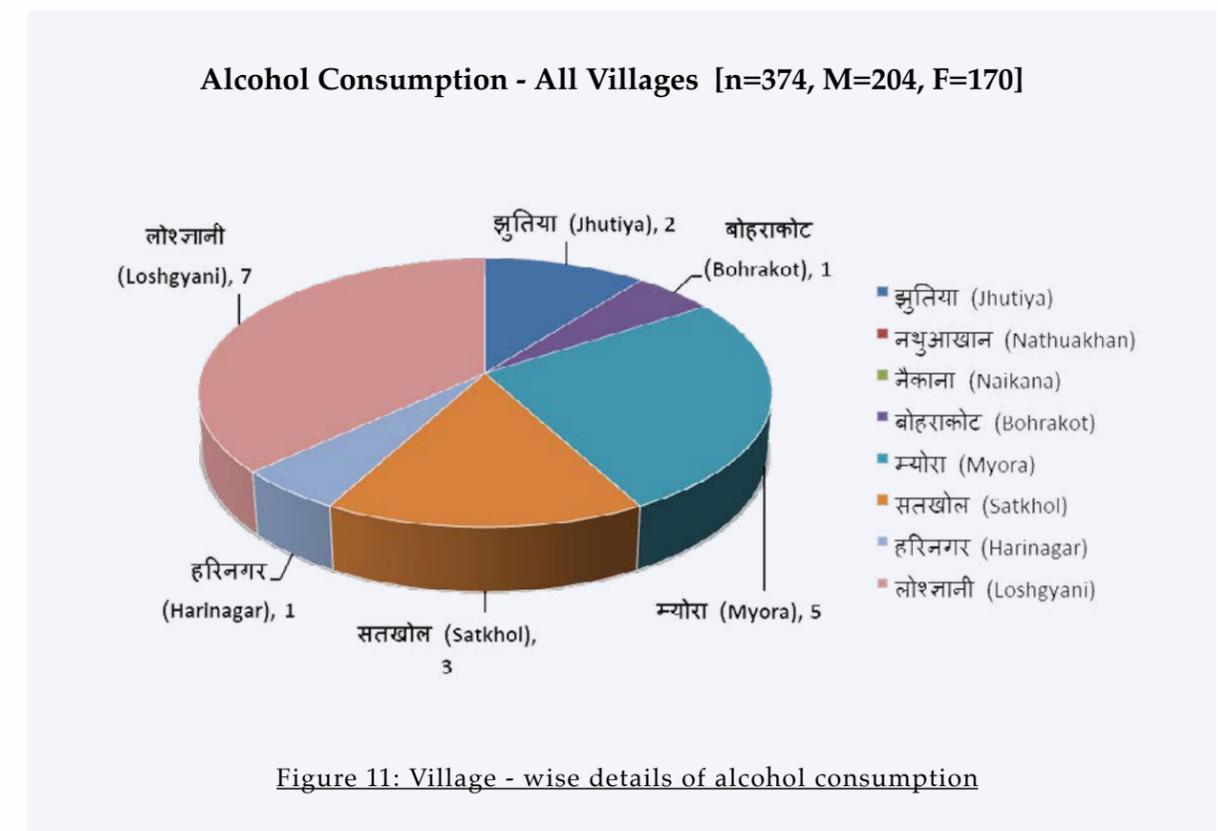
Figure 11: Village - wise details of alcohol consumption

झुतिया (Jhutiya)	नथुआखान (Nathuakhan)	नैकाना (Naikana)	बोहराकोट (Bohrakot)	म्योरा (Myora)	सतखोल (Satkhol)	हरिनगर (Harinagar)	लोश्ज्ञानी (Loshgyani)
No Vend	Yes	Yes	Yes	No Vend	No Vend	No Vend	No Vend

Table 4: Village - wise details of alcohol vends

Overall, 19 people out of total 374 villagers, merely over 5%, are reported to consume alcohol, which could be a low disclosure or a socially desirable response. Highest number is from Loshgyani followed by Myora, Satkhol, Jhutiya, Bohrakot and Harinagar as reported.

A local alcohol shop in Nathuakhan

Interestingly, villages having no vending reported the most number of alcohol consumers; while villages having vend reported either no or just a single alcohol consumer (Bohrakot).

According to an observational analysis (in Kumaon region of India)[12] regarding factors contributing to tobacco usage among patients diagnosed with tobacco

associated malignancies over the period of 2014 to 2018, it is estimated that about 70% (departmental data) of all patients diagnosed with cancer in the Department of Radiotherapy, Swami Ram Cancer Hospital and Research Centre, Haldwani, had history of chronic tobacco use (be in form of smoked tobacco or chewed tobacco for more than 5 years). Swami Ram Cancer Hospital and Research Centre runs as a part of the Government Medical College, Haldwani, Nainital (GMC HDW) and caters health services to the hilly region of Kumaon.

Facilities Available in Villages

	Primary School (Private)	Primary School (Government)	Anganwadi	Government Health Centre	Nursing Home (Private)	Private Hospital	Bank	Post Office	Self-Help group
झुतिया (Jhutiya)		√	√					√	√
नथुआखान (Nathuakhan)	√	√	√	√	√		√	√	√
नैकाना (Naikana)	√	√	√	√			√	√	
बोहराकोट (Bohrakot)	√	√	√	√	√	√	√		√
म्योरा (Myora)	√	√	√	√					
सतखोल (Satkhol)	√	√	√	√					√
हरिनगर (Harinagar)		√	√						
लोश्ज्ञानी (Loshgyani)	√	√	√						

Table 5: Facilities available in villages

As can be seen from the data, Bohrakot has all the essential facilities available. All the villages have government primary schools while some villages have private primary schools. Anganwadi Kendra is available in all villages. Five villages have government healthcare centre, four villages have post offices while four others have self-help groups.

Government Primary School in Harinagar, Ramgarh

An educational message "clean water, clean toilet, keep it clean" on the board of government-run Primary School in Harinagar

Anganwadi teacher and sakhis are at work

Additional Facilities (as Reported by the Respondents)

Bohrakot – Sandhya clinic, Tiwari clinic, power supply, panchayat, middle School, health centres, water facilities, shops

Sandhya clinic in Bohrakot

Local shop in Bohrakot

Naikana – Community centre, panchayat

Community centre and 'Gram Panchayat', Naikana village

Piped water supply facility at a house in Harinagar

A street in Nathuakhan market - a semi urbanized area with an ATM

Myora - Panchayat, police station, roads, commuting facilities, vehicles, shops, water tanks, cleaning facilities, hand pumps, shops, forests
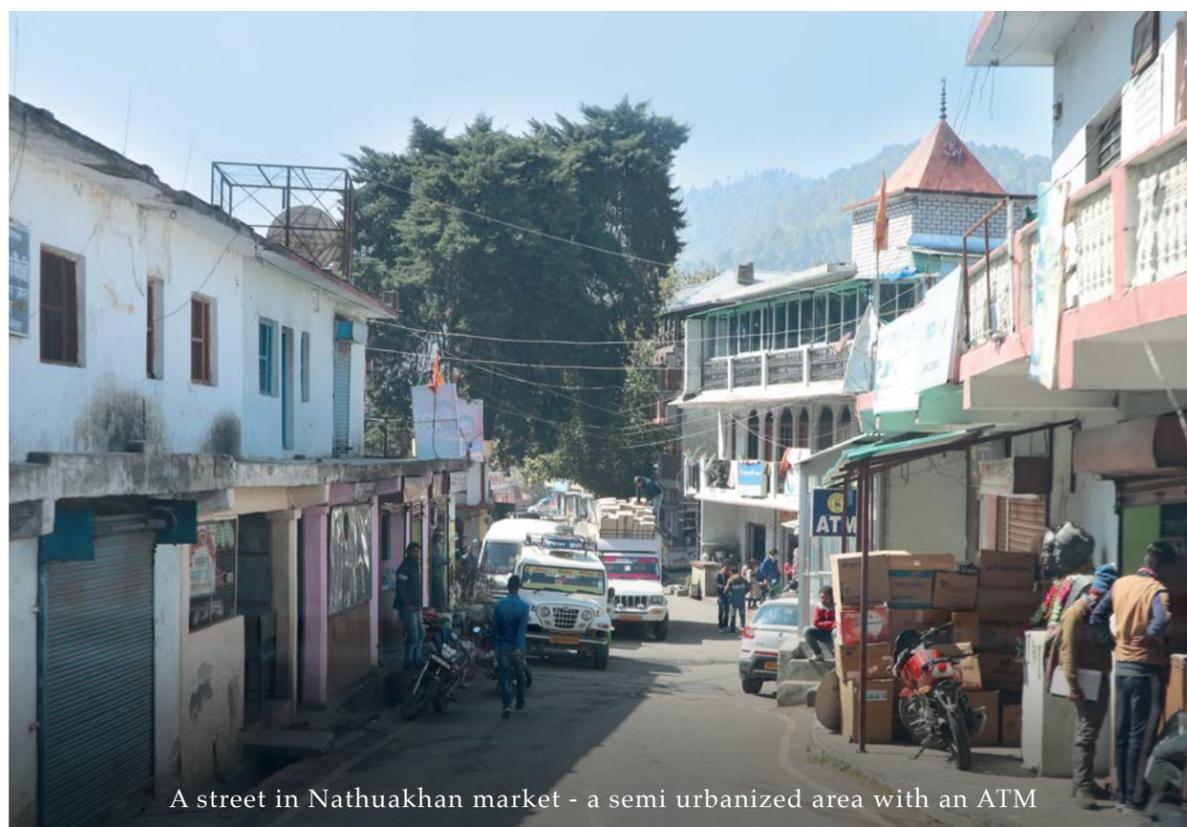
Loshgyani - Panchayat, middle school, community centre, power supply

An interesting linkage between the availability of the healthcare facilities and women's access to these facilities during the reproductive phase was narrated. This may be found under the heading "Community Access to Health Services".

Women's Education

76% (71 of 94) married women had gone to school and colleges. Total 23% of them are either graduates (13%) or masters degree holders (10%); 77% are school dropouts. 28%, 20%, 14% and 13% women left their studies after / at 8th,

School - going girls look happy (near Bohrakot, Ramgarh)

12th, 10th and 5th standards respectively. In the India level data from the 2015-2016 National Family Health Survey (NFHS) by Ministry of Health and Family Welfare, few reasons most cited for 'why rural females are not attending school' are: 'not interested' (24%), 'costs too much' (19.1%), 'required for household work' (15.1%) and 'got married' (8.1%) in that order. Thus, our results and the findings from previous studies highlight the need for initial field work with parents of the children to understand their thoughts on high dropout rates and then educate them and further integrate the perception of right to education into the TREC curriculum.
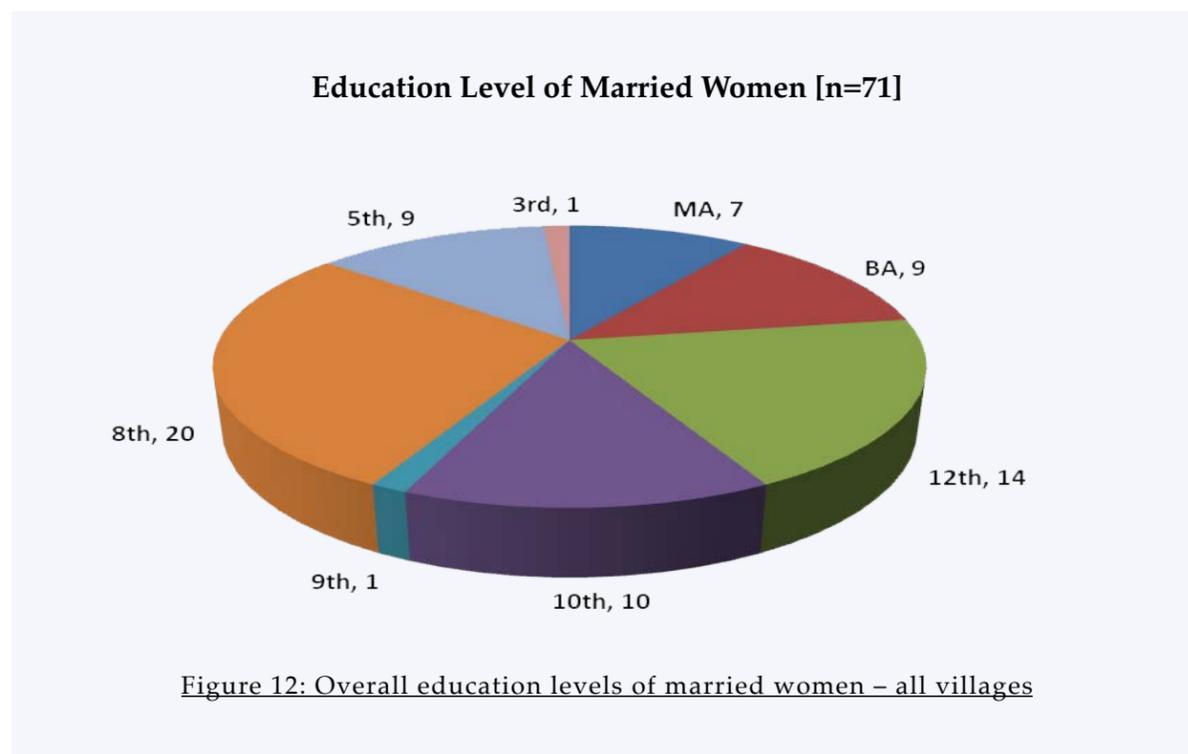

Education Level of Married Women [n=71]

Figure 12: Overall education levels of married women – all villages

There is a high percentage of educated women who can be mobilized and integrated in the education, health and livelihood programs of TREC.

Age of Marriage

61% of women married below 18 years did not go to school, while 84% of women married above 18 years went to school and colleges. 13% married women
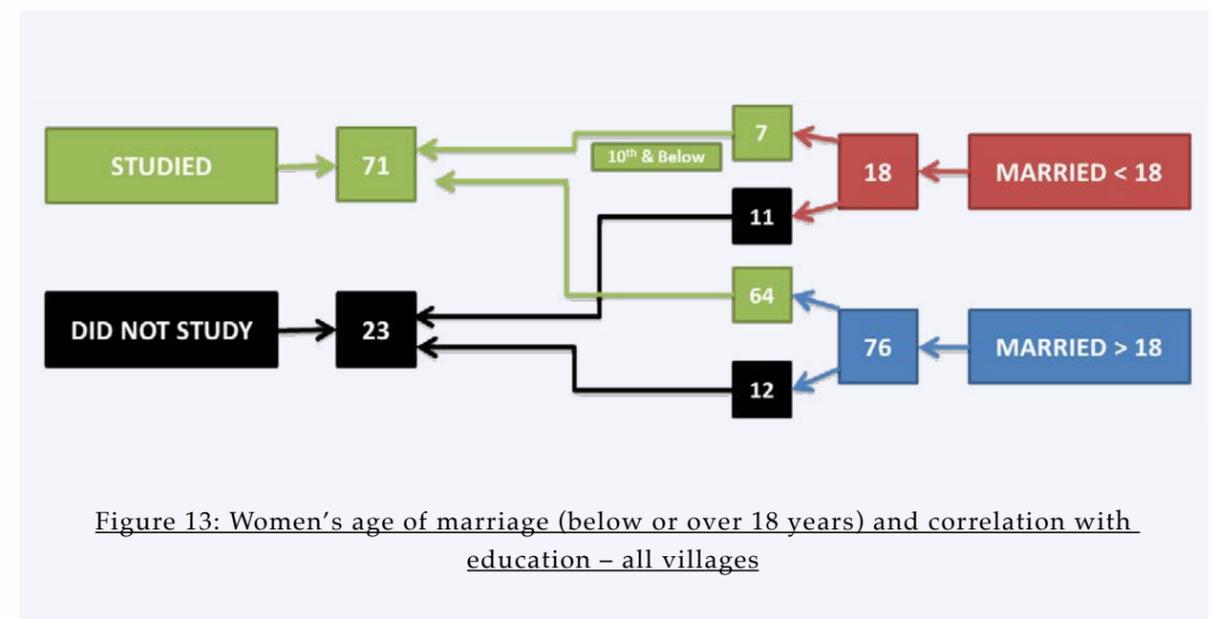

Figure 13: Women's age of marriage (below or over 18 years) and correlation with education – all villages

have completed graduate level education, while 10% of the married women completed master's degree in education.

Interestingly, the age of marriage has increased as is evident from the data. This is a good practice and a shift from the earlier work in this area[10], where the age of marriage was 16 and as a consequence there were multiple pregnancies and a high maternal mortality rate in the Kumaon hills.

Childbirth

Today the majority of children are born in hospitals – 70 out of 94 respondents say that at least one of their children was born in hospitals. Another respondent mentions:

"पहले घर पर देती थी"

The women also say that this is a change that they have seen during the last 5 years. In line with what the respondents mention, we see a shift in the women's choices of healthcare facilities for child birth. NFHS - 4 Uttarakhand

|	4. At home: (Yes/ No) / घर पर (हाँ / नहीं)?	5. At a hospital: (Yes/ No)/ अस्पताल में (हाँ/ नहीं)	6. Private nursing home: (Yes/ No) / निजी नर्सिंग होम में (हाँ/ नहीं)
झुतिया (Jhutiya)	14	17	2
नथुआखान (Nathuakhan)	8	7	7
नैकाना (Naikana)	8	22	22
बोहराकोट (Bohrakot)	7	3	0
म्योरा (Myora)	9	8	6
सतखोल (Satkhol)	5	7	3
हरिनगर (Harinagar)	0	2	2
लोश्ज़ानी (Loshgyani)	9	4	1
Total	60	70	43

Table 6: Childbirth location (home/ hospital/ nursing home) – all villages

2015-2016[9] mentions 41.2% women in Nainital district gave birth in public healthcare while TREC-CPEHL (conducted 4 years apart) data from 8 villages show 70% women are now choosing public hospitals. Similarly, NFHS data indicates 23.4% deliveries in Uttarakhand were done in private healthcare facilities. When we compare that with our data we see a significant increase where 43% women are now choosing private nursing homes. Further, the report mentions, the percentage of births in a health facility more than doubled in the 10 years between NFHS-3 and NFHS-4, from 33 percent in NFHS-3 to 69 percent in NFHS-4. From our data as well it is evident that hospitals and nursing homes together definitely take over the traditional way of giving birth at home. However, few of the respondents (from Loshgyani and Myora for example) do prefer home over hospitals and that reflects in the narrative of a few women.

A respondent from Myora said:

"तीनो बच्चे नैनीताल में घर में पैदा हुए; अधिक परेशानी होती है तोह नर्सिंग होम जाते हैं"

Overall, the shift from home delivery to institutional delivery is apparent from the data above and is a major change from the research done in the same area in 2004 by Capila A[10], wherein 94% deliveries were at home by Dais or traditional birth attendants.

Figure 14: Representation of first child birth - age - wise, all villages
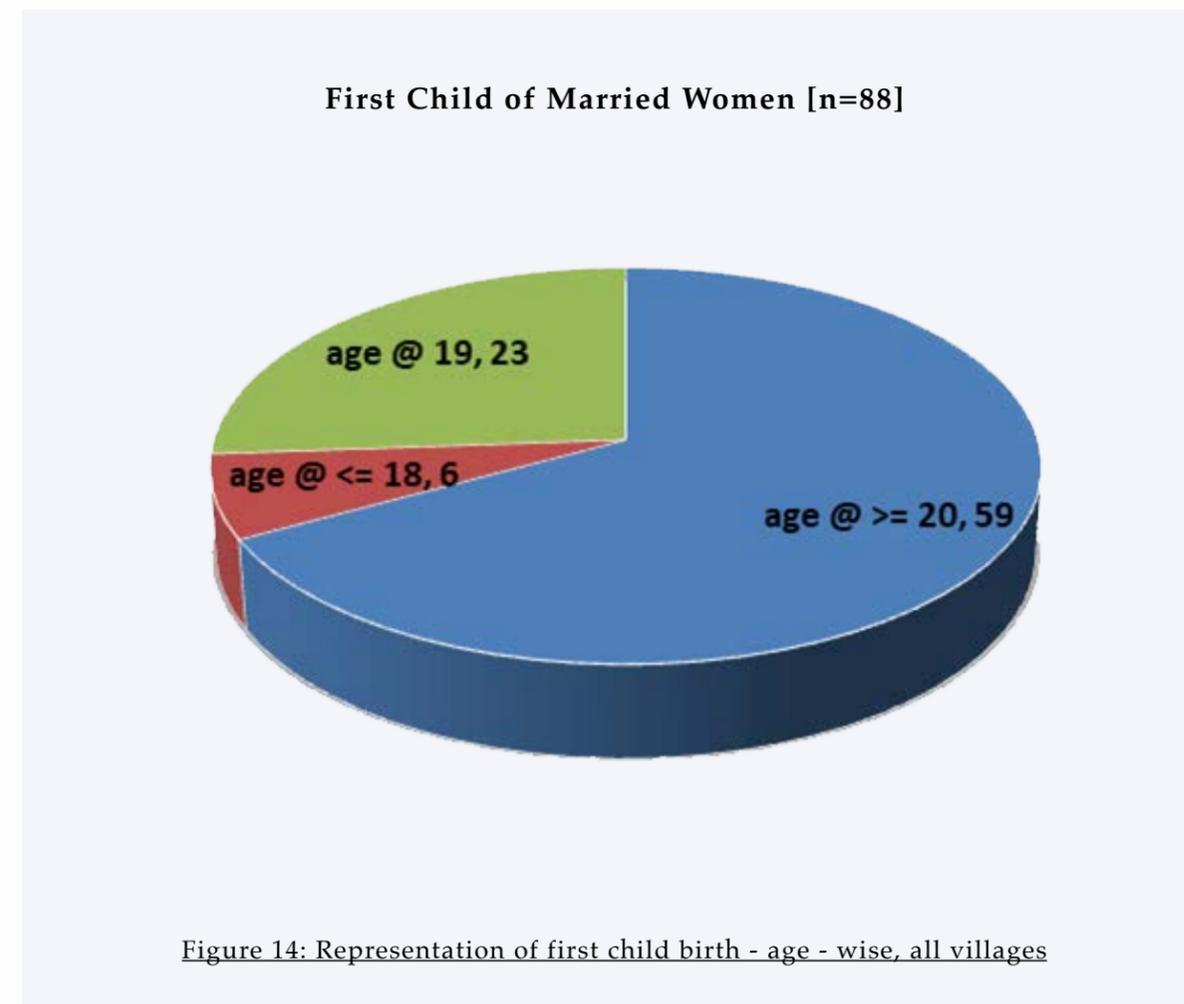
Majority of women had their first child when they were >=20 years. Although a good percentage has the first child birth age below 20 years. This demonstrates greater awareness despite the lower rate of higher education in women in the villages, which may contribute to the overall reduction in the mortality rate.

Women's Education and Equality

The trend of women getting married early (or child marriage) is no longer practiced. The notion of being inferior to men is not the norm in villages surveyed. Men and women are equally respected. Whether it is in case of festivals or for worship, men and women do the rituals together on an equal footing, with mutual respect. This is a sea change from the practices of the past. Girls and boys enjoy equal opportunities.
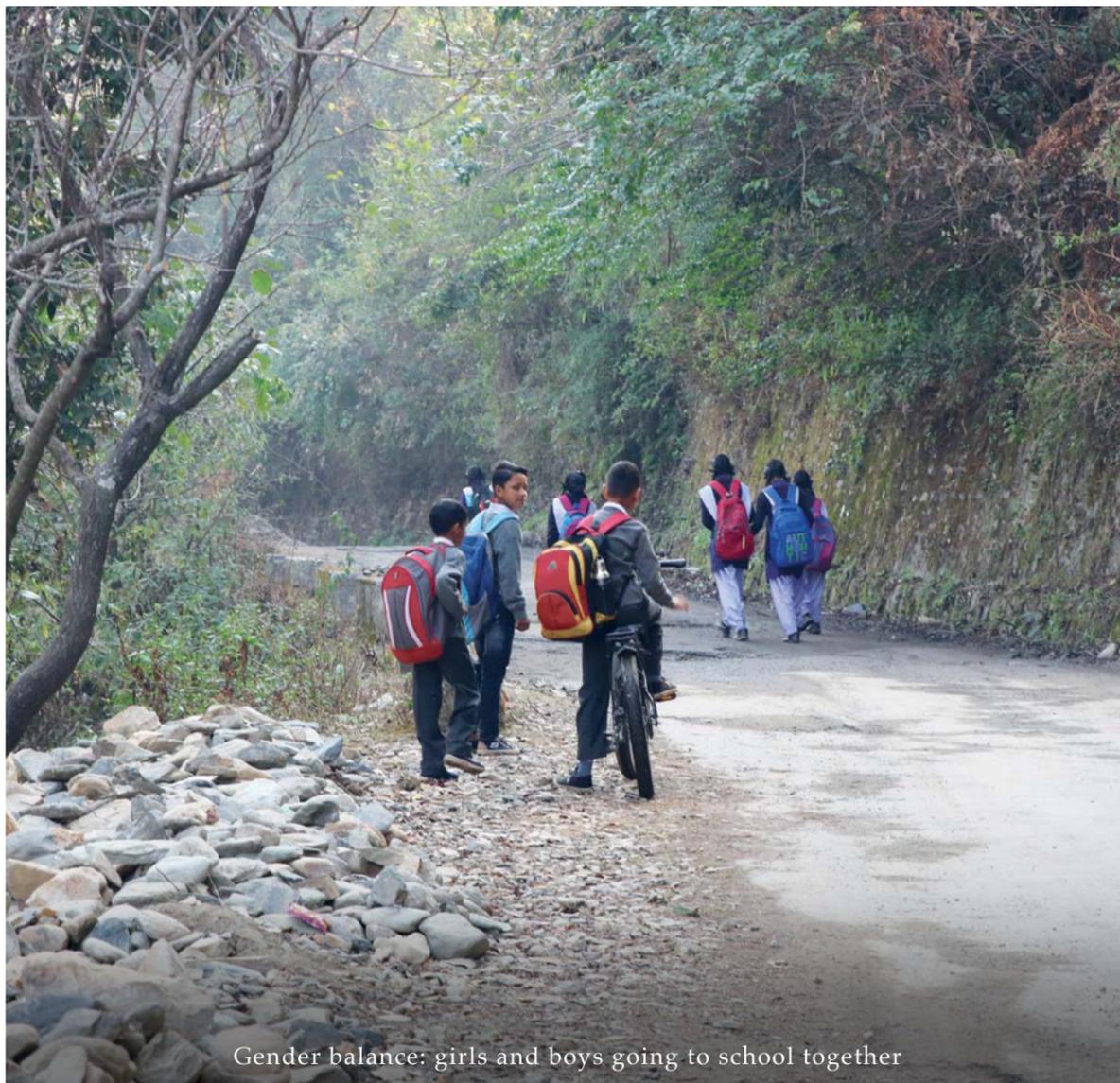
Gender balance: girls and boys going to school together

Women of the houses mention that today girls and women are given education on par with their male counterparts and they also go on to higher studies. Today's generation is much aware and understanding and that is attributed to their education.

"पहले लड़की को पढ़ाया नही जाता था, लड़की को जल्दी शादी कर देते थे । अब ऐसा नहीं है लड़का लड़की को एक समान माना जाता है"

From their perception of equality, a question definitely comes up and that is "is education the great equalizer and can we leverage that in our TREC curriculum?"

Girls and boys studying together in a local school near Bohrakot
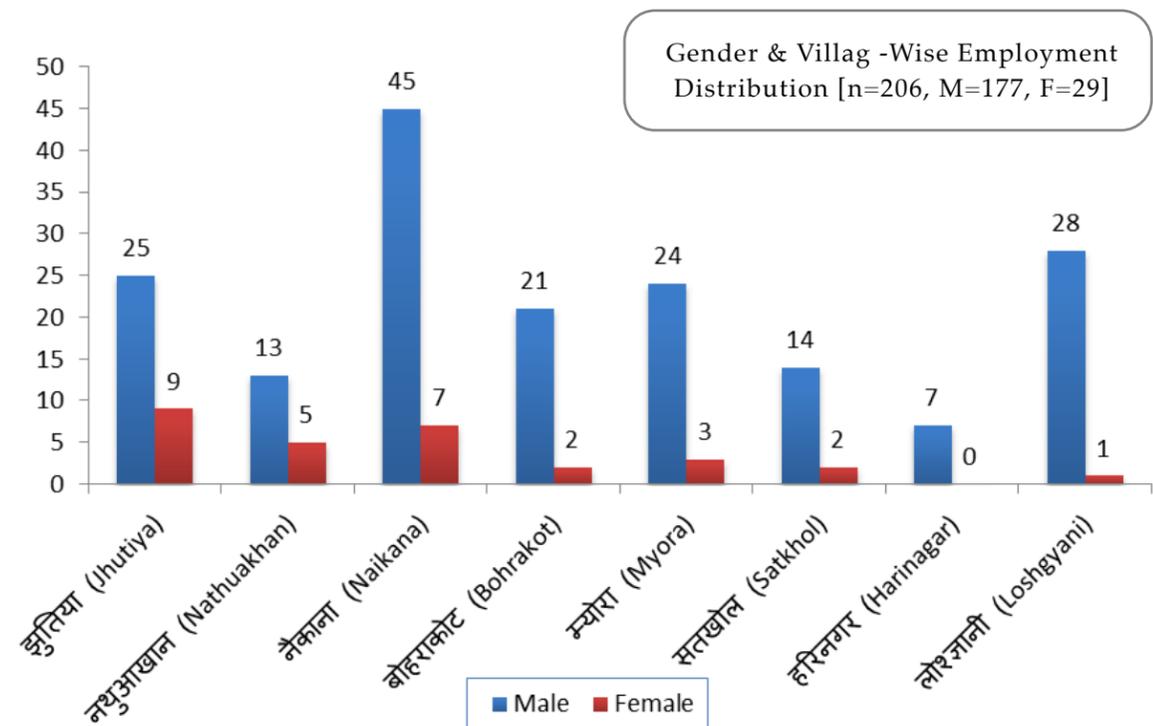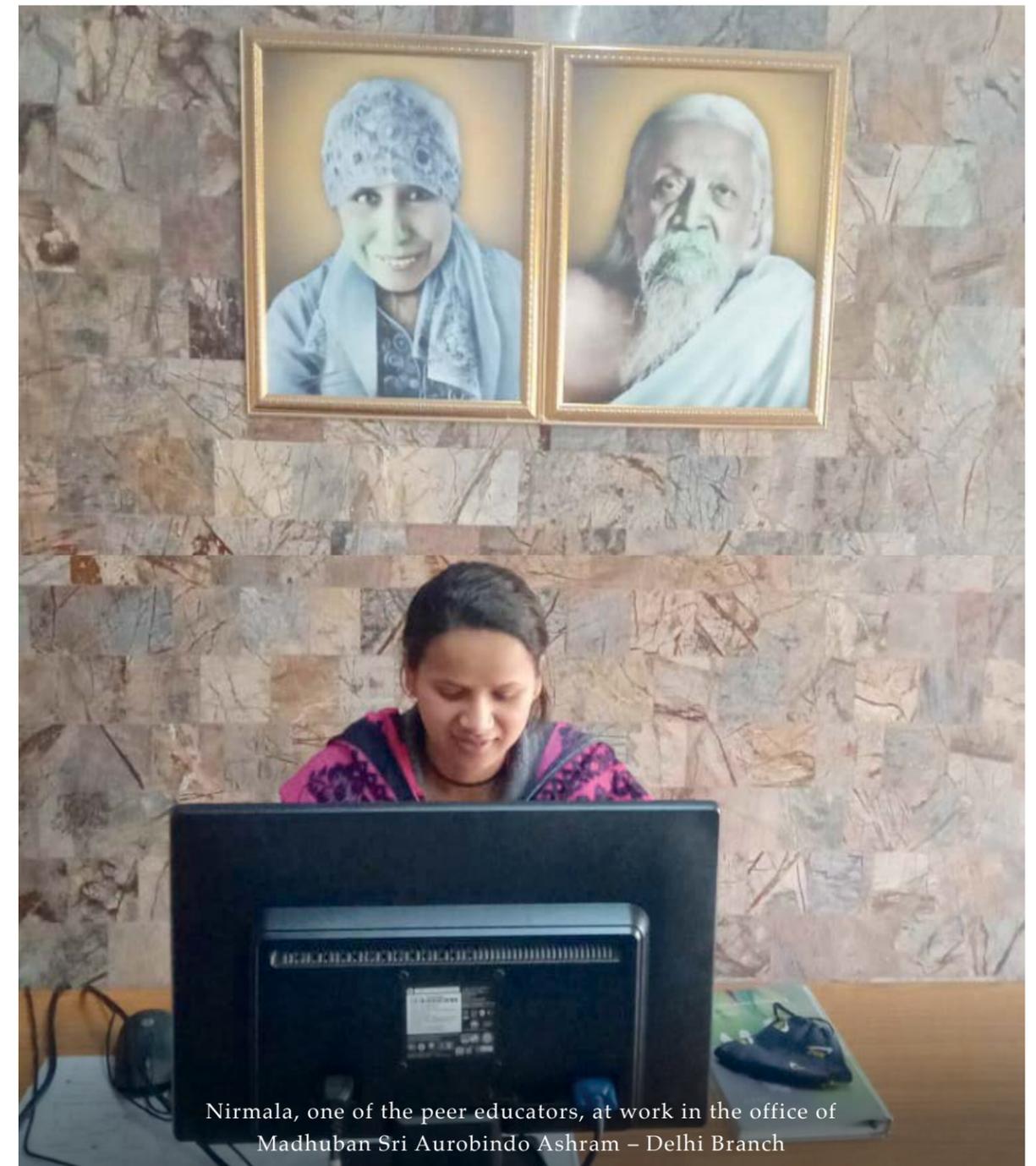
Women's Occupation and Employment

Figure 15: Gender and village -wise employment distribution

In overall occupation space, 86% men and 14% women are employed. Overall gender wise, around 83% of men are into some kind of occupation while the scenario with women employment is a little grim; out of total 170 women members, only 29 are employed. That is, just 17% of women are in some kind of occupation.

Out of 29 total employed women, Jhutiya has the highest (9) followed by Naikana (7) and Nathuakhan (5). If we consider the sample size of the villages to employed women ratio, then Nathuakhan records the highest women employment ratio (8:5) followed by Jhutiya, which is 18:9. Remaining villages have lower female employment across all occupations.

Women seem to prefer private jobs among all occupation categories followed by farming, teaching and stitching. 11 (38%) out of 29 females are employed in private jobs.

Nirmala, one of the peer educators, at work in the office of Madhuban Sri Aurobindo Ashram – Delhi Branch

Farming (24%) is preferred next and that is not age dependent as per data. Stitching is one area favored by female members. Interestingly, most of the government job holders are females that include 1 forest guard, 2 Anganwadi teachers and 1 ASHA employee (as per data from 8 villages and 94 households surveyed).
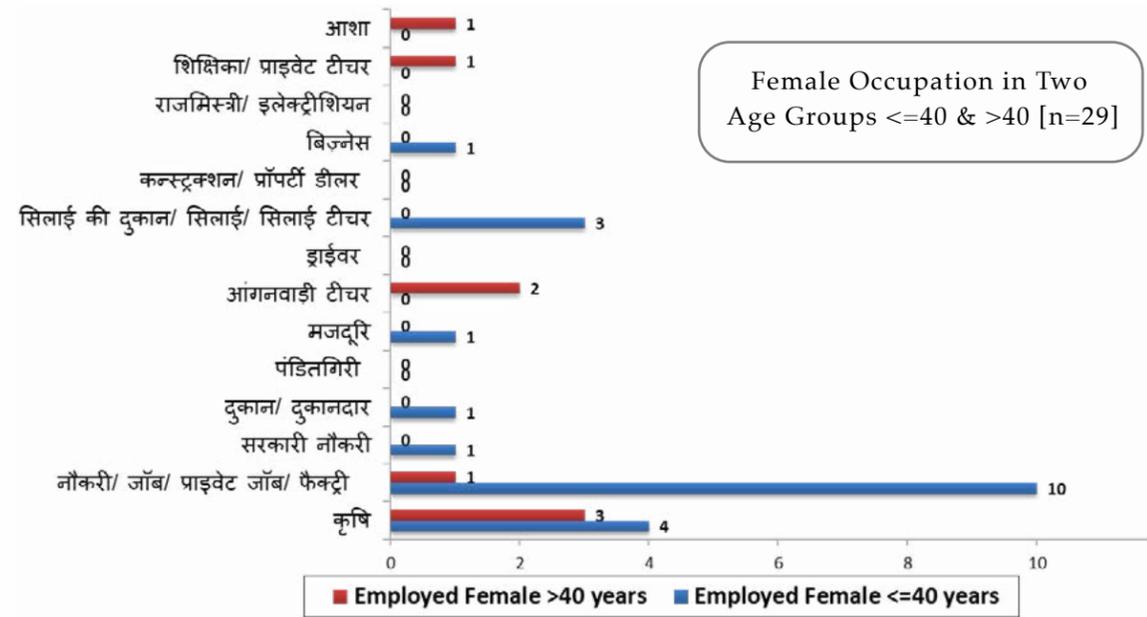
Figure 16: Occupation of women in two age categories/ groups – all villages

There are four occupations, which did not report any female employment - driving, construction/ property dealing, builder work and 'pundit giri' (occupation of Hindu pundits). This trend is similar to what can be seen in Urban India where the said occupational areas are dominated by men.

Interconnection between Women Employment and Societal Status

Women of the house say that today women of the villages go for work even outside their villages; run houses and stand equally with men. They have their say in family and other matters, which was a distant thing in the past. The women of the villages are respected today, they have progressed so much that they are credibly creating their own identities and are capable of running their own houses and voicing their opinions.

"आज महिलाएं इतनी आगे बढ़ गयी है वो खुद ही अपना घर चलाती है; अपनी पहचान बना सकते है"

Kamala Negi of Hodakhan is a living example who has created her identity through a job that is to be commended and respected. She is the 'Tyre Lady' as called by many who runs a tyre repairing and vehicle servicing shop by the name "नेगी टायर रिपेयर". She mentions *"मैं रिपेयर का काम भी करती हु और घर भी चलाती हू"* ("I repair tyres as well as run the house"). Further she says *"औरोतो को सिर्फ सिलाई कड़ाई ही नहीं ऐसे काम भी आना चाहिए! मैं तो बोलती हु लेकिन वो आते ही नहीं"* ("women should not only restrict themselves to stitching and knitting, they should take up these sorts of work too. I invite them to learn but they do not come")

Kamala Negi repairing tyres - her quintessential skill

Living, Festivals and Education

For festivals and other practices, women do want to retain the fervour of traditions and other rituals like marriages etc. that they feel are fading away in the harsh glitter of urban influences. Festivals lost their quintessential physiognomies as well as the enthusiasm; people used to celebrate festivals as a community however, today, families prefer to keep the festivals to themselves. The transactional, so-called 'modern' way of life has overtaken the beautiful

unassuming, traditional villages of Ramgarh too; easier availability of fast moving consumer goods (tinsel and plastic) have replaced craftsmanship and artefacts that beautify homes during festivals; overtaking and clouding the traditional ways of decoration in particular and lifestyles in general. Village women narrate:

"त्यौहार जैसे पहले दीपावली पर ऐपण खुद बनाते थे.अब दुकान से लेते है। कमेट नामक मिट्टी से पुताई करते थे, अब रंग-पेंट लगाते है"

Simple marriage rituals are now a thing of the past, even the traditional 'Sangeet' (pre-wedding/ engagement) ceremony too seems losing its conventional ambience (where songs specific to the blessed life of the bride and the groom would be sung) to the glare of strobe lights and urbanized DJs. For example, 'Mangal Geet' was an integral aspect of the wedding ceremony held in the family earlier. However, TREC-CPEHL 2020 data reveals a significant change from this traditional practice:

"पहेले शादियों में संगीत होता था अब DJ का उपयोग होता है"

They say, earlier people would wear traditional clothing, however now they have become advanced:

"पहेले के लोग अपने संस्कृति के हिसाब से कपड़े पहनते थे अब लोग आगे बढ़ गए है"

However, not all things are lost in the mundane urbanized influences. Example is 'Aipan', a quintessential folk art of Uttarakhand. Women use beautiful patterns of 'Aipan' to decorate floors and walls of homes, temples, school areas and also during other ritualistic functions.

A collection of 'Aipan' done by students of Sunrise school, Bohrakot

'Aipan' at a peer educator's home

Community Experience of Lockdown

The nationwide lockdown imposed in India due to the COVID-19 virus pandemic resulted in all the transport facilities like bus, taxi, etc. being suspended in all villages. Everyone was (and still is) required to wear masks if stepping out. Schools, shops, transport and all other public services were put on hold; banks were also not functioning in full capacity. Members who have their own private vehicles can go out to work if the work was not suspended.

Initially, businesses (in general) were affected due to the lockdown resulting in community members being unemployed and left at home with no work. This was reported primarily where people were engaged in manual labor. As the community members stay out of work, hiring a vehicle to travel to markets is an added expense as the car drivers are also charging higher prices for travels during the lockdown. This difficulty is being faced in the villages of Satkhol and Loshgyani. Some marriages and family events scheduled in the families have been cancelled due to the lockdown restrictions:

"काम नही हो पा रहे और अगर बाजार जाना पड़ता है तो गाड़ी वाले किराया ज्यादा ले रहे है"

People in Jhutiya, Myora, Nathuakhan and Naikana mentioned that the farm produce is ready however these could only go till Haldwani and some to Delhi and not beyond that. This was because the transport facilities were either suspended or were there only for a day or two. It was also a matter of concern for many since this is their only livelihood:

"गाड़ी बंद कर दी गयी है लेकिन किसानो की लिए ट्रक की व्यवस्था है, गाड़ी एक दिन छोड़ कर आती है, खेत में मटर तैयार हुई है; उत्पादों जैसे-सब्जियों, फसलें, फल व अन्य उत्पादों को बाजार तक पहुंचने में बहुत कठिनाई हो रही है, परन्तु अब लॉकडाउन की वजह से हल्द्वानी व देलही तक ही जा रहा है जिससे किसान को बहुत परेशानी होती है"

In the later period of lockdown, the Prime Minister in his efforts to help the farmers had allowed the trucks to travel, therefore the community was not facing a lot of difficulty in reaching their produce to the markets. Few respondents from Loshgyani shared that since only 2-3 trucks have received the travel permit it made things little easy. Hariram from the same village mentions that the Prime Minister gave all the facilities required during lockdown; provided ration for the village people and vehicle permits for reaching the produce to the market:

"प्रधानमंत्री जी ने किसानों की व्यवस्था के लिए ट्रक जाने की अनुमति दी है, उत्पादों को बाजार तक पहुंचने में कठिनाई नहीं हो रही है| मोदी जी ने सारी सुविधाएं प्राप्त कराई है| गरीबों के लिए राशन भेजा जा रहा है, फसल मटर के लिए भी सुविधा दी गयी है"

Respondents from Loshgyani, Nathuakhan, Satkhol mentioned that although ration is being provided they are finding it hard to manage the other expenses of the house due to suspension of ad-hoc work; and the shops are selling goods at higher rates.

"घर का खर्चा चलाने में मुश्किल आ रही है| दुकानों से अन्य सामान लेने पर दोगुने दाम में सामान दिया जा रहा है| जो लोग काम के सिलसिले में बाहर गए है उनको आने की अनुमति दी गयी है"

Respondents from Myora reported that the government provided food products. Lockdown made it difficult for them to sell milk initially; at a later stage however the dairies opened regularly. Although the lockdown was imposed for their safety, people were not following rules:

"सरकार द्वारा भोजन और अन्य खाद्य पदार्थ की व्यवस्था की गयी| दूध की गाड़ी नहीं आ रही है- दूसरों की मदद से लाते है| गाड़ी भी बंद कर दी गयी जिसमे हमारी ही सुरक्षा है, पर लोग इस बात को मान नहीं रहे है. बाद में दूध डेयरी खुली है"

During lockdown only a few reported problems selling milk briefly however, soon things were fine since the dairies reopened:

"हाँ मुश्किल आ रही थी| पर अब दूध के लिए दूध डेयरी खुल गयी है और अब मुश्किल नहीं है"

Most of the villagers mentioned they could sell milk as normal:

"हम दूध डेयरी में भेजते है, किसी प्रकार की तालाबंदी नहीं हुई" or "दूध वितरण से कोई तालाबंदी नहीं है"

Social Practices – Current and Changes

Health and Socio-Cultural Practices during Menstruation - Myths and Misconceptions

Menstruation is a crucial biological factor for women in their life. However, it is significant to note how this phenomenon is placed in the socio-cultural context and it is in this light that various traditional practices were studied during the CPEHL 2020 survey. The data from 94 households in the Ramgarh block from 8 villages were analyzed and the thematic cluster analysis regarding menstrual practices revealed some important aspects, which are discussed below:

Segregation

Majority of the responses are related to segregation of women this period. Women respondents reported that they stayed in a different room, ate in utensils that were kept separately for them. They were not allowed to touch a tree, plants, domestic animals or any other person as they were considered impure during this period.

Purity and Pollution

Women were considered impure, untouchable and were not allowed to participate in religious ceremonies or any other 'mangal' (auspicious) celebrations. They were also not allowed to visit the temple during this period. Some women stated that they were not allowed to cook during that period as they believed that the food would get contaminated. The practice of segregation was clearly related to the notion of purity and pollution. In a research conducted by Capila A[10], it was also found that the women were segregated during that period, however there has been a major shift from the earlier findings wherein women were confined to the cattle shed ('got'). The present CPEHL survey did not reveal any such practice - indicating a transition in the practices. The reasons given by women for the practice of segregation during this period was that the Kumaon Himalayas are the abode of the Gods. That is why they were kept separately and they were considered unclean and impure during this period; otherwise the gods and goddesses would be angered:

"उत्तराखंड को देवभूमि कहा जाता है..... इस समय महिलाओं का किसी भी शुभ कार्यों में जाना अशुभ माना जाता है ऐसा माना जाता है कि इससे देवी देवता नाराज हो जाते हैं."

Some of the respondents also shared that they were not allowed to walk through the fields during this period as the belief was that the vegetables and plants would dry up if a menstruating woman walked through:

माहवारी के दौरान उन्हें खेत में नही जाने देते है - लौकी, कद्दू, मिर्च, ककड़ी आदि के बेलो पर नहीं लगने देते है। कहते है सड़ जाएँगे या सूख जाएँगे ::: बड़े बुजुर्ग मानते है की यदि माहवारी के दौरान खीतो में जाओ तो फसल ख़राब हो जाती है

Another interesting finding was that the women while menstruating were not given any milk or milk products as the belief was that the cow or buffalo would stop giving milk:

"या फिर गाय के पास जाओ तो वो दूध देना बंद कर देगी "

All women were given only black tea to consume. While there is no scientific evidence to substantiate this view, it is important to be inclusive about the social cultural practices so that intervention programs can be designed to educate the communities on these issues. Practices that have no scientific or identifiable advantages to health or community well-being may be treated as myths and misconceptions and addressed during health communication sessions in the curriculum.

Some of the other important practices that emerged from the data were that the women were not allowed to lift heavy loads or perform household activities during this period. This could be viewed as a double edged sword that is to give her adequate rest or keep her away from work as she is considered to

be impure/ unclean. The later practice according to Capila A[10] had a detrimental effect on the self-esteem and self-image of the women. These practices impact women's health and should be included in outreach programs as an important component to address during health communication sessions with a view to inculcating a balanced view that helps women's work.

Several women shared the practice of sprinkling cow's urine for purification of the menstruating women on the fifth day. In this region, cow's urine is considered very pure and is used during several reproductive phases of a woman's life. Another myth expressed by only one woman in the community was that a new born baby is not shown to a woman having her periods as the baby will not gain weight and will remain weak:

"जैसे की माहवारी होने पर छोटे बच्चों को नहीं दिखाया जाता है जब तक उसे खाना नहीं खिलाया हो क्युकी बच्चा दुबला पतला हो जाता है "

These myths as stated above have no scientific basis at all but are an important aspect of the discourse on socio-cultural practices during the menstrual cycle. Interestingly there were other perceptions too regarding this period expressed by women in the community. These may be considered as outliers. According to Divyanjali of village Satkhol of Ramgarh block, the notion that local Devtas, Gods and Goddesses will be angered if a menstruating woman visits a temple or religious ceremony is completely wrong:

"देवी देवता नाराज नहीं होते क्योंकि भगवान ने ही तो जीवन दिया है, और भगवान जी ने ही उन्हें बनाया है... रीति रिवाज मनुष्य ने ही बनाया है"....

Human beings are God's creation; he has given life to them; these customs and rituals are entirely human creation and are completely wrong. Similar ideas are also expressed by Heera Devi of village Myora, who said that all these perceptions are man-made and completely wrong.

Many other women respondents from Nathuakhan village said that none of the above practices are observed and the notion that the plants will dry up is

entirely wrong. These are all man-made restrictions. It was heartening to hear these statements from the women of the community.

A nurturing and healthy statement by another women respondent was that women should be given nutritious food and milk and milk products during this period so that they remain healthy:

"उन्हें दूध से बने पदार्थ भी देने चाहिए ताकि वह स्वस्थ रहे "

Articulate women are change makers and their voices should be heard and should be integrated into the peer educator program of TREC.

Health and Socio-Cultural Practices during Pregnancy - Myths and Misconception

The period of pregnancy too - like the menstrual cycle, is marked by several customs and rituals. Majority of the women respondents from the eight villages in Ramgarh block stated that after the 5th or 6th month of pregnancy a woman is not allowed to cook food, particularly for the elderly members of the family.

Pregnant women are considered impure after the fifth month. According to Geeta Verma of village Jhutiya, elderly people are the embodiment of Gods and Goddesses that is why they do not eat food cooked by a pregnant woman:

"बड़े बुजुर्ग व जिनके अंदर देवी देवता आते है, वे लोग गर्भवती के हाथ का खाना नहीं खाते"

Some women also reported that it is believed that if elderly people in the family consume food prepared by a pregnant woman, they will fall sick.

One woman respondent also added to the above discourse stating elderly persons, priests and those who perform 'Jagars' do not consume food cooked by a pregnant woman as she is considered impure:

"बुजुर्ग व्यक्ति, पंडित जी, जागर लगने वाले (जंगरी/ दंगरी) और जिन्होंने वार्षिक ली हो वह गर्भवती महिला के हाथ का खाना नहीं खाते है "

Some of the other responses articulated regarding socio-cultural practices during pregnancy were that a pregnant woman is not allowed to see the solar eclipse or the lunar eclipse as the belief is that it will be harmful for the child:

"सूर्य ग्रहण या चंद्र ग्रहण को नहीं देखती क्योंकि यह बच्चे के लिए नुकसानदायक है"

Majority of the women also reported that they were not allowed to visit a temple or participate in auspicious celebrations after the fifth month of pregnancy:

"जब महिला गर्भवती होती है तो वह ५ महीने बाद किसी भी शुभ काम मे नही जाती, मंदिर नही जाती"

One woman also stated that she was not allowed to touch the drinking water in the household, as she was considered impure.

There appears to be an underlying assumption that all processes, which manifest women's fertility, are polluting and unacceptable to the gods and goddesses. There is an overwhelming negative outlook on the special role in procreation, which a woman as a biological entity is endowed with. Perhaps dialogues as these issues can be initiated with women in the community during health intervention programs.

Another important aspect that came up during the interviews was that women performed less household work and did more work outside the home.

Deepa Bist from Nathuakhan said that during pregnancy a woman does more outside work, which has a detrimental effect on her health:

"लेकिन महिला इन दिनों ज़्यदा तर बहार का काम करती है जिससे की उनके स्वस्थ खराब हो सकता है"

Some respondents also added that pregnant women avoid picking up heavy loads during this period.

Similar findings relating work performed during pregnancy were also reported by Capila A[10], wherein several women stated that they were not doing much household work but more work outside the house, which led to complications like back pain. The findings clearly show the interlinkages between the following:
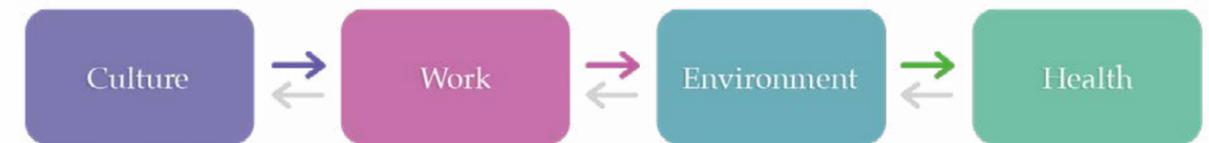
Interlinkages between diverse dimensions

From the above, it is clear that health education modules should focus on patterns of work distribution in the family especially during the reproductive phase of a woman's life cycle. It was heartening however to hear some altered voices from women who clearly stated that "there should be no discrimination towards a pregnant woman". Some women also shared that none of the above stated practices are observed by them. People in villages mention women are not allowed to work in the household because they need rest:

"इस दौरान महिला से कोई घर का काम नहीं करवाया जाता क्योंकि इस समय उसको आराम की जरूरत है"

Women Health and Hygiene (Health Issues Mentioned)

Women's Perception of Good Health

This comprehensive list of reasons for being healthy was reported by the women in the households surveyed. The responses varied, yet they clustered around a central theme. Respondents seemed well informed and they could afford a healthy diet. Some were aware of all the determinants of good health – hygiene, mental health, education for example.

Contributors to good health and healthy living

Overall, the reasons covered - eating nutritious food/ good home cooked food/ home grown vegetables and pulses/ milk, ghee, curd of home, taking care of cleanliness of self, house and environment; being physically and mentally fit, doing exercises, doing work at home and outside are some of the primary reasons for their good health. The responses are aligned to the definition of health, as given in the Constitution of the World Health Organization (WHO) [13], which is "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity". It is apparent that a community that enjoys household food security, lives in a clean environment will be aware of the benefits.

The CPEHL revealed that the people in the villages perceived themselves as being 'healthy'. The reasons were linked to the food they ate and the environment in which they lived. Knowledge of hygiene (such as hand-washing practices)

was high. Every house in the village had a toilet and those, which were used by the community. However, when asked about illnesses, the respondents mentioned a variety of aches and pains and non-communicable diseases such as diabetes, heart ailments and arthritis.

Some of the responses were very specific and mentioned that they eat home-grown fresh food and they have enough food (to eat):

"अपने ध्यान रखना, अपने वातावरण की हवा और फसल उगती है उसे ताज़ी ही खाती हु "

Some of the answers were related to hygienic habits e.g. one respondent mentioned that she keeps her nails, hands and feet always clean:

"और अपना नाखून हाथ पैर हमेशा साफ रखती हु "

Others were linked to good habits like exercise; they reported that they eat good food and do physical exercises and thus they are healthy:

"में घर का पोष्टिक भोजन करती हु, फिसिकल एक्स्सरसाइज़ करती हु इसलिए स्वस्थ हु "

Some responses linked health and environment. They report that they clean themselves and their surroundings to remain healthy:

"अच्छे स्वास्थ्य से यह मतलब है कि मैं अपने और अपने चारो और और के साफ सफाई और अपने घर का उगाया हुआ खाद्य पदार्थ का सेवन करना "

Other answers reflected on their self-dependence even for maintaining good health. They recount that they do their own work to remain healthy.

"मुझे कोई रोग नहीं है इसलिए मैं स्वस्थ हूँ क्यूँकि मैं काम करती हूँ "

Women work hard and they cited this as a reason for having good health

Two interesting answers were "Good health means being educated" and "Good health means clean and nutritious and balanced diet, in which no chemical is found":

"पौष्टिक व संतुलित आहार ग्रहण किया जाना चाहिए जिसमें कोई केमिकल ना मिला हो "

During the survey conducted by Capila A[10] in the same area it was seen that women suffered a lot from PIDs (Pelvic Inflammatory Disease) because of the heavy head loads that they carried from the forest sometimes twice in a day. One elderly woman also stated that the heavy 60 yards Ghagra that she had to wear and the extremely heavy anklets, neck piece (hasli) and nose rings all contributed to ache and pains in her body. In the present TREC-CPEHL 2020 survey women seem to be liberated from the traditional customs and accessories and are also making choices for easy and comfortable clothing at least seen in the younger women.

Many respondents reported that they eat a balanced diet (*संतुलित आहार*) . One graduate respondent Pushpa Darvyal from Bohrakot seems quite aware of a balanced diet as she mentions that her family consumes food with protein and vitamin and at the same time gives emphasis on outdoor games:

"हम प्रोटीन और विटामिन की चीज़े खाते है और खेलकूद करते है"

Mamta Mer from Jhutiya has an insightful response where she brings in the

balance of mind and body nicely and says that healthy humans have healthy brains; and thus physical as well as mental state should be in sync for being healthy:

"कहा जाता है की स्वस्थ मनुष्य में ही स्वस्थ मस्तिष्क होता है। जिससे मेरे स्वास्थ्य के साथ साथ मेरी मानसिक स्थिति भी स्वस्थ होनी चाहिए "

Further investigation may be needed on their perception of good food e.g., consumption of trans-fats, sugar, pre-packaged foods and fast foods. When asked about meals, respondents said that the kinds of snacks consumed with tea were mostly pre-packaged foods, savories and biscuits. There seems to be a rise in the incidences of diabetes and complaints of heart ailments in some villages, which could be controlled through information on healthy and age - appropriate dietary advice.

Cloud representation of actual responses of why the respondents think that they are healthy [cloud courtesy Zygomatic online publisher[11]]

Knowledge about one's own health, awareness about non-communicable diseases (e.g. diabetes, stroke, heart ailments, arthritis etc.) is lower than respondents' awareness of what keeps them and their families healthy. Health education would provide an opportunity for women to be more aware of their health issues. Rise of chronic and lifestyle related illnesses comes within the purview of health education.

Common Illnesses

Fever ("बुखार") remains the most common disease reported during the survey; followed by toothache, stomach ache, cold and cough, headache, back ache, piles and pain in the limbs etc. Few reports of jaundice, stones, heart problems, sugar, thyroid, pressure, problems with eyes are also there. While fever, cold and cough are common to people at all ages, other reported diseases are predominantly recounted for adults and elderly.

Other ailments mentioned were:

- Blood pressure
- Diabetes
- Mental stress
- Mouth Rashes
- Cataract
- Uric acid
- Breathing difficulty
- Polio-related disability
- Health issues following C-section

Cloud representation of prevalent diseases reported during the survey [cloud courtesy Zygomatic online publisher[11]]

Many of the health issues reported are related to the transition to sedentary lifestyles. With piped water and cooking gas in homes, women no longer walk long distances for water, fuel wood or go to the forest to gather fodder for animals. Illnesses reported are mainly those reflected by lifestyle changes -such as eating 'fast' food (for example biscuits and pre-packaged 'namkeen' – savouries) that are consumed at tea time by most villagers. Refined wheat is replacing traditional millets (such as 'mandua').
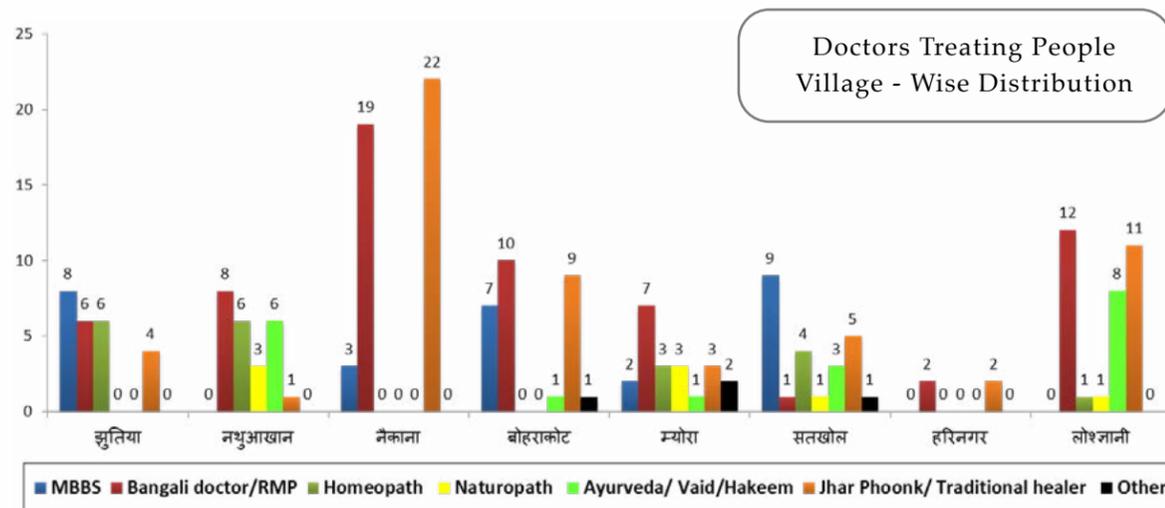
Figure 17: Village - wise treatment seeking behaviour

Many of the health issues reported by respondents are those which have probably been diagnosed by a trained health provider. However, data indicates that overall, 32% of the respondents prefer 'Bangali' doctors (untrained providers), 28% go to 'jhar phoonk' practitioners (exorcism). For example, for treatment of ailments like diabetes, arthritis and hypertension there is still a heavy reliance on the 'jhar phoonk' practitioners and Bangali doctors. Only 14% of the respondents go to an MBBS doctor for treatment, 10% go to a Homeopath, 9% seek Ayurveda, 4% seek treatment from Naturopath and 2% from other kinds of health providers trained in allopathic or in other systems of medicine. The graph gives a glimpse of preferred treatment modes in all villages. For example, some respondents in Satkhol have mentioned that they worship Devi and Devta *("देवी देवता को पूजना", "जागर लगाना")* and smear holy ash *("विभूति")* and pray for better health.

It is very evident that people have mostly consulted some doctors/ traditional healers '1-3 times' in the past 6 months. Naikana shows maximum respondents consulting health practitioners 'more than 6 times'. Only a small percentage
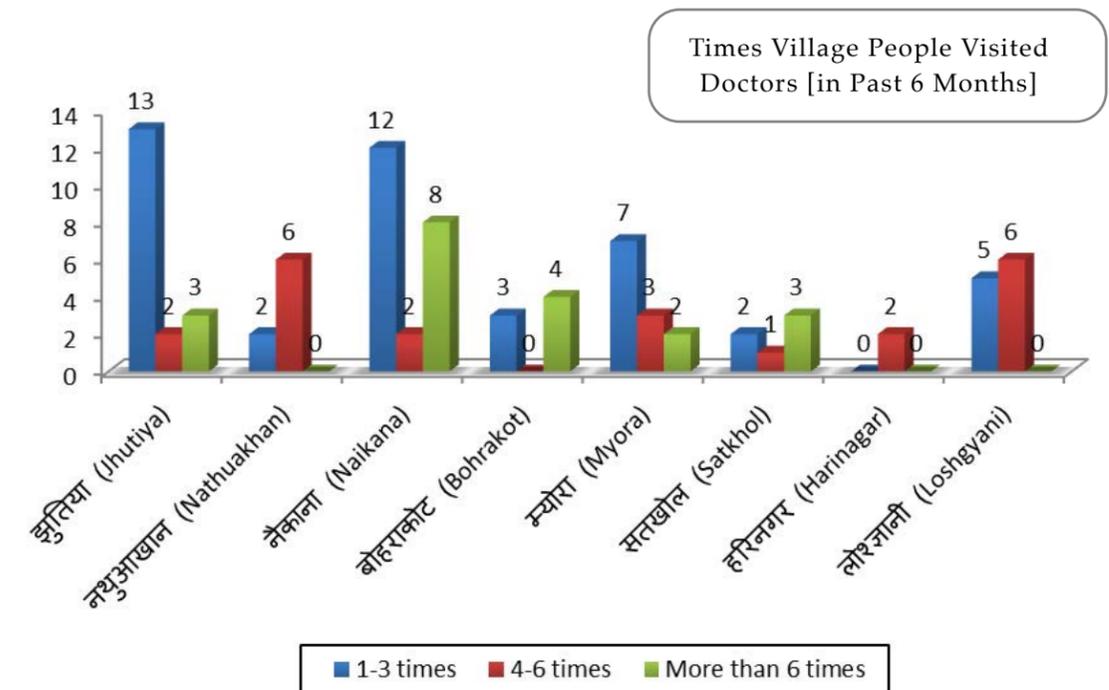
Figure 18: Village - wise frequency of visits to health practitioners in past 6 months

of people have reported for 'what' illness they were visiting doctors. Reasons for visiting doctors more than 6 times (as observed from few responses only) include, piles, heart ailments, 'sugar', back ache and stomach ache.

In a study of women's knowledge of healthcare services in Garhwal region of Uttarakhand, Dixit and Bandhani (2019)[14] found that both middle-class and lower middle-class women were knowledgeable about health services and that the healthcare functionaries were helpful. However, a section of the population surveyed during the CPEHL in 2020, 28% of the total sample of the villages responded that they sought treatment from 'jhar phoonk' practitioners. Satkhol was the only village where Auxiliary Nurse Midwife (ANM) and ASHA were consulted. Although the sample is too small to draw any conclusions, the presence of health functionaries and ASHA in the villages needs to be looked into.

Jhar Phoonk - Traditional Healing

A Case from Loshgyani

Although data shows that Loshgani's first preference is 'Bangali doctor' (a quack), however, many respondents mentioned that they first go to a person who does 'jhar phoonk' and then they consult a doctor if at all needed:

"गाँव में ज्यादातर झाड़ फूंक वाले को दिखाया जाता है क्योंकि माना जाता है ज्यादातर बच्चे या बड़े अंधेरे में डर जाने से बीमार पड़ सकते है"

The reason as recounted by a few respondents is fear of darkness (Nyctophobia) in children and adults as a causative factor for illness – the perception being that only this method is a cure. Total 57 women mention they go to a 'jhar phoonk' practitioner.

Village Level Analysis

Education levels of women who go to 'jhar phoonk' practitioners:

Education level	# Women
12th	10
10th	2
MA	7
BA	6
Below 10th	19
No Education	13

Table 7: Overall correlation between women's education and reliance on practices like 'jhar phoonk'

The above table shows that many of the women who sought 'jhar phoonk' were educated. Further, 23 of them live in a joint family while 34 live in a nuclear family; 18 women are <=40 years of age while 39 women are aged >40.

So, this cultural belief is rampant in the village, irrespective of education, age or family size. This finding would allow for an informed education of the larger community with regards to myths, misconceptions in treatment seeking behaviour through the health education program of the Madhuban Sri Aurobindo Ashram – Delhi Branch.

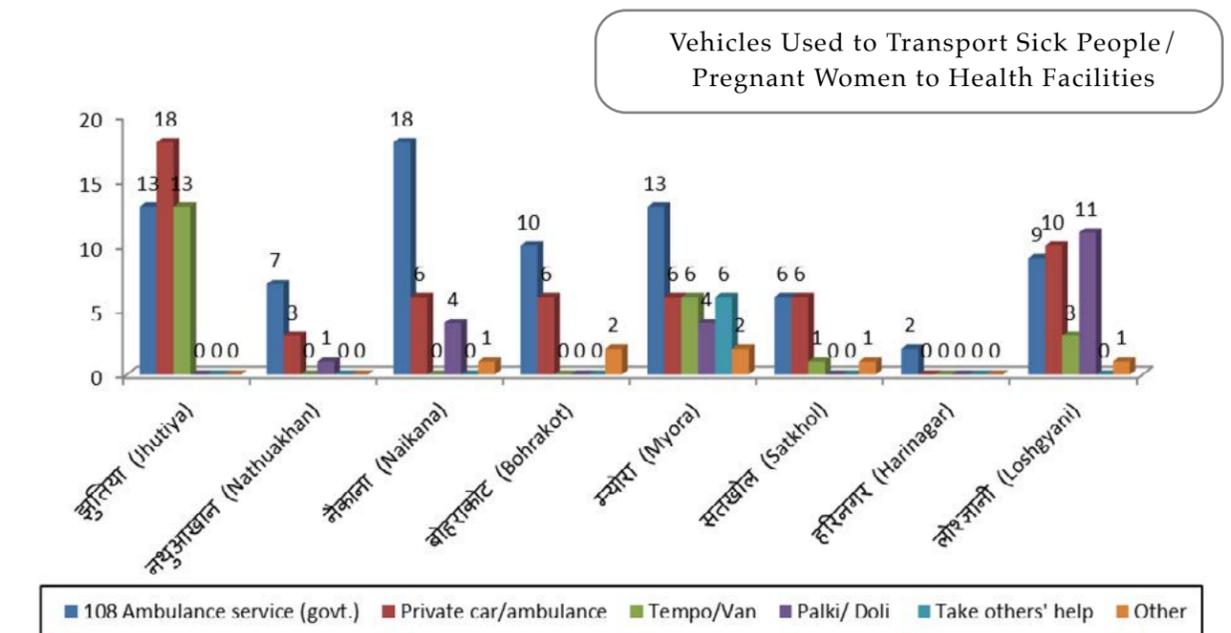## Community Access to Health Services

Figure 19: Village - wise access to health services

There is clear predominance of using 108 (government ambulance service) in most villages except Jhutiya, which reported using private vehicles (own vehicles) mostly and Loshgyani that has an interesting mix of using palki/ doli, private vehicles and 108 government ambulance.

Myora is the only village that has reported taking help from other village people to transport sick people/ pregnant women to the health facilities. And respondents of this village also recount that now there are almost all facilities

available, which was not the case earlier. The use of private vehicles has a similar trend across most villages irrespective of sample size/ village.

In Naikana, a respondent reported using a horse *(घोड़े का इस्तेमाल)* as transport; one respondent from Satkhol reported that they took the help of ASHA worker and midwife *(दाइ को बुलाते हैं)*.

The use of ambulance services by the community is definitely a plus point for the government. Use of ASHA and ANM reported from only one village (Satkhol). Institutional delivery is common, which is also a good development. Respondents reported that health facilities are available.

Overall, utilization of Mother and Child Health services (both in the government and private sectors) contrasts with access to treatment for chronic illnesses (wherein untrained providers were also consulted by villagers).

Water Sanitation and Health (WASH)

Almost everyone in the villages surveyed knew about the ways and importance of hand-washing:

"लगभग सभी लोग अपने अपने तरीके से जानते है; वह अपने हाथ अच्छे से किसी भी काम के पहले और बाद में धोते हैं"

Many respondents also say that they use soap for hand washing *"और सबुन से हाथ धोते हैं"*

All households in Satkhol and Nathuakhan had their own toilets. In Jhutiya and Naikana, respondents did not know whether every household had a toilet. But the respondents from Jhutiya said they had toilets in their homes. Under the toilet construction program of the Swatch Bharat Abhiyan (Clean India Campaign), In Nathuakhan and Loshgyani 10 -12 toilets are built every year. In Myora, about 28 toilets are 'kaccha' – i.e. non-cemented – construction. Overall, ownership and use of toilets was high in all the villages surveyed.

Community Knowledge of Swatch Bharat Abhiyan

Most respondents associated the campaign with cleanliness. Not all the women reported knowing about this nation-wide campaign that has given villages toilets and brought components of the WASH program to their doorsteps. Smt. Gudda Devi (Anganwadi teacher) from Naikana was able to give details because she had worked with the Abhiyan (campaign):

"हां मुझे स्वच्छ भारत अभियान की जानकारी थी क्योंकि हमने भी इस अभियान में काम किया अपने सेंटर में तथा इस पर हमने बैनर द्वारा रेली भी की"

A woman from Satkhol said she had heard that Swatch Bharat meant that they had to keep the environs of their homes clean; another woman said that they had to keep their garbage in one place and yet another spoke about keeping garbage segregated.

In Jhutiya, a woman said that she associated the campaign with the Prime Minister, and said that the program aimed to clean India and also make the country disease-free and open defecation free, to keep its surroundings clean and to create awareness about cleanliness. Sri Shailendra Singh Mer from Jhutiya maintains:

"स्वच्छ भारत अभियान भारत सरकार द्वारा पूरे देश में चलाया गया था, इसका उद्देश्य था भारत को खुले में शौंच करने से मुक्त करना, अपने आस पास के वातावरण को स्वच्छ रखना, सफाई के प्रति जागरूकता पैदा करना"

Many women and men from the villages said that it was a government-run program and aimed to keep India and the nation clean. Another woman respondent from Jhutiya said that people should not litter the village and keep their environment clean. Awareness of the importance of cleanliness was an integral part of the program. A male respondent from Bohrakot said that the campaign was linked to cleanliness. Smt. Neema from Naikana said that it aimed at keeping the village environment clean – consonant with the dream of

Mahatma Gandhi:

"यह स्वच्छता को लेकर किया गया जिसे गाव के गलियों को सड़कों आदि की सफाई की जाए व गांधीजी का स्वच्छ भारत अभियान का सपना पूरा हो सके"

Sri Trilok Singh from Jhutiya also said something similar. Sri. Shanti Prasad from Loshgyani and Sri Shanti Suyal from Naikana echoed the sentiment. Sri Singh added that after Mahatma Gandhi, Sri Modi (the Prime Minister of India) had launched the campaign. Smt. Leela Suyal also had detailed information about the campaign. Baliram from Myora village gave specific details about the campaign – roads, lanes and drains in the village had to be kept clean. His shop and its environs had to be kept clean. He got this information from the Anganwadi and from a book.

"हर दिन अपनी दुकान के और अपने चारों और की सफाई मिलकर करते है| इसके बारे में मैंने अपनी किताब और अंगणवाडी केंद्र में से सुना है"

Smt. Rupa Suyal from Naikana said that as part of the campaign, two kinds of dustbins had been introduced in the village for garbage disposal:

"सुना है टी. वी. के माध्यम से स्वच्छ भारत अभियान की शुरुआत प्रधानमंत्री श्री नरेंद्र मोदी जी ने २ अक्टूबर २०१४| इस अभियान के अंतर्गत सरकार द्वारा दो प्रकार के कूड़ेदान तैयार किये गये है - जैविक और अजैविक| हमें कूड़े को इसके अनुसार डालना चाहिए और पर्यावरण को स्वच्छ बनाना है"

It was heartening to see the awareness level of the village people with regard to Swatch Bharat Abhiyan and also how knowledge is translated into practice - keeping every road and lane of villages clean, for instance. Most respondents from this village had heard about the campaign from TV programs while some older people said that they learnt about it from their children; while some others mentioned that they got to know about Swatch Bharat from Anganwadi Kendra and also took part in the campaign:

"सभी ने सुना है अंगणवाडी केंद्र जाकर हमने साफ़ सफाई भी की"

Overall, those who had heard about the campaign from television were able to provide detailed information. The other source was children, who had obviously heard the Abhiyan discussed in school or Anganwadi. This was endorsed by the Anganwadi worker and a former gram pradhan.

Community Knowledge of COVID-19

Of all the villages surveyed, the maximum number of detailed responses came from Naikhana, Loshgyani and Jhutiya. Most of the respondents were aware of the symptoms of COVID-19 and protection from the virus. The idea behind asking about COVID-19 was not to test their knowledge but just to understand whether they were aware of the disease and its prevention.

Smt. Gudda Devi of Naikana said *"घर में रहो- जान है तो जहान है"* ("Stay at home; if you have life, you have the world).

A woman respondent from Jhutiya said that fever was a symptom. Many women respondents across villages said they had heard about COVID-19. Smt. Kavita Suyal from Naikana knew that the disease could be transmitted from others and that the government had closed schools and transportation services to prevent the spread of the virus. She said:

"सुना है यह वायरस आजकल बहुत फैल रहा है जिसकी वजह से सभी लोग घर पर बैठे है"

Few women respondents said that they knew the virus had come from China, was contagious and it was a transmissible disease and spread through contact and it was also fatal; others said the virus was spreading rapidly, which is causing problems and that one needed to be very careful. Some were aware that it is harmful for families while some mentioned that they were aware about how to keep themselves safe and their family safe.

Sonu Halsi from Jhutiya and other village women said that COVID-19 was

infectious and being aware, washing hands, maintaining social distance, wearing masks and following rules and instructions provided by the government were the best ways to prevent getting the disease and for protecting themselves and their families. Smt. Deepa Verma of Jhutiya said:

"कोविद १९ के बारे में सुना है और इससे सुरक्षित रहने के लिए जानकारी और सामग्री के साथ साथ जागरूक भी है"

Covid-19 safety measure in village outreach program at Madhuban
Sri Aurobindo Ashram- Delhi Branch

Smt. Kavita Devi of Bohrakot had heard the famous Bollywood actor Sri Amitabh Bachchan speak about ways of preventing COVID-19 and that way she felt it was important to understand the magnitude of damage that could be caused by not following Covid-19 safety measures. Smt. Meena Devi of Jhutiya said that she had heard about COVID-19 from television:

"प्रतिदिन T.V. में समाचार देखते है"

A male respondent from Myora said his family had heard about COVID-19 and that hand-washing prevented the virus from spreading. Sri Gopal Singh Mer of Jhutiya narrated the symptoms of COVID-19 (fever, pneumonia-like symptoms). Sri Dinesh Chandra Suyal from Naikana said that it was the first time the virus had been identified; to prevent it spreading, people should keep their distance from one another. Another male respondent said that people should stay at home since meeting people and shaking hands spread the disease.

Village women and men were aware that the virus was dangerous and there was no cure for it. Some were also aware that a medicine has yet to be invented, so it is up to the individual to protect oneself. Hira Devi from Naikana reports,

"इस वायरस का अभी तक कोई भी दवा या वैक्सीन तैयार नहीं हुआ है। इसलिए इस वायरस से बचने के लिए अपना बचाव करना ही अपनी सुरक्षा है।"

Smt. Pushpa Suyal said that the virus is spreading, despite the lockdown. Most of the respondents from villages were aware of COVID-19; knew something about the virus and symptoms of the disease; the instructions to be followed to protect themselves and their people:

Community Mental Health Experiences of Lockdown

Most of the experiences focused on children. Although some of the parents were OK with their children studying at home, the majority of the parents were not comfortable with the idea of their children studying at home, since schools have been shut in Uttarakhand since the lockdown in March 2020. They said that the usual quiet at home during mornings when children were at school was disturbed since children stayed indoors during lockdown. A few parents were worried that children would find it difficult to clarify doubts related to their studies.

Some parents do not own smartphones, so their children's studies have been

interrupted. Some respondents were worried about their children's studies because of these reasons:

"क्योकि विधालयो में फिक्स समय तक ही किसी विषय को पड़ते परन्तु अब लॉकडाउन के चलते उन्हें बहुत परेसनिया हो रही है, जैसे- कोई प्रश्न समझ नहीं आ रहा हो तो किस्से पूछे, और कब एग्जाम होंगे, कब उनका रिजल्ट आएगा, कैसे वो आगेतयारी करे, नेटवर्क इशू के कारण ऑनलाइन क्लासेस भी अटेंड नही कर पाते, ग्रामीण इलाको में"

Apart from this, some respondents were worried because their produce was not being sold in the markets (since transport was unavailable). One person said that everyone in the family is mentally distraught and stressed during the lockdown:

"हलाकि लॉकडाउन हम सब की सुरक्षा के लिए है परन्तु लॉकडाउन हर वर्ग के लोग चाहे व बच्चे हो बड़े हो या बूढ़े हो, सभी को मानसिक रूप से प्रभावित कर रहा है"

Many respondents reported that during the pandemic lockdown, every family member was at home; children to elderly had some kind of mental anxiety. Private work was interrupted and offices were also closed. People who were in private jobs worried whether they would still have their jobs after the lockdown was eased. Geeta Verma from Jhutiya mentions:

"जो लोग प्राइवेट जॉब करते थे लॉकडाउन के वजह से उनके काम भी बंद है जिससे वो भी बहुत परेशान है"

However some of the respondents also mentioned that they are not facing any disquiet or anxiety due to lockdown. Vimla Devi from Myora beautifully narrates that during the lockdown all the family members sat together and discussed matters. Everyone is sharing the workload whether at home (such as cooking etc.) or in the field. Elders are helping the children with their studies and that way all are keeping good mental health:

"अपनी परिवार में सभी लोगो के साथ बैठकर अपनी बाते को रख रहे है, और उनकी संभावना बस इतनी है वे अपने कार्यो में अपना योगदान दे रहे है; अपने स्वस्थय को, अपनी फसलो, अपने हाथ से बना भोजन बनाकर खा रहे है; और पड़ने में बच्चे भी योग दे रहे है जिसमे सभी प्रकार से महिला पुरुष मानसिक रूप से सही है"

CHAPTER

9.

TREC-CPEHL FACULTY/ TRAINER EXPERIENCE

Interaction with First Peer Educator (PE1)

AC: What did you gain while conducting the TREC-CPEHL survey?

PE1: Firstly, we came to know the reasons behind all the customs followed in our village. Sometimes we just follow customs without trying to find the reason behind it.

AC: Since you are educated, what do you think other girls in your village can do by learning how to read and write? What are the aspirations of young girls in the village? What do you want to be? How can young women change your village, your society?

PE1: Yes didi (elder sister). I have seen that many educated girls in the village don't have freedom to do what they want to. They are not knowledgeable or informed about many things and eventually after some time they get married. As for me, I wanted to learn many things, so I came here for training. I would like young women like me to come forward to learn many things and achieve their goals in life. I learnt a lot by doing the Survey for Madhuban Ashram. Similarly, I would like to help other young women to realise their goals in life.

AC: Do you want to work here or will you go back to your village?
PE1: Didi I will go back.

AC: How long is the course?
PE1: Didi, the course continues for three years.

AC: There is a lot to learn here?
PE1: Yes Didi.

TREC peer educators Babita, Indra and Komal with Dr. Anjali Capila and Dr. Anju Khanna

Interaction with Second Peer Educator (PE2)

AC: Have the practices during menstruation changed these days?

PE2: During my grandmother's time, menstruating women had to stay in small caves (called Udyiaar) for all five days of their periods. Food was served to them in the caves and they stayed there. After their periods got over, they had to go down to the stream and take a ritual bath. Those who served the food or went near them had to be purified by applying cow's urine. But these practices have changed now.

AC: How much have these practices changed?

PE2: They have changed somewhat. Earlier we used to live in caves, now we live in separate rooms in the house. The practice of purification with cow's urine is also a little less these days.

AC: So these beliefs are changing a little bit now?

PE2: Yes, they are changing, because people are educated now.

AC: Have you seen any change in yourself? While doing the survey for example?

PE2: Yes.

AC: How many houses did you cover during the community survey?

PE2: Didi, I conducted the survey in 13 houses.

AC: Was there any difficulty in doing the survey? Asking questions? What change did it bring about in you?

PE2: I took two days to adjust to asking questions and recording answers. Initially I was uncomfortable because we had to speak to men also. I was contemplating what I would say and how I would do; what sorts of questions didis have given us. Then I went to the first home and did the survey. After that, my confidence increased. The men in the household are usually literate, so they helped answer the questions; that made me feel good. Then I was able to talk freely and I felt that I was doing well and achieved the task that I had set out to do.

AC: Did you see a change in yourself? Did you gain confidence?

PE2: Yes didi, we are confident that we can do something. We can talk to anyone.

AC: What are your expectations from the TREC program? What do you gain by becoming a peer educator or getting skilled?

PE2: Didi I want to become a teacher in my village. You see, I went to a government school and learnt only what was written in books. The teacher would ask us to read our books and then leave the class. Then we used to take help of guide books to write answers. I do not want to become a teacher like that. I want to be a teacher who reaches down to her students, to their level and teaches them to be sensitive to their environment. I want to teach them what is happening in reality.

AC: What are some of your thoughts about your culture? Of the songs our mothers and grandmothers used to sing? Have these songs disappeared now? Do you still sing the songs your grandmother sang? After all, those were related to the environment.

PE2: These songs are not sung as much as before. These days most weddings happen in hotels. However, in the marriages that are arranged in the village, we sing "jorha" songs a few days before or a few days after the marriage.

Interaction with Third Peer Educator (PE3)

AC: How many houses did you cover during the survey?

PE3: I did the survey in 7 houses.

AC: Did you face any problems while asking questions?

PE3: Language was a problem. They speak Pahadi (hill dialect). I did not know much but I tried.

AC: So, what language do you speak at home?

PE3: At home adults, like my father speak Hindi so we speak Hindi as well. However, I like Pahadi too.

AC: What changes have you seen in yourself?

PE3: I have gained confidence. Initially, I couldn't speak even among my peers, but now I have no hesitation in speaking to previously unknown people.

Ruma Chakravarty's Experience while Visiting Peer Educators' Families and Local Centres

When Demands May Manifest Into Livelihood Options

During a visit to the Anganwadi Kendra, Harinagar, we saw that there were only one teacher and two sakhis to cater to around 20 students. In fact when we were in the Anganwadi Kendra, the students were waiting for their teacher. As a natural instinct our thought was that the teacher was late for the class however, soon we were happy to be proven wrong. The teacher was there five minutes after we arrived to the Kendra and we came to know that she was coming from home visits in the villages, which was part of her job along with teaching the children. She spoke to Dr. Anju Khanna and was in a hurry to get back to work (that is teaching), which explains how responsible she was.

This opens up another opportunity where the TREC educators may be involved in Anganwadi Kendra (or open day care centres) and assist the teachers and sakhis (assistants) with quality Integral Education to the children of working and other women/ parents. In fact, TREC peer educators are already working in that line where they had opened a crèche for the children of women participating in the skill building program "Sashakt Ramgarh" project (an extension to TREC) in Madhuban Sri Aurobindo Ashram – Delhi Branch during Feb-Mar 2021.

TREC peer educators teaching the children of women who were participating in "Sashakt Ramgarh" project

TREC peer educators offered the children fun-filled educational activities, physical education with exercises and games and took care of their other requirements like food etc.
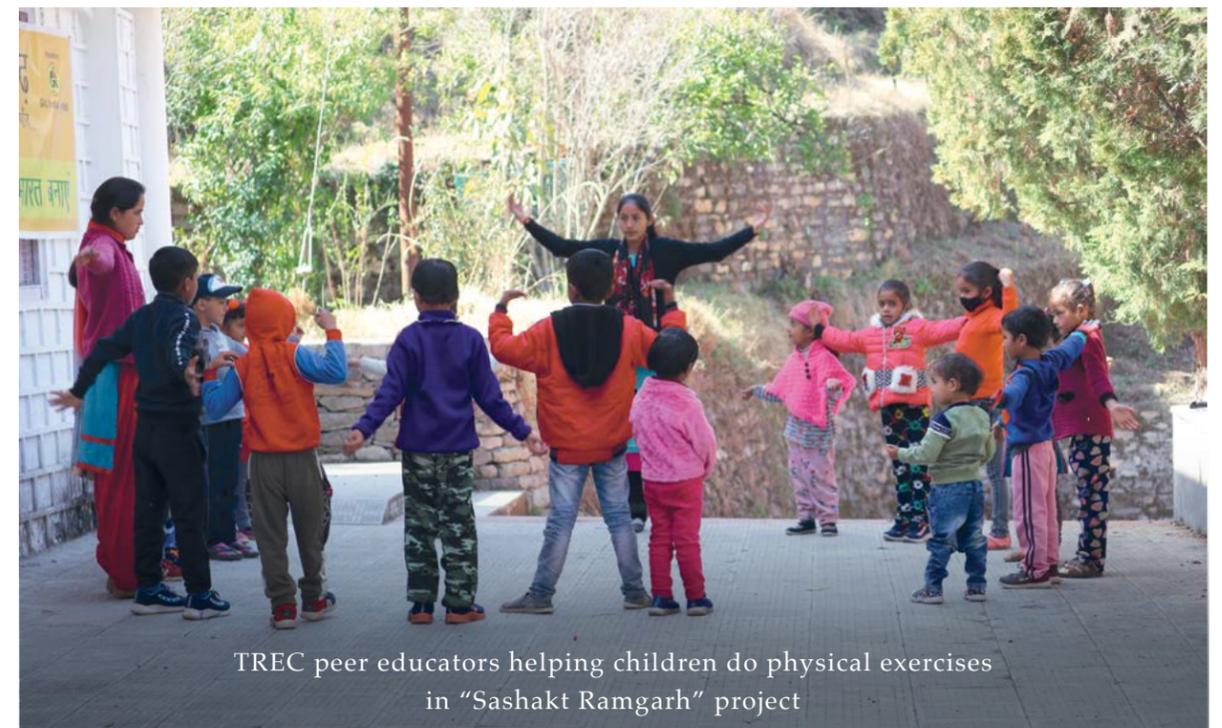
TREC peer educators helping children do physical exercises in "Sashakt Ramgarh" project

This is a wonderful mode of children's care with necessary mental, physical, educational and other aspects. This seems to be a perfect opportunity to connect the requirement of right education, sharing responsibilities and training the children with an open and Integral Education system.

A Mother's Aspiration

Every mother wishes to see her daughter prosper in life. And Puja's mother was no different. A strong lady with clear thoughts, she only knew that her daughter had to study, move forward, get trained, earn a decent living and lead a good life. Puja, one of our TREC peer educators from Satkhol is a very bright sportsperson. When we met her mother at their Satkhol home, Puja's mother was very happy with how Madhuban Sri Aurobindo Ashram is facilitating Puja's education, skill building training and other aspects; and was very particular that Puja should progress with all she is being provided with. Then she should start earning. Puja's mother mentioned **"लड़के तो जैसे तैसे कमा लेंगे, लड़की को आगे बढ़ना है| हमने तो नहीं पढ़ा उसे पड़ना लिखना है, आगे बढ़ना है"** ("boys would earn anyway, it's important that girls study and progress. I did not study, she needs to be educated."). It was like the mother wished her own aspirations to be fulfilled through her daughter.

When Puja had to assist her to carry some firewood on head from their land, her mother was so caring and it was heartening to hear her asking Puja **"पूजा तुझे तकलीफ तो नहीं हो रही?"** ("Puja you are not having any problem right?"). It was clear that the mother did not at all want her daughter to lead the life of challenges she led.

It is also evident that the daughter is being brought up like any other urban girl from the cities (with education or attire) while the mother is still in her traditional wear. The aspiration of the mother to give a good life to her daughter was coming through the conversation she had with Dr. Anju Khanna and me, her thoughts and the wishes she had. After all, mothers are also daughters.

TREC peer educator Puja and her mother head - carrying firewood from their designated land
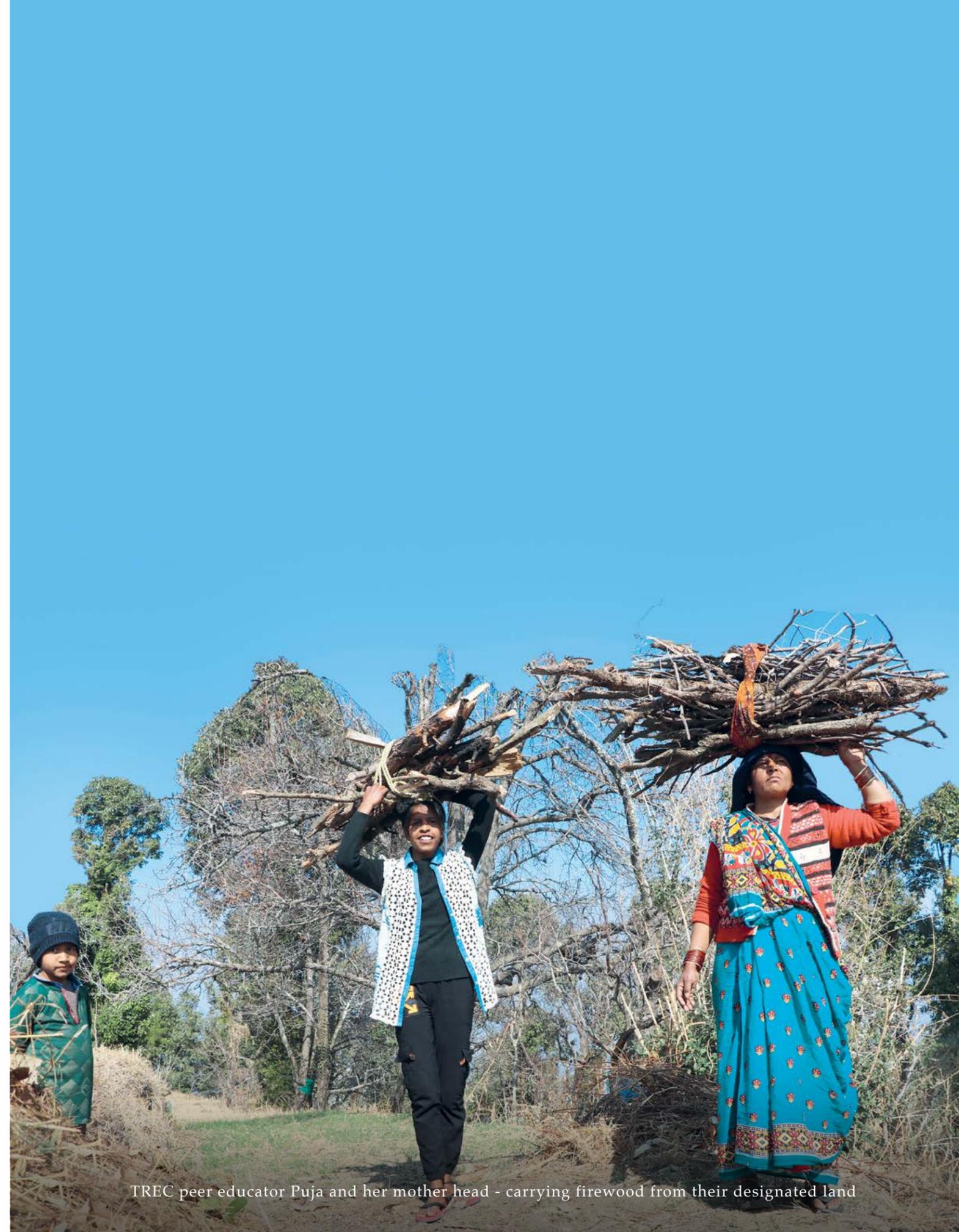
Time, Thoughts and Responsibilities are Indeed Changing and for the Better

Dr. Anju Khanna and I met Deepa (one of the TREC peer educators) and her family (husband, mother-in-law and 6 years old daughter) at their house in Harinagar. Deepa is a dedicated woman who was working in the primary section of a local government school in Harinagar. However, for better prospects she started TREC training with Madhuban Sri Aurobindo Ashram. This was my first face-to-face meeting with the TREC girls after we had conducted telephonic hand-holding and online training while conducting the TREC-CPEHL survey 2020. I was delighted to see how supportive Deepa's husband and mother-in-law were towards Deepa's pursuing training with Madhuban Sri Aurobindo Ashram. They were even ready to take care of her daughter when Deepa was away for residential training at the Ashram or even if she travels to Delhi for a few weeks.

'This gesture of reassurance speaks louder than words'. We knew Deepa would train with a composed mind

Deepa knew her daughter would be absolutely fine with her husband and mother-in-law

Their sense of sharing responsibilities was very encouraging even in a small village like Harinagar; and it was an eye-opener for me and yes quite literally. Her mother-in-law was also very clear that Deepa should start earning soon since she has done much training now (whether educational or skill building). *"अब दीपा को कमाना है, उसने तो काफी कुछ सीखा है"* ("Now Deepa should earn, she has learnt many things"). That is what Deepa's mother-in-law quipped. Deepa's husband was very happy when Dr. Anju Khanna narrated to them the idea of starting the TREC – facilitated day care for children from their house itself as they have a large area where day care setup can be done to impart Integral Education to children. And this is ideal for Deepa as she will be able to take care of her home and earn too.

I could realize that three aspects – education, skill building and livelihood for women in the villages are most important and those have come out in each interaction I have narrated. Incidentally these are the findings from our TREC-CPEHL survey 2020 as well. To realize those, TREC peer educators'

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families can offer all necessary support so that Madhuban Sri Aurobindo Ashram – Delhi Branch may facilitate the designated training with ease. This understanding definitely helped us narrow down our focus on the areas of TREC curriculum.

CHAPTER

10.

DISCUSSION OF TREC-CPEHL FINDINGS

Demographics, Living, Occupation and Livelihood – Gaps and Opportunities

Elderly women feel that the communion is somewhere lost in the mundane process of urbanization or in the process of progress where people started living in smaller families and the younger generation is migrating to cities for better job opportunities. Earlier they used to live together and would face both good and challenging times together. That was their strength. Some women feel that the larger united families build a cohesive community.

This scenario demands better employment opportunities for both men and women, better employability and superior business opportunities in villages in order for people to work from within the village with the resources of the villages and in the process bring in socio-economic development.

As per the data, farming is a primary occupation (around 47% of overall occupation categories) across villages and many young people are into that profession (predominantly male). Overall 66% of employed people are of age <=40. Hence there is a huge potential to upgrade and up-skill the young brigade in farming and farming related occupations. In addition, the women when educated can also be part of that sector through innovative business openings.

From the understanding of the types of houses respondents live in we get an indication that Naikana & Jhutiya (with majority cement houses) seem to have better economic stability than the other villages. Now, if we correlate this with village occupation, then we see that Jhutiya's prime occupation is farming (around 62%) while Naikana has only 19% farming while 81% constitutes some private jobs/ occupations and some business.

Further, farming constitutes 60% and 41% of Myora and Loshgyani's occupations respectively where the majority has mix-build houses. In essence, although farming emerges as the core occupation area, it may not be the only indicator for economic progress or social status. This is a domain that needs more focused research and may be another study to see the interlinked parameters (such as resources, occupation, culture, business and economy) on which the village prosperity depends.

Women Education, Employment - Gaps and Opportunities

Although the respondents talk about women's education, equality and progress, we see that there is a high dropout rate in schools (77%). The girls in the villages are encouraged to go to schools, however the completion of education is not emphasised. These high school dropout rates can be avoided with enhanced awareness among parents of girls regarding their continued education as well as greater community level awareness. Village-wise education drives can be conducted consonant with a larger vision of equal opportunities in every sphere. Further, women in the villages already feel empowered even with few women completing their higher education and

taking up jobs. However, when we look at the data, we see that in the overall pattern of occupations, only 14% of women are employed. Further, out of a total 170 female members, only 29 are employed. Among the 94 married women, 17 are doing some work. If we just look at the master degree holders (7) and graduates (9) we find that out of 7 master degree holders, 4 are working (2 are Anganwadi teachers, 1 is ASHA worker, 1 has a tailoring shop); while out of 9 graduates only 3 are working; 1 among them is a teacher. Here we are just considering the married women as per the scope of the survey. The potential of these women with higher education needs to be tapped and utilized for TREC training and mobilizing.

Few Emerging Questions:

- What is the perception of "education" to them?
- Why is there a gap between perception about girl education and education itself?
- What is the meaning of education & prospect to the village people?
- Why is the dropout rate so high?
  - Has this something to do with parents' education/ awareness about "education"?
  - Is this something to do with societal pressure that after an age girls need not study?
- How can this scenario be altered so that girls and women get the right education? Who decides??
- Why is the employment rate low for women in villages? Is it education or other social restriction(s)?
- How multidimensional-multimodal and Integral Education and skill building can be made easily accessible to the girls and women?
- How can women be part of self and village development with the help of the village resources?
- How entrepreneurial skills can be inculcated in the women of the villages?

Intersectionality of Religious, Social, Cultural and Health Practices

An overlap between the religious, social and health practices during menstruation and pregnancy is evident. The interviews with the community members across eight villages underscore the blurred line between many social and health practices. For example, social practices of not allowing the menstruating and pregnant women to cook and contribute to other household chores are also aimed at providing them with adequate rest. Traditional beliefs of advising pregnant women to not watch solar and lunar eclipses are also rationalised by the community as it is believed to have an adverse impact onthe health of the unborn child.

According to many respondents, a major reason for continuing these social and health-related practices during menstruation and pregnancy is the respect for traditions that have been followed through generations. They shared that not following these practices may result in the community talking ill of them. This is indicative of a cohesive normative behaviour that is followed by women belonging to a village society presumably arising from some particular health coincidence in the distant past.
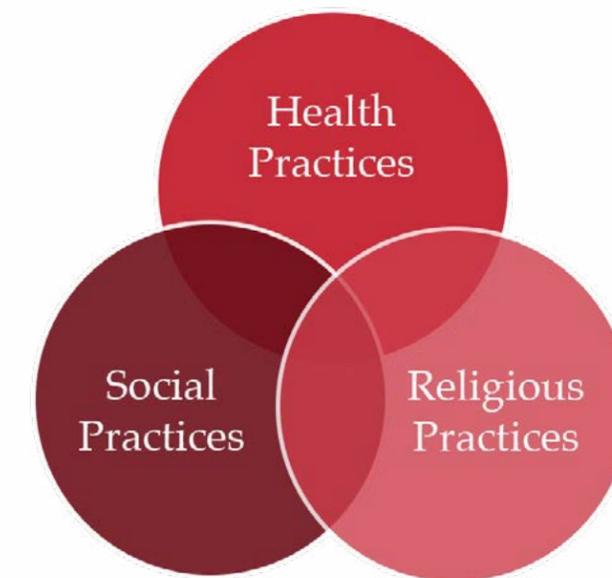
Intersectionality between practices

Reflection on the Present Changes – Gaps and Opportunities

However, many changes in these practices have taken place through the past five years (or may be little more) in these 8 villages. While most of the women feel that there have been changes and for the better, some feel there were no changes and the practices still exist - only the magnitude and mode of following/ not following those have changed for various reasons whether it's with time (*समय के साथ*), with modernization *(नयी ज़माने की बहू जो होती है)*, education *(पड़ी लिखी तथा शिक्षित होने की वजह से)*, awareness *(जागरूक है और समझदार)* etc.

Responses reflect the women's happiness and a sense of self-respect when they recount their discontinuance of a few practices, which they thought were holding them back, were regressive and unjust towards them. Examples include staying in a cow shed during menstruation; not touching anyone or anything including plants as they might dry up; or otherwise purifying with cow urine - a long list indeed. And these are not followed today, which indicate a progress as every woman has the right to her reproductive health when there are various means of menstrual hygiene available these days.

However, this should not be a reason to disapprove of all other traditional and religious practices. There could be some valid reasons that might not have been communicated rightly to the women or they were not educated about those; this led to the practice in a patchy and unreasonable way. For example, as it is true that during menstruation, the release of impure blood is actually harmful for plants, human and animal hygiene, which may spoil those in case cleanliness is not maintained; it is also true that this can be taken care of by proper menstrual hygiene, handy health measures, right education and awareness. Thus, the reasons for which a socially sanctioned health practice was established in the past are not adhered to these days because proper care is taken and not because ancient practice was wrong. Women and girls in the villages have become conscious of their health, hygiene and cleanliness. And that led them to lead a better and respectful life where they stay inside the house during menstruation and do all normal routine work including farming work. However, among all these changes, religious belief takes precedence over everything else since the practice of not going to temple during menstruation still remains *("बस केवल मंदिर में नहीं जाती हैं")*.

Removing Socio-Cultural Barriers in Education

Cultural and social perspectives, though sometimes overlooked, need to be part of Integral Education system to improve learning perspective where community engagement and participation are also essential. In this process, 'living and learning' must be integrated. This is a larger area of intervention where village resources, community and learning are brought under the same framework of change.

Few Emerging Questions:

- Even with lower "higher education rates" (as per the data) what makes women think since women are "educated" hence they are not following practices?

- How has modernization changed the thought processes and ways of living?

- Does "being aware" (in the respondents' view) disprove "traditional practices" or vice versa?

- What do they mean by "women progressed so much" *(बहुत आगे बढ़ गए)*?

- Is the cultural transposition an influence of films, TV, social media where aspirations of simple-living people are met with aspects far from actuality and values?

Women Health and Hygiene – Gaps and Opportunities

The presence of piped water, other water sources and overall the awareness initiatives in the villages may be a driver of hand-washing practices and the absence of diarrhoeal diseases in the community. Although the survey did not cover correct hand-washing practices, the correct method of hand-washing could be an important part of health education in view of the COVID-19 and other disease outbreaks.

With growing incomes, lifestyles have also changed – villagers are consuming pre-packaged foods – all over the landscape one can see many small shops selling pre-packaged soups, breads, beverages and biscuits. Health education will have to incorporate the harms of eating such foods over traditional foods such as millets, puffed rice and locally grown fruits and vegetables. Some own scooters and cars or they commute or go for trips in minivans. This contributes to a sedentary way of life. Easy availability of LPG gas and water supply for many of the houses added to that. These sedentary life-styles - at least for a few villagers who are looking forward to the urbanized lifestyles - are a precursor to ailments such as diabetes and heart disease.

We can see some discrepancies in responses between "I am Healthy" and "Illness". E.g., a respondent who says "I am healthy because I eat good food and do exercises" also reports that she is suffering from heart problems and piles. Such gaps are found on multiple occasions.

A health education program and health camps to sensitize villagers about NCDs, reproductive health issues and the importance of healthy diet and active lifestyles is the need of the hour. Health functionaries and Anganwadi workers need to be sensitized about children who have Nyctophobia and are taken to 'jhar phoonk' practitioners. The community may need to be linked to ASHA workers. Holding regular health camps in villages and motivating ASHA and Anganwadi workers to speak to women may wean the villagers away from consulting untrained providers ('jhar phoonk', for example). Pathways of knowledge gain and information transmission, the role of influential persons (not only elected leaders but former gram pradhans, retired and serving Anganwadi and school teachers) needs to be explored for community mobilisation for health promotion, vocational education and livelihood/ career options. These are opportunities for the primary health services to reach out to men and women in the community utilizing the health outreach program being planned by the Madhuban Sri Aurobindo Ashram – Delhi Branch.

The Health Education curriculum would have to include concepts and pathways for prevention of both communicable and non-communicable diseases. Some misconceptions about transmission of COVID-19 would also have to be addressed and communities would have to be updated about relevant facts about the disease.

11.

AREAS OF FOCUS EMERGING FROM
TREC-CPEHL STUDY

Parameters emerging from the data, analysis and discussion offer insights about the changes in all practices, in every aspect of living, social-cultural, festivals, marriages, health, education; thoughts and beliefs; and others; which whether are beneficial or not somehow may not be in sync with one another as per the need of the people, community and for larger cause. Those are the areas that need to be focused on for the Integral Education system to be built through TREC. A broad education in all areas is mandatory to bridge the gaps between modern education, understanding of our roots, traditional wisdom and values. It is not about right or wrong of any notion; it is about what is practicably relevant and right for now. Focus on women's education, skill building and health is the need of the hour to boost this space for women to progress and contribute to school education and education for the community. As a next step, employability and livelihood follows as for better employability or entrepreneurial ventures, women in the villages will need to be academically/ educationally qualified or skilled enough to be stable and earn a living. And that needs to align with community and village development.

Thus, areas of focus for TREC training as emerging from TREC-CPEHL include the following:

For 11 Peer Educators/ Teachers/ Other Educated Women

● The 11 young women need to be co-held for their further studies and training for becoming grassroots teachers in local schools and other alternative schools as facilitators who understand, follow and implement Integral Education based on the principle of integral living; one that understands the local skills, local needs; and the aim of education becomes rooting the teachers as facilitators of change.

● Connecting the curriculum to the reality of the village needs is important. This also emerges from TREC-CPEHL analysis as a gap in education perception. The educators also study the assumption behind the present

Peer educators in touch with their roots

education and see whether it leads the primary level children towards individual and collective self-reliance rather than being more dependent.

● TREC-CPEHL findings reveal that the women on the hills are very hopeful about girls' education. They feel empowered even in a situation where higher education is relatively rare. And this is where TREC will need to steer them towards the right direction that will influence all their further actions - be it self-development, transmitting the knowledge to the school children, livelihood building, community development etc. The high rates of dropouts clearly point towards the need for open schooling to compensate for lost opportunity.

● The women with higher education (as found by TREC-CPEHL) can be the role models for other village girls/ women and bring changes in the education scenario in villages. TREC training needs to enable them to contribute substantially by becoming effective peer educators or mobilizers (through TREC Training) for educating others in the village and for community and livelihood building.

● The TREC led teacher needs to see the interlinks between what happens in the class and its impact on society; children forming a love for their local culture, working with their hands, understanding the local knowledge, data on rainfall, patterns of crops, flora and fauna of the place, soil, demographics – human and cattle population. They learn different arts and crafts in the area to initiate the children in the primary wings to their roots in relationship with the local, traditional system and resources. The training curriculum must include appreciation for traditional arts, crafts and culture and the reintroduction of local painting like the 'Aipan' for decoration and local craft like making handloom products, cane/ bamboo products etc. TREC will need to help discover latent talents of the peer educators to explore and incorporate art and craft in school education and also promote the same to educate the young adults, community women and others in the villages.

A beautiful cane basket, a traditional craft that is getting lost in the villages surveyed

● Mangal Geet, the intangible cultural heritage needs to be reintroduced into mainstream performance, which would provide livelihood for traditional artists and give an impetus to the revival of the traditional cultures.

● The primary years TREC curriculum is to be linked to indigenous knowledge to facilitate exposure of the teacher for a connect to their geographical, historical, social and economic reality where they can form a love for their village and work in terms of traditional occupations with a scientific temperament. As has emerged from TREC-CPEHL findings, there is a need to remove the socio - cultural barriers and that can be done only through conscious education.

A simple message on agricultural development

A child is empowered for literacy, logical thinking, fine motor movements and skills - for tomorrow

● They learn the primary occupations, emerging areas of livelihood interest and economy linked to livelihood patterns to counter the livelihood and employment imbalance that is clearly evident from the TREC-CPEHL findings; and that is with emphasis on women livelihood, occupation and employment.

● The peer educators will understand the changes towards urbanization and its impact; the awareness they can incorporate in the grassroots level of school education. TREC will need to ignite scientific-creative temperament for them to understand all processes and to build up on the traditional wisdom and knowledge emerged from the community through TREC-CPEHL.

● TREC training for village teachers to be in context to health, nutrition and hygiene along with healing practices as existed with local herbs and vegetation. The medical needs of the women and children need to be seen in the context of where Ashram can further carry its medical camps and educate others communities through peer educators and mobilized groups.

Further, TREC-CPEHL reveals respondents' awareness about balanced diet without knowing exactly what it is. The peer educators here would learn about what a balanced diet is and that too with the local grown food that they eat. Another emerging area of focus is 'mental health' education. Majority of the respondents emphasized that a healthy mental state (along with physical health) as important to 'be healthy'.

● As found from TREC-CPEHL, farming is the primary occupation in the villages and at the same time there are migration challenges. The reason is, villages do not see the value in growing traditional millets and grain (for village consumption) and have very little appreciation for crafts as a source of livelihood. TREC will focus on instilling this in the basic curriculum in order for educators and children to value what traditional-usable knowledge and practices are rather than raising false aspirations amongst the parents or children regarding the meaning of education and its notion of getting a job in the city. This linear and utilitarian outcome of education

limited value when compared to Sri Aurobindo's vision of Integral Education and this needs to permeate to the villages covered by TREC and beyond.

● TREC peer educators will learn to teach English but only as a second language. English is important while 'Rastrabhasha'/ mother tongue is mandatory for overall linguistic growth and exercising her/ his learning and cognitive faculties to its full potential.

● Computers and awareness of modern technology is to be provided to widen their understanding of societal needs, to support their education, livelihood, occupation, to access relevant information, to boost their local and traditional knowledge using those. These skills should be based on a spirit of enquiry and scientific temper. Advantage of Bharat's 'Digital India Education' should be a perfect model to be incorporated for this purpose.

● Involving local centres/ institutes, local school teachers, parents of children, local institutions, community members, Anganwadi, self-help groups and other stakeholder in TREC education/ training would be helpful since repositories of information related to socio-cultural-health etc. can be transmitted through these educative pathways. Further, from TREC-CPEHL findings, these sources of information have emerged as important in the study. Schools and Anganwadi Centres may be used for health promotion activities by the Madhuban Sri Aurobindo Ashram in the future as well.

● Linkages with colleges should be developed to provide internship opportunities to college students at Madhuban Sri Aurobindo Ashram to support the TREC Vision and mission based on the TREC-CPEHL 2020 finding.

बिच्छू बूटी (Common Nettle), a popular plant eaten as cooked vegetable in Uttarakhand, has many nutrients

Oak trees evaporate water that forms cloud, which in turn comes back to us as fresh water

● In continuation, TREC will focus on a special curriculum that will enable them to promote village occupations and resources with literacy, technology integration and research to make entrepreneurs; equip them with other professional skills that empower them to be self-reliant with their own entrepreneurship ventures and in turn gain independent livelihood. They will develop insights and field realities on indignity and indigenous models for building livelihood options. Further, skilling village communities for widening their current livelihood options too will be part of TREC curriculum. Madhuban Sri Aurobindo Ashram plans to facilitate this in a phased out manner.

Lata Arya, Anganwadi teacher (left); Bhavna (right), a young woman who advises village community about money saving plans and also helps in Anganwadi work

Other Women (both Educated and Less Educated)

● Skill building, occupation, entrepreneurship and livelihoods are very much interconnected. Men and women in the villages surveyed are looking for livelihood options. TREC will help implement a systematic and standardized approach to identify the potential skills of village women (also of men) and their areas of interests through direct interactions, outreach programs, workshops and hands-on projects primarily focused towards promoting village resources, traditional art & craft, food etc.

● Madhuban Sri Aurobindo Ashram – Delhi branch will be training the women of the 8 villages surveyed in polyhouse farming.

● Further, the skill based curriculum will train the community women and others in the villages to develop marketable products and services in order for them to earn a living.

Scope of widening existing livelihood options

180

Village outreach program (pickle/ juice making, knitting and stitching)
for community women at Madhuban Sri Aurobindo Ashram – Delhi Branch

Amla murabba is being prepared in village outreach program at
Madhuban Sri Aurobindo Ashram – Delhi Branch

Madhuban Sri Aurobindo Ashram - Delhi Branch facility for training
women in organic farming

Community women preparing rhododendron juice in Madhuban
Sri Aurobindo Ashram – Delhi Branch

Community women preparing stitched products for sale in the stitching
unit of Madhuban Sri Aurobindo Ashram – Delhi Branch

● Expert trainers/ faculties and resource persons from academics, industries and professional fields are part of the TREC module development and delivery.

● In different phases of TREC, these trained community members will be linked to institutions/ organizations and markets where they may exhibit/ market and sell their products.

● The trained women in later phases will act as master trainers/ resource people for skill building of other women in the community in their respective areas.

● Thus, TREC curriculum will be a mix of replicable training modules based on community needs as well as livelihood opportunities, skill development pathways and forward-looking syllabi that respects traditional practices and promotes well-being.

12.

TREC – THE WAY FORWARD / PATHWAYS

MADHUBAN SRI AUROBINDO ASHRAM – DELHI BRANCH

Community Building / Reconstruction
Occupation / Employment / Livelihood
Technology - Information access & Control
Empowerment

T Skill Building
Local Art & Craft
R Scientific Temperament
Education
Culture & Festivals
E Religious Belief
Health & Hygiene
C Social & Health Practices

Food Habits
Traditional Knowledge
Village Resources – Agriculture etc.
Family

HOLISTIC DEVELOPMENT

Integral Education

TREC FACULTY AND STAKEHOLDERS

Proposed map of TREC Integral Education - implementation and outcome

Teachers Resource Education Centre (TREC) initiated by Madhuban Sri Aurobindo Ashram – Delhi Branch attempts combining the questions raised in discussion chapter and focus areas emerged, to train peer educators and self-help groups to make them aware about these gaps, train them with a mix of valued traditional wisdom and modern technology in order for them to bring in positive and reflective changes to the community and to the education offered to children.

Teacher education comprises precise actionable targets that make it a noble profession to be pursued with intensive involvement with various stakeholders, advocacy groups including local communities, organizations, institutes and parents other than students. Imparting adequate understanding of the traditional, indigenous and local subjects, equipping the peer educators with scholastic skills, enabling them to understand child psychology and differences, teaching approaches, instructional facilities are some important focus areas of teacher education.

With the broad vision, TREC project activities are being divided in three phases – PHASE I, PHASE II and PHASE III. First phase (PHASE I) has three stages – Implementation of TREC Curriculum, documentation of the real-time training activities[20] and stakeholders meetings.

Combining Madhuban Sri Aurobindo Ashram's objectives and TREC-CPEHL findings, TREC Curriculum for PHASE I is based on the learning from Integral Education of Sri Aurobindo and The Mother. In addition, TREC curriculum will also be modelled on education and community reconstruction approaches proposed and implemented by Rabindranath Tagore, Gandhi Ji, Dr. Sarvepalli Radhakrishnan, Dr. Shyama Prasad Mukherji Rurban Mission (SPMRM) and Mahadevi Verma.

TREC – PHASE I

Stage I - Proposed TREC Modules – Implementation		
TREC Modules	**Training/ Learning**	**Methods/ Approaches**
Redefining Education	**What is the meaning of education to peer educators?** An interactive session where peer educators will share what education means to them. Then the facilitators will add value with an overview about the concept and importance of Integral Education, importance of multidimensional education systems for children that should include understanding their roots, village resources (nature, environment, ecosystem), culture, occupation etc. Emphasis on Girl education	• Interactive session • Participation of peer educators, facilitators and trainers • Discussion • Brainstorming
Self-Reflection	Self-Introspection/ Self-Reflection (including Sva – Avlokan by Dr. Anju Khanna and Dr. Kamala Menon)	• Interactive session • Observation & participation of peer educators, facilitators and trainers • Discussion • Self - learning
Village Resource Mapping	Orientation of village mapping; diagrammatic representation of facilities; resource mapping for villages	• Demonstration • Participation of peer educators, other stakeholders, facilitators and trainers • Discussion • Hands on training & learning • Field resource mapping
Community Engagement	Community, local institution, stakeholder engagement in a collaborative approach and engagement	• Participation of peer educators, other stakeholders, facilitators and trainers • Discussion • Hands on training & learning • Collaborating • Village & field work
Importance of Local Languages	Aspects of languages, mother tongue and multilingualism, how children learn – languages through play stories, songs, cultural aspects of language Vis a Vis – Medium of instruction (MOI)	• Interactive session • Participation of peer educators, facilitators and trainers • Discussion • Brainstorming • Creating ones language and multilingual dictionary
Learning from Health and Socio-Cultural and Traditional Practices	Participatory session – festival journal (festival, devi-devta worship, core belief, rituals, food, special characteristics, environmental-social-cultural aspects associated, any story associated, at least 2 songs associated); reproductive health phases (menstruation, pregnancy, childbirth and contraception)	• Participation of peer educators, other stakeholders, facilitators and trainers • Demonstration and lectures • Hands on training & learning • Field visits • Discussion
Learning from Village Resources and Nature	Walk into the forest, listen to the sound of nature, insects, trees, rivers, spring, identify, detox, connect; know your environment, do nature study, creating awareness about local plants, trees, water sources, hills, flora fauna etc.	• Participation of peer educators, facilitators and trainers • Field visits • Discussion • Demonstration • Hands on training & learning

Component	Activity Details	Methodology
Learning from Local Art and Craft	Emphasizing on local music, rituals & practices (riti - riwaj), art & craft; bring in their music back in festivities, marriages and rituals. Teachers should seed in art and craft in their own life as well. Skills building and livelihood options to emerge from local art and crafts (crochet, knitting, stitching, weaving, food processing, etc.) – both peer educators and other village women who are not much educated; finding and focusing on the areas to develop further	• Participation of peer educators, facilitators and trainers • Discussion • Demonstration • Hands on training & learning
Health & Hygiene - Learning the Benefits of Traditional and Natural Healthcare System	Emphasizing on how the traditional and natural systems are valuable for long-term health benefits; how medicinal plants can link up to health, how it can be a livelihood opportunity and village building; promoting access to healthcare for NCDs, mental health issues, health education, advocacy for tobacco control and alcohol use	• Field visits • Interviews, • Discussion • Demonstration
Technical Skill Development Program/ Capacity Building Programs	Computer literacy; soft skills such as communication skills; teamwork/ building/ collaboration skills; classroom/ community transaction skills; dealing with differentiated classrooms etc.	• Participation of peer educators, other stakeholders, facilitators and trainers • Coaching/ mentoring • Demonstration and lectures • Hands on training & learning • Discussion
Employment, Livelihood, Entrepreneurship, Empowerment	There peer educators learn how to empower themselves through wider dialogues with other stakeholders; identify livelihood opportunities by	• Participation of peer educators, other stakeholders, facilitators and trainers

| | development and utilization of village resources; learn how to be empowered to open their own centres with the help of training, education, know-how, machinery through TREC education model; promoting village occupations and resources with skills, technology and research to build entrepreneurs | • Coaching/ mentoring
• Demonstration and lectures
• Hands on training & learning
• Discussion
• Village and field work |

Stage II - TREC Modules – Documentation

Component	Activity Details	Methodology
Field Visits for Livelihood, empowerment	Visits to NGO centres to observe livelihood and employment options	• Field visits by facilitators and trainer • Recording details
Debriefing of field visits, way forward	Participatory discussions with peer educators and role-play; presentation of role-plays based on content developed during group work; themes of role-plays to include socio-cultural practices, education, livelihoods and health aspects	• Demonstration and lectures • Discussion • Participation of peer educators, facilitators, and trainers • Hands on training & learning
Documentation	Develop an online resource bank of the training modules by making short videos of the training sessions	• Video recording

Stage III - TREC Meetings with Stakeholders

Component	Activity Details	Methodology
Meetings with district officials	High level presentation with district officials like Chief Medical Officer [CMO] (e.g. Swatch Bharat), District Magistrate, District commissioner, District Education Officer and Block Development Officers	• In person meetings between TREC spokespersons and district officials
Meetings with other stakeholders	Heart-to-heart discussions with parents of children, local centre coordinators/ supervisors/ heads, community members, Anganwadi teachers, teachers of local schools, self-help groups, facilitators, trainers, administrators and other stakeholders	• In person meetings between TREC spokespersons and other stakeholders

Table 8: Proposed TREC Curriculum and methodologies

In addition to curriculum based learning, TREC peer educators also get hands-on training on the following:

- Community and village based research

- Collaborative approach of learning through engagement with different stakeholders

- Proficiencies to work with people from diverse cultures and backgrounds

- Leadership skills where they learn to sharpen their talents to work with inter & intra teams, build relationships and networks, develop professional and negotiation skills

- Exchange ideas, brainstorm, listen to others, share, learn to identify with and empathize

- Overall, they experience, reflect and perceive

Madhuban Sri Aurobindo Ashram's vision of TREC goes beyond training the peer educators or educating other village women or groups. TREC emphasizes on 'Putting into practice' of that 'learning' through TREC and plans to move forward by:

- Connecting the curriculum being done by Mirambika - Free Progress School with TREC curriculum in a manner that it can be a pilot project for village primary education in Ramgarh area through Madhuban Sri Aurobindo Ashram - Delhi Branch.

- Settling these 11 peer educators to discover their own role as primary teachers who believe and practice Integral Education with emphasis on their own understanding of self and the role of a teacher; and in later stages, with involvement of other groups of women.

- Facilitating diverse livelihood options in later stages. Hence the holistic framework of TREC is being built up in three phases (refer Logical Framework Matrix).

- Making a set of recommendations for district and state administration, national planners and policy makers who are responsible for implementing primary education, skills development and health education in order to make education and skills more relevant, useful and enriching.

- Document curriculum development and findings for reaching out to agencies for funding and implementing the above for a period of next three years as a pilot project.

Proposed Educational Models - TREC Curriculum Synthesis

TREC Curriculum is being built as an Integral Curriculum based on an understanding of the way children learn in early years through primary years as a construct of relating to aspects that they observe from their cultural, social and basic home environment in which they are born and grow. Such an education is linked to life that becomes an integral part of the ecosystem in which the child develops as a community person. TREC Curriculum views holistic development of the peer educators that integrates the practical knowledge of education, living, livelihoods and skill building that can further be imparted to the children as well as to the people involved in community and village development programs.

TREC integral curriculum is synthesized from the harmonized thoughts of Sri Aurobindo and The Mother. We also consider the best practices from the visions of Rabindranath Tagore, Gandhi Ji, Dr. Sarvepalli Radhakrishnan, Dr. Shyama Prasad Mukherjee and Mahadevi Verma in order to develop reproducible TREC models for right education, community development and village reconstruction.

Sri Aurobindo & The Mother's Integral Model of Education

Much of the latest research in education and learning the world resonates well with three Principles of Education as were shared by Sri Aurobindo:

The first Principle "Nothing can be taught" has to be a connect that the teacher forms with the child and her/ his world that facilitates the learning process, shifts the focus from the teacher to the child and from 'how to teach' to 'how best can the child learn'.

The second Principle suggests "Mind must be consulted in its growth" – this shifts focus from 'we know – what's good for you as a syllabus' (to be drilled into the student) to making the children participate in a flexible learning process in which the teacher is more a facilitator, guide and also one who learns from an interactive, experiential process as a much needed addition to the meanings she/ he holds as an adult.

The third Principle "Take the mind from what is near to what is far, from that which is to that which shall be..." suggests that the essential step in learning is to establish a context, which is familiar/ relatable/ non-threatening/ relevant to the learners' point of view. This ensures that the resistance is low and motivation of the learner is high and the mind of the learner is enthused to the learning journey in a willing manner, one that is experiential and has a rhythm of relatedness.

These are not merely three principles. These are a complete philosophy, structure, framework and design template for any effective education program especially in the primary years of school education. The baseline understanding of indigenous, local needs as expressed by Rabindranath Tagore, Gandhi Ji, Dr. Sarvepalli Radhakrishnan, Dr. Shyama Prasad Mukherjee and Mahadevi Verma too are proposed as connects to the Integral Education platform as created for TREC.

Sri Aurobindo and The Mother's emphasis on Integral growth of the child is based on the principle of holistic growth for transformation of the following aspects of inner and outer ecology:
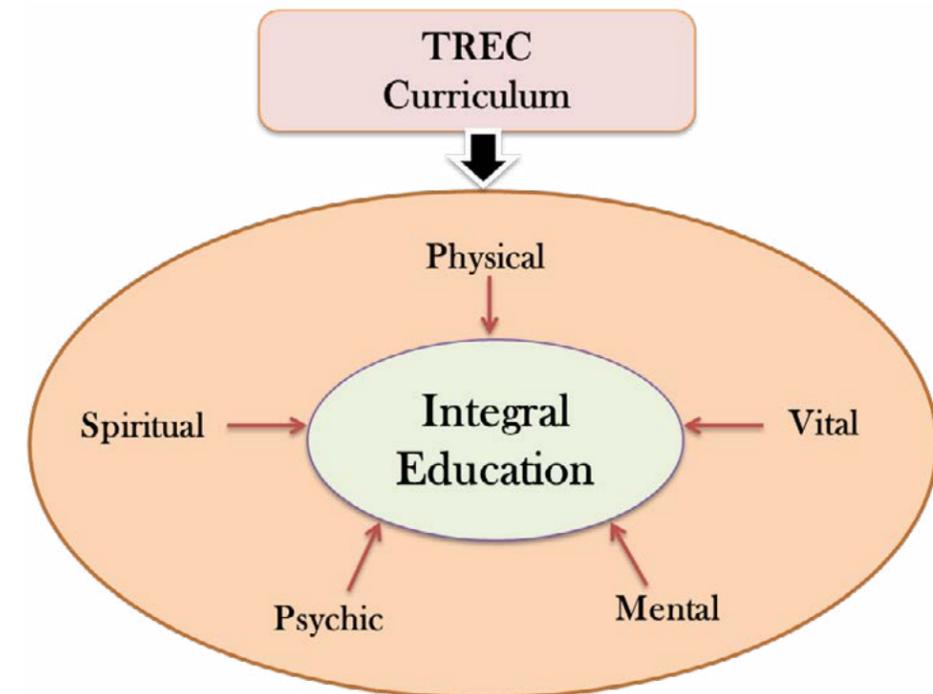
Integral learning model for TREC curriculum is synthesized for all - round development of a child's physical, mental, psychic, vital and spiritual

1. The Physical:

The physical encompasses control and discipline of functioning of the body; an integral, methodical and harmonious development of all parts of the body; correction of any defects and deformities.

Aspects:

- Postures, positions, movements of the body
- Coordination of all parts
- Developing flexibility, agility, grace, balance
- Developing strength and stamina
- Food and diet

- Hygiene
- Rest and sleep
- Exercise
- Prevention and resistance to disease
- Developing beauty and harmony in the body

The Body:

If the transformation of life upon earth – and the perfection of our existence is the aim of evolution then a deep change in the functions of our physical body is required.

For the body to be so changed, a systematic process of education is needed and this education can only be initiated in the earliest years, as the body then is most supple and free of habits and can be molded in any way.

2. The Vital:

The vital is the fountain head of the fountain of life, the energy without nothing else can be achieved. It is also the source of all our emotions, feelings, desires and impulses; purified it can be the perfect instrument for all we want to realize in life in the physical world.

Transformation of character:

Development and use of sense organs:

- Education of the senses
- Cultivation of discipline and aesthetics sense
- Education of the emotions
- Capacity of effective will

Development of vital qualities:

- Truth and sincerity
- Courage
- Perseverance
- Humility
- Desire for progress
- Sensitivity and concern
- Compassion and love

Through activities:

- Dance, music, drama
- Cultural and local festivals and customs
- Games, project work
- Meditation and introspection

3. Mental Education:

The true role of the mind is the formation and organization of action. The mind has a formative and organizing power and it is that which puts the different elements of inspiration in order for action; for organizing action. And it would only confine itself to that role receiving inspirations from the outer and inner world and simply forming the base of one's actions. The mind needs to make choices and its inspiration and organization is important especially in the primary foundation stage of human development.

Mental education:

- Developing faculties
- Academic skills
- Information processing
- Research and enquiry
- Thinking skills
- Organizing
- Understanding self and life

Through project work:

- Participative
- Child centered
- Research based
- Experiential
- Open ended
- Self- evaluative
- Life related

Developing:

- The Power of concentration
- Capacities of expansion
- Widening complexity, richness, organizing one's thoughts
- Thought control
- Mental silence
- Calm and receptivity to inspiration
- Faculties of the mind
- Observation
- Memory
- Judgement
- Imagination
- Reasoning
- Analysis
- Formative action
- Expression

4. The Psychic Dimension:

The psychic is the spark of the divine force in us one which upholds the evolution of each individual upon earth, it is the consciousness within, the three aspects of education – Physical, Mental and Vital that deal with the external and are needed to build the personality, making the individual a well-defined self-conscious entity.

With psychic education we come to the true motive of human life, the purpose of life on earth and the connects one has with mother earth. From the beginning when children are taught that there is a reality deep within them, they have a connect with earth and with the universe. Children are much more in sync with their psychic being when young and so the primary years' work that connects them to themselves, the earth as a living embodiment is to be nurtured and looked after. This seeds a relatedness with the rhythm of environment consciousness and thus connecting the children to their psychic centre is important in Integral Education.

5. Spiritual Education:

The centre of Integral Education is the spirit. A disciplined physical, a fulfilled and potent vital, a clear and free mind and a physic that is active in all parts of the being is the basis for a life constantly evolving towards human growth and perfection. All education in its true sense aims at a spiritual perfection alone that justifies and completes life.

TREC program in its truest sense is a unique offering, one that looks at education as a deep -connect to life and individuals evolving to their own perfection in all five domains of the physical, mental, vital, psychic and spiritual aspects in education for life. It is a wide all-encompassing aspect much needed in education and it is neither narrow nor religious in its essence.

Thus, this whole model of education of The Mother and Sri Aurobindo is a gradual process of evolution of a human being.

Rabindranath Tagore's Model of Rural Education and Rural Reconstruction

The centrality of Rabindranath Tagore's model of rural education and rural reconstruction was all- around development in the areas of education, (pathshala, middle and high school), charitable healthcare centres, agriculture, cottage industries, weaving etc.[15] He applied the model himself with facilitators in areas of rural Bengal and incorporated technology in indigenous sectors to develop self-sufficient communities. With this model the peer educators will learn:

- How to emphasize on indigenous system of knowledge for imparting education
- How to use modern scientific techniques and technologies to boost education and the community at large
- How culture with music, dance and drama need to be central to education and expression
- How development of a community and society depends on developing systematically each person, sector and resource centres of the village
- And that education with local wisdom is at the heart of development of any rural sector

Gandhi Ji's Nai Talim

Gandhi Ji's Nai Talim was primarily focused on refraining children from the influence of urbanized thoughts and sedentary learning and having them focus more on learning through doing and experiencing the local, social and overall attainment of holistic development[16].The educators as per Gandhi Ji should train students with a rapport based indigenous model that connects them directly to who they are and eventually build them to be part of a self-reliant community. Primarily peer educators learn:

- To redefine the teaching/ learning model so that the student learns in a respectful, open and fearless atmosphere
- How to make local art and craft to be at the centre of education
- How the education to be directly linked to the livelihood and occupational needs
- How through education students are financially independent and socially productive

Dr. Sarvepalli Radhakrishnan's Dimensions of Education

Dr. Sarvepalli Radhakrishnan, the educator after whom *शिक्षक दिवस* (teacher's day) is observed in India, had given different dimensions to the semantics of education, which are important for every trainer to be an educator[17]. According to his thoughts, education should:

- Be humane; should include refinement of heart and discipline of spirit and should be physically, mentally and spiritually relevant
- Focus on building character
- Offer experiential learning *("anubhavavasanameva vidya phalam - the fruit of knowledge, the fruit of vidya is anubhava.")*
- Help students to think for themselves
- Help preserve, deepen and propagate the culture
- Aid in social, cultural and economic change
- Focus on scientific education

Dr. Shyama Prasad Mukherji's Rurban Mission (SPMRM)

Shyama Prasad Mukherji Rurban Mission (SPMRM) aims at developing clusters of smart "Rurban (rural-urban) Villages" that preserve and nurture the essence of rural community life with focus on equity and inclusiveness, facilitated with urban techniques[18]. This echoes with TREC's objective of utilizing village resources with modern amenities to

- Educate peer educators with indigenous knowledge systems
- Enable employment/ livelihood oriented skill development
- Enhance technical/ computer and digital literacy
- Promote knowledge of traditional health practices
- Enable empowerment
- Stimulate village economy through enabling entrepreneurship
- Help reduce migration from the villages

Mahadevi Verma's Vision of Education

Mahadevi Verma, the visionary educator and poet shared some precious and crystal clear thoughts on indigenous education, which are the need of the hour for the students with self-esteem, confidence and openness to bring in changes to national cause[19]. Through her vision, the educators should learn to:

- Value one's roots and incorporate traditional wisdom in education
- Advocate for usage of mother tongue in education for rootedness, for culture, for right expression and for identity
- Prepare students meaningfully for life and also should make education compatible to the student's interest/ talent/ skill
- Utilize education to liberate the students from narrow thought processes
- Make goal of education clear; enable the students to achieve higher objectives in life and not be confused by tapering purposes

TREC Logical Framework (Logframe) Matrix

TREC way forward, the blueprint of TREC project is summarized in the following Logical Framework (Logframe) Matrix. The framework is a design of TREC project with it's 3 years window that depicts the goal, immediate purpose and outcomes related to the activities in each phase of the TREC project. This initial blueprint changes as the project progresses.

GOAL	
PLAN SUMMARY	In a window of 3 years, creating an operable knowledge-based infrastructure for women education & empowerment; village development and self-sustained villages with the understanding and utilization of indigenous resources. This is in alignment with Madhuban Sri Aurobindo Ashram – TREC larger vision; Integral Education of Sri Aurobindo, The Mother; education and community reconstruction models of Rabindranath Tagore, Gandhi Ji's Nai Talim, Shyama Prasad Mukherji's RURBAN, Dr. Sarvepalli Radha Krishnan and Mahadevi Verma
VERIFIABLE INDICATOR	• Level of education • Employment/ self-occupation
MEANS OF VERIFICATION	• TREC-CPEHL Survey inference Apr- Sept 2020 • Madhuban Sri Aurobindo Ashram record/ documents
ASSUMPTIONS	• TREC and TREC-CPEHL vision of Madhuban Sri Aurobindo Ashram are aligned • Local knowledge, traditional wisdom to be incorporated and promoted • Starting with 4 facilitators (Dr. Anjali Capila, Vijayluxmi Bose, Ruma Chakravarty and Dr. Aparna Khanna) along with Dr. Anju Khanna and other stakeholders from Madhuban Sri Aurobindo Ashram
PURPOSE (immediate)	
PLAN SUMMARY	• Redefining our 'Meaning of Education' through execution of TREC-CPEHL action research & training by conducting initial workshop(s); module development and TREC training delivery • Women skill development through local crafts, music as well as professional technical & soft skills for developing livelihood opportunities (PHASE I) • Focus on intermingling of traditional knowledge and science in education: • Cultural, social (rituals & practices), agricultural, environmental, natural healthcare, local food, arts and crafts, music, village resources etc.

VERIFIABLE INDICATOR	• Rest of the indicators will be verified as per currents status (Dec 2020)
MEANS OF VERIFICATION	• TREC-CPEHL Survey inference Apr- Sept 2020 • Madhuban Sri Aurobindo Ashram record/ documents
ASSUMPTIONS	• TREC-CPEHL Peer educators/ teachers/ women group are available • Mobilizers are available as supporters of TREC – Madhuban Sri Aurobindo Ashram project

OUTPUTS	
PLAN SUMMARY	• TREC-CPEHL Report based on TREC – Madhuban Sri Aurobindo Ashram vision, inference from TREC-CPEHL survey data and plan of action (POA) for action research • Trained peer educators (for primary education) • Trained, skilled & empowered women with their own business (or stable/ paying jobs) • Trained mobilizers • 1 food processing unit at Madhuban Sri Aurobindo Ashram – Delhi Branch • 1 Health care centre at Madhuban Sri Aurobindo Ashram with natural healers (e.g. Ayurvedic, Naturopathic, Homeopathic healers; Physiotherapist, Music therapist etc.) • 1 Model School • 2/ 3 Model Villages (self-sustained) • Mountain food shop run by Women – to sell organic products from village produce, local grown nutritious food, home-grown potato chips, local arts and craft • Livelihood centres • Focus on prevention of migration
VERIFIABLE INDICATOR	• TREC-CPEHL Report to be Completed by Jan 2021 • Indicators provided by Madhuban Ashram • Number of women educated/ employed/ started their own shops or centres • Number of villages that have become self- sustained • Other indicators developed through implementation
MEANS OF VERIFICATION	• TREC-CPEHL Survey inference Apr- Sept 2020 • Madhuban Sri Aurobindo Ashram record/ documents • Business/ employability/ village development/ education status report

ASSUMPTIONS	• Madhuban Sri Aurobindo Ashram will facilitate training through TREC facilitators, their own infrastructure setup, outsourced training (e.g. INHERE etc.) • Peer educators are employed • Women have space near their own home where they can have their own setup/ shops etc.

ACTIVITIES	

PLAN SUMMARY	**PHASE I**
	
	Stage 1
	
	• Baseline TREC-CPEHL survey in 8 villages
	• Data analysis and inference
	• TREC-CPEHL Delivery
	  • Pilot workshop
	  • Module development
	  • Pilot run of modules
	  • Finalize modules
	  • Training delivery to TREC peer educators, other teachers and village women as relevant
	• Other skills training/ internships
	• Planning for awareness programs and practicable solutions for village resource utilization
	
	Stage 2
	
	• Number of session successfully video-graphed with full attendance
	
	Stage 3
	
	• Number of meetings held
	• Number of stakeholders present
	• Checking the completion of actionable point
	
	PHASE II
	
	• Settle the girls as teachers
	• Help women (with less education) with other skills for livelihood
	• Making recommendations for national planners and policy makers of primary education
	
	• Planning & implementing first phase of food processing unit at Madhuban Sri Aurobindo Ashram

	● Planning & implementing first phase of healthcare centre at Madhuban Sri Aurobindo Ashram ● Reaching out to agencies for funding and implementing **PHASE III** ● Training women in the food processing unit/ knitting/ stitching/ weaving to be self-sufficient and start their own business ● To be an independent shop holder, they need skills & license, which the women can learn and train from INHERE, Almora.
VERIFIABLE INDICATOR	**MEANS** Inputs/ Resource: ● Madhuban Sri Aurobindo Ashram stakeholders ● TREC peer educators/ teachers/ women group ● TREC facilitators and stakeholders involvement ● Village head and groups ● Mobilizers ● Local institutions ● Awareness campaigns ● Training infrastructure and materials ● Madhuban facilities ● Computer lab at Madhuban Sri Aurobindo Ashram (later phases)
MEANS OF VERIFICATION	**COSTS** ● Madhuban Sri Aurobindo Ashram – Delhi Branch ● Grants/ funding as available/ feasible
ASSUMPTIONS	● TREC facilitators are available ● Mobilizers are available ● Madhuban Sri Aurobindo Ashram still supports TREC-CPEHL ● Madhuban Sri Aurobindo Ashram's – TREC vision of food processing unit setup is unchanged ● Madhuban Sri Aurobindo Ashram's – TREC vision of healthcare unit setup is unchanged ● Madhuban Sri Aurobindo Ashram – Delhi Branch will support the requisite training, development and setting up activities in phases as per goal and purpose

Table 9: Three years way-forward logical framework matrix

Children playing in a crèche set up by peer educators in Madhuban Sri Aurobindo Ashram – Delhi Branch

CHAPTER

13.

LIMITATIONS OF TREC-CPEHL

As narrated in the earlier section, due to Covid-19 pandemic lockdown, TREC-CPEHL training of investigators was conducted telephonically; while the training for coding and data capture was conducted online as was feasible with limited participation. Thus, the effect of in-person 'training the untrained' in field conditions was not feasible. The study sample was also modified to a convenience sampling technique. The findings of the CPEHL therefore have to be read in the light of these limitations. At this time, the TREC-CPEHL is a precursor to further, in-depth study of what the initial findings have revealed and that would be planned for subsequent phases of TREC as the requirement unfolds.

Masking up during the pandemic

Madhuban Sri Aurobindo Ashram during the pandemic

14.

SUMMARY OF FEEDBACK FROM
PEER EDUCATORS

Individual transformative experience

The TREC-CPEHL Survey has helped the participants learn many new skills ranging from the opportunity to work on their weakness to adopting a new method for doing a certain task. All of the participants shared that this CPEHL Survey conduction has helped them in enhancing their communication skills -both verbal as well as non-verbal.

Individual transformative experience shared by peer educators after conducting TREC-CPEHL interviews

Many participants considered that this process helped them in learning about their respective village culture and about several practices followed in their villages. So, by this process they understood about the existing social order, values and norms of their villages. One of the participants also said that this survey process had taught her about the edutainment method for probing into society.

Another participant shared that this TREC survey process has improved her precision in doing different tasks. For some participants it was difficult to get the health details related to the weight of children, as

Individual transformative experience shared by peer educators after conducting TREC-CPEHL interviews

because of lockdown the Anganwadi Centres were shut and parents did not have the health cards of children with them.

Individual transformative experience shared by peer educators after conducting TREC-CPEHL interviews

Overall, all the participants agreed that the process enhanced their communication skills and built their personality.

Questions in which the participants were hesitant or found difficulty in asking the community members

All the participants acknowledged that the community members were interested in knowing what were the reasons behind the survey and also if the participants were conducting the survey for their personal benefits.
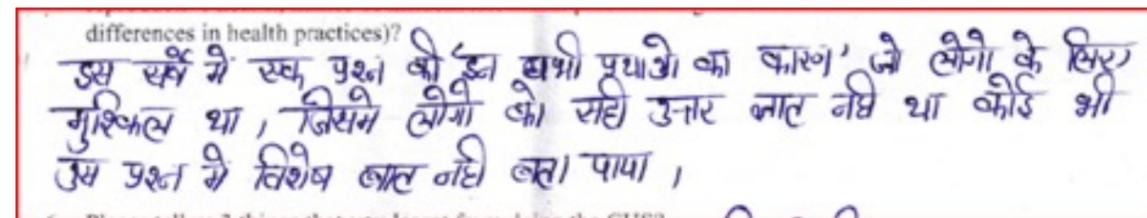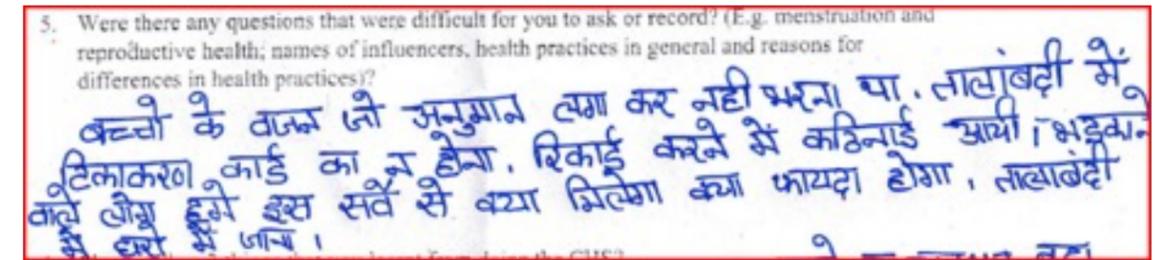

Difficulties/ hesitations in asking questions by peer educators while conducting TREC-CPEHL interviews

Some participants agreed that menstruation and pregnancy are taboo topics in their villages and people are hesitant in talking about these natural and biological processes.
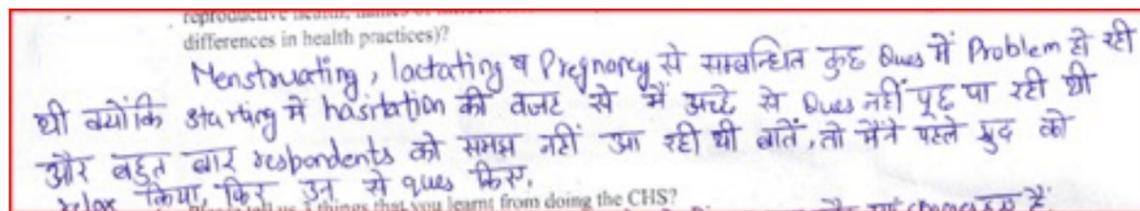
Difficulties/ hesitations in asking questions by peer educators while conducting TREC-CPEHL interviews

Some also said that when they told the community members about the outcomes of the Survey process, they agreed to share their views and opinions about different prevalent practices in their villages.

Difficulties/ hesitations in asking questions by peer educators while conducting TREC-CPEHL interviews
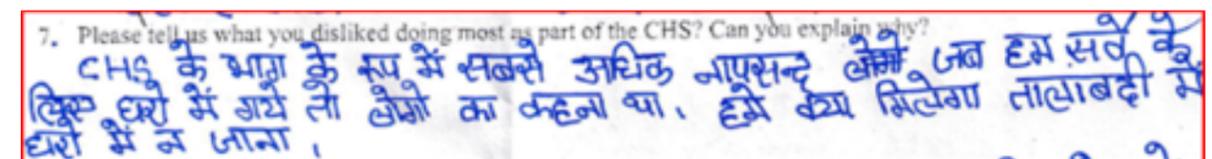
Most challenging part during CPEHL interviewing/ fielding

Many participants shared that the community members were not responding very willingly, which was causing some trouble for them. A common question asked was why are the peer educators doing the survey? What better policies or benefits will the village people or the villages will get from this?
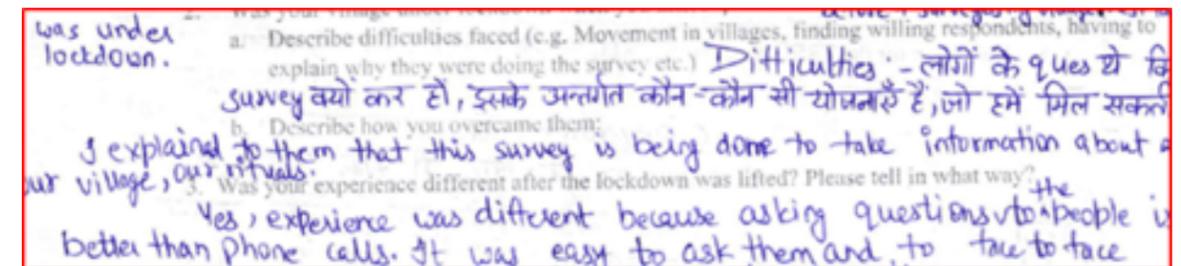
Most challenging part faced by peer educators while conducting TREC-CPEHL interviews

The COVID-19 outbreak also spread fear amongst the participants and prevented them from stepping out of their homes.

Most challenging part faced by peer educators while conducting TREC-CPEHL interviews

Some participants also said that people did not know the importance of hygiene and keeping the surroundings clean. They were also not very well aware about the various diseases. It was quite troublesome for some participants to

talk to people over phones regarding the surveys, because of the network issues.

Most challenging part faced by peer educators while conducting TREC-CPEHL interviews

They had to redial the number many times. Also, some peer educators found it difficult to ask the same questions to different people.

Most challenging part faced by peer educators while conducting TREC-CPEHL interviews

Particular experience during coding data from CPEHL interviews

The coders mention they learnt many things while coding. While the peer educators mention they feel very good that they have learnt the coding process and can do that with confidence, the intern trained in development research mentions that CPEHL coding as a procedure has changed her perspective towards the research process.

One of the trained interns mentions, "While in academics, importance is given to the findings and conclusion of the study but my experience with CPEHL has helped me appreciate the value of coding in a study. From going beyond entering data and finding relations between the emerging themes, coding for TREC-CPEHL has been a journey of learning for me. I am hopeful that the learning from TREC-CPEHL will help me in my efforts to become a thoughtful, empathetic and considerate development researcher"

One of the peer educators narrates her experience as "I am fully confident in working on data…. confident to help other girls to learn the coding process…"

Recount from another peer educator

Experience of peer educators while coding data for TREC-CPEHL interviews

Another trained coder narrates "Understanding the nuances of qualitative responses, just treatment of every word shared by the respondent, coding as a system of organising and verifying the data and more than anything, being amazed yet again by the different realities of different communities, even though they are so closely located."

Any particular experience to share that would help us plan such surveys in future

Participants shared a range of experience varying from the change in probing to change in the questions framing. Few of the participants said they will ask the questions in a decent manner.

Experience of peer educators to share to conduct such participatory action research surveys in future

Some said that they will like to do such surveys in future that will lead to development of their schools and villages.

10. Do you have any particular experience to share that would help us plan such surveys in the future?

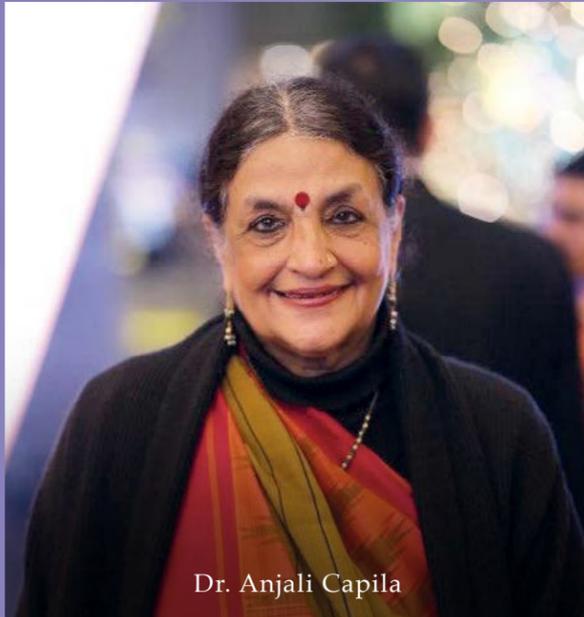भविष्य में ऐसे सर्वेक्षण करेंगे जिस का गाँव व स्कूलो का विकास हो किन-किन चीजो की आवश्यकता है।

Experience of peer educators to share to conduct such participatory action research surveys in future

Others said the questions framed should be in a more comprehensible manner, so that it could lead to a better range of answers.

CHAPTER

15.

ABOUT THE AUTHORS

Dr. Anjali Capila

Dr. Anjali Capila has a Ph.D. in Community Resource Management from the Department of Home Science, University of Delhi. She was an Associate Professor in the postgraduate Department of Development Communication and Extension at Lady Irwin College, University of Delhi. Among other achievements in a long and distinguished tenure at the college, she was instrumental in starting a study-abroad program in partnership with Michigan State University, USA.

Dr. Capila's major published works have focused on anthropology and communication. Her first book, "Images of Women in the Folk Songs of Garhwal Himalayas: A Participatory Research", is a treatise on how songs can be a powerful source for social communication. Her second book, "Traditional Health Practices of Kumaoni Women: Continuity and Change", reflects on how modernity and tradition can coexist without losing their essence.

Dr. Capila is Vice President of the Mountain India Peoples Forum, an Executive and Governing Board Member of the Institute of Himalayan Environment Research and Education (INHERE) in Kumaon, and a Trustee of HIMCON in Tehri Garhwal.

Dr. Capila has also worked with the International Planned Parenthood Federation's South Asia Regional office for three years as the Program Officer for Adolescents. She set up several innovative projects for young people in the region and developed a manual on male involvement in Sexual and Reproductive Health and Rights (SRHR), entitled "Men as Partners in SRHR".

At present, Dr. Capila is the project coordinator of a research study entitled "Documenting Riverine Cultures: The Ganga from Gangotri to Haridwar", supported by the Indira Gandhi National Centre for the Arts.
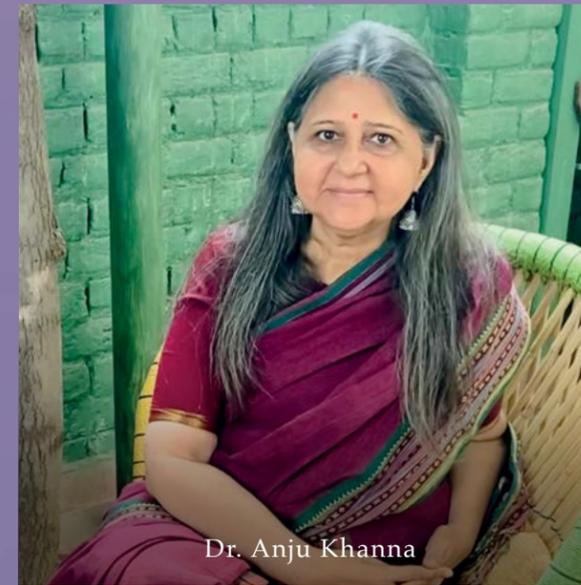
Dr. Anju Khanna

Dr. Anju Khanna has a PhD in Treatment of love and relationships in the Victorian Era. She worked as an Associate Professor in Meerut for 18 years. She was part of the Scholarship exchange program at State College Pennsylvania as an exchange professor. She headed the department's work for student cultural and leadership projects in areas of gender, myths and symbols. Post college teaching she moved to early childcare and education and did advanced research on Montessori Methodology for special needs in children.

She created 'The Circle' for young children, to delve in the arena of Integral Education based on the philosophy of Sri Aurobindo and The Mother. Her foray in Integral Education was the beginning of her mentoring many centres of excellence in urban India and mentoring books for primary classes for NCERT along with training master trainers for National curriculum framework 2005. Dr. Anju Khanna is a writer for children's books and supports teachers to create local resource materials.

With the experiences gathered from higher and primary education she has for past many years worked incessantly in the Talla reigon with village education in areas of curriculum mapping in teacher training and connecting livelihood skills to education in the primary years. She leads Madhuban chapter of Sri Aurobindo Ashram - Delhi Branch with projects that lay emphasis on Integral Education:

1. Project Gazaab with Singapore Management University (S.M.U) - the knitting and stitching units at Talla Ramgarh have been set under this support.

2. Project Village Harmony with Foundation for World Education, U.S.A. for Integral Education in 10 kms around Madhuban Sri Aurobindo Ashram.

3. Project TREC with Friends of Madhuban, U.S.A. that seeded the Teachers Resource Education Centre to educate village girls in a holistic and integral manner.

Ms. Vijayluxmi Bose

Ms. Vijayluxmi Bose has an MS in Communication Studies from Emerson College in Boston, USA. She has 30 years' experience in teaching communication; curriculum development and delivery of health education, with specialization in communication support to key public health areas especially adolescents, women, mother and child health, birth defects, nutrition, communicable and non-communicable diseases (NCDs).

She has taught at the AJK Mass Communication Research Centre, Jamia Millia Islamia in New Delhi, India for over 11 years. She was an adjunct faculty for the Distance Learning Program at the Indira Gandhi National Open University's Televised Countrywide Classroom teaching modules (IGNOU). Further, Ms Bose was an external examiner and guest faculty for Delhi University, Department of Development Communication, Lady Irwin College.

Ms. Bose has worked as a Health Communication Specialist at the Public Health Foundation of India, as Coordinator for the Indian Child Protection Medical Network, International Centre for Missing & Exploited Children and as a Consultant with various UN agencies, primarily with the South-East Asia office of the WHO and the UNESCO-HQ in Paris. She drafted a Report on the Impact of COVID-19 on essential SRMNCAH Services, School Health and Country response in South-East Asia Region. She is a member of the International Society for the Prevention of Child Abuse and Neglect, a USEFI and Salzburg Fellow.

In addition to her work in Health Communication, Vijayluxmi Bose writes about life in a village in rural Dehradun and reviews children's books.
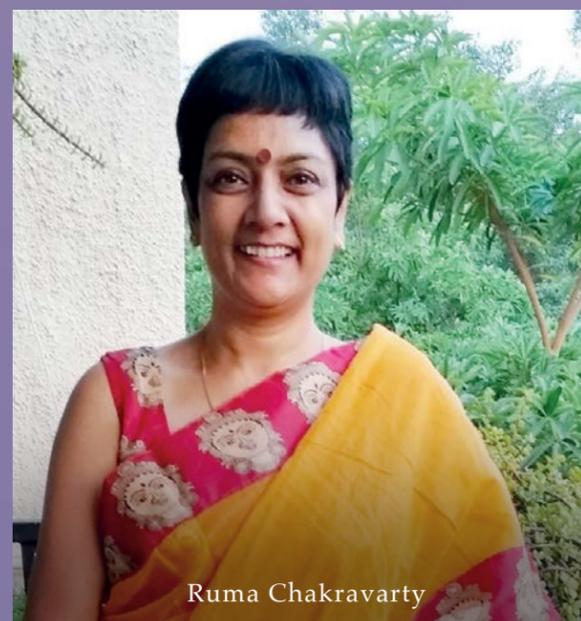
Ruma Chakravarty

Ruma Chakravarty has a Masters in Biophysics. She has worked in research & analytics, coaching and training domains for over 23 years with reputed companies and as an independent consultant before starting her own venture Factorize, a company dedicated to Reflective Leadership Coaching and Indian Music Therapy.

Ruma holds 'Train the Trainer' certification in online surveying & research methodologies from Confirmit, London. She is a John Mattone certified practicing leadership executive coach, Richard Bandler certified NLP practitioner and holds a Medical Neuroscience certification from Duke University. She is also a certified Cognitive Behavioural Therapy (CBT) practitioner from Achology, Scotland. Ruma is also a trained Hindustani musician and a passionate Indian Music Therapist practicing and researching for around 15 years now. She has authored the book "Music Therapy With Indian Music (Essentials & Sources) - Volume 1".

Presently, Ms. Ruma is working (and researching) in two core areas - Coaching (Leadership Executive, Social Setup and Students Coaching) and Indian Music Therapy. She works with children and elderly to help them align their resources with energy balancing & redirection; with young adults for capacity building in diverse areas (urban and rural) and for livelihood opportunities. Further, Ruma coaches professionals and students to assist them in igniting leadership mindset, in vocational rehabilitation among others.

Ruma is also spearheading a project 'Skill Up Little More' for children who 'Deserve Little More' initiated by Factorize.

CONSENT

For this report, each community member and others gave their consent for conducting the research, having their photographs and interview details and views published.

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CONFLICT OF INTEREST

All the authors declare that they have no conflict of interests for the publication of this report.

APPENDICES

Sarpanch Details *

Village	Name	Address	Contact #
Jhutiya	Suresh Singh Mer	Jhutiya, Talla Ramgarh, Nainital	9675844835
Nathuakhan	Ramesh Singh Bisht	Nathuakhan	9757612502
Naikana	Trilok Singh Bisht	Sri Narayan Swami Ashram, Naikana Pali, Talla Ramgarh	9758295784
Bohrakot	Basant Lal Sah	Bohrakot, Talla Ramgarh	9756363856
Myora	Nandu Pradhan	Myora, Nathuakhan, Nainital	9012121379
Satkhol	Harish Nayal	Satkhol , Nathuakhan	9758848179
Hari Nagar	Prema Devi	Hari Nagar, Talla Ramgarh	9756569293
Loshgyani	Manohar Lal Arya	Loshgyani	7500826230

as on 15th July 2021

Influential People *

Village	Name	Designation	Address	Phone Number
Jhutiya	Hira Devi	Former Head of the village	Jhutiya	9536339335
	Gopinath Sarkar	Teacher	Jhutiya	7536060825
	Deepa Rawat	Aanganwadi worker	Jhutiya	9012218947
Nathuakhan	Deepak Singh Bisht	Army	Nathuakhan	
	Chandan Singh Bisht	Postman	Nathukhan	9411303949
Naikana	Guddi Devi	Anganwadi worker	Sri Narayan Swami Ashram, Naikani Pali, Talla Ramgarh	7830429107
	Kaviya Sual	Homemaker	Sri Narayan Swami Ashram, Naikani Pali, Talla Ramgarh	9720389357
	Deepa Negi	Current Head of the village	Sri Narayan Swami Ashram, Naikani Pali, Talla Ramgarh	9012519610
	Sita Mer	Homemaker	Sri Narayan Swami Ashram, Naikani Pali, Talla Ramgarh	8006375703
	Anita Negi	Homemaker	Sri Narayan Swami Ashram, Naikani Pali, Talla Ramgarh	8449642748
Bohrakot	Devendra Daramval	Village development committee member	Talla Ramgarh, Bohrakot	9761740881
Myora	Aasha Devi	Former Head of the village	Myora	8057504638
	Nandan Singh Bisht	Current Head of the village	Myora	9012121379
Satkhol	Yashpal Arya	Social worker	Satkhol	8449185502
	Pushpa Devi	Former Head of the village	Satkhol	9837015674
	Raghvendra Bisht	Teacher	Satkhol	7088582167
	Leela Devi	ASHA worker	Satkhol	9758219893
	Pushpa Nayal	Current Head of the village	Satkhol	9758848179
	Manoj Joshi	Former Head of the village	Satkhol	8475871111
	Diwan Chandra	Social worker	Satkhol	9761286105
	Mangala Arya	Anganwadi worker	Satkhol	9756361903
Loshgyani	Geeta Devi	Head of the village	Loshgyani	7668707913
	Bahadur Ram	Former officer	Loshgyani	8958394886
	Chandan Lal Arya	Former member of Panchayat	Loshgyani	8006637191
	Baliram Ji	Elderly	Loshgyani	9411563767
	Ramesh Chandra	*Jhar Phoonk* (traditional healer)	Loshgyani	9639273907
	Hari Ram	Army	Loshgyani	He is on duty
	Ganga Devi	Anganwadi worker	Loshgyani	7900662350
	Soru Devi	100 years old woman	Loshgyani	No number

	Pinki Devi	ASHA worker	Loshgyani	9639709655
	Diwan Ram	Dhol player	Loshgyani	9720699724
	Raju Lal		Loshgyani	9761461020
	Dharampal Arya	Primary teacher	Loshgyani	9917744079
	Harish Chandra (son of Bhadur Ram)	Former Head of the village	Loshgyani	8958394886
	Hem Kumar	Army	Loshgyani	9639709655

as on 15th July 2021

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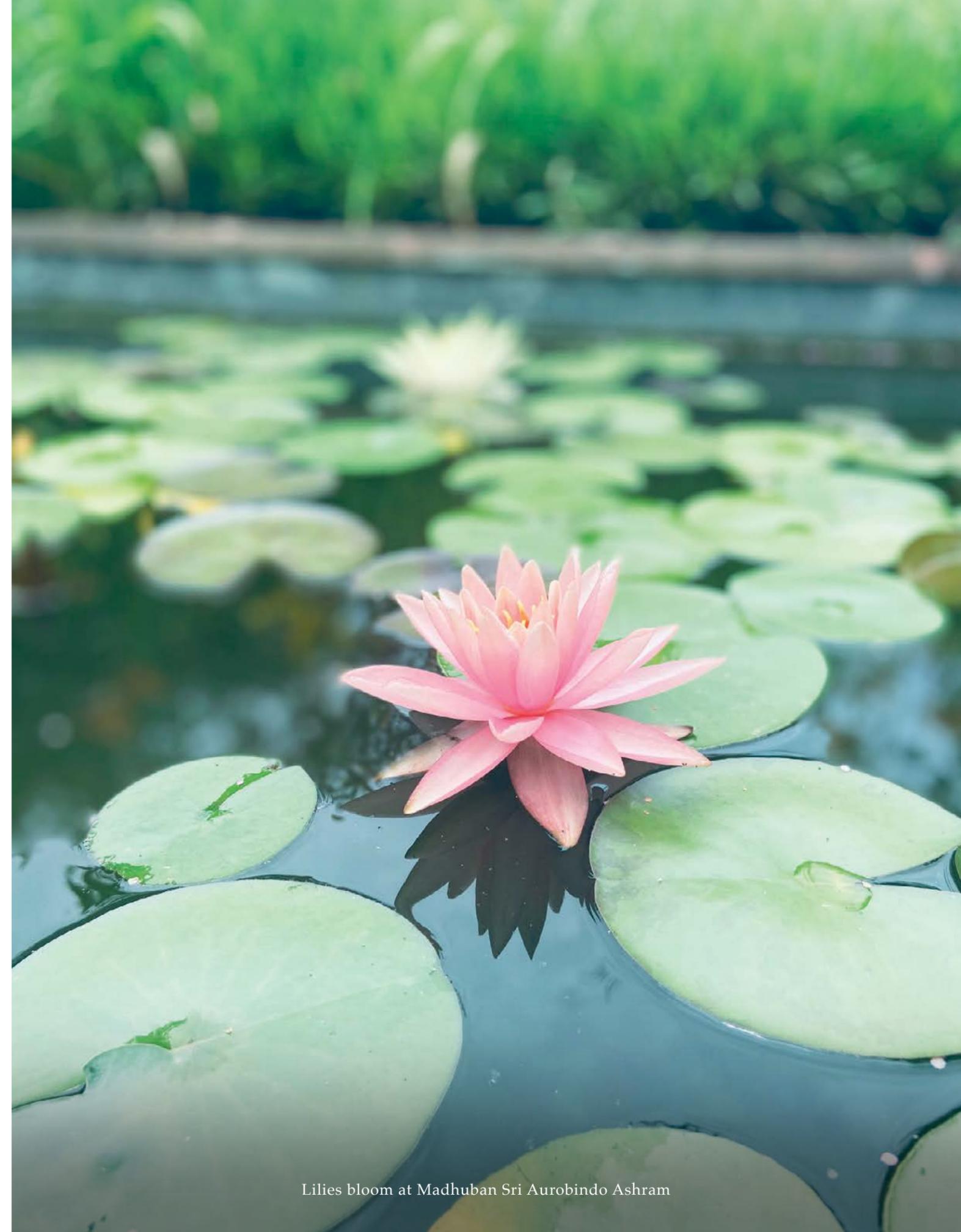
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Lilies bloom at Madhuban Sri Aurobindo Ashram

Relics at Madhuban Sri Aurobindo Ashram