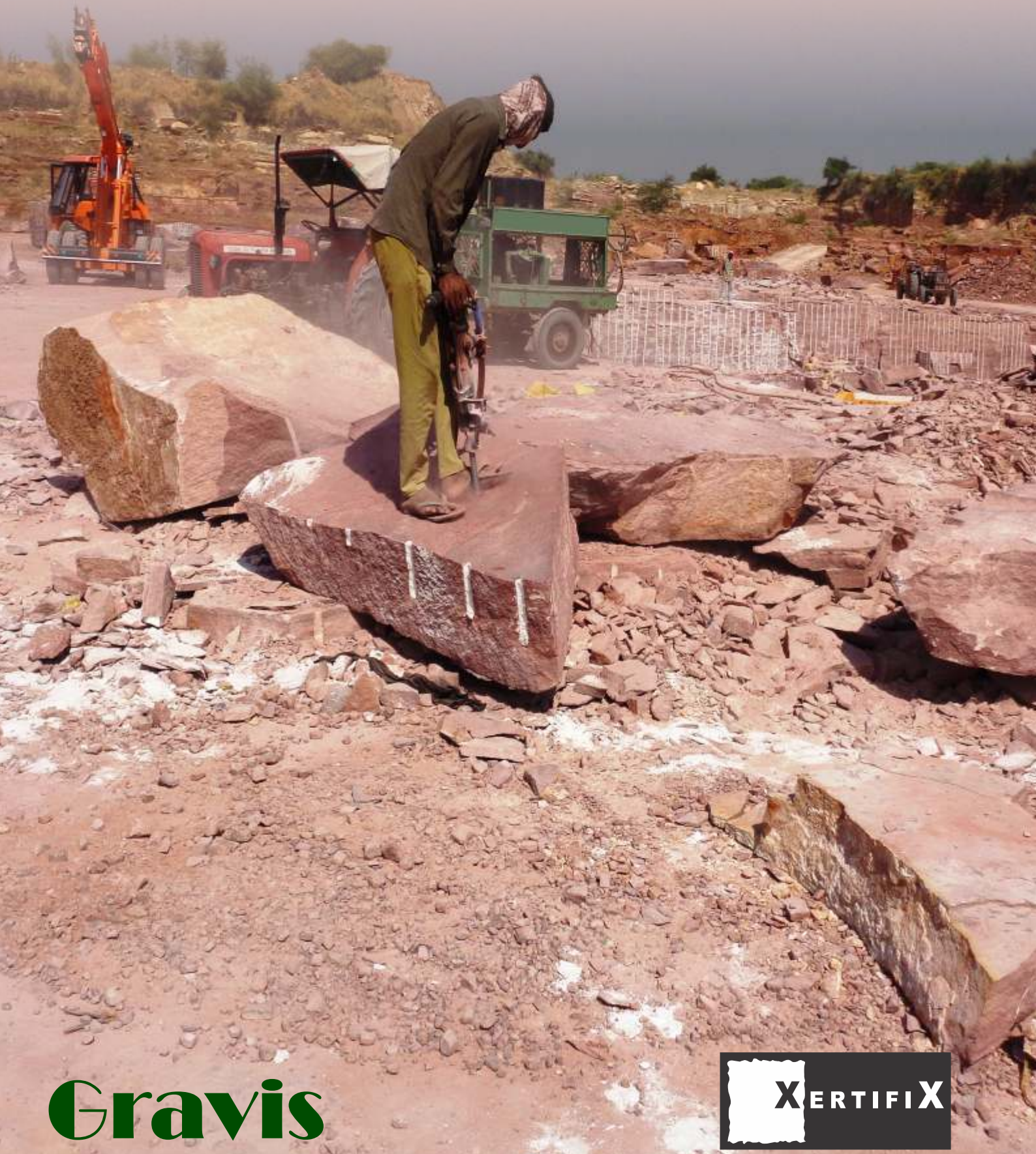


# RISING FROM DUST



**Gravis**



# **Rising from Dust**

Reflections, practices and learnings from the project -  
Promoting Lung Health in Mineworkers (PLHM)





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**Written by**  
Jyotsna Sripada

**Gramin Vikas Vigyan Samiti (GRAVIS)**

3/437, 458, M.M. Colony, Pal Road  
Jodhpur – 342 008, Rajasthan, INDIA  
Phone: 91 291 2785 116  
E-mail: [email@gravis.org.in](mailto:email@gravis.org.in)  
Website : [www.gravis.org.in](http://www.gravis.org.in)

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## **Author's Note**

Persistent struggles, unequal battles and disproportionate burdens, yet, a powerful spirit that steers life and development. This is a sentiment that resonates with people living in the Thar region. Although the Thar region is an extremely challenging place to dwell in, given the extreme arid conditions, scarce resources and limited opportunities, people of this region remain strong and committed to overcoming these challenges.

Mining is a thriving sector in Rajasthan, employing a significant number of workers-men, women and sometimes even children. Extreme poverty, lack of education and lack of alternative opportunities compel them to take up these jobs. Some of them are oblivious to the fact that they can cause irreversible and irreparable damage.

The PLHM (Promoting Lung Health in mineworkers) project is a much-needed ray of hope for mine workers in Balesar Tehsil, Rajasthan. It has strengthened them, assuring them of life beyond deadly diseases such as silicosis and tuberculosis. The project has brought together stakeholders from different domains and has promoted collective action.

I am thankful to the GRAVIS team for their support, insights and cooperation. Their insights have been extremely useful for me to develop my perspective and deepen my understanding about the issues confronting mine workers and their families. I am certain the ongoing efforts of GRAVIS will certainly result in uplifting the lives of many workers and their families and I believe this report will be useful in strengthening this process.

**Jyotsna Sripada**

Public Policy Practitioner

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## Executive Summary

The mining sector is one of the largest employers in the State of Rajasthan. The state provides the highest number of mining leases (over 33,000 for major minerals, minor minerals and quarry licences) and employs almost three million workers. Mining poses a wide spectrum of challenges including physical, chemical, biological, ergonomic and psychosocial occupational health hazards. The policy and legal landscape governing the mining sector exist in terms of defining the obligations of the state and other actors and institutions involved in the operations of mines, yet, these are not robust enough.

Promoting Lung Health in mineworkers project is one of the longest serving projects being implemented by GRAVIS with an aim to protect mine workers, pre-empt the dangerous effects of their occupation and provide a pathway for rehabilitation. The project is a ray of hope wading through the cloud of dust surrounding mine workers and their families. The project has paved the way for life-altering solutions, offering pathways of hope, resilience and rehabilitation. Occupational hazards and associated diseases are preventable, provided a strict protocol is in place, clearly prioritising the needs of mineworkers and articulating what are the safe conditions and practices that need to be adhered to. This evaluation report cum best practices document is an opportunity to reflect on how the lives of mine workers and their families in Balesar Tehsil have been transformed through the interventions implemented as part of the PLHM project.

The project has been designed in such a manner that it encompasses critical elements such as outreach, awareness generation, capacity building, advocacy, and empowerment. These components are carefully woven together to empower mine workers and their families with the necessary resources and support to overcome the hazardous conditions and after effects of mine work. These components have proved to be vital for the beneficiaries. The report highlights some of the practices such as using an integrated project design and approach, adopting gender sensitive approaches addressing the needs of women, etc that have enabled GRAVIS to demonstrate tangible change, particularly in a very challenging setting such as the mining sector in Balesar Tehsil.

It concludes with a couple of recommendations including advocating for stricter implementation of guidelines and enforcing better working conditions, conducting literacy and vocational courses for young girls and women, increasing the frequency of community level engagement, and intensifying efforts to prevent lung diseases caused by prolonged exposure.

The PLHM project has been an important contribution to the people of Balesar Tehsil, Rajasthan. The interventions and their impact on people is a testimonial of people's ability to rise above challenges, provided they are given the right support and direction. The project must be replicated in many other areas where mining pervades the lives of lakhs of workers and their families, who are yet to rise above the dust.

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## Chapter 1

### Introduction

As one walks through the dusty lanes of villages in Balesar Tehsil, Jodhpur district, in Rajasthan, the fading cloud of hope amidst those living there is unmistakable. Majority of them in this region are landless, lack education and are compelled to take up jobs in mines. Ironically, those who take up work in mines face the harsh reality that their source of livelihood is also a cause of morbidity and mortality. The absence of alternative employment, poor working conditions, unfavourable weather conditions and apathy of mine owners have compelled mine workers to surrender themselves to life threatening conditions such as silicosis and tuberculosis. Owing to the same reasons, women and children, sometimes as young as ten years, are forced to take up mining to support their families financially. Mine workers are trapped in a life-long hellhole that slowly eats away into their lives, leaving behind only pain, suffering and deprivation.

The mining sector is one of the largest employers in the State of Rajasthan. The state provides the highest number of mining leases (over 33,000 for major minerals, minor minerals, and quarry licences) and employs almost three million workers. Mining poses a wide spectrum of challenges including physical, chemical, biological, ergonomic, and psychosocial occupational health hazards. Exposure to dust in mining and quarrying continues to be a major risk to the health of workers. Breathing in dust, such as coal dust, silica dust and other finely powdered materials, can damage the lungs and airways. The risk to health varies depending on the size and nature of the dust particles. Exposure to dust can cause irritation to the eyes, skin and respiratory tract, and prolonged exposure can lead to a range of serious lung diseases including silicosis, coal workers pneumoconiosis (CWP), chronic obstructive pulmonary disease (COPD) and lung cancer. Respiratory impacts are the most studied and problematic of health impacts for workers. Injuries have declined in importance but continue to be an important safety issue in mines.

Long-term impacts include cancers, mental health problems and some evidence of genetic disorders.

The policy and legal landscape governing the mining sector exist in terms of defining the obligations of the state and other actors and institutions involved in the operations of mines, yet these are not robust enough. Several organisations including the Rajasthan Human Rights Commission and Civil society Organisations (CSOs) have flagged concerns associated with the lives of mine workers and their families, yet, there remains a lot more that has to be done, to ensure long term rehabilitation and restoration of their lives.

Despite the challenges that continue to persist, the PLHM project is a ray of hope wading through the cloud of dust surrounding mine workers and their families. The project has paved the way for life-altering solutions, offering pathways of hope, resilience, and rehabilitation. Occupational hazards and associated diseases are preventable, provided a strict protocol is in place, clearly prioritising the needs of mineworkers and articulating what are the safe conditions and practices that need to be adhered to. Furthermore, there is a need to offer solutions that enable mine workers and their families to lead a long



and healthy life, free from the deadly burden of diseases such as silicosis and tuberculosis.

This evaluation report cum best practices document is an opportunity to reflect on how the lives of mine workers and their families in Balear Tehsil have been transformed through the interventions implemented as part of the PLHM project. The report aims at capturing the context, impact of interventions and offers ways in which this endeavour can be strengthened further.



*Drilling work in progress in one of the mining sites*



## Chapter 2

### **About the implementing organisation-GRAVIS and the PLHM project**

Gramin Vikas Vigyan Samiti (GRAVIS) or Centre of People's Science for Rural Development was established in 1983 by a group of Gandhian development activists. The organization was formed in order to organize rural development activities in the remote parts of Thar Desert. Over the past 38 years, GRAVIS' work in the Thar Desert, Uttarakhand and Uttar Pradesh, has expanded from its first centre at Gagadi village. As of 2024, GRAVIS operates through its main office in Jodhpur and 20 field centres throughout rural Rajasthan, Bundelkhand region of Uttar Pradesh and in Uttarakhand. GRAVIS has reached out to 2 million people across 2,000 villages.

There are two principles that are cardinal to the work undertaken by GRAVIS-the Gandhian philosophy of "Sarvodaya" - all rising, but the last person first - is the foundation for GRAVIS' vision and mission. Accordingly, GRAVIS works for the collective mobilisation and development of men, women, and children, regardless of economic situation, caste or religion. Addressing the situation through the empowerment of rural communities, GRAVIS also adheres to another Gandhian notion, "Gram Swarajya", or village self-rule, when implementing its efforts. GRAVIS works toward the rehabilitation of the rural community, enabling village ownership and control over its environment, institutions, and relations.

Over four decades, GRAVIS has implemented several projects aimed at strengthening social structures, processes and mediums through which knowledge can be generated, shared and enhanced. The primary focal area of intervention by GRAVIS has been on the restoration of dwindling natural resources and on the upliftment of marginalized groups. Through community-based organizations such as village development committees, self-help groups, intergenerational learning groups, etc, GRAVIS has fostered important and mutual connections amongst the community members, to promote sustainable and resilient means of survival. It believes in blending the traditional wisdom with new techniques to create long-term, sustainable and cost effective means for improving the lives of rural inhabitants. In order to achieve its overall goal of creating self-reliant village communities, it strives to involve the local communities in its programmes and interventions, train and build their capacities further and develop community ownership. GRAVIS' actions focus on the poor, backward and marginalized section of Thar Desert communities with particular emphasis on women, children and elderly. GRAVIS has a deep concern for the development of children, women empowerment and gender justice. Accordingly, the participation of women has been ensured in all the programmes and activities.

The PLHM project (phase 3) has been designed to empower mine workers in the Balesar region of Jodhpur district, Rajasthan. Balesar is home to almost 2,00,000 people and mining is a thriving industry here. Compelled to make a sustained form of livelihood, many of them in this region, men, women, and sometimes even children, are forced to take up mine work, for their survival. Despite the dangerous and



irreversible impact that mine work has on them, people in this region are constantly trapped in the vicious cycle of dust, disease and death.

The PLHM project is one of the longest serving projects being implemented by GRAVIS with an aim to protect mine workers, pre-empt the dangerous effects of their occupation and provide a pathway for rehabilitation.

This chapter briefly provides an overview of the PLHM project, including the key objectives, expected outcomes, approach and key areas of intervention.

The overall goal of the project will be to contribute to reducing the incidence and prevalence of silicosis and TB in the sandstone mines of Balesar, India and to promote lung health in mining communities.

Specific objectives embedded into the design of the project are listed hereunder :

- Expand the knowledge and awareness on lung health among mineworkers and mine-owners in Balesar area
- Improve health status through Village Health Workers (VHWs) and medical services to mineworkers aimed at improved lung health.
- Enhance nutritional status of mineworkers through nutrition gardens, training and capacity building
- Liaison with the local government and advocate for better healthcare facilities for mineworkers
- Document the best practices and learning to promote replication of lung health programmes in other areas.

Planned for a period of three years, between October 2021 and September 2024, the project aimed at reaching out to 25,000 mine workers of the Balesar area working in sandstone mines. The target groups included mineworkers working in sandstone and marble mines, and their families.

The project envisaged the following outcomes:

- Enhanced capacities of mineworkers, mine-owners and GRAVIS team on lung health aspects
- Improved health status of mineworkers and their families through the services of 10 Village Health Workers (VHWs) and with 36 outreach medical camps
- Enhanced nutritional status of mineworkers and their families through Home based Nutrition Gardens (HNGs)
- Increased interest of Government and other stakeholders on lung health activities as a result of advocacy efforts
- Project learning shared and interventions are replicated in other areas

In order to achieve these objectives and expected outcomes, GRAVIS has adopted a comprehensive approach, encompassing key elements including promotion of health and nutrition, community mobilisation, fostering linkages between government and civil society representatives, and capacity



building.

The next chapter entails a detailed evaluation of the project, reflecting on the extent to which the objectives and outcomes have been realised.



*A stone mine*



## Chapter 3

### Insights from evaluation

This project evaluation has been designed to reflect on the positives and challenges confronted by the project, practices that steered progress and ensured effective, efficient, resilient and sustainable outcomes. While the evaluation is based on the OECD development criteria comprising five key principles including relevance, coherence, effectiveness, efficiency, sustainability and impact, this document also highlights the best practices included in the interventions and implementation of the project that paved the way for successful realisation of the outcomes that were envisaged. Going forward, the study identifies areas that can be prioritised and pursued.

**Methodology:** The evaluation of the project is based on the criteria defined by OECD DAC network on Development Evaluation (EvaNet), which is governed by components such as relevance, coherence, efficiency, effectiveness, impact and sustainability. The entire project has been evaluated against this framework, carefully considering the insights drawn from the project related documents, reports, reviews and field-based interactions. The next few sections will capture observations connected to each of the components mentioned above.

#### **a. Relevance: Prioritising lung health of mining workers in Rajasthan**

People in the Thar region endure extremely challenging conditions and are often compelled to choose livelihood options that jeopardise their life. When agriculture is no longer a viable option, hundreds of men migrate to nearby districts in search of a means of income and end up taking up mine work. Women stay behind to take care of the families, often burdened with multiple responsibilities, and with barely any resources to manage.

A mine worker spends almost ten to twelve hours a day, almost the entire week, working amidst extremely challenging working conditions. Trapped in extremely hostile conditions for long hours, with minimal or sometimes no safety equipment, mine workers are constantly battling for their survival. Mine workers in Rajasthan have faced similar atrocities. As highlighted by the Rajasthan Human Rights Commission in their report in 2013, the problems of mine workers have been known to all stakeholders, yet, action has never been taken.

Those who are engaged in mine work as their main source of livelihood are often oblivious to the dangerous and long-term effects this form of work can have. Given these precarious circumstances, convenient and quick access to periodic health check-ups, diagnostic, preventive and curative services are crucial. However, in the Thar region, inaccessibility and unavailability of such services is only one of the many barriers present. The lack of prioritisation of lung health and associated conditions, lack of awareness amongst the beneficiaries, poor infrastructure, lack of necessary scientific equipment to facilitate accurate

screening, apathy of government officials etc, contribute to an extremely complicated web of challenges that mine workers and their families are confronted with.

When one explores the socio-economic status of mine workers in the region, the majority of them belong to the poor and marginalised groups. Compelled to take up mine work, these mine workers are often exploited, pushed to work in extremely difficult conditions and left to tread an extremely challenging path where there is no hope. Poverty, illiteracy, malnutrition, exhaustion, are common among those who pursue almost 12-15 hours of work in mines every single day, without a break. Having dedicated most part of their lives to this form of hazardous work, mine workers invariably become susceptible to silicosis and the burden to support their families gets passed on to their children. With no option left, young adults are forced to take up mining work, jeopardising any opportunities to learn or continue to pick up other skills that may be useful to stabilise their economic condition in the future.



*Mine workers work in extremely challenging conditions*

The PLHM project undertaken by GRAVIS is grounded in the fundamental understanding that silicosis, although a deadly condition, is a preventable disease and this can be addressed through an integrated approach. In order to ensure that occupational hazards do not jeopardise the lives of mine workers and their families, the PLHM project is certainly relevant and timely. The project has been designed in such a manner that it encompasses critical elements such as outreach, awareness generation, capacity building, advocacy and empowerment. These components are carefully woven together to empower mine workers and their families with the necessary resources and support to overcome the hazardous conditions and after-effects of mine work. These components have proved to be vital for the beneficiaries as they not only offer immediate solutions to overcome economic uncertainty, deteriorating health conditions and a vicious cycle of dearth and deprivation, but also offer a long-term pathway of physical, economic and emotional rehabilitation.



While outreach is important to conduct screening and facilitate early detection of symptoms, these are important channels through which the mine workers can gain information on their health condition and pre-empt possible deterioration. Outreach camps give people the hope that an incurable condition like silicosis can be addressed much earlier on. The capacity building workshops that provide information on safety practices and precautionary measures are vital to ensure that long term protection for the mine workers is ensured on-site and off-site as well. The project has been designed to empower mine workers and their families and provide them with sustained support so as to ensure that the families can be assured of safe working conditions, but also have access to essential support services including health check-ups, sustained nutrition through home based nutrition gardens and continuous monitoring and capacity building. The PLHM project has not only addressed the core concern of mine workers but has also enabled setting up a robust system through which their physical and mental health, nutrition, community engagement and networking is taken care of.

The PLHM project is a beacon of hope for many mine workers and their families who were unsure of how their families would sustain themselves in the larger backdrop of health, economic, social and physical barriers.



*One of the beneficiaries under the PLHM project who is now eligible to receive benefits under Government scheme*



## **b. Coherence: Strengthening systems to facilitate access to government schemes specifically designed to support persons with Tuberculosis and Silicosis**

Government assistance plays a very crucial role in sustaining the treatment and rehabilitation processes for those diagnosed with lung related conditions such as tuberculosis and silicosis. While availing this form of assistance is necessary, the process is often complex, cumbersome, and inconvenient. The government of Rajasthan has rolled out a few schemes to aid the mine workers and their families. Although the government took cognizance of the issue only recently and has devised policies to combat the effects of silicosis, this has been an important step in recognising the need to commit to the health and safety of mine workers. Despite government schemes being designed to support families, procedural and documentation related challenges hinder the process of realisation of the benefits. Many mine workers and their families are oblivious to the fact that the Government of Rajasthan has rolled out a few schemes predominantly designed to support their needs in terms of nutrition, health screening, treatment, rehabilitation, etc. This is perhaps more visible in remote and inaccessible areas where poverty, lack of awareness, information asymmetry, etc exacerbate their problems.

Through the PLHM projects, GRAVIS has stepped in to form a crucial link between the government and mine workers and their families. The interventions have been strongly rooted in facilitating a channel of communication and coordination between government departments and beneficiaries through a well capacitated pool of village health workers. With an objective to advocate for better health facilities for mine works and ensure timely access to diagnosis, treatment and rehabilitation, GRAVIS has demonstrated the need for stronger convergence between state and non-state actors to enable robust systems. Liaising between representatives of the government and the mine workers has filled a vacuum that persisted for decades.

The efforts undertaken as part of this project has brought together department officials, members of the State Human Rights Commission, domain experts, functionaries, representatives of Civil Society Organisations working towards the upliftment of mine workers and their families. The project has five key interventions contributing to the aspect of coherence:

Firstly, enabling awareness of the NikshayPoshan Yojana, which is a central scheme implemented by the Government of India to provide nutritional support to tuberculosis patients in India. A direct benefit transfer of Rs. 500 per month is provided in order to enable the patient to consume quantitatively and qualitatively adequate meals while availing treatment for his/her condition. In Balesar, thirty-three village health volunteers have been trained to disseminate relevant information on schemes such as the NikshayPoshan Yojana and enable the beneficiaries to navigate through the various processes including submitting applications, following up on the status of applications, providing support to opening accounts, accessing the cash benefits every month and addressing any concerns, if any.

Secondly, linking patients diagnosed with TB to the Daily Observed Therapy Shortcourse (DOTs). The DOTs



programme, recommended by the World Health Organization is aimed at combating the lack of organisation of services to ensure widespread detection and cure of TB patients, particularly the infectious ones. This programme is credited for combining technical and managerial components that makes the infectious cases non-infectious and breaks the cycle of transmission. Using DOTS also prevents the development of drug-resistant strains of TB that are often fatal and almost 100 times more expensive to cure. This programme is a sustained effort undertaken by the Government to control TB spread and linking TB patients to this, as part of the PLHM project, is a very significant intervention. This intervention has ensured that patients have continuous access to treatment without any gaps that may worsen the condition.

Thirdly, GRAVIS has brought together state and non-state actors, including department officials, union leaders, health service providers, civil society representatives, government functionaries such as ASHA workers, to the same platform, through networking meetings. These meetings have enabled discussions on the key concerns faced by mine workers and their families, need for policy level interventions to address these concerns and short term and long-term interventions to prevent, control and rehabilitate mine workers. Such meetings have fostered stronger linkages between the government, community and civil society organisations, paving way for effective implementation of programmes. In the past year, such networking meetings have brought about a fundamental change in the perspectives of government officials towards the apathy faced by mine workers. They have been sensitised to the problems faced, especially in terms of the lack of safety equipment, constant exposure of silicon dust and perpetual risk in terms of succumbing to conditions such as TB and silicosis. The meetings have also enabled mapping of roles and responsibilities of a diverse group of stakeholders, seeking clear commitments in terms of how the system can be strengthened further to respond to the problems faced by mine workers in a swift and effective manner. Over the past one year, three such meetings have been organised and have contributed to the lives of several mine workers and their families.

The organisation of public hearings to raise concerns faced by mine workers and their families is yet another important intervention by GRAVIS, with the primary objective of facilitating a platform where grievances can be heard, filed and addressed immediately. On 22nd July 2023, a public hearing for sandstone mineworkers was organized at Balesar, where 136 mine workers attended to address the issue of delay in compensation processes. The hearing was facilitated by Rajasthan High Court advocate Mr. K K Vyas.

The PLHM project has contributed significantly in establishing channels between the government, civil society organisations and the community of mine workers in Balesar. It has demonstrated that stronger systems, comprising open and accessible channels of communication between the government and beneficiaries, is necessary not only for the beneficiaries but also for the larger community. Furthermore, the project, which is essentially designed to facilitate access to government schemes and ensure the beneficiaries have timely access, has enabled families to allocate money towards the next generation, facilitate access to education and developing vocational skills, all of which remained distant to them, all these years.



### **c. Effectiveness : Pursuing an integrated approach to achieve the objectives envisaged**

One of the key characteristics of the PLHM project is the manner in which it has been designed, to encompass various components that directly impact the health, nutritional status, household income, education, research and advocacy. The project has not only integrated various sectors but also facilitated the involvement of actors and institutional mechanisms in a convergent manner. The objectives of the project have been woven so intricately to combine elements that not only protect the mine workers at the work site but also cater to the needs and aspirations of their children and families.

In order to achieve optimal achievement of the objectives envisaged in the project, the first step undertaken by GRAVIS is to ensure orientation of the project team. Discussions with the project team reflect their commitment in pursuing the interventions with keen interest and resolve to uplift mine workers and their families. They are well adept with the socio-economic challenges faced by the mine workers and have been able to articulate very clearly what the project aims to achieve and how this has been planned. Each of the project team members, after having been sensitised through training workshops and an exposure visit, demonstrated clear understanding of their role, responsibilities, methodology of implementing the activities, measuring the outcomes achieved and documentation of the progress reports and case studies. In terms of other activities associated with enhancement of knowledge and awareness generation, the project has devoted significant amount of time and energy towards organising exposure visits for mine workers, awareness camps at the community level (36 have been organised in 3 years) and health safety trainings for selected knowledge leaders in the community (12 have been organised in 3 years).

The second objective of the project, which aimed at improving the health status of mine workers included activities such as building a cadre of ten village health workers to provide health education to mine workers and organise outreach medical camps to provide screening, diagnostic, curative and referral support. In a span of three years, the project has organised thirty-six such camps.

Closely associated with the second objective is the third one that is centered around augmenting the nutritious status of mine workers. The project has paved the way for setting up of twenty-five home-based nutrition gardens to enable mine workers and their families to grow fruits, vegetables and greens. These gardens have been a crucial source of a diverse basket of nutrients for mine workers, which is essential for them to cope with aggressive health conditions such as TB and silicosis. The nutrition gardens have contributed to a healthier living for mine workers, and this is an important lifeline, given the challenges posed by dry and arid conditions in the region.

While field-based interventions are one of the key components of the project, liaising and advocacy are another important arm that is aimed at bringing about systemic and policy level changes. The project has included two broad categories of activities as part of this particular objective-the first one being commemorating important days such as International Labour Day, International Women's Day and World Lungs Day; the second being organising networking meetings, public hearings and advocacy workshops at



district and state levels to enable participatory learning, sharing and future planning. While the first category has ensured community-based mobilisation of mine workers, the second category has paved way for a platform, a medium or a space where mine workers can voice their concerns and seek immediate redressal. These platforms have not only enabled swift action, but have reinstated the faith in systemic change, secured by the involvement of both the government as well as civil society representatives. The activities under both these categories have been completed as envisaged during the planning and preparatory stage of the project and continues to improve the conditions of mine workers and their families.

Documentation has been an integral part of the project, through the span of three years and by way of progress reports, annual reports as well project publications, the outcomes achieved, insights and learnings have been well captured. Furthermore, each of the case studies are a testimonial to the fact that this project has transformed the lives of mine workers in the Balesar region of Jodhpur district. While the baseline survey, conducted during the first year of the project has been an important yardstick to measure the progress, the evaluation reports have been able to capture success stories, best practices and recommendations to further strengthen the impact of the project.

All the activities have been executed as per the plan and design of the project and these have contributed significantly to policy, systemic, institutional overhaul. These systems will continue to serve the needs of mine workers and their families.



*Village Health Workers training in progress*

#### **d. Efficiency: Enabling timely and effective interventions for mineworkers and families**

When one reflects on the project design, a clear insight that emerges is that it is centered around the comprehensive or overall improvement in the lives of mine workers and their families. Different components, impacting health, nutrition, income, etc are encompassed in the design, requiring sustained, systematic and continuous engagement. Given the scale at which all the activities have been implemented, one must acknowledge the fact that the project has been designed and executed in a timely manner, taking into consideration all the objectives, outputs and outcomes that were envisaged at the beginning of the project. Sufficient time and effort have been allocated to ensuring that the activities are completed well within the time frame, and that the outputs and outcomes are captured and disseminated accordingly. This includes the advocacy component that involves the participation of government officials, functionaries and civil society representatives. Given the fact that GRAVIS has grounded its work in this region for over four decades now, the organisation has emerged as an important anchor for crucial activities of restoration, rehabilitation and revival of traditional methods and knowledge. This has been one of the key strategies not only in the case of drought management and natural resource management, but also with respect to the lives of mine workers. While advocating for larger policy and systemic changes, GRAVIS has ensured that the timeline of activities and interventions have been compiled with, by leveraging the resources, capacities and institutions in an optimal manner.

#### **e. Sustainability: Envisioning a future that is built on resilience and sustenance**

One of the key concerns that is often associated with the implementation of any project is how the stakeholders, including the beneficiaries, will sustain the impact of the project beyond the project period.



*A public hearing being organised for beneficiaries to voice their concerns*

Although the flow of resources may be contingent upon certain external factors, the nature of interventions as part of the PLHM project are designed to achieve long-term change. What is unique is the fact that this long-term change is steered by the community that is empowered with the necessary skills, capacities and information. In other words, the community, particularly the beneficiaries, are custodians of the change. They will lead the change that is expected to benefit not just themselves but also the future generations of the family. The village health workers, for instance, form an important pool of persons who are vested with responsibilities such as outreach, early detection, counselling and referrals to hospitals for further treatment. This intervention, in particular, has resulted in significant change as it empowers members of the community to proactively identify cases of tuberculosis and silicosis, ensure timely referrals and treatment and complete rehabilitation of the patient. This form of engagement has proved to be extremely beneficial.

In the past three years, GRAVIS has quite successfully worked towards interventions that are sustainable in nature. For instance, the home-based nutrition gardens is a critical intervention to ensure that beneficiaries have sustained access to a wide variety of micronutrients, vitamins and minerals, that are grown organically. This ensures sustainability in two broad ways—firstly, the method in which the fruit, vegetables and greens are grown. This comprises the use of locally available, climate resilient seeds that ensure that the soil is conserved, water resources are used optimally, and the benefits are reaped by the entire family. In cases where the family is able to generate more than what is necessary for consumption, it also provides avenues to sell them in the market and augment their household income. This intervention is not only contributing to the physical rehabilitation of mine workers who have been affected or who may be potentially affected by silicosis or tuberculosis due to their prolonged exposure, but also contributing by means of an alternative source of income.



*Intense community level engagement as part of the PLHM project*

Knowledge and capacity building, awareness generation and perspective building are crucial interventions built into the design of the project. The periodic engagement of the project team with the beneficiaries, hand holding through the documentation process and active participation in the exposure visits, has ensured that the beneficiaries not only leverage these for themselves but also pass on the same to the next generation. The need to loop in the next generation is important so that they are aware of the consequences of taking up mining work and that they are aware of ways to pre-empt these consequences as well.

Another dimension of ensuring sustainability that is embedded in this project is that of systemic change. GRAVIS has included engagement with the state department officials and members of the civil society organisations whose role and impact will be instrumental and cementing the outcomes achieved through the course of the project. By involving state and non-state actors in the discussion and interventions, GRAVIS has ensured that the changes envisaged are not merely short term but will go beyond the tenure of this project. The systemic involvement is imperative to ensure that the environment is conducive to accessibility, availability, adequacy and sustainability of services that are being provided to mine workers and their families. The project has also facilitated opportunities where mine workers and the community in large can put forth their concerns to the officials and expect transparent and swift redressal of the same. Furthermore, GRAVIS's role in terms of standardising personal records, liasoning with government officials and providing legal and administrative guidance has proved to be extremely crucial in ensuring a sustainable source of income and support for families. By enabling access to the government benefits for patients diagnosed with tuberculosis and securing financial compensation, GRAVIS has contributed to long-term sustenance for the families.



*One of the beneficiaries of the PLHM project who has gained significantly from the interventions*



## **f. Impact: Promoting an integrated, community centric model of governance to address the concerns of mine workers and their families**

The second phase of the PLHM project has been successful in situating the study in a robust governance framework, while drawing strength from the community centric forces and linkages. This structure has been achieved through a multi-pronged strategy that directly translates to achieving the five key objectives that were envisaged as part of the project.

GRAVIS has leveraged more than four decades of its experience working in this region to prioritise its interventions benefiting the community and enabling them combat the challenges imposed on them by a wide spectrum of factors including climate change, socio-economic and cultural barriers, scattered and inaccessible topographies, etc. This experience has proven to be quite insightful given the fact that the project, although focussing on mine workers and their families, relies on a comprehensive approach addressing health, nutrition, income security, knowledge and capacity building, awareness generation and most importantly, creating platforms that promote transparency, accountability, monitoring and timely redressal of grievances faced by the beneficiaries. The rich expertise of the organisation has enabled a streamlined, systematic arrangement of interventions that fit very well in the given socio-economic, cultural and geographical context.

Expanding knowledge and awareness generation amongst the beneficiaries has been one of the first priorities pursued by the project to ensure that the project team has a clear understanding of the purpose, objectives and interventions of the project. Furthermore, they are well equipped to engage with the beneficiaries in a time-sensitive manner. Orientation workshops for the project team have been instrumental in building a foundational perspective for the team members. The project has also facilitated one exposure visit for the team and one for the mineworkers. These exposure visits have contributed significantly to understanding the wide spectrum of challenges that mine workers face and have, in many ways, provided a deeper context as to why these workers endure such harsh working conditions that almost cause irreversible damage to their health. That apart, thirty six awareness camps and twelve health training camps have been conducted over a period of three years. Periodic engagement of this nature is crucial to foster a sense of prioritisation and swift action. These awareness camps and health training camps have emerged as an important medium through which mine workers and their families are not just provided with the information in terms of preventive and curative care measures to be adopted, but also enabled early detection, swift referral, immediate treatment and sustained rehabilitation. These camps have also provided various avenues in which the mine working community can invest in, such as the home-based nutrition gardens, to achieve comprehensive change. Through these camps, more than 607 beneficiaries have been reached out to, their understanding has been enhanced and their capacities to detect and respond to deteriorating health situations have been built with the aid of village health workers.

The Village Health Workers are an important cadre of personnel, identified as part of the PLHM project, to effectively realise the objective of improving the health status of mine workers. These workers are vested with the primary responsibility of providing health education to the mine workers and their families; they



cover a wide range of themes including dietary habits, importance of consuming a diverse spectrum of nutrients, early detection of symptoms, government schemes that provide support to those identified with silicosis or TB, safety measures and practices. They are also responsible for facilitating the health camps, thirty-six of which have been conducted in the span of three years. These VHWs must be credited for ensuring that mine workers are aware, alert and adept with means to respond to any concern associated with their condition. Given how intensely they engage with the mine working community, the VHWs offer more hope for such families. The mine workers and their families have gained significantly from this particular intervention. It is also important to note here that the VHWs, who are from the community themselves and very well appreciate the socio-economic challenges faced by the mine workers, are being empowered to address concerns, provide solutions and more importantly, offer a ray of hope in families that had lost everything in their battle against deadly conditions such as silicosis and TB. The mine workers and their families are better placed to deal with concerns and associated risks that emerge from their nature of work, and the role of VHWs in this process is noteworthy.

For communities in the Thar region, food and nutrition security is often a distant dream. A quick look at the nutritional indicators of women and children in the region warrants concern. As per the National Family Health Survey (V) conducted between 2019 and 2021, 32% of children below five are stunted, 17% are wasted, and 28% are underweight; 72% of children between six and fifty-nine months and 54% percent of women are anaemic. Although the indicators have shown considerable progress over the years, the underlying socio-economic factors make this progress almost difficult to sustain. This is where the need for health based and nutrition-based interventions emerges as these are extremely necessary to enable families find hope in solutions that make them self-reliant, resilient and less affected by the ever-changing climatic conditions. The intervention of home-based nutrition gardens bridges the gap between nutritional needs of a family and nutritional means that are available, accessible and adequate. Through the PLHM project, 25 such gardens have been set up for beneficiaries. As part of the training, one of the components that is repeatedly reinforced is the need to leverage locally available resources to achieve optimal nutrition and health. The beneficiaries are provided all the necessary support to set up, harvest and maintain the gardens. They grow a wide variety of fruits, vegetables and greens. These gardens have emerged as a successful model to address the nutrition and health related concerns of workers, their children, women and older persons in the family. Furthermore, what is unique about this intervention is that it has enabled the restoration and use of local varieties of seeds. Protecting the local variety of seeds and promoting their use is one of the core objectives of GRAVIS and the setting up of HNGs has ensured the same. These have contributed to achieving the dual purposes of nutrition security on one hand and sustainability on the other.

While field-based interventions are necessary to provide a pathway and medium of change at individual, household and community levels, it is imperative that these are steered by robust governance systems. One of the key factors that determine the success or effectiveness of any intervention or approach is the extent to which it is able to accommodate and address concerns faced by beneficiaries. The PLHM project is unique



in the sense that it acknowledges the role of both top-down and bottom-up approaches and focuses on combining the strength of both these methods as part of the interventions. Having spent a significant amount of time understanding and engaging with systemic and institutional challenges, GRAVIS has carefully considered the need to involve actors from both government and non-government sectors in order to achieve change. Through the PLHM project, GRAVIS has endeavoured to provide multiple avenues through which stakeholders can come together, discuss the concerns and challenges that impede or hinder the progress and ways in which these can be addressed immediately. Some of the interventions as part of this combined approach include celebrating important days such as world labour day, world lung's day and womens' day, organising public hearings, network meetings, and district level and national level workshops. In a span of three years, the project has commemorated all the three events, every year, along with two public hearings and one workshop each at the district and national levels.

These events have contributed immensely to mobilising efforts at the community level, bridging gaps between government, non-government and community actors, generating effective demand for enhanced systems, and integrating accountability and transparency as part of the entire process. By integrating these principles, GRAVIS has enabled the setting up of an open, accessible, functional and responsive medium that not only addresses problems and challenges faced by the mine workers, their families and communities at large, but also fosters trust and faith in the process of good governance. All these methods have resulted in reiterating the need for multi-stakeholder dialogues at various levels, enabling the need for cross learning, experience sharing and an integrated and comprehensive manner of addressing concerns.



## Chapter 4

### Best practices

One of the key factors that determines the success or progress in any intervention is the consistency, design and efficiency with which it has been executed. In a span of forty years, GRAVIS has been at the forefront of advocating for systemic changes across several domains, ranging from agriculture, public health, education, natural resource management, climate change, mining, etc. The familiarity with the socio-economic, cultural, climatic and topographical context, the sustained engagement with communities and the trust that GRAVIS has built with the beneficiaries over the years have significantly contributed to shaping the lives of people in this region. This chapter is aimed at highlighting some of the practices that have enabled GRAVIS to demonstrate tangible change, particularly in a very challenging setting such as the mining sector in Balesar Tehsil.

#### **a. Integrated project design and approach**

One of the primary factors that drive the successful implementation of a project is its intent and how this intent is incorporated as part of a larger design of the project. The PLHM project is unique in the sense that it directly engages with community specific interventions, while also simultaneously interacting with and enabling systemic changes. The design is quite demanding in the sense that it seeks to include a wide range of stakeholders and also facilitate a strong communication channel between the beneficiaries, project team of GRAVIS, civil society organisations, department officials and community based functionaries. Despite the complexity of this, GRAVIS has successfully demonstrated the value and strength of an integrated design. The PLHM project not only focuses on the core issue of mine workers but also weaves other dimensions such as their nutrition, health, sustainable means to life, prevention, resilience-building, rehabilitation and governance. The holistic nature of the project has contributed significantly to the outcomes, particularly in terms of accessibility to swift and responsive healthcare services, accessibility to benefits provided by the government, sensitization of community members, empowerment of community members, and most importantly, breaking the vicious cycle of poverty and dearth that compels generations to take up mine work as their source of livelihood.

#### **b. Intense community level engagement**

Community based interventions can be quite challenging in regions where climatic, topographic factors impede outreach. That apart, these are further compounded by social and behavioural factors that exacerbate inequalities. One of the practices that has proven to be significantly effective is the appointment of VHWs. These workers have bridged the gap between mine workers and health care services, effectively reducing the time taken to identify, respond, or treat conditions that are consequential to engaging with mine work. The intense community level engagement, anchored by the VHWs is one of the key elements of



this project that have achieved significant progress. Their role, in terms of not just facilitating outreach camps and diagnostic services but also through sensitisation, perspective building and capacity building, have contributed immensely to the lives of mine workers and their families. This is a very pivotal strategy, considering the fact that it not only bridges the gaps but also fosters trust and communication. The fact that VHWs are from the respective villages and their interaction with the beneficiaries is built on trust and assurance. The VHWs must be credited for their deep engagement with the community and for fostering hope.

### **c. Gender sensitive approaches addressing the needs of women**

In an arid and inhospitable region like the Thar, women and young girls face a disproportionately higher burden. They are compelled to face an indomitable path that entails physical and mental exhaustion, drudgery, and rigid cultural practices. Undertaking arduous treks in the quest for water for household consumption, childcare and taking up menial tasks to contribute to the household income are some of the expectations that are thrust upon women and young girls. This is, despite the amount of pain and suffering it imposes on them. Women and young girls are often weighed down by the pressure imposed on them to “care” for their families, which, ironically, debilitates them to a point of no return.

In the mining sector, minor girls and women are forced to take up mine work owing to poverty and lack of education. While they assist with cutting and drilling, carrying and cleaning works, some adolescent girls are also expected to go into the mine if required because they are petite and flexible to do the job. Sadly, women workers are often underpaid, malnourished, exploited and often physically abused. The hostile working conditions also expose them to many diseases. Left with no choice, women are forced to work on all seven days, and even during their periods.

The PLHM project is sensitive to the challenges faced by young girls and women who are directly or indirectly involved with the mining sector. Acknowledging the burden faced by single women who lost their husbands to silicosis or other issues due to sustained engagement in mines, the project offers a path of hope. Avenues such as home nutrition gardens, village health work and capacity building have a huge impact in terms of what women can do. The project highlights the fact that there are other viable options that can contribute to enhanced health, nutrition and living standards, without having to depend on sectors such as mining. The project also offers a pathway for families who earlier were forced to take up mining as their only source of livelihood. Women are encouraged to participate and voice their concerns as part of the capacity building workshops; they are nudged to take up roles other than those that have been imposed on them by societal structures; they are empowered to confidently pursue vocations to support themselves and their households. The PLHM is enabling women to break away from the shackles of poverty and disease.



#### **d. Liasoning and linking with government programmes**

The PLHM project interventions have been designed to equip the beneficiaries with the necessary information regarding government schemes and facilitate access. This is a critical intervention as in many cases, beneficiaries are oblivious to procedures or even benefits that they are entitled to. Sometimes, these processes to link the beneficiary to the scheme may be extremely complicated or may entail multiple steps of verification. For a mine worker or any member of his or her family, navigating through this may seem quite challenging. Furthermore, it may take away a day or two of work which automatically translates to loss of wages for that particular period of time. Many families chose not to pursue this process for the same reason. Through the PLHM project, GRAVIS has stepped in to handhold the beneficiaries and support them with availing the benefits provided by the State government. Liasoning and linking with government programmes emerges as an important lifeline for mine workers and their families as they are entitled to a lump sum amount that may be useful to avail medical care. Additionally, this amount may also be used to set up a small business for the family, thereby providing them an alternative source of income.

#### **e. Enabling participation, grievance redressal through transparent processes**

Reaching out to the most marginalised and bringing them to the core of any development intervention is a daunting task. Creating a space for them to participate, voice their concerns and effectively demand for redressal of their problems is an important intervention. It fosters a sense of accountability amongst those who are responsible for ensuring that the benefits are provided in a timely and adequate manner; it also creates an environment of trust between the beneficiaries, civil society organisations and department officials, who collectively discuss and deliberate upon issues confronting mine workers and their families. All community-based mobilisation activities, network meetings and public hearings conducted as part of the PLHM project have brought together a heterogenous pool of concerns that have been collectively addressed. These types of interactions also enable a smooth transition from handholding to collective ownership by the community. The community is empowered to raise questions on its own, to examine issues from different lenses, to collectively arrive at solutions that may improve the condition of mine workers and their families. By drawing on the expertise of various stakeholders and leveraging from their intense engagement at the field level, the PLHM project has certainly contributed to creating robust, transparent, effective and efficient spaces that prioritise the lives of mine workers.



## Chapter 5

### Gleaning from the past experiences to move forward

Projects like the PLHM are important as they sow a seed of change. The project has significantly contributed to the transformation of mine workers, their families and communities at large, in Balesar Tehsil. The project, by adopting an integrated approach and deploying a multi-pronged strategy, has not only strengthened individuals but also systems that are responsible for enabling change. While some of the interventions have focused on improving the nutritional and health status of mine workers through setting of HNGs, sensitization, awareness generation and capacity building, a larger part of the project has focused on creating linkages between government schemes and beneficiaries, creating transparent spaces to discuss and address issues and establishing a conducive environment for mine workers and their families to recover from the deadly impact caused due to prolonged engagement in mines. Building resilience and rehabilitation are central to this project that has been achieved by leveraging the power of collective, community led, coherent processes. While the project has successfully achieved the projects as envisaged earlier, it is imperative to bring a greater number of beneficiaries and stakeholder groups under the ambit of these interventions. Following are a couple of recommendations that glean from the PLHM experience over the past few years.

- **Advocating for stricter implementation of guidelines and enforcing better working conditions:** Given GRAVIS's extensive engagement with mine workers in different districts in Rajasthan and rich expertise in this domain, it puts the organisation at a higher pedestal in order to influence policy making at the State level. GRAVIS may consider engaging with state level departments to effectively demand for stricter implementation of rules, guidelines and protocols associated with various components classified under mining. To begin with, there is a need to demand for more mines to be registered/licensed. This directly brings the mines under the realm of regulation, thereby fostering more accountability on part of the mine owners. Furthermore, GRAVIS may consider advocating for better working conditions in mines through guideline documents, standard operating procedures or other forms of material that can strengthen the understanding of government departments and mine workers as well. Better working conditions, especially for women, is a must. Given GRAVIS's position in the civil society network in Rajasthan, it would be helpful to gather support and push for better working conditions for mine workers, including fixed number of working hours, proper arrangements for food, water and sanitation, adequate number of breaks, safety equipment, promotion of wet drilling techniques, etc.
- **Literacy and vocational courses for young girls and women:** Many families engaged in mine work are often trapped in this sector because they neither have the educational qualifications to pursue jobs in other sectors, nor do they earn enough from the mining sector to invest in other businesses. They are



dependent on external support (most of the time as loans borrowed from mine owners) to provide for their medical treatment. While GRAVIS has already kickstarted the process of breaking this vicious cycle of poverty and debt, one intervention that can prove fruitful is by way of offering literacy classes and vocational courses for young girls and women. This will create different avenues for women to earn and support the household income. It will also give young girls an opportunity to pursue vocations that can sustain themselves and their families. To that effect, GRAVIS can also consider giving scholarships to girls to support their education. In the long run, GRAVIS can also consider setting up women collectives, who can proactively work towards establishing economic means/ways to earn income that can in turn feed into supporting their households as well. These collectives can also contribute to the mental well-being of women, by way of providing support and counselling. These groups can emerge as a platform for women to share their experiences, their ongoing struggles and measures that have helped them cope. Through these steps, women will find strength, will find access to knowledge and information that is critical to their empowerment.

- Increasing the frequency of community level engagement: Through the PLHM project, the community level engagement has contributed significantly to empower mine workers and their families, equip them with knowledge and information to gain access to benefits provided under government schemes, and also facilitated public hearings and network meetings among multiple stakeholders. These interventions have been quite useful, and it would be helpful to organise them more frequently, reaching out to a larger number of community members. Frequent meetings will bring in a stronger culture of accountability and transparency and more community members will be able to voice their concerns.
- Intensifying efforts to prevent lung diseases caused by prolonged exposure: The interventions to prevent diseases associated with prolonged exposure in mines can be intensified further, by setting up a system to periodically monitor the health of all the workers. This monitoring exercise can be institutionalised and made mandatory as part of the standard protocols to be followed in mines, so that any signs of silicosis or tuberculosis can be alleviated immediately. A quick response mechanism to probable symptoms can be designed so that any possibilities of lung related conditions can be referred to and treated before the condition deteriorates. GRAVIS must nudge mine workers to invest in measures such as exhaust ventilation and dust collection systems, water sprays, wet drilling, enclosed cabs, and drill platform skirts. These can be incorporated as part of the standard protocols and monitored periodically for compliance. GRAVIS must also amplify it's efforts to prevent people from falling prey to the mining sector. Although this is a long-term suggestion, it is believed that breaking the intergenerational cycle of poverty and debt is necessary to uplift the lives of people living here.

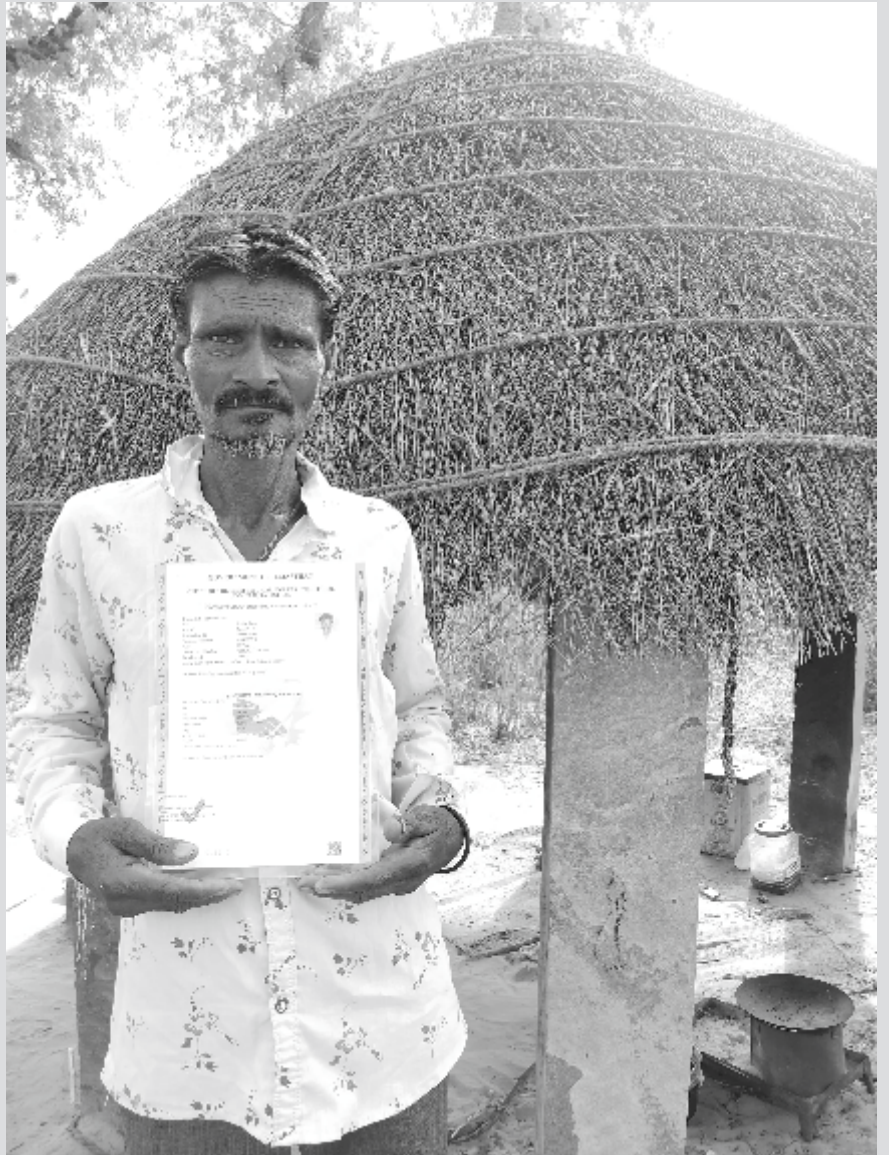
The PLHM project has been an important contribution to the people of Balesar Tehsil, Rajasthan. The interventions and their impact on people is a testimonial of people's ability to rise above challenges, provided they are given the right support and direction. The project must be replicated in many other areas where mining pervades the lives of lakhs of workers and their families, who are yet to rise above the dust.

## Stories of hope :

### Case study 1

#### Budha Ram's journey of hope

Budha Ram hails from the Meghwal community, a scheduled caste group that faces social and economic marginalization. Growing up in Jaitsar village, Budha Ram's family of six lived in a semi-pucca house, reflecting their modest economic status. His father was a mine worker, and due to deteriorating health conditions, the responsibility of supporting the family fell on young Budha Ram. Instead of attending school, Budha Ram began assisting his parents in mining activities at an early age. Alongside his mother, he was involved in physically demanding tasks such as filling trolleys with mined materials. The lack of education and economic pressure forced Budha Ram into labour-intensive work, depriving him of opportunities for personal and professional development. After dedicating approximately 15-17 years to mining under unsafe and hazardous conditions, Budha Ram began experiencing severe respiratory problems. Despite his declining health, economic necessity compelled him to continue working in the mines. The cycle of hardship continued as his son also started working in the mines, perpetuating the intergenerational cycle of poverty and health issues.





GRAVIS organized an outreach medical camp in Jaitsar village as part of the PLHM project initiatives. A dedicated medical team conducted comprehensive health screenings for local miners, including Budha Ram. Based on symptoms and thorough examinations, Budha Ram was screened and diagnosed with Stage 2 silicosis. Understanding the criticality of early intervention, the medical team recommended that Budha Ram undergo further evaluation by the official silicosis board. GRAVIS facilitated the online registration process for his certification. However, during the application for compensation, discrepancies in Budha Ram's personal documents were identified, posing a significant barrier to accessing benefits.

After successful documentation correction and application processing, Budha Ram received a compensation amount of Rs. 3,00,000 within 3-6 months. GRAVIS provided guidance on utilizing the funds effectively to ensure long-term sustainability. Utilizing the compensation, Budha Ram established a grocery shop in his village, providing a stable and safer source of income. GRAVIS offered training and support in basic business management to help Budha Ram run his new venture successfully. With improved financial stability, Budha Ram's children were able to return to school, breaking the cycle of labour and illiteracy.



## Case study 2

### **Oma Ram's exceptional journey of overcoming social, economic and cultural barriers to be free from tuberculosis**

Oma Ram has been living in the village of Dhadhaniya, Balesar, for his entire life. He began working in the nearby mines around 20-25 years ago, following in the footsteps of his father, who was also a mineworker. Oma Ram does not recall his exact age when he started working, but he remembers being around 10-12 years old, initially involved in goat rearing. Due to his early involvement in income-generating activities, Oma Ram was unable to pursue education, which significantly impacted his future opportunities. Around five years ago, Oma Ram began experiencing persistent cough, chest pain, and evening fevers. Initially, he sought treatment from local, non-registered medical practitioners (NRMPs), who provided temporary relief. This cycle continued for a long time, with Oma Ram receiving intermittent relief without addressing the root cause of his symptoms.





By 2022, Oma Ram's condition worsened, and he was diagnosed with drug-resistant tuberculosis (DR-TB) during an outreach medical camp organized by GRAVIS. This was a severe form of TB that did not respond to standard treatments. Additionally, it was discovered that Oma Ram's wife had also contracted TB. Recognizing the gravity of the situation, GRAVIS provided extensive counseling to Oma Ram and his family. GRAVIS staff facilitated Oma Ram's admission to K N TB Sanatorium for specialized treatment, and his wife was also started on TB treatment. The organization educated the family on preventive measures to protect the rest of the household from TB and enrolled them in the Ni-kshayPoshan Yojana (NPY), a government scheme aimed at providing nutritional support to TB patients.

After approximately 11 months of rigorous treatment, Oma Ram was declared Tuberculosis free by his doctors. His wife also responded positively to the treatment and recovered. Today, both Oma Ram and his wife acknowledge that their lives were saved thanks to the timely intervention and support provided by GRAVIS

## Case study 3

### Prema's journey of becoming a social changemaker

Prema lives in a kuchcha house with her family of seven in Bheelo ki Dhani. Her husband, Champaram, worked as a mine labourer for over 15 years before being diagnosed with tuberculosis. His illness led to a significant decline in his health and ability to work, plunging the family into financial difficulties. Ms. Prema stepped up as the primary caregiver and breadwinner, working as a labourer in the village to support her family. Despite the hardships, her dedication helped Champaram complete his tuberculosis treatment.

Inspired by her grandmother, a traditional midwife, Ms. Prema had a longstanding interest in health-related work. This passion became more pronounced as she managed her husband's illness while caring for her family. Despite her limited formal education and traditional household responsibilities, Prema was determined to make a difference in her community's health.

Ms. Prema's path to becoming a Village Health Worker (VHW) began when she was introduced to GRAVIS, a non-profit organization, during her husband's treatment at a block-level hospital. GRAVIS' initiative to train village women as health workers caught Prema's attention. She eagerly participated in the training program, acquiring essential skills and knowledge about health care and government support for conditions like tuberculosis and silicosis.





Her training included communication skills, which were pivotal in securing her role at a telemedicine facility operated by the Kairu Dham Ashram health center. Ms. Prema now earns Rs. 9,000 per month through telemedicine and supports GRAVIS by identifying tuberculosis and silicosis patients, organizing health camps, and aiding in the immunization of pregnant women. Additionally, she assists mine workers in accessing social security benefits and government schemes.

Ms. Prema's transformation has had a profound impact on her family and community. Her children are now all enrolled in school, and she remains committed to their education. Her husband has regained employment at a local hotel, contributing to the family's improved financial situation. With the combined income and her empowered role in the community, Ms. Prema is able to provide better opportunities for her family and make a significant contribution to her village.



## Acronyms

HNG-Home-based Nutrition Gardens

TB-Tuberculosis

VHW-Village Health Workers

PLHM - Promoting Lung Health in mineworkers

## Glossary

Tehsil- A local administrative unit in India that is similar to a county

Kuccha house- A kind of house, where the walls are made up of bamboo, mud, grass, reed, stones, thatch, straw, leaves and unburnt bricks

Pucca house- Pucca house is a term used to describe permanent, solid dwellings built from durable materials

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**3/437, 458, M.M Colony,  
Pal Road, Jodhpur - 342008,  
Rajasthan, India  
Phone : 91 291 2785 116  
Email: [email@gravis.org.in](mailto:email@gravis.org.in)  
Website: [www.gravis.org.in](http://www.gravis.org.in)**

**GRAVIS is a leading Non-Governmental Organization working in rural India in the States of Rajasthan, Uttarakhand, and the Bundelkhand region of Uttar Pradesh. Since its inception in 1983. GRAVIS has worked in over 2,000 villages reaching a population of over 2 million and has established over 4,000 Community Based Organizations (CBOs). GRAVIS believes in participatory community development that blends traditional knowledge and modern sciences and promotes equality.**

**GRAVIS is registered under Rajasthan Societies Registration Act and under section 80 (G) and 12A of IT Act, 1961 of Government of India with tax exemption status.**