I am very happy being a seed collector, or ‘mateiro’ as we say in the bush. All of the knowledge that I have been able to gain through years of experience and observation. I never went to university. Today I’m working with biologists and professors. Seeds have value. It is a product that comes from the forest and preserves nature.”

Salvador da Silva, resident of Brumadinho (MG) and collector with the Reflorestar - Seeds of Reparation project.
At Vale, we are committed to our focus on people, safety, and reparation. We are working diligently to build a Vale that is more humane, safer, and increasingly sustainable, placing individuals at the centre of our decision making.

Our work is inspired by the principle of guaranteeing that Brumadinho is never again repeated nor forgotten, and to ensure that those affected by the collapse of B1 and relocated due to dam emergency levels receive compensation in a manner that is swift and fair.

We are making progress in providing individuals affected with compensation and fulfilling the commitments made under the Full Reparation Agreement, as well as in restoring the environment and eliminating upstream dams. We recognize the fact that there is still a lot that needs to be done, but we are taking important steps towards making Vale an industry reference for safety and a reliable operator, reducing carbon emissions, and contributing to strengthening the regions in which we operate.

Message from the Director

We are working each day to fulfill our mission of providing complete reparation for damages caused to people and territories as a result of the B1 dam collapse and subsequent emergency evacuations. Throughout a nearly three-year period, in addition to compensation and the Full Reparation Agreement, we have made significant advances in the areas of health care for those affected, the provision of training and mentorship allowing local residents to develop both new businesses and those which already exist in the community, as well as advances in the area of the environment.

Our structural initiatives have evolved throughout all of these regions. We recognize, however, that some dissatisfaction remains, and we are seeking to learn through these issues. We remain vigilant with regards to the needs of local residents. We are constantly evolving in the area of project execution and are delivering new or revitalized public equipment that is important for local communities. In the regions in which emergency evacuations were carried out, we have made advances, through constant dialogue with local residents, in constructing and executing Compensation and Development Plans.

We remain firmly committed to reparation, caring for those affected, improving local infrastructure, reinvigorating economic activities, restoring nature, place value on the tourism industry, and honouring the memory of victims.
Important information regarding Reparation

Full Reparation Agreement
The initiatives included in the Full Reparation Agreement, which was entered into in February 2021 by the Minas Gerais state government, the State and Federal Public Prosecutor’s Office, the Public Defender’s Office, and Vale, are being outlined and implemented. Included among the initiatives carried out throughout this second half of 2021 was the payment of R$ 4.4 billion allocated towards the implementation of the Income Transfer Program (PTR), which is governed by the legal system institutions and operated by the Getúlio Vargas Foundation.

PTR is a definitive solution for emergency aid payments provided by Vale to those affected by the dam collapse in Brumadinho.

Wide-ranging public consultations with the residents of the 26 municipalities affected by the dam breach was carried out by the parties to the Agreement between the 5th and 22nd of November. Individuals affected were able to indicate areas of priority for investment in socioeconomic reparation projects in their municipality.

Learn more about the agreement
The estimated R$ 37.7 billion amount provided for under the Full Reparation Agreement establishes Vale’s obligations for action and payment, which include initiatives for socioeconomic and socioenvironmental reparation for damages resulting from the dam breach in Brumadinho.

Compensation in relation to individual rights are not included in this amount and continue to be provided by Vale.

The Agreement also provides resources for contracting independent auditors for the purposes of supporting institutions in monitoring the execution of projects.

View all information regarding the Full Reparation Agreement

New search strategy employed by firefighters
The searches being carried out by the Minas Gerais Military Firefighter Corps with continuous support from Vale, entered into a new phase with the implementation of its 8th strategy. The corporation began operating with Search Posts using equipment developed together with firefighters and with participation from the association of victim’s families.

The objective is to improve conditions for searches, both with regards to efficiency and agility and the safety of all those involved. The equipment is being installed in the vicinity of the old Córrego do Feijão mine Railway Cargo Terminal (TCF). At the Posts, material resulting from the dam breach is classified and inspected by firefighters in a safe environment protected from bad weather through the use of high definition cameras. Two Search Posts are already operating and by the start of 2022 we will have a total of four posts operating simultaneously, as well as a standby.

Covid-19 prevention
We continue to adopt strict protocols for preventing Covid-19 in all of our operations. This allows us to guarantee the continuity of operations in a manner that is safe for our collaborators and the community.
What you will see in the following pages

Projects for providing qualifications, support for entrepreneurialism, and the promotion of local tourism, strengthening existing local production chains and contributing to increasing the household income of the local population and diversifying the economy.

Initiatives aimed at going beyond financial reparation through structured projects in the areas of health care, education, citizenship, and initiatives providing families with support in their process of resignifying their lives.

Initiatives aimed at environmental reparation that are advancing through the use of innovative and sustainable techniques for reforestation in Brumadinho, as well as for ensuring the wellbeing of the region’s wildlife.

Construction projects related to social initiatives and urban infrastructure, which are part of the process for providing compensation for impacts. All projects are established by actively listening to and engaging with communities and in partnership with the government, with a focus on improving quality of life and collective wellbeing.

Initiatives that seek to develop a sense of normalcy for evacuated communities through means of Compensation and Development Plans involving Vale’s efforts alongside the government and impacted communities. The building and renovation of public equipment, investment in projects aimed at strengthening local social organizations, diversifying sources of income, and providing incentives for new business areas are also included in these measures.
Timeline:
highlights from July to December 2021

**July**
- **Infrastructure**
  - Construction of preschool in the Palhano community in Brumadinho completed
- **Social**
  - More than 600 pieces of equipment delivered to UBSs (Basic Health Care Units) participating in the Health Cycle in the Paraopeba River Basin.
- **Evacuated regions**
  - Renovations on the Daura de Carvalho Neto State School in Antônio Pereira, Ouro Preto completed
  - Renovation of Dona Manoca Healthcare Centre in Engenheiro Corrêa, Ouro Preto completed
- **Socioeconomic Projects**
  - Formation and selection of businesses for incubation phase of Itabirito's Territorial Development Project complete

**August**
- **Evacuated regions**
  - Work on the ground in Capela Velha, in Macacos initiated
- **Socioeconomic Projects**
  - Yara Tupynambá Project in Brumadinho concluded
  - Registration for the Value Program in Brumadinho, Barão de Cocais and Santa Bárbara opened
  - Renovations for Military Police Battalion in Brumadinho completed

**September**
- **Social**
  - Triângulos do Saber (Trails of Knowledge) for Sport and Leisure project launched in Itabirito
  - Renovation and revitalization of the exercise court at Guilherme Hallais Municipal School in Itabirito completed
- **Socioeconomic Projects**
  - Public Notice issued for Project for Strengthening the Competitiveness of the Private Tourism Sector

**October**
- **Social**
  - Vale finalizes emergency aid payments with Judicial deposit of total amount for Income Transfer Program
- **Evacuated regions**
  - Renovation of CRAS (Reference Centre for Social Assistance) in Antônio Pereira, Ouro Preto completed
- **Socioeconomic Projects**
  - Pre-acceleration and selection phase for businesses as part of the Acceleration stage for Horizonte Project concluded
  - Consultations held with local residents for naming the spaces included in the Park Territory Project in Córrego do Feijão
  - 15 hectares of areas directly impacted, as well as repair projects in surrounding areas, including areas protected under the reforestation process

**November**
- **Social**
  - Labour compensation includes the immediate families of all workers who passed away in the dam collapse
  - Study containing conceptual solutions for minimizing floods along the Itabirito river completed
- **Evacuated regions**
  - Health agreement for Antônio Pereira, Ouro Preto signed
  - Training for communities located within ZAS in Barão de Cocais initiated in partnership with the Yara Tupynambá Institute
  - Renovation and revitalization of Fundação Sorria (Smile Foundation) in Antônio Pereira, Ouro Preto completed
- **Socioeconomic Projects**
  - 23 hectares under reforestation process

**December**
- **Infrastructure**
  - Family Health Unit and Municipal Preschool in Mário Campos completed
- **Evacuated regions**
  - Renovation of the Daura de Carvalho Neto State School in Itabirito completed
- **Environment**
  - Leve 1 in Brumadinho cleared by the Minas Gerais Military Firefighter Corps (CBMMG)
- **Socioeconomic Projects**
  - Public Notice issued for Project for Strengthening the Competitiveness of the Private Tourism Sector
### Progress on initiatives as of December 2021

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marco Zero pilot project - Brumadinho</td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Renovation of Antônio Toledo Sobrinho Municipal School - Itabirito</td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Renovation of 16 municipal schools - Brumadinho</td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Completion of Alberto Flores bridge and overhead passenger walkway - Brumadinho</td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Drilling of well, building of distribution line and water treatment system in Parque da Cachoeira - Brumadinho</td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Installation of Public Lighting in Pires - Brumadinho</td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Renovation of APAE - Itabirito</td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Pallhano Preschool - Brumadinho</td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Preschool and Health Care Unit - Parque da Cachoeira - Brumadinho</td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Renovation of Environmental Education Centre (CEA) - Itabirito</td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Revitalization of Capela de São Sebastião church - Macacos</td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Cohab Preschool - Brumadinho</td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Containment of Tabuleiro river - Antônio Pereira, Ouro Preto</td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Renovation of Municipal Cemeteries - Brumadinho</td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Paving, drainage, and installation of signage along the highway connecting Córrego do Feijão to Avenida Alberto Flores</td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Completion of water pipeline in Córrego do Feijão - Brumadinho</td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Building of pipeline in Pará de Minas</td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Vara Tupinambá Project - Brumadinho</td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Construction of Family Health Unit - Mário Campos</td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Building of Rubem Costa Lima Municipal School - Macacos</td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Renovation of Fundação Sorria in Antônio Pereira, Ouro Preto</td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Renovation of CRAS in Antônio Pereira, Ouro Preto</td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Paving, drainage, and installation of signage on Rua Amiante street</td>
<td><strong>100%</strong></td>
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<tr>
<td>Renovation of exercise court at Guilherme Hallais França Municipal School - Itabirito</td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Nossa Senhora do Bonsucesso Basic Health Care Unit - Itabirito</td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Renovation of Praça da Lagoa square - Barão de Cocais</td>
<td><strong>98%</strong></td>
</tr>
<tr>
<td>Covering and renovation of exercise court and building of changeroom in Ribeirão de Eixo Municipal School - Itabirito</td>
<td><strong>80%</strong></td>
</tr>
<tr>
<td>Sewage Treatment System in Pires - Brumadinho</td>
<td><strong>55%</strong></td>
</tr>
<tr>
<td>Horizonte Project - Evacuated Regions</td>
<td><strong>50%</strong></td>
</tr>
<tr>
<td>Renovation of exercise court in Jardim Amanda</td>
<td><strong>28%</strong></td>
</tr>
<tr>
<td>Memorial in Honour of the Victims - Córrego do Feijão - Brumadinho</td>
<td><strong>20%</strong></td>
</tr>
<tr>
<td>Memorial in Honour of the Victims - Córrego do Feijão - Brumadinho</td>
<td><strong>5%</strong></td>
</tr>
<tr>
<td>Construction of a municipal preschool - Mário Campos</td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Renovation of Daura da Carvalho Neto State School - Antônio Pereira, Ouro Preto</td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Renovation of Dona Manoca Health Care Centre - Engenheiro Corrêa, Ouro Preto</td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Study on removing sediment from Itabirito River</td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Installation of water filters for riverside communities and rural producers</td>
<td><strong>57%</strong></td>
</tr>
<tr>
<td>Centre for Specialized Services in Bela Vista - Brumadinho</td>
<td><strong>50%</strong></td>
</tr>
<tr>
<td>Program for the Promotion of Agriculture in Brumadinho and Mário Campos - Brumadinho</td>
<td><strong>30%</strong></td>
</tr>
<tr>
<td>Preventative measures aimed at water security - Barão de Cocais</td>
<td><strong>20%</strong></td>
</tr>
<tr>
<td>Municipal School - Conselheiro Lafaiet</td>
<td><strong>5%</strong></td>
</tr>
<tr>
<td>Renovation of soccer field in Capela Velha - Macacos</td>
<td><strong>3.5%</strong></td>
</tr>
</tbody>
</table>
Brumadinho isn’t just Inhotim. We have a very beautiful city offering a variety of attractions. This is what I hope to see with tourism in Brumadinho: growth and discovery of the natural beauty that can be found in all of the tourist sights that we have.

Renato Barbosa, owner of Pousada Verde Villas bed & breakfast in Brumadinho.

Continuing to work towards economic development in regions affected by the Barragem B1 dam collapse and subsequent regional evacuations is our priority. Through means of projects for providing qualifications, support for entrepreneurialism, and the promotion of local tourism, we provide incentives for the creation of new business areas and the strengthening of existing production chains, thereby contributing towards increasing household incomes among the local population and diversifying the economy.
Promoting Tourism

Driving tourism in Brumadinho

Strengthening the potential for tourism in Brumadinho and the surrounding regions is a path towards diversifying its economy, creating jobs and sources of income, and reducing dependency on mining.

Training entrepreneurs, helping them to structure their businesses and, as a result, improving upon and expanding services and offers, is one of the main aspects of the Project for Strengthening the Competitiveness of the Private Tourism Sector, which is carried out in partnership with the Veredas Tourist Circuit. The project is currently underway in Brumadinho, Igarapé, Juatuba, Mário Campos and São Joaquim de Bica and has been extended for a further two years. This means that work which began in 2020 with 50 businesspeople will be expanded, and new entrepreneurs will receive support in improving their businesses, with a total of 90 entrepreneurs benefiting from the project.apoiados pelo projeto.

The training that we have held was carried out by highly qualified individuals, which provided our business with a great deal of information with regards to management, allowing us to look towards the future.

Renato Barbosa, owner of Pousada Verde Villas bed & breakfast in Brumadinho.

These economic incentive programs are conceived from the perspective of carrying out a transition in municipalities’ economies. They are designed to stimulate, restructure, and modernize production chains such as tourism, using local trades, values, and knowledge as a continuous base”

Maria de Fátima Chagas, Vale’s Socioeconomic Reparation manager.

Another initiative that is providing assistance to local entrepreneurs in Brumadinho is the Languages Project, which was started in 2021. They are currently 77 people involved in Brumadinho’s tourism sector that are learning English as a part of a year and a half long project.

Launched in 2021, the Program for Promoting Sustainable Tourism in Brumadinho, developed in partnership with Instituto Rede Terra (The Earth Network Institute), is also underway.

With a total of five structured projects aimed at strengthening tourism governance, increasing rural and community-based tourism, diversifying the offer of local tourism, the expansion of mechanisms for financing in the area, and the restructuring of the calendar of tourism events, the Program will work directly with the region’s entrepreneurs during the next three years. The goal is for Brumadinho to be able to establish itself as a destination offering a wide range of attractions beyond visits to Inhotim.
Yara Tupynambá Project

Learning that inspires

Maria de Lourdes Almeida, resident of Parque da Cachoeira, in Brumadinho, has good reason to be proud. She completed a Civil Construction Official course and had her house renovated as part of the Yara Tupynambá Project.

In addition to Dona Lourdinha, another 144 residents of Parque da Cachoeira, Cantagalo and Córrego do Feijão have had the opportunity to complete courses providing professional qualifications provided by the Yara Tupynambá Institute. In addition to opportunities for learning, students selected 232 residences which were renovated and contributed to the planting of 230 gardens.

The project started at the end of 2019 and was concluded in September 2021.

It’s very powerful to be able to learn new things because you realize that you can do it. I took on the challenge and was able to see it through.”

Dona Lourdinha, resident of Parque da Cachoeira and student in the Civil Construction Official course

Access the video and hear Dona Lourdinha’s story:

Territorial Development and Social Transformation Project in Itabirito

“ I really took advantage of having such great teachers and mentors. They provided me with tools that allowed me to truly fulfill my purpose”

Ítalo Satiro, owner of Vista Alegre ranch.

New businesses, new possibilities

Italo Satiro is a farmer and resident of Itabirito and was one of 14 local entrepreneurs selected in August to be part of the incubation phase for the municipality’s Territorial Development and Social Transformation Project. These entrepreneurs will receive financial support and individual consultation up to July 2022 in order to accelerate their projects.

More than 40 individuals have been trained since the Project was started, which is aimed at promoting economic development and generating jobs and income for the local population through means of education and qualifications provided to local entrepreneurs and exploration of the regions’ potential, particularly in relation to the areas of Culture, Tourism, and Agrobusiness.
Horizonte Project

We are currently in the validation phase for a pilot system aimed at producing biofuels using leftover food from restaurants that are interested in the proposal. Horizonte Project has played a major role in developing our business and the team”

Aline Paranhos, Green Gás.

Developing People and Businesses in order to improve lives

Launched in March of 2021, the Horizonte Project seeks to stimulate local entrepreneurship and provide initiatives with innovative solutions for the problems faced by local residents.

Since the project was launched, 311 entrepreneurs responsible for 79 businesses received training in Barão de Cocais, Macacos, Itabirito, Santa Barbara and Ouro Preto during the pre-acceleration phase and, in October, 39 businesses were selected for the acceleration phase.

One of the 39 projects selected for the Horizonte Project’s acceleration phase, which is carried out in partnership with Semente Negócios (Seed Businesses), is that of the Green Gás team in Itabirito. During this phase, Aline Paranhos and her team will have access to specialized consultation in the specific areas in which they are active, mentorship, a partner network, and a contribution of up to R $50 thousand in seed capital.

Projeto Curral Tronco Balança (Corral, Stall, and Scale Project)

New corral for weighing cattle in Pompéu

Rural producers involved in projects in the Queima Fogo and Chácara do Choro settlements in Pompéu, received in September a new corral for handling and weighing cattle. The space contains a precision scale, stalls, and a squeeze chute for holding and handling cattle, as well as proper access for producers. The producers received training in how to use the new equipment. The structure makes it possible to properly weigh cattle, ensuring that they are commercialized at a fair price.

When it came time to sell, we needed to trust in the purchaser that brought the cattle in to be weighed. This new scale is really going to be great since we will already know the actual weight of the cattle. This is something really important for everyone here.

Geraldo Eduardo, resident of the Cachoeira do Choro community.

Green Gás

Access the video and learn more about the Horizonte Project.

When it came time to sell, we needed to trust in the purchaser that brought the cattle in to be weighed. This new scale is really going to be great since we will already know the actual weight of the cattle. This is something really important for everyone here.

Geraldo Eduardo, resident of the Cachoeira do Choro community.

Access the video and learn more about the Curral Tronco Balança project.

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Geraldo Eduardo, resident of the Cachoeira do Choro community.

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Geraldo Eduardo, resident of the Cachoeira do Choro community.
Cultivar Project news

The Cultivar Project has been extended for an additional 15 months. With this extension, nine rural producers from Mário Campos will continue receiving seedlings, technical assistance, and training until December 2022 in order to fully develop their production activities.

Included among new initiatives is the installation of five septic tanks used to treat the domestic sewage of nine horticulturists, built by residents themselves in September during skills training offered by the Yara Tupynambá Institute.

Cultivar also carried out awareness training regarding the use of Personal Protective Equipment (PPE) in horticulture this year, which was administered by the Synergia Environmental Consulting, as well as installed information signs providing step-by-step instructions for the use of PPEs.

Aprendi a ter mais gestão do meu negócio, a organizar o trabalho, a não desperdiçar material. Consegui dobrar minha produção mensal desde que comecei a implementar as mudanças que aprendi no Cultivar e espero seguir crescendo.”

Dimas Bessa Souza, horticultor.

Value Program 2021

Value 2021 includes social organizations from three different municipalities

In addition to Brumadinho, the Value Program was also implemented in Barão de Cocais and the districts of André do Mato Dentro, Cruz dos Peixotos, Brumal and Barra Feliz, in Santa Bárbara.

155 individuals registered in the program this year. Organizations will now participate in technical training and, after the public call for registration has been issued, an independent committee will select and provide winning entries with financial resources.

It was the community’s dream to hold the Campinho Fair and it was something that was possible thanks to the awards provided under the Value Program”

Edirlei Pedro da Silva, President of the Campinho Resident’s Association. The Association was one of the organizations that received an award in the 2020 edition of the Value Brumadinho Program.
Workers participate in a consultation for choosing the names of the spaces that are being built in Córrego do Feijão, such as the Community Market, Cultural Centre, among others.

Córrego do Feijão - Park Territory Project

Work is continuing to move forward in Córrego do Feijão. The Park Territory Project will carry out the paving of access roads, install public lighting, and build groves, trails, lookout points, a reflection pool, nursery, garden, school, soccer field, a Community Market, Centre for Culture and Artisanal Work (20% completed) and a Central Square (30% completed).

Since July, representatives from the community have participated in meetings and training workshops aimed at the sustainable management of these spaces. Residents were also involved in the process of choosing the names of the spaces that will be built.

The names for the spaces that will be constructed were tabled and selected by the community.
Vale is striving for full reparation and the wellbeing of the individuals affected through means of sustainable initiatives that transform.

The wellbeing of those affected is our main focus. In addition to financial reparation, we offer structured projects in the areas of healthcare, education, citizenship, and initiatives that support families throughout the process of resignifying their lives.

During the time that I spend embroidering, I can’t help but think positively. When I am completing workshops with my colleagues, we’re not sad, everybody’s laughing and telling stories. It really is the best. The monitors motivate us and you really want to do something that is better. It is really rewarding to have people experience a story through what you have embroidered. Participating in the exhibition in Inhotim was amazing.”

Geralda de Fátima Ribeiro Pereira, student with the Semeando Esperança (Seeds for Hope) project.
Compensation

To date, more than 11.7 thousand people have entered into civil or labour compensation agreements with Vale, which has resulted in the payment of more than R$ 2.6 billion. At least one relative from each employee, whether from Vale itself or a subcontractor, who passed away in the Barragem B1 dam collapse has already reached a settlement agreement with Vale. This reaffirms Vale’s commitment to providing compensation to those impacted by the dam breach or subsequent evacuations in a swift and definitive manner.

Post-compensation support

Administrative employee Flávia Lerma is one of the almost 4 thousand people that have already received support from the company’s Full Assistance Program for Affected People (PAIA). Flávia needed to leave her house in Macacos, in Nova Lima, due to safety concerns. After receiving compensation, she received support from financial educators in order to organize her finances, as well as from attorneys and architects in seeking out, choosing, and purchasing a new residence.

In addition to financial consulting, the program offers psychosocial assistance and support for purchasing properties and the reinitiating of business activities, striving to make a difference for people beyond the financial compensation received.

I really did not have control of my financial life. I learned a lot. This program really helped me so much, not only in just organizing my financial matters, but also in purchasing my new house, ensuring that it was a sound decision and that I would not have any problems in the future. I started with a course in financial literacy. After eight sessions, I had already learned how to save and invest money.”

Flávia Lerma, received support from the Full Assistance to Affected People Program (PAIA).

Rather than put energy and money into marketing, why not fulfill the obligation to provide compensation for the damages caused by the collapse of your dam?

Serving people is our main focus in providing reparation. Since 2019, we have committed ourselves to full reparation for affected communities and we are obligated to provide compensation in a manner that is swift and fair, to all individuals that were directly affected. For this reason, we have teams that have dedicated themselves to reaching an understanding with the families, always with the participation of the Public Defender’s Office for the State of Minas Gerais. Individual compensation is calculated according to the parameters of the Agreement signed with the Public Defender’s Office for the State of Minas Gerais. To date, more than 11.7 thousand people have reached a settlement agreement with Vale.

What has changed with regards to emergency aid payments? Who is responsible for it?

On the 4th of February 2021, a judicial settlement was entered into by the State of Minas Gerais, government institutions, and Vale. The agreement included the creation of an Income Transfer Program for the affected population as a definitive solution with regards to emergency aid payments that had been made by the company up to that point, which fulfilled its commitment to making payments up until October 2021. On the 28th of October 2021, Vale made a judicial deposit of the amount provided for in order to make the Income Transfer Program viable. The amount deposited included the total amount allocated for the program – R$ 4.4 billion – adjusted to the IPCA (Broad Consumer Price Index) up to August 2021, with operational costs and emergency aid payments made between June and October 2021 deducted. This program is the responsibility of legal system institutions that will establish criteria for participation and administer the allocation of the amounts deposited among those affected without the company’s participation.
Specialized support

To be present in a person’s life when they find themselves in a vulnerable situation, to provide them with some measure of strength, it really makes a difference. The Family Reference program makes this possible, providing humanized and personalized psychosocial monitoring. Using each family member’s specific context and the identification of impacts, we created a systematic monitoring plan.”

Roberta de Souza, professional with the Family Reference Program.

Roberta is a professional who has been working with Family Reference for more than a year and has made a major contribution to this intimate and specialized work carried out with affected individuals. “The program is essential for those who have been impacted. It helps families to organize themselves based on their needs. Orientation and awareness are the basis for our work, which is carried out with the families in a careful and respectful manner”.

The monitoring of immediate family members is carried out until a degree of autonomy allowing them to carry on with their routines independently has been reached. To date, we have concluded the monitoring of 64.3% of the individuals receiving assistance from the program.

The program was implemented in 2019 and offers psychosocial support and active care to the families affected by the dam collapse or involuntary relocation. More than 93% of eligible families have received the program’s services so far. More than 1100 families have received support, which corresponds to more than 3300 individuals receiving services.

Approximately 1100 have benefited from the program

3300 people have received support

95,800 consultations have been made

Community Centre

The Community Centre, the result of the vision of the Association for Victims’ Families and Those Affected by the Córrego do Feijão Dam Collapse – Avabrum, was delivered to families by the company at the start of the year. The space, which welcomes an average of 80 people each month while adhering to health protocols related to the Covid-19 pandemic, is dedicated to the victims’ families and is meant to be a place in which they can gather and experience moments of sharing, mutual assistance, build connections, and participate in courses and workshops aimed at resignifying pain, such as art therapy and other Supplementary Integrative Practices (PICs) including yoga, massage therapy, and acupuncture. Since October, families have been gathering weekly for an ecumenical prayer. Online activities also began this month for family members throughout Brazil such as functional training, solo pilates sessions, and meditation offered through means of virtual lessons carried out using applications.
Strengthening Health

The Health Cycle program continues to contribute to improving primary health care in 15 municipalities in Minas Gerais.

Focused on providing management support, the program is implementing, together with the health secretariats involved, the Health Cycle Geographic Information System (SIG), a planning tool capable of presenting a variety of information relevant to Basic Health Care using maps. This resource allows Family Health teams to view performance indicators and specific information for regions previously identified by the teams during workshops. In other words, it is an instrument allowing challenges and local solutions to be identified in order to establish public health care initiatives.

In addition to providing management support, the program is active in other areas: providing equipment to 100% of the municipalities’ Basic Health Care Units (UBS) and providing the health care professionals working on Family Health Strategy (ESF) teams with the appropriate qualifications.

Participating municipalities: Brumadinho, Mário Campos, Sarzedo, Itabirito, Barão de Cocais, Nova Lima (São Sebastião das Águas Claras), São Joaquim de Bicas, Paraopeba, Pará de Minas, Pompéu, Inhaúma, Fortuna de Minas, Morada Nova de Minas, Papagaios e Pequi.

“Strengthening Health

The mapping of water collection points made possible by the georeferencing system allows vulnerable areas to be identified and corresponding health care initiatives to be applied.”

Geovane Gomes, Health Surveillance Coordinator in Brumadinho.

Learn more about numbers for the Health Cycle Program up to now:

- 2011 health care professionals receiving training in themes related to medical services, prevention, and the promotion of wellbeing.
- 5589 pieces of equipment delivered, including items for providing medical services such as oximeters, boxes of vaccines, dentistry equipment, electrocardiographs, laptops, and furniture.
- 332 workshops held.
- 143 Basic Health Care Units (UBS) receiving support.
- 1.245 hours of courses provided
- 216 YouthBuild in Health members trained.

Watch the video to learn more about the Health Cycle:
Active participation in the community

Knowledge is freedom! The course provides a wealth of knowledge and immeasurable learning opportunities that create value. It brings about a change inside us and our attitudes as we move towards becoming a more active and democratic community. I am so grateful for having been able to participate in the initiative.”

These are the thoughts of Marciane Oliveira, community leader in Barão de Cocais, one of the 97 individuals who participated in leadership training courses offered through the Program for Strengthening Social Participation.

Open communication channel

One of the commitments made by Vale is to consistently maintain its channels for dialogue with communities in a transparent manner. In addition to the Community Relations teams that work in the field, we are making a free telephone line providing general services to the affected population.

This channel, which complies with the Brazilian General Data Protection Law – LGPD, underwent an improvement process and, since March 2021, has been providing updates for issues received and the status of requests through SMS and the e-mail addresses of those using the service until they have been successfully resolved.

Memorial

Construction work on the memorial honouring the victims of the dam collapse is currently underway. The foundations have been concluded and we have already begun erecting the structures.

The project, which was designed by Avabrum - Association for Victims’ Families and Those Affected by the Córrego do Feijão Dam Collapse, is being built in the community of Córrego do Feijão in a location chosen by the family members represented by the association.

The memorial will occupy an area of 5.5 hectares and will consist of three thematic areas (the Pavilion, Memory Space, and the Testimony Space), which are connected by open air corridors. At the end of the corridor, there will be a lookout point with a view of the area of the dam collapse. Construction is planned to be concluded by December 2022.

By November 2021, 99.6% of channels were up and running.

Support Centre: 0800 031 0831
The work of 73 embroiderers from the Semeando Esperança project has arrived in Inhotim. For a two-month period between October and December, the largest open-air museum in the world will display mandalas, panels, gowns, and cushions embroidered by students from the three different classes that are part of the art therapy project. The exhibit brings together 16 panels, 44 mandalas, and 18 different pieces produced by Brumadinho’s embroiderers. The panels, embroidered collectively during psycho-pedagogical sessions, tell stories, translated through thread and needles, of life experiences, the territories in which the artists live, and the characteristics that unite them.

Since 2019, the students, working together, have produced more than 500 pieces. They are able to tell their life stories, experiences, and express their relationship with the territory in which they live through means of embroidery. The initiative seeks to help these women to resignify their pain through conversation and techniques centring upon free embroidering.
Environmental restoration continues to move forward.

Through the use of innovative and sustainable techniques, advances continue to be made in the restoration of areas degraded by the dam collapse. This chapter will present the progress of initiatives for reforestation in Brumadinho and the importance of native bee species and wildlife to this process.
Since 2019, **600 kg of fruit and seeds from 80 different species** have been collected. Resulted in the production of 200 thousand seedlings, which are now gradually being planted in impacted areas as well as areas of compensation.

I inherited my love of nature from my father. I was raised in the forest and was always very curious about trees. As I got older, I began working as a rural producer until I realized that my passion could become my profession. I am very happy being a seed collector, or ‘mateiro’ as we say in the bush.

Salvador da Silva, resident of Brumadinho (MG).

**From seeds to seedlings**

The process of transforming seeds into seedlings is the beginning of a 700 km journey between Brumadinho (MG) and Vale Natural Reserve (RNV), in Linhares, Espírito Santo, with the majority of this trip made by train along the Ferro Vitória to Minas Railway. The 23-thousand-hectare area is dedicated to conservation and scientific research and gathers the expertise and capacity needed to produce up to three million seedlings per year.

At Vale Natural Reserve, the seeds are placed for germination and, when they reach the ideal size, they are ready to be brought back to Brumadinho as seedlings as part of a new journey.

Upon arriving “home”, for a minimum period of 15 days, the seedlings are held in a standby nursery located in the region nearby the restoration areas.

Learn more using the QR Code:
Water supply

Definitive measures for supplying the streams that are part of the Paraopeba river basin.

In order for residents of riverside communities to have access to definitive alternatives for water supply, Vale is working to construct or reactivate groundwater withdrawal systems. New wells are installed in locations that are adequate and that guarantee that water is accessible. This year, around 40 groundwater withdrawal systems were built or reactivated.

All wells drilled or reactivated by the company are monitored every three months. A certified laboratory collects the water and verifies parameters related to animal consumption, irrigation, or domestic use.

Well monitoring

Emergency measures in progress

Structured initiatives seek to reinforce water security in communities impacted by the Barragem B1 dam collapse in Brumadinho.

The two municipalities will also soon be provided with a new raw water reservoir with a 700 thousand m³ capacity.

Caetanópolis and Paraopeba

- Drilling of tube wells
- Surface water withdrawal in the Cedro stream system ensure that the population living in these municipalities is provided with high-quality water.

Pará de Minas

- Pará river pipeline
- Service to the population of Pará de Minas
- 50 km in length
- Flow of 284 L/s (the previous volume withdrawn by the municipality)

Learn more using the QR Code:

Pará de Minas

- Pará river pipeline
- Service to the population of Pará de Minas
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Caetanópolis and Paraopeba

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The two municipalities will also soon be provided with a new raw water reservoir with a 700 thousand m³ capacity.

Emergency measures in progress

Those that have not yet been given access to definitive alternatives will continue to regularly receive high-quality water.

- more than 60 truckspump water each day
- around 620 families receiving services per day
- as of November, more than 1.3 billion litres of drinking water have been
- measurement of chlorine content, of which to date 100% of samples are in compliance with existing legislation
- around 260 rural producers regularly receive animal feed products
- more than 130 million kilograms of animal feed supplies
- technology capable of tracking and monitoring all water delivered
- a flow of 29.4 million L/day made available for public water supply, enough volume to supply a city of 200,000 thousand inhabitants
- 1.8 billion litres of water provided by drilled and/or reactivated wells

Monitoring of wells is carried out in a continuous manner.

Report delivered to owners

Supply and quarterly monitoring initiated

Testing of flow and water quality

Drilling or reactivation of well

Technical assessment for well drilling

Hydraulic connection, electrical, and fencing

Measurement of chlorine content, of which to date 100% of samples are in compliance with existing legislation

Around 620 families receiving services per day

As of November, more than 1.3 billion litres of drinking water have been
Native animal species are returning to their habitats

The wildlife that was living in Brumadinho before the dam breach is gradually starting to return to the region, its original habitat. Recordings from 50 image and heat-capturing devices have identified a wide range of animals such as ocelots, giant anteaters, pacas, toucans, and a puma once again moving around the region.

11 artificial avaries, 8 artificial shelters, and 36 water fountains for animal use were installed in a 3.33 hectare area surrounding the affected region.

For Vale’s environmental analyst, Gustav Specht, the presence of animals representing different levels of the food chain is a strong indication that these locations are providing important systemic ecological services, such as seed dispersal, fertilization of soil through means of feces, among others.

Native bee species are helping with reforestation

Native species of stingless bees are playing an important role in environmental restoration. Beehives which previously existed in the area affected by the dam collapse, as well as in areas currently under construction, are being catalogued, monitored, and reinserted into reforestation areas.

These activities, which began in 2019, are part of an agreement entered into with the Brumadinho’s Municipal Environmental Secretariat aimed at the preservation of species.

Native bee species are helping with reforestation

For Vale’s environmental analyst, Gustav Specht, the presence of animals representing different levels of the food chain is a strong indication that these locations are providing important systemic ecological services, such as seed dispersal, fertilization of soil through means of feces, among others.

The bees pollinate the flowers, and the flowers produce fruit. Fruits are eaten by animals such as birds, which carry out what we call seed dispersal. These seeds will in turn become new trees. Bees are an essential part of ecological succession processes in forests.

Yasmine Antonini, professor and coordinator at the Ouro Preto Federal University’s (UFOP) Biodiversity Laboratory.

With the passage of time, these areas will form a type of green corridor that will help to expand forested areas that provide shelter to all types of animals.”

Gustav Specht, Environmental analyst at Vale
Studies carried out during the more than two years since the Barragem B1 dam collapse in Brumadinho have suggested that the Paraopeba River is already showing signs of improvement across a wide range of physical and chemical parameters. A complete analysis of iron and manganese elements, which may be directly correlated to the dam breach, present a reduction in concentrations between the region’s rainy and dry periods. Statistical tests carried out prove that the quality of the water found in the regions most impacted is being recovered.

There are currently 70 monitoring stations and approximately 250 professionals involved in the work carried out in these regions. More than 38 thousand samples have already been collected and have generated about 5.6 million results for analyses of water, soil, tailings, and sediments. Automatic monitoring is also carried out using 11 telemetric stations allowing remote measurements to be made each hour. Data is transmitted by satellite, which increases efficiency in the information provided.

Since January of 2019, the water quality in the Paraopeba River has also been monitored by the Minas Gerais Water Management Institute (Igam). Some of the region’s tributaries are also preventively monitored, as well as the reservoir at the Três Marias Hydroelectric Plant and the São Francisco River, which were not directly affected by the tailings.

All work completed is monitored by an independent technical and environmental auditor recommended by the Public Prosecutor’s Office for the State of Minas Gerais. Data obtained through monitoring are periodically delivered to regulatory organs.

Restrictions on the use of water in the Paraopeba river

Igam, the Minas Gerais State Health Secretariat, and the State Secretariat for Agriculture, Fisheries, and Supply (SEAPPA) continue to recommend that raw water from the Paraopeba River not be used as a preventative measure along the stretch that runs between the municipalities of Brumadinho up to the limit of the Retiro Baixo hydroelectric plant in Pompéu. The use of water in the stretches of the river before the municipality of Brumadinho (before the location affected by the dam collapse) and after the UHE Retiro Baixo, are cleared for a wide range of usages and no restrictions have been put in place by government organs.

Structures provide continuity in the containment of sediments

Continuous monitoring in the series of containment structures installed in the Ferro Carvão stream system confirms that they continue to fulfill their role in reducing the carrying of sediment to the Paraopeba river, significantly reducing the turbidity of the water. Monitoring is carried out 24 hours per day and the data, such as the amount of rain, turbidity, and flow in waterways, are passed along each day to authorities and regulatory bodies. A Treatment Station was installed to integrate this series of structures that collect water at the final dam structure located in the region of Alberto Flores. The measures carried out to date show that the water that spills over the sheet piling curtain, together with the 26 billion litres of water treated in the Station, has an average turbidity of 19 NTUs when it reaches the Paraopeba River, an index which is well below the 100 NTU limit established by Conama (National Council for the Environment).
The building of the Cohab Preschool is a well-structured project that is loved by everyone and also provides greater convenience and access for children and families, providing major improvements and instilling values within the community.”

Giovânia Cândida Jesus de Paulo
Preschool director
Projects completed in Brumadinho

- Alberto Flores Bridge.
- Alberto Flores Overhead Passenger Walkway.
- Drilling of a well, installation of a distribution line and water treatment system in Parque da Cachoeira.
- Draining and paving of roadway in Tejuco.
- Water pipeline in Corrego do Feijão.
- Overhead Passenger Walkway.
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- Water pipeline in Corrego do Feijão.

- Revitalization and expansion of public lighting in Pires.
- Paving, drainage, and installation of signage along the highway connecting Pontilhão to Alberto Flores.
- Preschool in the community of Palhano.
- Renovation of Military Police Battalion.
- Paving, drainage, and installation of signage on Rua Amianto street.
- Draining and paving of roadway in Tejuco.
- Water pipeline in Corrego do Feijão.
- Overhead Passenger Walkway.

"The preschool was something that we were really hoping for. So, it’s really benefited us. There is already a waiting list for the upcoming school year. Not to mention that it is very well-built, with all the qualities that a preschool needs.

Antônio de Sena Souza, leader in the Cohab neighbourhood.

"Having a health unit here has been really great. We are receiving services from the municipality. There’s a doctor here and also a really great dentist. Everything is new and well taken care of."

Silei Matias Aguiar, resident of Parque da Cachoeira

"The branch has 92 students from infants up to 5 years of age. The structure is excellent, open and colourful spaces. The children, the families, and our team is very happy. This is the first preschool in Parque da Cachoeira, so it’s really brought a lot of benefits. People’s eyes light up when they see it!"

Zélia Maria Ribeiro, director of EMEI – Parque da Cachoeira.
Paving of rua Amianto street

Work related to asphalt paving, drainage, and the installation of traffic signs on a stretch of around 2 km of the rua Amianto road, which connects the community of Pires to the centre of Brumadinho, has been completed. The remaining smaller stretch of road, 400 metres in length, is located within the community and, along with the other internal roads in Pires, will receive interlocking concrete block pavement. This initiative is part of compensation activities established through dialogue with local communities and municipal governments in order to improve safety and residents’ quality of life.

The asphalt has been really great for everyone, it makes it easier for us to come and go. The highway is clean, with excellent signage, speed bumps, and reflectors. I really appreciate all the kindness and dedication, since even the way in which the work was carried out involved a great deal of affection. Now we are even able to walk without getting our feet dirty.”

Maria Aparecida Silva Benevides – resident of Pires.

After they put in asphalt here there was a major improvement in the amount of dust, and the mud that we had during the rainy season. There were even less break downs due to the road conditions.”

Crisleide Rozimery Soares Nascimento – resident of Pires.
Mário Campos

Work on the new municipal preschool and Family Health Unit in Mário Campos has been completed. The structures, the result of dialogue between Vale and the municipality, are fully furnished and equipped to be delivered to the community and contribute to improving quality of life and collective wellbeing.

Reforma Praça da Lagoa

Renovation work on the Praça da Lagoa square in Mário Campos began in November. The project which was developed through active engagement with the community and municipal government, includes the revitalization of the gazebo and the gardens, as well as the construction of a pergola and the inclusion of new gathering spaces, such as a children’s area, gym, and a space for holding events.
Basic Family Health Care Unit

**Area:** 352 m² of area

**Patient rooms:**
- 3 general clinical consultation rooms,
- 1 gynecological consultation room,
- 1 dental consultation room with tooth brushing room, a room for applying dressings, and a basic care room.

**Service areas:** sterilization room, utility room, pharmacy, area for waste and control of zoonosis.

**Administrative areas:** reception, waiting room, community health agents’ room, stockroom, and meeting room.

**Common areas:** employee lunchroom, dressing rooms, and bathrooms (including facilities adapted for disabled persons).

Renovation of Cachoeira do Choro (Curvelo) Residents’ Association

The Cachoeira do Choro Residents’ Association in Curvelo has a classroom for the professional training courses that will be provided by Senar in partnership with the Municipality of Curvelo.

“This is an opportunity for residents to be able to commercialize desserts in compotes [fruit dessert], among other products, which may become a new source of income.”

Carlos Roberto Filho, Association president
The benefits of the Compensation and Development Plans are already being seen.

As part of efforts alongside governments and the communities affected by emergency evacuations and preventative relocation, as well as public construction and renovation projects, we are continuing to invest in projects aimed at strengthening local social organizations, diversifying sources of income, and providing incentives for new areas of business.

Additionally, we are maintaining our commitment to increasing safety within the community, intensifying preventative and corrective measures, and the monitoring of our structures.

“...The partnership with Vale has offered residents of Antônio Pereira greater dignity and increased humanization allowing Fundação Sorria to reach its goals.”

Dr. Aluídio Drummond, president of Fundação Sorria.
Barão de Cocais
Sul Superior Dam, Gongo
Soco Mine (Level 3 emergency)

Initiatives package

It is now time to put the initiatives established by the Compensation and Development Plan’s committee through an expansive public consultation process carried out in 2020 into action. More than R$ 40 million will be invested in the areas of education, health care, infrastructure and urbanism, economic development, sport, the environment and waterways, tourism, culture, public safety, and social assistance. An additional R$ 30 million will be invested in the municipality based on dialogue with the local government and the community, bringing the total of investments to R$ 70 million.

Look, it was a long and arduous battle that took a year and a half and involved some forty plus daily meetings. It is a really proud moment getting to this point, since we fought so hard for it, and we believe that the future will only bring us success.”

Carlos Adão, president of Liga Desportiva and committee member.

The committee for Barão de Cocais’s Compensation and Development Plan is made up of representatives from the community, government, educational institutions, the municipality’s commercial association, and Vale.
### Education
- Job Market Preparation Program (PPMT) + Career HUB
- Installation of a Qualifications Centre Professional in Gastronomic Practices - Kitchen School in Barão de Cocais
- Support for Renovation of Brazil Open University University (UAB)
- Donation of 60 computers for renovation of UAB’s information technology laboratory
- Pedagogical Assistance Program
- Support for renovation of municipal schools

### Health
- Support for construction of Centre for Specialized Medicine (CEM) and Physical-Motor Rehabilitation
- Support for construction, renovation, and acquisition of equipment for 10 new ICU beds in the Municipal Hospital
- Support for Volunteer Search and Rescue
- Health Cycle Program

### Economic development
- Study on economic diversification for Barão de Cocais
- Supplier Development Program
- Programa de Desenvolvimento de Pequenos Empreendimentos
- Program for identifying and valuing the region’s cultural elements
- Horizonte Project

### Environment and waterways
- Support for structuring of municipal landfill
- Program for strengthening the Catadores (Waste Pickers) Association and promotion of awareness in society
- Improvements to Soledade Farm

### Sport
- Support for athletic organizations
- Support for expansion and renovations of Central Multi-Sport Facility
- Support for completion of sports complex in the Dois Irmãos neighbourhood

### Public Safety
- Support for implementing the Olho Vivo (‘Live Eye’) Project
- Support for Civil Police
- Apoio à implementação da Guarda Municipal

###culture
- Support for building of multicultural complex
- Support for reopening of Fernando Toco museum in Cocais
- Support for requalification of Sobrado do Cartório heritage site in Cocais
- Support for renovation of Capela Nossa Senhora Aparecida church in Barão de Cocais
- Criando Caminhos (Building Pathways) Program

### Infrastructure and urbanism
- Support for the building of an exhibition park
- Renovation and revitalization of town squares
- Implementation of Mobility Plan

### Social Assistance
- Value Program
- Plan for Strengthening Social Participation
- Social Protection Program

### Tourism
- Georeferencing map of serras (mountain ranges) of Garimpo and Cambotas with support for adventure tourism
- Revitalization of entrance to Cocais
- Support for building of Entre Serras Tourist Support Centre (CAT) in Cocais (Gold Circuit)
- Support for building of Tourist Support Centre (CAT) in Cocais

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The following section contains all of the work and initiatives that are planned.

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Learn more about Barão de Cocais’s Compensation and Development Plan using the QR Code:
Residents of Barão de Cocais will soon be able to enjoy a completely renovated Praça da Lagoa square. The project includes renovation of the soccer field, multi-sport exercise court, open-air gym, and metallic overhead walkway, as well as the installation of a drainage and irrigation system, the building of a playground and new press seating, improvements in public lighting, the replacement of seats, and landscaping.

Organs involved
• The Municipality of Barão de Cocais
• The Chamber of Councillors

is a centre for leisure and athletics in the community, one that really does a lot to stimulate commerce in the region. I am really grateful to Vale and the municipality for having completed this work on the square and leaving this permanent legacy for residents of Barão de Cocais.”

Sergio Inácio dos Santos Sobrinho, resident and leader of the neighbourhood association.

Social activities

Until very recently, learning how to paint, embroider, and crochet was merely a dream for Maria Aparecida Brito, resident of Vila do Gongo. After participating in workshops offered by Casa do Artesão (Artisanry House), she now plans to even sell her work. Maria Aparecida participated in the first cycle of social activities for residents of the evacuated communities of Socorro, Piteira, Tabuleiro and Vila do Gongo, which provided a total of 350 training sessions. The second cycle began in August. Activities are carried out in partnership with Casa do Artesão, Projeto Sementes (the Seed Project), and with the NGO Juventude Viração (Youth for Change) and are held in the Community Space, which was renovated and restructured in 2020.

There wasn’t much to do at home and the Quitandas course really did a lot for me! I learned new recipes and met many great people. It’s amazing to be able to produce our own food rather than purchase industrialized products. It is healthier and helps us to save money.”

Dulce Arcanjo Rodrigues Marques, project participant
Downgrading of state of emergency

The building of an Upstream Containment Structure (ECJ) located 6.8 km from the Sul Superior dam has provided increased safety to the Barão de Cocais’s urban areas. With these changes, workers present at the seven gathering points were cleared to leave and three ambulances for attending to injured individuals, as well as eleven emergency vehicles, were decommissioned with approval from the Municipal Civil Defense.

The ECJ will also allow families evacuated from Vila do Gongo that have not yet received compensation and are interested in returning to their original residences to do so. Residents will only be able to return to their homes after the updated version of the Emergency Mining Dams Action Plan (PAEBM) for the Sul Superior dam is reviewed and validated by the competent authorities (currently scheduled to take place in May 2022). The process will involve direct dialogue with residents and will respect their preferences.

Social Dialogue

Residents of Barão de Cocais, including the evacuated communities of Socorro, Piteira, Tabuleiro and Vila do Gongo, were able to learn about the municipality’s plans for decommission emergency resources firsthand at a meeting held in August at Soledade Farm, which included the participation of representatives from Vale, Brazilian Civil Defense, and the Public Prosecutor’s Office.

Reduction of emergency level at Sul Inferior dam

In June, the Gongo Soco mine’s Sul Inferior dam, had its emergency level reduced from 2 to 1. The change, which attests to the structure’s increased safety and stability, is the result of corrective work carried out on its slopes. The improvements were monitored and validated by the technical consultants in charge using international standards.

Will Vale rebuild or carry out renovations in the community and residences in order for residents to be able to return to Vila do Gongo?

Yes. Vale understands the need to carry out repair of houses and improve infrastructure in order for families to be able to return to Vila do Gongo. The manner in which rebuilding and renovations will be carried out will be established by the community and may be completed by the company itself or by owners through means of compensation.

How was the emergency level at Sul Inferior dam able to be reduced if it is located below the Sul Superior dam?

The Sul Inferior dam entered into a level 2 emergency in 2020 due to the anomalies (fissures) in the slope of the upstream tailings dam. These anomalies did not have any connection with the Sul Superior dam, which is located upstream from the Sul Inferior dam. Corrective work was successfully completed throughout 2020. Efficiency was tested during the rainy periods of 2020 and 2021 using the most recent monitoring systems (including radar and robotic total stations) and no indication of movement or deformation was found. The quality and efficiency of the work completed was also attested to by an external engineering firm and the international technical auditor from the Public Prosecutor’s Office for the State of Minas Gerais (MPMG).

You can learn more about other reparation activities completed in Barão de Cocais in other chapters of the Report:

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Meetings of the Compensation and Development Plan’s committee, which is made up of representatives from the microregions of Antônio Pereira and Vila Antônio Pereira, the government, and Vale, began with a reception aimed at bringing representatives together before moving on to installation of the committee and finally meetings for establishing criteria for analysis and prioritization of improvement initiatives brought forth at the public consultation held in 2020.

During this phase, the ten themes established at this meeting are being discussed: health care, infrastructure and urbanism, tourism, social assistance, the environment and waterways, economic development, social participation, and public safety.

Being part of the committee means contributing to ensuring the company is carrying out proposed initiatives aimed at improving quality of life in the district.”

Cláudia Lúcia Pinheiro, educator

Progress made during meetings is widely disseminated through the communities by means of informative bulletins prepared by the committee members themselves.

Meetings are also being broadcast live for residents. These broadcasts were the result of efforts made on the part of the 24 committee members to provide increased visibility and transparency to the work of the committee.
Renovations in the district

Three significant renovations were completed during the last quarter in the Antônio Pereira district.

The renovations will make these areas more accessible. Its spaces were adapted and are now better organized. The classrooms are brighter and offer better air quality since they previously did not have any ventilation or curtains. It is now a safer place for teachers to work and the students have a dignified place to study in which they can carry out activities that are more dynamic and flexible.”

Paula Pereira, mother of students and council representative.

Reference Centre for Social Assistance (CRAS)

More than 840 families living in a situation of social vulnerability and that rely on basic social protection services have benefited from the renovations, which were designed to provide increased safety and comfort during the provision of services.

Through this project, Vale is strengthening its connection with the municipal government and is opening up a wide range of partnerships capable of minimizing the impacts of mining processes carried out within the district, impacts that have as much of an emotional aspect as an environmental or material one.”

Edvaldo Rocha, secretary of Social Development, Housing, and Citizenship.

Carried out in partnership with the Minas Gerais State Education Secretariat, the project is aimed at providing a high-quality learning environment and increased safety for more than 600 children enrolled.
In order to provide better care, the unit dedicated to the oral health of children and adolescents was completely renovated in order to improve the quality of existing structures.

The project included interior and exterior painting, a review of electrical and hydraulic systems, ceramic finishings in the lunchroom, review and replacement of doors and cupboard spaces, as well as a general cleaning of floors and tiling. Fundação Sorria also received new dental equipment.

"Vale is Fundação Sorria’s longest-standing partner. It has now made significant improvements to Antônio Pereira dental care unit, modernizing its entire physical space and providing equipment that will assist us in our dental practice."

Dr. Aluízio Drummond
president of Fundação Sorria.
Waste pickers in Antônio Pereira are receiving technical consultations with regards to increasing their production and management capacity, making it possible to expand their work and corresponding sustainable waste disposal. The project involves the preparation and carrying out of strategic planning, regularization of documentation, training workshops, market studies, plans for innovation and investment, as well as technical support for accounting practices.

Program for Strengthening Catadores (Waste Pickers) Associations

This dream started nine years ago. Since then, we have been trying to participate in a variety of projects until Vale created this initiative for strengthening the associations. We are really so grateful since, in addition to generating income for the community, we are having a positive effect on the environment.”

Agenor Magalhães,
vice president of the Vila Residencial Antônio Pereira Residents’ Association.

Socio-territorial study

In parallel to the development of the Compensation and Development Plan, we carried out a socio-territorial study of the Antônio Pereira district for the purposes of evaluating Vale’s actions in the region, as well as to better understand local realities and the expectations of the local population. Relocated residents and residents that have remained in Antônio Pereira and Vila Residencial Antônio Pereira, businesspeople, representatives from the Municipality of Ouro Preto and the Civil Defense, among other institutional representatives all voluntarily participated in interviews.

Professionals in the area of education and athletics in Antônio Pereira have received new tools for encouraging exercise in schools and other areas within the community.

During the next few months, they will participate in training cycles provided as part of the Trilhas do Saber project, which is being developed by Vale in partnership with Sesi-MG (Industrial Social Service of Minas Gerais), with support from the municipality. The initiative is aimed at promoting sport as a fundamental right, reinforcing its connection to human development through videos and technical manuals, qualifications for project management and the gathering of resources, school mentorship, and strengthening of the connections between families and support networks for children and adolescents.

I really learned a lot participating in the program. At meetings, we were able to learn the importance of respect and gratitude, and we learned to never give up on our dreams, regardless of the obstacles that we face. This is something that has been really great for the Gigantex family.”

Lucilene Matias, the head of the Gigantex social project.

Trilhas do Saber (Trails of Knowledge)

This dream started nine years ago. Since then, we have been trying to participate in a variety of projects until Vale created this initiative for strengthening the associations. We are really so grateful since, in addition to generating income for the community, we are having a positive effect on the environment.”

Agenor Magalhães,
vice president of the Vila Residencial Antônio Pereira Residents’ Association.
In November, we signed an agreement with the Municipality of Ouro Preto aimed at increasing health and psychosocial services in the district. We will put a total of R$ 379 thousand towards the contracting of a multidisciplinary team that includes psychologists, psychiatrists, and social assistance services. We will also provide vans for the transport of service teams and patients.

**Health care agreement**

Through Vale's initiatives for reparation and compensation, Antônio Pereira was able to restore its Reference Centre for Social Assistance (CRAS), which has been completely renovated. Its doors are now once again open to provide services that strengthen society.

**Angelo Oswaldo,**

mayor of Ouro Preto

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Access to Rua Grande, which is near my house, was really bad due to the flow of heavy vehicle traffic that left parts of the road uneven. But, with these construction projects, it has improved a lot.”

**Maria das Dores,**

resident of Antônio Pereira.

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As agreed upon with the community, we have completed maintenance work on roads in Antônio Pereira used for vehicle traffic prior to building access roads for initial work in decommissioning the barragem Doutor mine. The roads Rua Grande, Rua da Lapa Queimada, and Rua das Flores were all included within the scope of the project. Rua Terezinha Pessoa is still being restored. Work included resurfacing asphalt, replacing sidewalks, and drainage services.

**Repair of roadways**

Access to Rua Grande, which is near my house, was really bad due to the flow of heavy vehicle traffic that left parts of the road uneven. But, with these construction projects, it has improved a lot.”

**Maria das Dores,**

resident of Antônio Pereira.
Emergency Simulations

In order to contribute to the safety of the communities located in Antônio Pereira, we held in May a simulation of the evacuation of the Self-Rescue Zone (ZAS) for the barragem Doutor dam. The objective of the simulation was to test flows and procedures during emergency situations, provide residents with training in these areas, and identify opportunities for improvement. Prior to the event, residents were notified and received orientations with regards to what actions to take.

The barragem Doutor dam had its emergency level reduced from 2 to 1 as part of the Emergency Mining Dams Action Plan (PAEBM) in May after improvements in the safety of the structure were validated.

Spillway operation

The new spillway canal, which began operating in September of this year, remains closed in order for measures to be taken to correct damages identified in some stretches of the gabion channel once water began passing through the canal. The problem intensified as a result of the strong rains in the region receives during October. All of the engineering involved in the spillway is being reviewed, and it is still not certain when it will be reopened. Until these activities are completed, the reservoir’s water will be kept at low levels through means of the pumping system used before the spillway was opened.

Vale Answers

Why did Vale not inform the community that damages were found and that they are currently repairing some stretches of the spillway?

We originally believed that this work only involved maintenance services which may be carried out soon after operation of a new structure begins. However, with the increase in damages after the rains, we decided to inform the competent authorities and the community of the situation, as well as made the decision to close the spillway in order to swiftly find a permanent solution.

Organs involved

- State Civil Defense
- Municipal Civil Defense
- Military Police
- Military Firefighters Corps
- Municipal Guard
- The Chamber of Councillors

You can learn more about reparation initiatives completed in Ouro Preto in other chapters of the Horizonte Project Plan for Strengthening Social Participation:
Spaces for athletics and education renovated

The return of in-person classes for approximately 2200 students in Itabirito’s public education was full of surprises. In addition to once again entering into physical contact with teachers, classmates, and friends, students found that the spaces in their schools designated for athletics had been completely revitalized. Since July, four schools have had their exercise courts completely renewed, with new lighting, repainting of the floors, installation or renovation of fencing, installation of sports accessories (volleyball nets and posts) and, in some cases, covering installed in the location.

Fully renovated, these spaces for leisure and the practice of sports will also be open to the community.

“As a teacher, it was a dream come true to see the children having access to a higher-quality exercise court. As a mother, seeing my son enjoying this space is really rewarding. When I was a student here, this was an open area, and our activities were weather-dependent.”

Izabela Ferreira, teacher, mother of a student, and former student at José Ferreira Bastos Municipal School, which had its exercise court renovated and covered.
Basic Health Care Unit - Nossa Senhora do Bonsucesso

Around 300 residents of the community of Bonsucesso in Itabirito will receive medical care from the nearest public health care service. With a capacity for 32 medical consultations and 12 dental consultations, the Nossa Senhora do Bonsucesso Basic Health Care Unit - Support Unit was delivered to the local population on the 7th of December.

The health unit is a type 4 unit, which means it has the infrastructure to hold a minimum of four Basic Health Care teams. The project provides complete access to wheelchair users (PCR) and has a reception area, waiting room, gynecological consultation room, dental consultation room, storage room, lunchroom, dressing room for employees, and an area for the safe disposal of waste, as well as support areas.

It is a very emotional experience seeing this UBS here. I worked for many years at the original facility. It’s very important having this UBS here so close to our community.”

Cleuza Francisca, resident of Bonsucesso.

Having this health unit next to my house is going to change things a great deal. It is going to be easier to receive care. I’m very happy.”

Maria do Carmo Alves da Silva Soares, resident of Bonsucesso.

Organs involved
Municipality of Itabirito
**Lighting at tourist sights**

Between July and August of this year, we held public consultations during which residents selected the tourist sights in Itabirito that would receive new lighting.

Soon these postcard-perfect sights will be even more beautiful. Learn which sights will be lit up and how many recommendations each one received from local residents.

**Organs involved:**
Municipality of Itabirito

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**Trilhas do Saber (Trails of Knowledge) - sport and leisure**

Professionals working in the areas of education and athletics or those interested in implementing initiatives in these areas, are taking part in Trilhas do Saber.

The initiative offers, through means of mentoring and training cycles, new tools for encouraging exercise in schools and other areas within the community.

Additionally, Trilhas do Saber offers mentoring in schools aimed at providing teachers and other professionals with tools for encouraging good citizenship practices and the internalizing of accountability amongst the community’s children and youth. There will even be a stage of the project dedicated to strengthening connections between families and support networks for children and adolescents.

**Organs involved:** SESI

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**Study containing conceptual solutions for minimizing floods along the Itabirito river**

Prepared by the company Tetra Tech at Vale’s request, the study was presented to the Municipality of Itabirito on the 1st of December.

The purpose of the initiative is to assess the city’s high water marks, developing conceptual solutions for minimizing floods, recommending potential interventions that can be implements along the waterway in order to minimize the consequences of recurring flooding in the municipality.

The study will seek to support the municipal government with regards to solutions for preserving the river and preventing floods.
Itabírito

Safety

Upstream Containment Structures increase community safety

With 95 metres of height and 330 metres long, the structure, which was completed in May, will increase the safety of those living in nearby communities and protect the dams’ Secondary Safety Zones, which include part of the municipalities of Raposos, Rio Acima and Nova Lima, as well as three neighbourhoods in Belo Horizonte.

The containment structure was built using the most rigorous national standards, best engineering practices, and technical references from international entities.

Vale is continuing to assess the need for supplementary action together with the technical auditor from the Public Prosecutor’s Office.

The delivery of the project is an important step towards fulfilling our commitment to reducing process risks and decommissioning upstream tailings dams. In the case of a rupture of the Forquilhas I, II, III, IV and Grupo dams, the containment structure would act as a barrier preventing tailings from reaching the city’s urban area and spreading throughout the local environment, ensuring the safety of individuals, and significantly reducing social and environmental impacts.

Now that the structure has been completed, access points used during the construction project are being restored.

The building of the Fábrica Mine’s containment structured has contributed significantly to increasing safety in the municipality of Itabírito, which is located downstream from the structure. I am very happy to have been able to contribute to a project that is transforming the future of mining, making our operations more reliable.”

Gabriela Gamarano,
Engineer at Vale.

You can learn more about reparation initiatives completed in Itabírito in other chapters of the Report:

- Territorial Development and Social Transformation Project in Itabírito 17
- Horizonte Project 18
- Health Cycle 31
- Plan for Strengthening Social Participation 32
Work to rebuild the soccer field in the Capela Velha neighbourhood has begun and will be concluded in the first quarter of 2022. Among the improvements provided under the project are the recovery of natural grass, the installation of lighting, fencing and posts, the installation of a system for drainage and irrigation, the rebuilding of the concession stand and the building of administrative and meeting areas.

The project also includes the division of the field into three smaller fields for the futebol society, each accessed individually. Through this project, the space will become a leisure centre prepared to receive athletes and participants in amateur sport of all ages.

**Organs involved**

- Local associations
- Municipality of Nova Lima

Throughout the years in which I have been working in Macacos, I realized that the structure available for athletics was precarious. We have been trying to get the resources together to renovate the field since 2005.”

**Fernando José Santos**, known as Feijão, educator and coordination of Associação Neemias.
Renovation of Jardim Amanda’s exercise court ✔ 28%

In October, renovation work began on Jardim Amanda’s exercise court. The space will be revitalized, with the fences rebuilt, new lighting provided, and the court and surrounding area repainted. Additionally, part of the old temporary school will be transformed into change rooms and administrative offices. The exercise court is scheduled to be delivered to the community in February 2022.

Parque do Engenho has its water network expanded

In October, residents of the Parque do Engenho Residence in Macacos received the neighbourhood’s third artesian well. This work expanded the region’s water network and was necessary to ensuring that families received their own water for consumption.

The action is the result of a partnership between Vale and the Parque do Engenho Water Management and Improvements Association (Agape).

Organis involved
• Agape Association

Families return to homes located outside the ZAS

Since August, 43 families in Macacos that were relocated have been able to safely return to their homes. These families retain their right to compensation and the return was possible after a study of the dam’s definitive high-water mark concluding that these homes were located outside of the ZAS (Self-Rescue Zone) was completed and presented to authorities.

Relocation had been carried out in 2019 as a preventative measure aimed at ensuring the safety of these families until the definitive water mark was found and reported, actions that were completed in 2020.

The feasibility of the return was documented in an agreement entered into with the Public Prosecutor’s Office of the State of Minas Gerais, the organ responsible for auditing the study of the dam’s definitive high-water mark. Families living within the ZAS will remain in the hotels, bed & breakfasts, and residences that they have chosen until compensation has been provided.

The company is paying all fixed expenses (rent, IPTU (Urban Building and Land Tax), water, and electricity), food baskets, and gas. Committed to providing compensation in a manner that is swift and fair, processes for extrajudicial agreements continue to move forward. Vale makes the Full Assistance Program for Affected People available to all individuals receiving compensation, which offers psychosocial, educational, and financial support, orientations for the purchase of real estate, and for reinitiating production activities. This allows families to plan out their future ahead of new economic and socioenvironmental conditions.

Renovation of Bridges

Interventions made on the Marcinho Bridge began in November. Containment structures built using tires will be replaced and rockfill (filling with stones) will be installed in culvert wing-walls. Obstructions will be removed from the stream running under the Grota Fria Bridge, wooden parts of the structure will receive chemical treatment, and a guard rail will be installed.

Organis involved
• Municipality of Nova Lima

And if the families that live outside the ZAS do not feel safe returning to their home?

People are now able to return to their homes because a rigorous study was carried out that concluded that these homes were located outside of the self-rescue zone. In addition, the return is conditional upon the livability of the residence between verified, as set forth in the Agreement entered into with the Public Prosecutor’s Office of the State of Minas Gerais.
Learn more about the progress made in decommissioning the B3/B4 dam

The B3/B4 dam, located at the Mar Azul Mine, will undergo decommissioning work in which tailings will be completely removed and the area reintegrated into the local environment.

In order to guarantee the safety of employees involved in decommissioning projects for upstream tailings dams, rigorous safety standards have been adopted. One of the initiatives that have been implemented is the use of remotely operated equipment to access the dam area.

Since November of 2020, when the removal of the dam was first underway, we have already taken out more than 800 thousand cubic metres of tailings and waste rock from the dam, the equivalent of 17% of the total materials.

In January of this year, I began training with driverless trucks. I am gaining experience with this new technology that will offer innovation and increased safety in mining operations as part of this project for decommissioning upstream tailings dams. It is a really rewarding experience to be part of this project. When I first started working with unmanned operations, everything was new, it was a real challenge. After all, it is an operation that requires a great deal of attention. We were trained and received qualifications, but we are learning more and more each day. It is amazing how a technology can allow us to operate equipment kilometres away from the dam and I can honestly say that this makes me feel really safe.”

Claudya Haissa Amaral de Souza, operator of driverless trucks used in the dam decommissioning project, employee with the company Construtora Barbosa Mello.

Once the dams have been decommissioned, we will execute a plan for environmental restoration in relation to the containment structure that we installed in Macacos. The B3/B4 project is scheduled to be completed by 2027.

The structure is monitored 24 h per day by the Geotechnical Monitoring Centre (CMG).

We are continuously working to assess and reduce the impacts of this project, such as switching off and repositioning part of the posts and installing reflectors to reduce light pollution in the surrounding areas, replacing tractors with newer, quieter models, and building an acoustic barrier using waste rock to reduce noise emitted by construction work.

Learn more about reparation initiatives completed in Macacos in other chapters of the Report:

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A ceremony for the initiation of work on Escola Meridional’s new campus was held on the 21st of September. The project is part of a compensation initiative for the educational community aimed at allowing normal activities to be restarted. The school’s students had their lessons suspended as part of preventative measures in March of 2020 related to the technical assessment of one of the operation’s waste rock piles, which is located near the school. Since then, students have been attending classes at a temporary structure built by Vale on the premises of the Presidente Antônio Carlos University Centre (Unipac).

The new facility will be built on a property with an area of approximately 17 thousand m² that was donated by Vale. The project will expand the school’s capacity from 650 children to 840 children across two study periods. With a constructed area of more than 8 thousand m², which has been adapted to provide accessibility to all students, the school will have 21 educational spaces, a library, a multi-use arena, resource centres for students with special needs, an art room, nurse’s office, two playgrounds, as well as an administrative areas and areas for support and services.

In October, there was a change in the company responsible for the project. Will this result in a delay?

Vale is reaffirming its commitment to building Meridional Municipal School’s new campus and is working diligently to ensure that the deadlines agreed upon with the community and the municipality are met. Construction is currently underway with earthworks and draining of the property underway. Metallic structures that will be used in the buildings are also being delivered.
Quarterly report on Vale’s reparation and development initiatives in areas impacted by the Barragem B1 dam collapse and evacuated regions.

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OFFICIAL COMMUNICATION CHANNELS

These channels can be used to resolve any questions or concerns and stay up to date with reparation initiatives:

- www.vale.com/reparacao
- Support Line: 0800 031 0831
- Aids Indenizações (Compensation): 0800 888 1182

In-person services are currently suspended due to the novel coronavirus pandemic. During this period, all requests will be received through digital channels or the Support Centre.

Community Support

Community support will continue to be provided at 0800 031 0831. Community Relations Professionals also maintain direct contact with the families in a virtual format, providing in-person services as needed while adhering to all Covid-19 health protocols.

Offices - Compensation

During the Covid-19 pandemic, all negotiations for individual compensation processes are taking place in an online format. Meetings can be scheduled through the following contact numbers:

- Brumadinho
  (31) 99600-7242, (31) 99648-6483 ou (31) 98445-8059
- Belo Horizonte, Betim and Macacos
  (31) 99983-9076
- Barão de Cocais
  (31) 99944-6773
- Ouro Preto
  (31) 99830-5886