



The new Central Square in Córrego do Feijão is part of the Território Parque project and has the purpose of contributing to the well-being of the community and to the development of the local economy and tourism
Photograph: Video Delivery

Overview of the **Reparation**



Irreparable damages

Vale offers its solidarity to each one of the families of the people affected by the dam breach in Brumadinho. We know that these are irreparable damages and we are committed to go on working to minimize the effects of this tragedy.

ADAIL DOS SANTOS JUNIOR
ADAIR CUSTÓDIO RODRIGUES
ADEMÁRIO BISPO
ADILSON SATURNINO DE SOUZA
ADNILSON SILVA NASCIMENTO
ADRIANO AGUIAR LAMOUNIER
ADRIANO CALDEIRA DO AMARAL
ADRIANO GONÇALVES DOS ANJOS
ADRIANO JUNIO BRAGA
ADRIANO RIBEIRO DA SILVA
ADRIANO WAGNER DA CRUZ DE OLIVEIRA
ALÁERCIO LÚCIO FERREIRA
ALANO REIS TEIXEIRA
ALEX MÁRIO MORAES BISPO
ALEX RAFAEL PIEDADE
ALEXIS ADRIANO DA SILVA
ALEXIS CÉSAR JESUS COSTA
ALISSON MARTINS DE SOUZA
ALISSON PESSOA DAMASCENO
AMANDA DE ARAÚJO SILVA
AMARINA DE LOURDES FERREIRA
AMAURI GERALDO DA CRUZ
ANAILDE SOUZA PEREIRA
ANDERSON LUIZ DA SILVA
ANDRÉ LUIZ ALMEIDA SANTOS
ANDREA FERREIRA LIMA
ANGÉLICA APARECIDA ÁVILA
ANGELITA CRISTIANE FREITAS DE ASSIS
ÂNGELO GABRIEL DA SILVA LEMOS
ANÍZIO COELHO DOS SANTOS
ANTÔNIO FERNANDES RIBAS
ARMANDO DA SILVA RAGGY GROSSI

AROLDO FERREIRA DE OLIVEIRA
BRUNA LELIS DE CAMPOS
BRUNO EDUARDO GOMES
BRUNO ROCHA RODRIGUES
CAMILA APARECIDA DA FONSECA SILVA
CAMILA SANTOS DE FARIA
CAMILA TALIBERTI RIBEIRO DA SILVA
CAMILO DE LELIS DO AMARAL
CARLA BORGES PEREIRA
CARLOS AUGUSTO DOS SANTOS PEREIRA
CARLOS EDUARDO DE SOUZA
CARLOS EDUARDO FARIA
CARLOS HENRIQUE DE FARIA
CARLOS ROBERTO DA SILVA
CARLOS ROBERTO DA SILVEIRA
CARLOS ROBERTO DEUSDEDIT
CARLOS ROBERTO PEREIRA
CASSIA REGINA SANTOS SOUZA
CÁSSIO CRUZ SILVA PEREIRA
CLÁUDIO JOSE DIAS REZENDE
CLÁUDIO LEANDRO RODRIGUES MARTINS
CLÁUDIO MARCIO DOS SANTOS
CLÁUDIO PEREIRA SILVA
CLEIDSON APARECIDO MOREIRA
CLEITON LUIZ MOREIRA SILVA
CLEOSANE COELHO MASCARENHAS
CRISTIANE ANTUNES CAMPOS
CRISTIANO BRAZ DIAS
CRISTIANO JORGE DIAS
CRISTIANO SERAFIM FERREIRA
CRISTIANO VINICIUS OLIVEIRA DE ALMEIDA
CRISTINA PAULA DA CRUZ ARAUJO

DAIANA CAROLINE SILVA SANTOS
DANIEL GUIMARÃES ALMEIDA ABDALLA
DANIEL MUNIZ VELOSO
DAVID MARLON GOMES SANTANA
DAVYSON CHRISTHIAN NEVES
DENILSON RODRIGUES
DENNIS AUGUSTO DA SILVA
DIEGO ANTÔNIO DE OLIVEIRA
DIOMAR CUSTÓDIA DOS SANTOS SILVA
DIRCE DIAS BARBOSA
DJENER PAULO LAS-CASAS MELO
DUANE MOREIRA DE SOUZA
EDENI DO NASCIMENTO
EDGAR CARVALHO SANTOS
EDIMAR DA CONCEIÇÃO DE MELO SALES
EDIÔNIO JOSÉ DOS REIS
EDIRLEY ANTÔNIO CAMPOS
EDNILSON DOS SANTOS CRUZ
EDSON RODRIGUES DOS SANTOS
EDY MAYRA SAMARA RODRIGUES COELHO
EGILSON PEREIRA DE ALMEIDA
ELIANDRO BATISTA DE PASSOS
ELIANE DE OLIVEIRA MELO
(PREGNANT WITH MARIA ELISA)
ELIANE NUNES PASSOS
ELIS MARINA COSTA
ELIVELTOM MENDES SANTOS
ELIZABETE DE OLIVEIRA ESPÍNDOLA REIS
ELIZEU CARANJO DE FREITAS
EMERSON JOSÉ DA SILVA AUGUSTO
ERÍDIO DIAS
EUDES JOSÉ DE SOUZA CARDOSO

EVA MARIA DE MATOS
EVANDRO LUIZ DOS SANTOS
ÉVERTON GUILHERME FERREIRA GOMES
EVERTON LOPES FERREIRA
FABRÍCIO HENRIQUES DA SILVA
FABRÍCIO LÚCIO FARIA
FAULLER DOUGLAS DA SILVA MIRANDA
FELIPE JOSE DE OLIVEIRA ALMEIDA
FERNANDA BATISTA DO NASCIMENTO
FERNANDA CRISTHIANE DA SILVA
FERNANDA DAMIAN DE ALMEIDA
(PREGNANT WITH LORENZO)
FLAVIANO FIALHO
FRANCIS ERICK SOARES SILVA
FRANCIS MARQUES DA SILVA
GEORGE CONCEIÇÃO DE OLIVEIRA
GERALDO DE MEDEIROS FILHO
GILMAR JOSE DA SILVA
GIOVANI PAULO DA COSTA
GISELE MOREIRA DA CUNHA
GISLENE CONCEIÇÃO AMARAL
GLAYSON LEANDRO DA SILVA
GUSTAVO ANDRIÉ XAVIER
GUSTAVO SOUSA JÚNIOR
HEITOR PRATES MÁXIMO DA CUNHA
HELBERT VILHENA SANTOS
HERMÍNIO RIBEIRO LIMA FILHO
HERNANE JUNIOR MORAIS ELIAS
HUGO MAXS BARBOSA
ÍCARO DOUGLAS ALVES
IZABELA BARROSO CÂMARA PINTO
JANICE HELENA DO NASCIMENTO
JHOBERT DONADONNE GONÇALVES
MENDES
JOÃO MARCOS FERREIRA DA SILVA
JOÃO PAULO ALTINO
JOÃO PAULO DE ALMEIDA BORGES
JOÃO PAULO FERREIRA DE AMORIM
VALADÃO
JOÃO PAULO PIZZANI VALADARES MATTAR
JOÃO TOMAZ DE OLIVEIRA
JOICIANE DE FÁTIMA DOS SANTOS
JÔNATAS LIMA NASCIMENTO
JONIS ANDRÉ NUNES
JORGE LUIZ FERREIRA
JOSÉ CARLOS DOMENEGUETE
JOSIANE DE SOUZA SANTOS
JOSUÉ OLIVEIRA DA SILVA
JULIANA CREIZIMAR DE RESENDE SILVA
JULIANA ESTEVES DA CRUZ AGUIAR
JULIANA PARREIRAS LOPES
JÚLIO CÉSAR TEIXEIRA SANTIAGO
JUSSARA FERREIRA DOS PASSOS SILVA
KÁTIA APARECIDA DA SILVA
KÁTIA GISELE MENDES
LAYS GABRIELLE DE SOUZA SOARES
LEANDRO ANTONIO SILVA
LEANDRO RODRIGUES DA CONCEIÇÃO
LECILDA DE OLIVEIRA
LENILDA CAVALCANTE ANDRADE

LENILDA MARTINS CARDOSO DINIZ
LEONARDO ALVES DINIZ
LEONARDO DA SILVA GODOY
LEONARDO PIRES DE SOUZA
LETÍCIA MARA ANÍZIO DE ALMEIDA
LETÍCIA ROSA FERREIRA ARRUDAS
LEVI GONÇALVES DA SILVA
LOURIVAL DIAS DA ROCHA
LUCIANA FERREIRA ALVES
LUCIANO DE ALMEIDA ROCHA
LÚCIO RODRIGUES MENDANHA
LUÍS FELIPE ALVES
LUÍS PAULO CAETANO
LUIZ CARLOS SILVA REIS
LUIZ CORDEIRO PEREIRA
LUIZ DE OLIVEIRA SILVA
LUIZ TALIBERTI RIBEIRO DA SILVA
MANOEL MESSIAS SOUSA ARAÚJO
MARCELLE PORTO CANGUSSU
MARCELO ALVES DE OLIVEIRA
MARCIANO DE ARAÚJO SEVERINO
MARCIEL DE OLIVEIRA ARANTES
MARCILEIA DA SILVA PRADO
MARCIO COELHO BARBOSA
MASCARENHAS
MÁRCIO DE FREITAS GRILO
MÁRCIO FLAVIO DA SILVA
MÁRCIO FLAVIO DA SILVEIRA FILHO
MÁRCIO PAULO BARBOSA PENA
MASCARENHAS
MARCO AURÉLIO SANTOS BARCELOS
MARCUS TADEU VENTURA DO CARMO
MARIA DE LURDES DA COSTA BUENO*
MARLON RODRIGUES GONÇALVES
MARTINHO RIBAS
MAURÍCIO LAURO DE LEMOS
MAX ELIAS DE MEDEIROS
MILTON XISTO DE JESUS
MIRACEIBEL ROSA
MIRAMAR ANTONIO SOBRINHO
MOISÉS MOREIRA DE SALES
NATÁLIA FERNANDA DA SILVA ANDRADE
NATHALIA DE OLIVEIRA PORTO ARAUJO*
NILSON DILERMANDO PINTO
NINRODE DE BRITO NASCIMENTO
NOÉ SANÇÃO RODRIGUES
NOEL BORGES DE OLIVEIRA
OLAVO HENRIQUE COELHO
OLÍMPIO GOMES PINTO
PAMELA PRATES DA CUNHA
PAULO GEOVANE DOS SANTOS
PAULO NATANAEL DE OLIVEIRA
PEDRO BERNARDINO DE SENA
PETERSON FIRMINO NUNES RIBEIRO
PRISCILA ELEN SILVA
RAFAEL MATEUS DE OLIVEIRA
RAMON JÚNIOR PINTO
RANGEL DO CARMO JANUÁRIO
REGINALDO DA SILVA
REINALDO FERNANDES GUIMARÃES

REINALDO GONÇALVES
REINALDO SIMÃO DE OLIVEIRA
RENATO EUSTÁQUIO DE SOUSA
RENATO RODRIGUES DA SILVA
RENATO RODRIGUES MAIA
RENATO VIEIRA CALDEIRA
RENILDO APARECIDO DO NASCIMENTO
RICARDO EDUARDO DA SILVA
RICARDO HENRIQUE VEPPLO LARA
ROBERT RUAN OLIVEIRA TEODORO
ROBSON MÁXIMO GONÇALVES
RODNEY SANDER PAULINO OLIVEIRA
RODRIGO HENRIQUE DE OLIVEIRA
RODRIGO MIRANDA DOS SANTOS
RODRIGO MONTEIRO COSTA
ROGÉRIO ANTÔNIO DOS SANTOS
ROLISTON TEDS PEREIRA
RONNIE VON OLAIR DA COSTA
ROSARIA DIAS DA CUNHA
ROSELIA ALVES RODRIGUES SILVA
ROSIANE SALES SOUZA FERREIRA
ROSILENE OZORIO PIZZANI MATTAR
RUBERLAN ANTÔNIO SOBRINHO
SAMARA CRISTINA DOS SANTOS SOUZA
SAMUEL DA SILVA BARBOSA
SANDRO ANDRADE GONÇALVES
SEBASTIÃO DIVINO SANTANA
SÉRGIO CARLOS RODRIGUES
SIRLEI DE BRITO RIBEIRO
SUELI DE FÁTIMA MARCOS
THIAGO LEANDRO VALENTIM
THIAGO MATEUS COSTA
TIAGO AUGUSTO FAVARINI
TIAGO BARBOSA DA SILVA
TIAGO COUTINHO DO CARMO
TIAGO TADEU MENDES DA SILVA*
UBERLANDIO ANTÔNIO DA SILVA
VAGNER NASCIMENTO DA SILVA
VALDECI DE SOUSA MEDEIROS
VINÍCIUS HENRIQUE LEITE FERREIRA
WAGNER VALMIR MIRANDA
WALACI JUNHIO R CÂNDIDO DA SILVA
WALISSON EDUARDO PAIXÃO
WANDERSON CARLOS PEREIRA
WANDERSON DE OLIVEIRA VALERIANO
WANDERSON PAULO DA SILVA
WANDERSON SOARES MOTA
WARLEY GOMES MARQUES
WARLEY LOPES MOREIRA
WEBERTH FERREIRA SABINO
WELLINGTON ALVARENGA BENIGNO
WELLINGTON CAMPOS RODRIGUES
WENDERSON FERREIRA PASSOS
WESLEI ANTÔNIO BELO
WESLEY ANTÔNIO DAS CHAGAS
WESLEY EDUARDO DE ASSIS
WILLIAN JORGE FELIZARDO ALVES
WILSON JOSE DA SILVA
WIRYSLAN VINÍCIUS ANDRADE DE SOUZA
ZILBER LAGE DE OLIVEIRA

* Persons currently not found



Message of the President



Photograph: Vale Archive

Eduardo Bartolomeo
president

The human losses are irreparable. We are talking with the families of those affected and supporting the Military Fire Brigade of Minas Gerais in the search for the four victims still not found as a result of the dam breach in Brumadinho. We have learned in the most painful way what is the most valuable in our cultural transformation: to act in behalf of life.

The guarantee of no repetition has inspired us to work focused on the safety of people and on the risk management of our dams, through the adoption of strict international standards developed after the breach. Forty percent of the upstream dams were eliminated and until 2035 all will be de-characterized.

What we have learned so far must leverage us towards our transformation journey. We will never forget Brumadinho



Message of the **Director**

We have worked tirelessly to accomplish our mission of repairing and compensating the damage caused to the people and to the land by the collapse of the B1 and by the emergency rescues. Along these almost four years, we dedicated ourselves to guarantee the effectiveness of our actions and the participation process of the affected people, focusing on the assistance to those impacted, on repairing the environment, on the social and economic development of the communities and restoration of normal life in the evacuated territories.

In this publication we are reporting the last measures taken for reparation and compensation. The content covers the progress of the Framework Agreement of Integral Reparation, the works and other structuring actions in Brumadinho and the adjacent region. We also bring information on the evolution of the dam management process and on the de-characterization program, and also on the work performed in the evacuated territories started with the Compensation and Development Plans

We will continue committed on the reparation and reinforcement, because we will never forget Brumadinho.



Photograph: Vale Archive

Marcelo Klein
director of Reparation
and Territorial
Development

What you will see in the next pages

Commitment with the searches	7
Timeline 2022	8
Brumadinho and the Paraopeba Basin	12
Framework Agreement of Integral Reparation	13
Socioeconomic Reparation Program (Annex I)	15
Social and Environmental Reparation Program (Annex II)	29
Mobility Program and Program for Reinforcing the Public Service (Annexes III and IV)	36
Other obligations of the Framework Agreement of Integral Reparation	37
Other initiatives	39
Water	40
Care with animals	43
Socioeconomics	44
Social and infrastructure works	52
Management of dams	57
De-characterization of upstream dams	58
Innovation and technology	66
Dams with emergency level	68
Monitoring of dams	70
Virtual visits	70
Evacuated Territories	71
Itabirito	71
Macacos	79
Barão de Cocais	85
Antônio Pereira	94
Helpline numbers	103

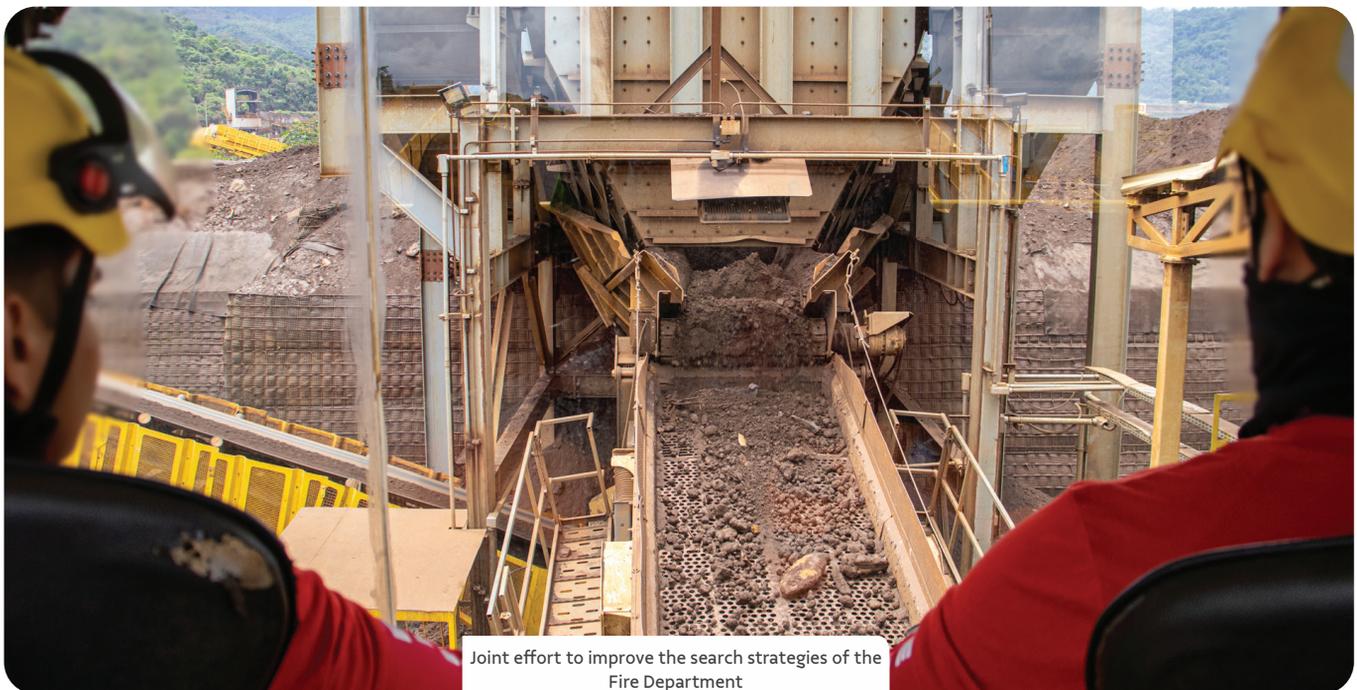
Commitment with searches

The Minas Gerais Fire Department (CBMMG), supported by Vale, is still committed in the search for those affected by the dam breach in Brumadinho. Until the end of June 266 affected persons were found and identified, and 4 are still being searched. The operation is carried out according to the 8th strategy of planned and studied searches by the Intelligence team of the CBMMG, by the Civil Police (through the Forensic Medical Institute) and by the Vale team, with the participation of the families of those affected. The search for the people affected by the breach started on January 25th, 2019 and follows practically without interruption, although with two interruptions due to the Covid-19 pandemic.



Station of the 8th strategy searches

Photograph: Video Delivery



Joint effort to improve the search strategies of the Fire Department

Photograph: Video Delivery

Timeline of 2022

Official delivery of the Palhano nursery in Brumadinho, to the local management:

Launching of the program Trilhas do Saber Creative Learning in Itabirito.

Signature of the Donation Term for the transfer of R\$ 6.5 million to the APAE of Itabirito.

Delivery of the refurbishment of the Jardim Amanda court, in Macacos.

Delivery of the refurbished Lagoa Square in Barão de Cocais.

Start of the qualification of the Compensation and Development Plan actions of Antônio Pereira with the Committee and the Local Government.

Start of the Kitchen School project, with the Joaquim Artes e Ofícios Institution in Barão de Cocais.

Launching of the Trilhas do Saber Creative Learning program in Macacos.

Conclusion of the Health Cycle in Brumadinho, Mário Campos and Sarzedo.

Start of the Kitchen School project, with the Joaquim Artes e Ofícios Institution in Barão de Cocais.

Start of the Economic Diversification Study of Barão de Cocais in partnership with FIEMG-IEL.

Delivery of the refurbishment of the court of the Municipal School Ribeirão do Eixo in Itabirito.

JAN

FEB

MAR

Opening of the Woods area of the Central Square of the Project Território Parque Córrego do Feijão for community use.

Conclusion of the Street maintenance in Antônio Pereira.

Start of the Galera Mão na Massa workshops in Macacos.

Conclusion of the Health Cycle in Barão de Cocais.

Conclusion of the Health Cycle in Pará de Minas.

Start of the project Galera Mão na Massa workshops in Macacos.

Donation of execution projects for the construction of UBS in Itabirito.

Conclusion of the Health Cycle in Macacos.

APR

Delivery of the first phase of the refurbishment of the Municipal Polyclinic Antônio Fernandes.

Opening of the pergula of the Central Square of the Project Território Parque Córrego do Feijão for community use.

Delivery of the refurbishment of the Sports Center to the local management.

Renewal of the Health Cycle program in Itabirito for another six months.

Conclusion of the Health Cycle in São Joaquim de Bicas.

Delivery of the refurbishment of the Civil Defense station in Macacos.

Donation of computers to Brazil's Open University (UAB) - Cluster Barão de Cocais.

Restarting of the elimination works of the Sul Superior dam in Barão de Cocais.

Start of the paving of the Terezinha Pessoa street in Antônio Pereira.

MAY

More than 13 thousand people involved in indemnity agreements, between civil and labor.

Conclusion of the Program for Strengthening of the Social Participation.

Start of the project Galera Mão na Massa in Itabirito.

Public Inquiry for the choice of the totem for the entrance to Macacos.

Start of the Preparation Program for the Labor Market (PPMT) in Barão de Cocais.

Transfer of resources for the Empreender Program of ACIABAC in Barão de Cocais.

JUN

Timeline of 2022

Realization of the gastronomy workshop of the Professional Qualification Program for the residents of the communities of Socorro, Piteira, Tabuleiro and Vila do Gongo in Barão de Cocais.

Realization of the project Cinema na Cidade in Antônio Pereira.

Launching of the Catalogue Céu de Montanhas in Inhotim (Fostering Program for Sustainable Tourism) for Brumadinho and adjacent region.

JUL

Project Galera Mão na Massa in Itabirito.

AUG

Participation in the Céu de Montanhas Catalogue in ABAV, in Pernambuco.

Project Galera Mão na Massa in Betim.

Conclusion of the de-characterization of another three structures: Auxiliary dike of Dam B5, in Nova Lima, Dike 3 of the Pontal System, in the Cauê mine and Ipoema dam, in Mina do Meio, both in Itabira (MG).

Visit of the community of Antônio Pereira to the Geotechnical Monitoring Center (CMG) of Itabira.

Realization of the Popular Culture Festival in Antônio Pereira.

SEP

Conclusion of the refurbishment of the Municipal Theater of Brumadinho.

Conclusion of the improvement works on the Terezinha Pessoa street in Antônio Pereira

OCT

Conclusion of the Central Square of Território Parque Córrego do Feijão (Brumadinho).

Conclusion of the works of the Bela Vista Specialized Assistance Center (Brumadinho).

Participation in the project Veredas na Festuris in Gramado (RS).

More than 13.4 thousand people involved indemnity agreements, between civil and labor.

Closing of the project Horizonte in Barão de Cocais, Itabirito, Nova Lima, Ouro Preto and Santa Bárbara.

Start of the devolutions concerning the flooded areas in the communities of Brumadinho and the Paraopeba Basin.

Start of the UFLA experiment to expand knowledge about the death of fish in the Paraopeba river.

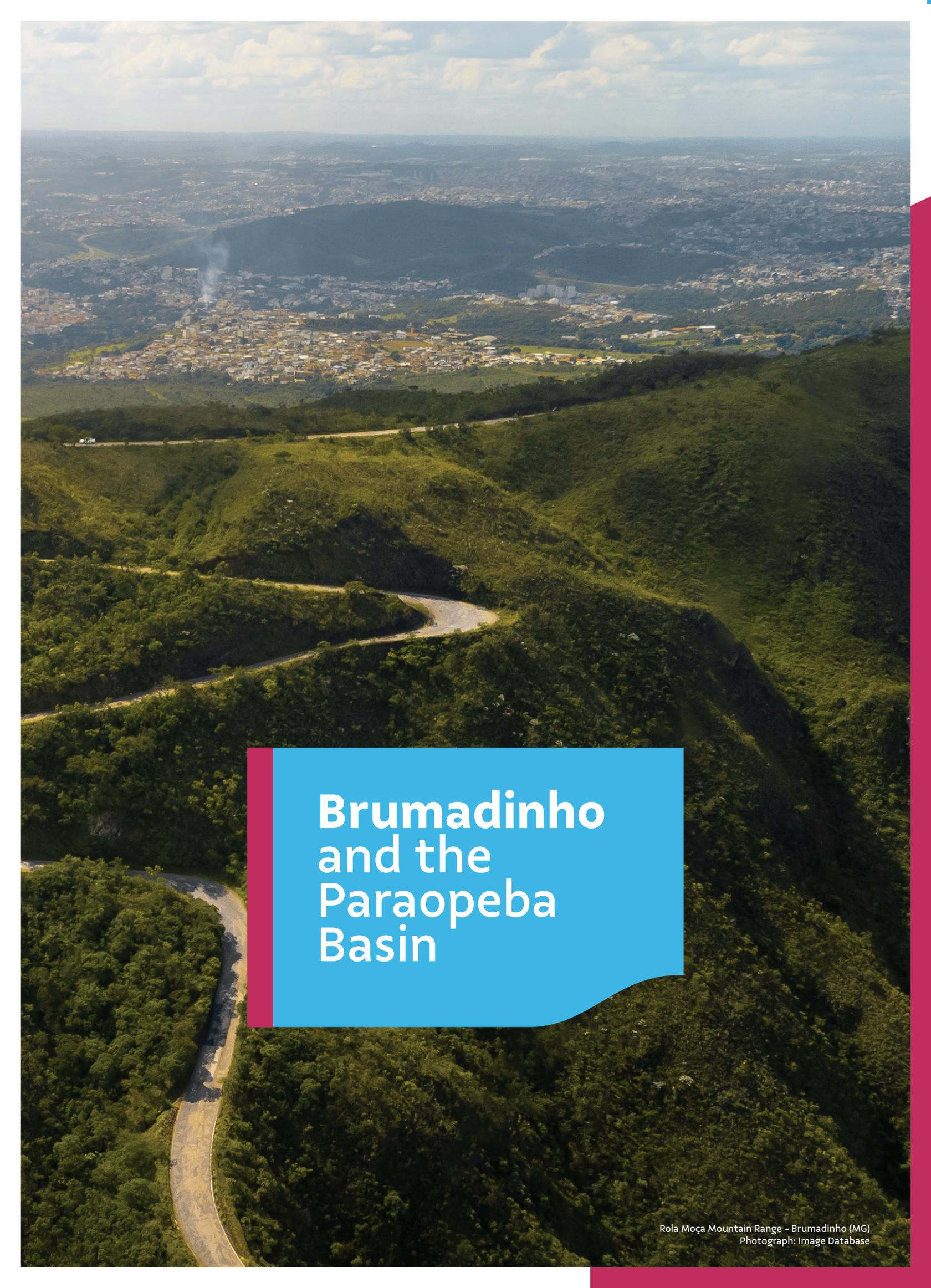
Start of the classes of the Preparation Program for the Labor Market (PPMT) in Antônio Pereira.

NOV

Conclusion of the Community Market and the Center of Culture and Handcraft of the Território Parque Córrego do Feijão (Brumadinho).

Conclusion of the works of the Casa Branca nursery (Brumadinho).

DEC



Brumadinho and the Paraopeba Basin

Framework Agreement of Integral Reparation

We are still committed to comply with the obligations and commitments defined in the Framework Agreement of Integral Reparation. Check in the next pages the progress of this last semester.

Understanding the Framework Agreement of Integral Reparation

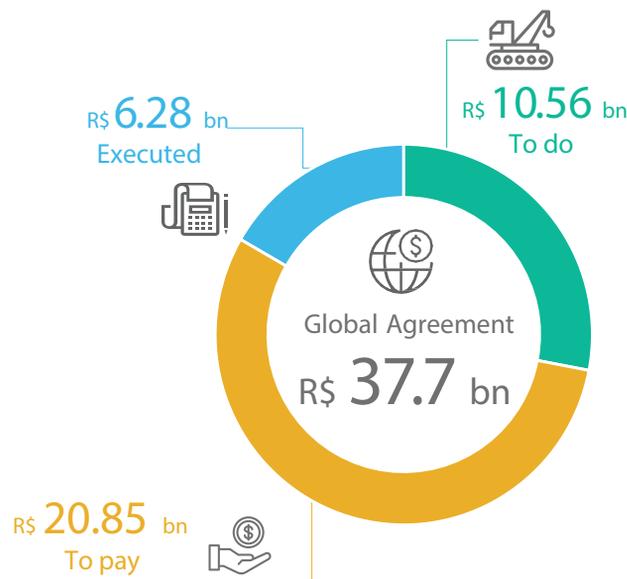
In order to continue the work for the reparation of Brumadinho and the other communities impacted by the dam breach, the **Framework Agreement of Integral Reparation** was signed on February 4, 2021, between Vale and the compromisers.

With an estimated amount of R\$ 37.7 billion, the document defines the Vale obligations to do and to pay, concerning the socioeconomic and social-environmental reparation.

The Agreement also provides resources for the hiring of independent auditors, with the purpose of helping the institutions to follow-up the execution of the projects.



Amounts of the Framework Agreement of Integral Reparation



To find additional information about the **Framework Agreement of Integral Reparation** point the cell phone camera to the QR Code at the side or access mg.gov.br/pro-brumadinho



Program for Socioeconomic Reparation *(Annex I)*

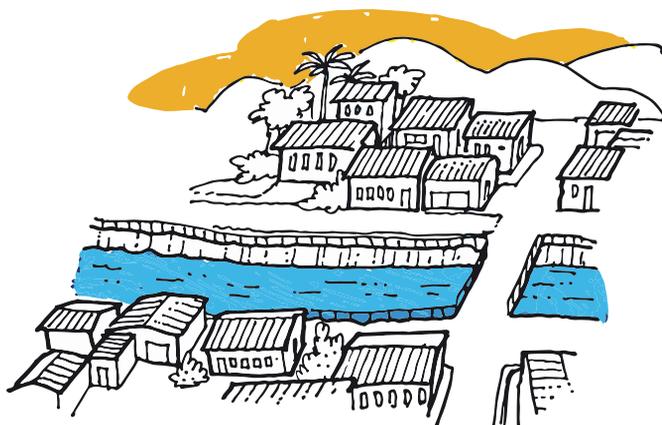
Keep updated

Annexes	Classification	Amount*	Progress
I.1 – Demand Projects of the Affected Communities	Obligation to PAY by Vale	R\$ 3 billion	Payment made by Vale in 2022, in the amount of R\$ 3.4* billion through legal warranties and complementary disbursement
I.2 – Income Transfer Program for the affected population	Obligation to PAY by Vale	R\$ 4.4 billion	Payment made by Vale in 2021, in the amount of R\$ 4.4* billion
I.3 – Projects for the Paraopeba Basin	Obligation to PAY by Vale	R\$125 million	Payment made by Vale in 2022, in the amount of R\$ 144* million
I.3 – Projects for the Paraopeba Basin	Obligation to DO by Vale	R\$ 2.37 billion	Initiatives for detailing and projects under execution
I.4 – Projects for Brumadinho	Obligation to DO by Vale	R\$ 1.5 billion	Initiatives for detailing and projects under execution

*Amounts corrected by the IPCA, as defined in the Agreement.

Obligation to DO by Vale

The **Socioeconomic Reparation** projects are in progress with significant advances. Up to this moment, the *compromisers have approved and gave the start order for **24 projects** within the **obligations to do by Vale**, being **9 in Brumadinho** and **15 in other 25 municipalities of the Paraopeba Basin**. Vale is responsible for the execution of the projects, which are followed-up and inspected by the compromisers with the technical support of the Socioeconomic Auditing of the Getúlio Vargas Foundation.



Socioeconomic Reparation

Projects for Brumadinho

Projects for the Paraopeba river basin
25 cities

**Compromisers: Government of Minas Gerais, the Prosecution Office of Minas Gerais (MPMG), the Federal Prosecution Office (MPF) and the Public Defender's Office of Minas Gerais (DPMG).

Follow up the execution of the approved projects

Paraopeba Basin (Annex I.3)

Municipalities awarded: Abaeté, Betim, Biquinhas, Caetanópolis, Curvelo, Esmeraldas, Felixlândia, Florestal, Fortuna de Minas, Igarapé, Juatuba, Maravilhas, Mário Campos, Mateus Leme, Morada Novas de Minas, Paineiras, Papagaios, Pará de Minas, Paraopeba, Pequi, Pompéu, São Gonçalo do Abaeté, São Joaquim de Bicas, São José da Varginha and Três Marias.



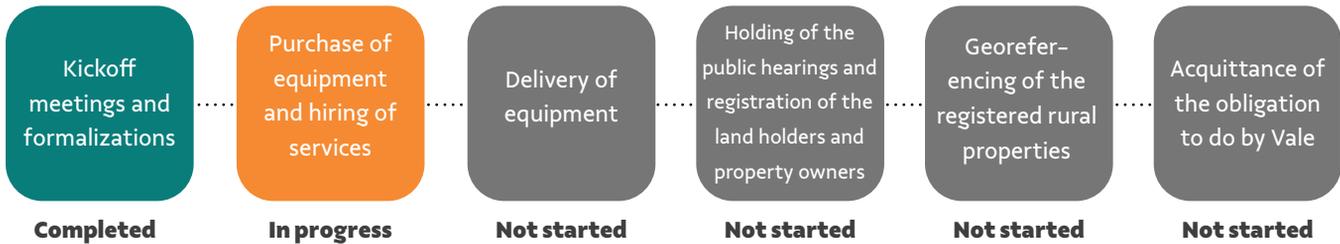
Survey, Identification and Georeferencing of the Properties subject to the Adjustment of Land Rights

Purpose

To support the land rights adjustment of rural territorial occupations (possession areas) and areas with not registered title deeds in the 25 municipalities of the Paraopeba River Basin.

Start
Apr 2022

Conclusion
Jan 2025



Donation of streetmarket kits, structuring of streetmarkets in the municipalities and technical and managerial orientation for rural products

Purpose

Support the adjustment of the streetmarket infrastructure of the affected municipalities and qualify for the project the eligible farm workers concerning the technical and managerial handling of the production and marketing of the farming products.

Start
May 2022

Conclusion
Nov 2023





Maintenance Program of rural roads and environmental recovery works - Phase A

Purpose

Equip the city governments so they will be able to carry out the maintenance of rural roads, through the purchase and delivery of 75 pieces of equipment (three machines for each one of the 25 municipalities of the Paraopeba Basin).

Start
Jan 2022

Conclusion
Mar 2023*

Kickoff meetings and formalizations

Completed

Purchase of equipment

Completed

Delivery of equipment

In progress

Acquittance of the obligation to do by Vale

Not started

* Exception compactor roller with kit: October 2023

61 machines delivered



Photograph: site of the Pró-Brumadinho Committee



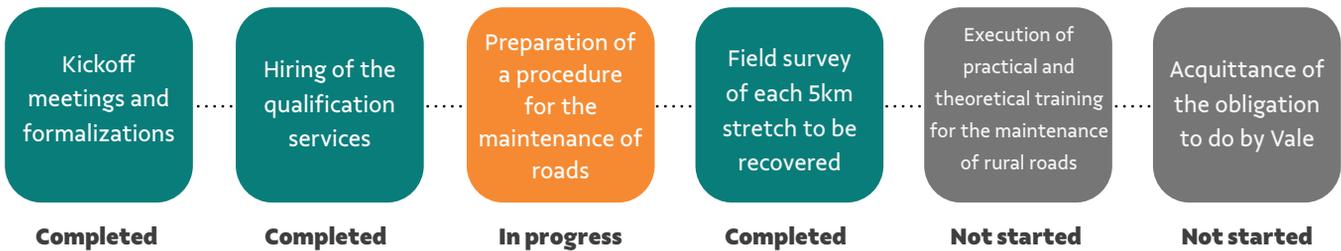
Maintenance Program of rural roads and environmental recovery works - Phase B

Purpose

Qualify technical teams and operators of machinery and equipment who are responsible for the maintenance of unpaved rural roads, through the preparation of a procedure for the maintenance of roads and the execution of practical and theoretical training.

Start
Apr 2022

Conclusion
Oct 2023



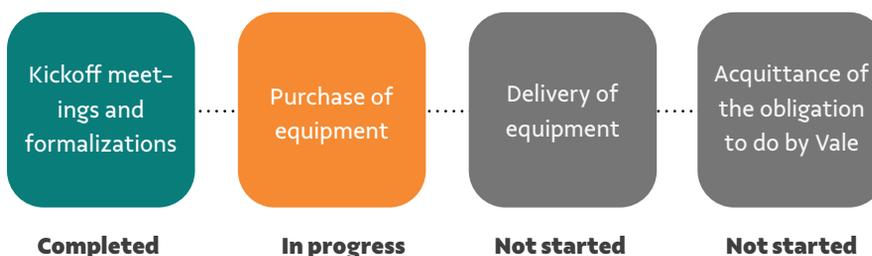
Purchase of equipment for the improvement of the activities of the Department of Agriculture, Environment and Sustainable Development (Esmeraldas)

Purpose

The purchase of equipment and vehicles to support the services provided by the Department of Agriculture, Environment and Sustainable Development of Esmeraldas, expediting the assistance, technical visits and fiscalization.

Start
Jan 2022

Conclusion
Jun 2024





Vocational Training Program

Purpose

Offer professional qualification courses focused on the development of knowledge, skills and attitudes that contribute for the insertion into an opportunity of job and generation of income for the population.

Start
Jan 2022

Conclusion
May 2025



Strengthening of the Municipal Social Assistance Services

Hybrid project

Obligation to pay (resources to be transferred to the municipalities for the hiring of a temporary team and/or the purchase of equipment, materials and supplies) and obligation to do (offer of qualification for workers, managers and council members – 15 semi-presential courses of 40 hours each).

Purpose

Contribute with the strengthening of the Single Social Assistance System (SUAS).

Start
May 2022

Conclusion
Dec 2026





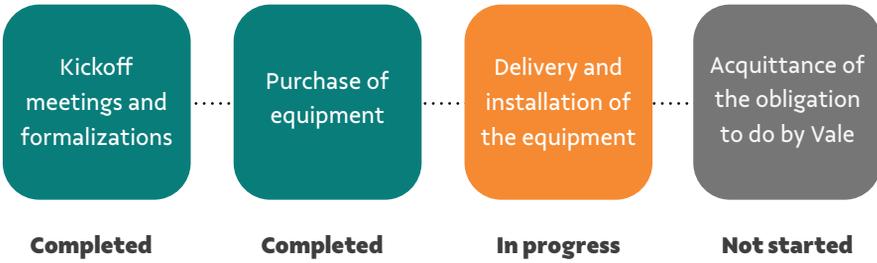
Structuring of the Urgency Rooms

Purpose

Structuring of an Urgency Room in the affected municipalities through the purchase, delivery and installation of materials, equipment and furniture.

Start
Jan 2022

Conclusion
Dec 2023



Framework Agreement of Integral Reparation



Urgency rooms

Delivery of **100% of the equipment**, materials and furniture, which corresponds to about **1,270 items for the 13 municipalities** eligible for the Project.

Photograph: site of the Pró-Brumadinho Committee



Urgency rooms

Photograph: site of the Pró-Brumadinho Committee



Strengthening Program for Primary Healthcare

Hybrid project

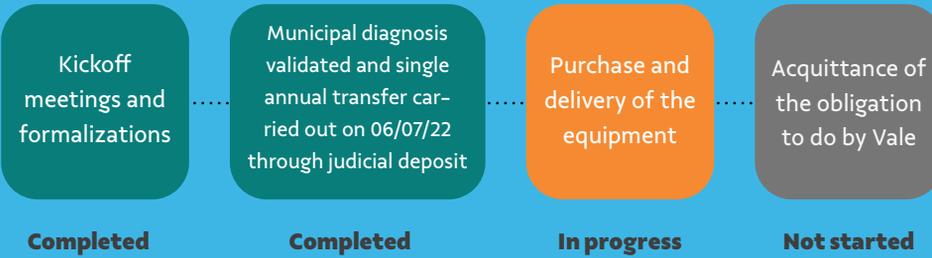
Obligation to pay (resources to be transferred to the municipalities) and obligation to do (purchase of equipment).

Purpose

Payment through judicial deposit for the municipalities to strengthen the Primary Healthcare through the increase in personnel, the qualification of teams and investments on the structuring and adequacy of the Primary Healthcare Units.

Start
Jan 2022

Conclusion
Jun 2023



Expansion of the services of medical visits and specialized exams, and of eligible surgeries of medium and high complexity (Pompéu)

Hybrid project

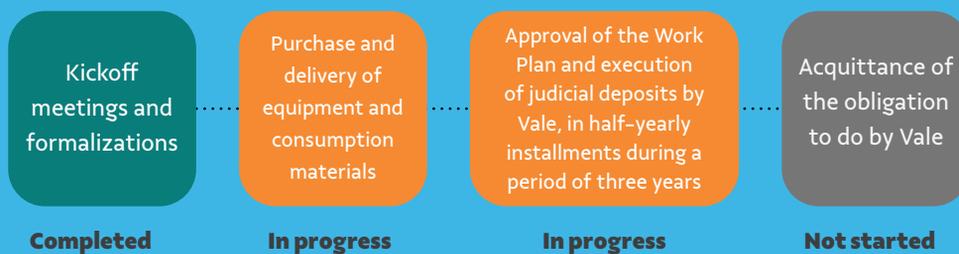
Obligation to pay (financial resources to be transferred to the municipalities) and obligation to do (purchase of equipment and vehicles).

Purpose

Purchase of equipment for the qualification of the surgery compound, intended for the implementation of orthopedic surgery and surgery using por videolaparoscopy; purchase of two vehicles of the microbus type for the transport of citizens that need transport for healthcare services in another municipality. In addition to supporting the costs of the medical team for eligible surgeries, specialized medical visits and high complexity exams.

Start
Jan 2022

Conclusion
Mar 2026





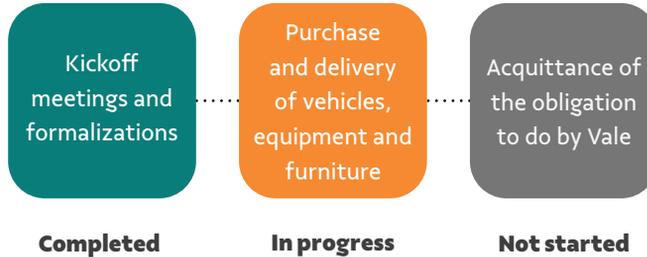
Purchase of vehicles for the renovation of the Health Department fleet and equipment and furniture (São Gonçalo do Abaeté)

Purpose

Purchase of vehicles for the renovation of the Health Department fleet with the purpose of improving patient transport; purchase of equipment, furniture and several accessories to strengthen the Primary Healthcare of the municipality of São Gonçalo do Abaeté.

Start
Jan 2022

Conclusion
Aug 2023



Purchase of equipment for image exams (Biquinhas)

Purpose

Purchase and delivery of three pieces of equipment for the strengthening of the local health policy: one digital mammography device, one X-Ray apparatus and one laser printer, to be installed in the José Araújo de Oliveira First Aid Unit of the municipality of Biquinhas.

Start
Sep 2022

Conclusion
Aug 2023





Purchase of Equipment for the execution of Medical Exams (Abaeté)

Purpose

Contribution for the strengthening of the Healthcare Network of the municipality of Abaeté through the Purchase of Equipment for the execution of Medical Exams in the municipality.

Start
Jan 2022

Conclusion
Aug 2023



Obligations to Do converted into Obligations to Pay

(Payment of judicial deposit made by Vale on 07/06/2022)



Promove Minas

Purpose

Strengthening of the multidisciplinary teams in the context of the Promotion of Health, Integration and Complementary Practices and Permanent Education on Health.

Deposit made by Vale in the judicial account in the total amount of R\$ 37,680,000.00, which will be made judicially to the municipalities in five annual installments, against evidence of the compensation.



Strengthening of the psychological and social care network

Purpose

Adoption of actions that contribute with the strengthening of the psychological and social care network, for the fostering and qualification of the teams assigned to the municipalities.

Deposit made by Vale in the judicial account in the total amount of R\$ 19,036,242.00, which will be made judicially to the municipalities in three annual installments, against evidence of the compensation.

Brumadinho (Annex I.4)



Agro Fostering Program

Purpose

To develop processes for the strengthening of Agribusiness, considering the execution of studies and surveys that highlight the necessary productive adjustments; the implementation of production traceability, having in mind the legal compliance and the access to diversified markets, including the preparation and implementation of individual production projects with the local farmers.



Results

- 192** Individual projects performed
- 5200** Hours of technical assistance
- 447** Analyses of vegetal tissues
- 230** Properties with soil analysis
- 83** Implemented traceabilities
- 8** Qualification courses
- 167** Supplies of marketing materials
- 4** Participation in trade shows

Start
Jun 2020

Conclusion
Apr 2024

Formalization and performance of orientation studies

Completed

Preparation of individual social-productive projects and the implementation of traceability

In progress

Project monitoring and assessment

In progress

Stimulate the autonomy of producers and organizations

In progress

Implementation of individual productive projects

In progress

Acquittance of the obligation to do by Vale

Not started



Participation of producers in the Aproxima Trade Show



Industrial District of Brumadinho – Phase A

Purpose

Adoption of actions that contribute with the diversification of the municipality’s economic activity, collaborating with the reduction of the economic dependency with the mining activity. Phase A – execution of studies for the structuring of an Industrial District in the municipality of Brumadinho and for the fostering of new industrial-tertiary business (industry, commerce and provisioning of services).



Start
Jan 2022

Conclusion
Feb 2024

Formalization and performance of orientation studies

Completed

Validation of the premises of the District model for the planning of the infrastructure to be installed and the actions for the strengthening of the business environment, including the start of three technical courses (quality, electrotechnics and automation)

In progress

Acquittance of the obligation to do by Vale

Not started



Brumadinho Digital – Initial Studies

Purpose

Execution of studies for the development of a new business model for the solution of connectivity (infrastructure for internet and fixed and mobile telephony).

Start
Jan 2022

Conclusion
May 2023

Formalization and performance of orientation studies

Completed

Connectivity solutions and the respective business models for validated fixed and mobile broadband. Definition of how the models will be formalized and what will be contracted

In progress

Acquittance of the obligation to do by Vale

Not started



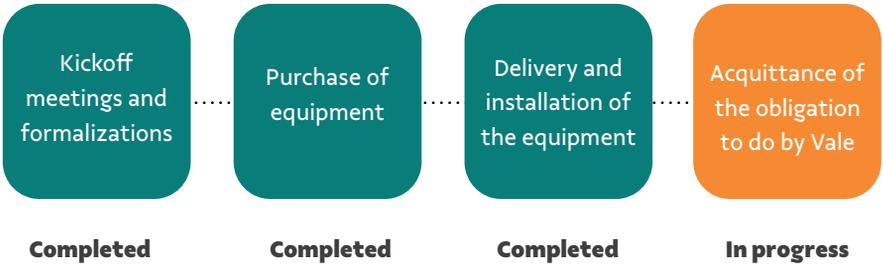
Structuring of the Urgency Room

Purpose

Structuring of an urgency room in the UPA Valdemar Assis de Barcelos through the purchase, delivery and installation of materials, equipment and furniture.

Start
Apr 2022

Conclusion
Dec 2023



Framework Agreement of Integral Reparation



Urgency room equipped with beds, respirators, infusion pumps, oxygen cylinder, monitors, among other items

Delivery of **100% of the equipment, materials and furniture, corresponding to about 102 items.**

Photograph: site of the Pró-Brumadinho Committee



Urgency room

Photograph: site of the Pró-Brumadinho Committee



Heart monitor

Photograph: site of the Pró-Brumadinho Committee



Strengthening of the Municipal Social Assistance Services

Hybrid project

Obligation to pay (resources to be transferred to the municipalities for the hiring of a temporary team and/or the purchase of equipment, materials and supplies) and obligation to do (offer of qualification for workers, managers and council members – 15 semi-presential courses of 40 hours each).

Purpose

Contribute with the strengthening of the Single Social Assistance System (SUAS).

Start
May 2022

Conclusion
Dec 2026

Kickoff meetings and formalizations

Transfer of resources executed by Vale on a judicial account on 09/28/22; preparation and approval of the Resources Application Plan by the municipality

Implementation of the Resources Application Plan by the municipality and the hiring of a university educational institution for the offer of qualification

Performance of the qualifications

Acquittance of the obligation to do by Vale

Completed

Completed

In progress

Not started

Not started



Strengthening of the Health Complex of Brumadinho

Hybrid project

Obligation to pay (resources to be transferred to the municipality) and obligation to do (qualification of workers, managers and council members).

Purpose

Make investments on the units that are part of the Health Complex Valdemar Assis de Barcelos (hospital, UPA and Specialties Center) with new equipment, utensils and furniture, bringing more modernity and promptness for the services, also supporting the maintenance costs.

Start
Jan 2022

Conclusion
Feb 2028

Kickoff meetings and formalizations

Purchase and delivery of equipment and consumption materials

Approval of the Municipal Work Plan and the execution of judicial deposits in five annual installments for the municipality

Acquittance of the obligation to do by Vale

Completed

In progress

Not started

Not started



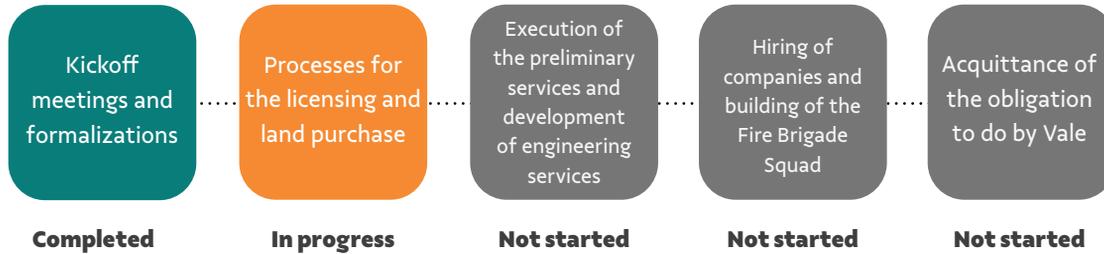
Implementation of the Physical Structure of the CBMMG squad

Purpose

Purchase of land and building of the squad of the Military Fire Brigade of Minas Gerais (CBMMG) in the municipality of Brumadinho.

Start
Apr 2022

Conclusion
Mar 2027



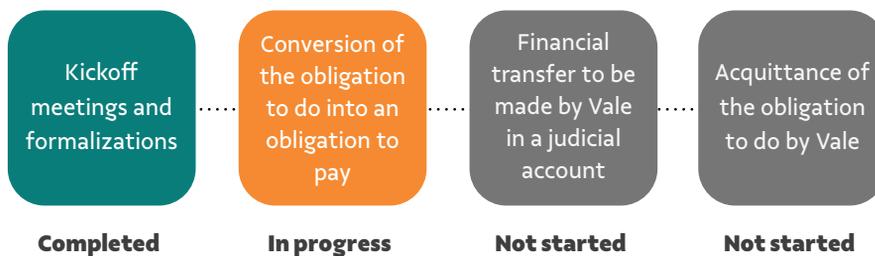
Continuation of the actions of social and health assistance (Agreement Term of Acts)

Purpose

Financing of the multidisciplinary personnel integrated to the departments of Social Development and Health of the municipality, for 35 months, for the continuation of the actions concerning the Agreement Term of Acts (TPA). To be carried out through the transfer of financial resources to the municipality of Brumadinho, in the form of a single deposit in judicial account

Start
Oct 2022

Conclusion
Jul 2023



Obligations to Do converted into Obligations to Pay

(Deposit in a judicial account in the amount of R\$ 10,990,875.03, carried out by Vale, on 09/12/22)



Maintenance of the Agreement Term of Acts in Brumadinho

Purpose

Continuation of the financing of the payroll of the professionals working in the Municipal Department of Health, involved in the actions of Primary Healthcare and Psychological and Social Care.

Social and Environmental Reparation Program *(Annex II)*

Keep updated

Annexes	Classification	Amount*	Progress
II.1 – Social and Environmental Recovery	Obligation to DO by Vale	R\$ 5 billion (estimated)	Actions in progress since 2019 Reparation Plan under validation by the environmental department
Social and environmental compensation for damages already known	Obligation to DO by Vale	R\$ 1.55 billion	Detailing initiatives
II.3 – Hydraulic Safety Projects	Obligation to PAY by Vale	R\$ 2.05 billion	Payment made by Vale in 2021, in the amount of R\$ 2,1* million

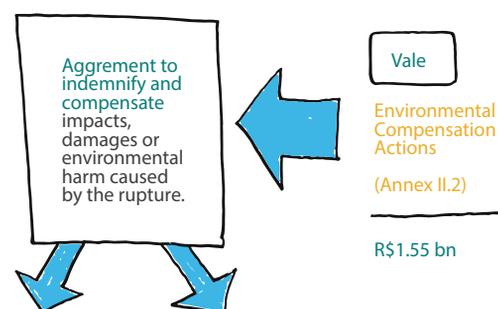
*Amounts corrected by the IPCA, as defined in the Agreement.

Obligation to Do by Vale

The work front for the **Social and environmental** Reparation covers actions of **recovery and compensation**.

In the work front for **compensation**, as defined by the compromisers, priority was initially given to the project of **sanitation** in the affected municipalities, which is being detailed by Vale and, after approval, will be executed by the company. In addition to the later, in the last period, another three projects were indicated by the compromisers to be detailed by Vale.

- 1 **Structuring** of the Conservation Unit in Brumadinho and Management of the State Park of the Rola Moça mountain range.
- 2 **Red Lists** – preparation of the lists of the endangered species of the Minas Gerais fauna and flora to be carried out under the coordination of the State Institute of Forests (IEF).
- 3 **Implementation** of a Center for Reception, sorting, temporary shelter, castration and sending for adoption of domestic animals, according to its attributions specified below:
 - *Ethic populational management of dogs and cats;*
 - *Donation of kits for the event of adoption of dogs and cats.*



Definitions

- Minas Gerais State Government
- Minas Gerais Prosecution Office
- Federal Prosecution Office
- Minas Gerais Public Defender's Office

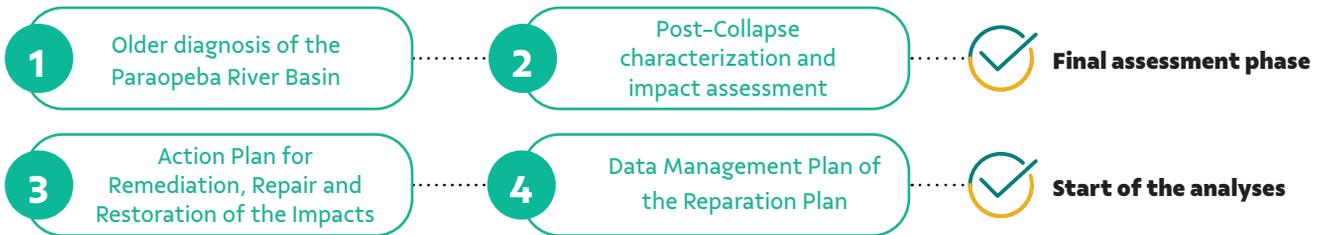
Detailing and execution

- Vale

Obligation to Do by Vale

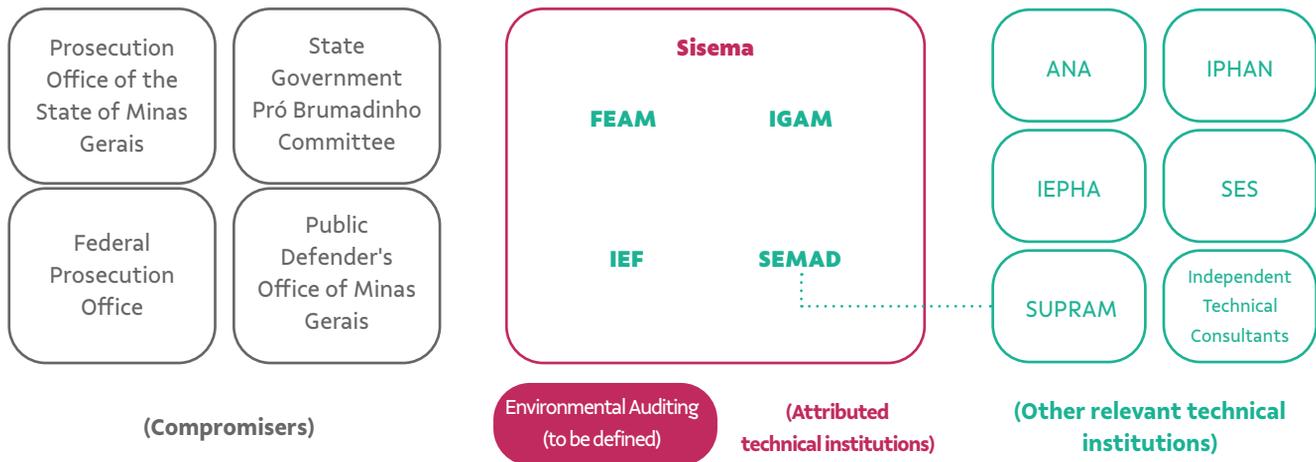
Within the **recovery** process, the **Plan for the Social and environmental Reparation of the Paraopeba River Basin** is being built since 2019, by a specialized consulting hired by Vale, according to the parameters of the State Environmental System (Sisema). Presently, it is being analyzed by the relevant departments and undergoing revisions.

The plan is divided into four chapters.



Check the preliminary version of the plan by pointing the cell phone camera to the QR Code.

Institutions involved



- The estimated amount of the plan is **R\$ 5 billion**.
- It is restricted to the areas effectively impacted inside the **26 municipalities**.
- Its construction is being followed up by an independent auditing, **Aecom**.
- After Sisema has assessed the new versions** sent by the consulting, adjusted according the orientations of the departments involved, **the plan will be submitted to the validation of the compromisers**.
- The validated actions will enter in the **execution phase**.



Vale Answers

When the R\$5 billion in investments is reached, will the plan be completed?

The total initially estimated for the environmental reparation of the damages is R\$5 billion, however, there is no financial limit. Eventual damages that might appear later – or that are presently unknown and might be effectively linked to the breach – will be included in the plan.

What is being done

Since 2019, we are steadily carrying out a series of actions for the recovery of the Ferro-Carvão stream and the Paraopeba River, by investing on studies to understand the environmental impacts of the breach, monitoring the quality of the water, of the soil and of the sediments, and contributing for the preservation of the local flora and fauna.

All these initiatives were included in the Social and Environmental Reparation Plan and, presently, are followed up by the compromisers.

Residue evacuation

The residue removed from the impacted area is destined to the Search Stations for inspection and release by the firefighters. After this stage, the material released is sent to the Temporary Residue Deposits (DTRs) or for final disposal on the Córrego do Feijão pit. In addition to making feasible the 8th Search Strategy, the process is also fundamental for the environmental recovery.

Total volume of the B1 dam: 11.7 million m³ (approximate)
Volume that has spilled: 9.7 million m³ (approximate)
Volume removed: 6 million m³ (60% approximate)

Waste management

Residues as metals, rubber and wood resulting from the residue removal activity and from the screening stations, are sent to their respective Intermediate Residue Deposits (DIR), to be later conducted to their final destination.



Monitoring of water and sediments

The results obtained by Vale in the continuous monitoring work of the quality of the water and sediments of the Paraopeba River, usually point to a **greater approximation to the conditions existing before the breach**. The data converge with those being produced based on the monitoring of the Water Management Institute of Minas Gerais (Igam).

The drought period of 2022, was particularly noted by a content of the main markers (manganese, iron, aluminium) greater than those of the previous droughts, particularly in the Paraopeba stretch up to the Retiro Baixo reservoir, including the upstream stretch. **This behaviour can be a result of the significant rain volume that occurred in the previous period**, which reflected on the quality of the water observed in the last drought period.



Investment on technology improves the monitoring

Four of the nineteen Vale telemetric stations, used for the continuous monitoring of the water quality, are being equipped with sensors that measure the Paraopeba River level in real time, allowing the estimation of the flow rate. This action complements the monitoring network of the National Water and Basic Sanitation Agency (ANA) and adds higher reliability to the data transmission during critical events, therefore assisting in the flood forecast and the planning of an eventual contingency plan.

79 points

(PME, PMQS, PMD and PMO programs)
Sections of the Paraopeba river, tributaries, the Retiro Baixo and Três Mariás reservoirs, the Ferro-Carvão stream basin and the dredging activities.

almost 67 k samples collected

+6 million

of results of water, effluent and sediment analyses

Biodiversity monitoring

A population of more than one hundred collar swallows (*Pygochelidon Melanoleuca*), a species considered critically in danger of extinction in Minas Gerais, was found in the Paraopeba River Basin, between the municipalities of Pompéu and Curvelo. The unprecedented discovery occurred during an investigation of the **Diagnosis Program of Environmental Damages on the Biotic Environment**, carried out by Vale biologists and academic specialists. The team is now conducting the first detailed study of the reproductive biology of the species in the whole world.



“With this study we came to the conclusion that we have a large active reproductive population, what means a great legacy for science, particularly for the conservation of the species.”

Leonardo Lopes,
biologist specialized in birds and
professor of the Federal University of
Viçosa (UFV)



Watch the video and learn more about this work.



“To find a healthy population of this species, in large numbers and in new points in the Paraopeba river, is an important environmental indication that enhances that the breach has not affected the quality of life of these birds.”

Cristiane César,
Vale environmental analyst.

Photograph: Gabriele Silva



Clarification notice about doubts concerning the flooded areas

The communities of Brumadinho and of the municipalities of the Paraopeba river valley are receiving, since november, teachnical Vale teams for clarifications about the characteristics of the material that was deposited by the floods that have occurred in 2020 and 2022, and of the potential impacts of the B1 dam breach on such scenarios.



The dialog is based on the results of the studies of the waste characterization and of the flooded areas

Photograph: Vale Archive

What have the studies revealed?

Program of the Geochemical Research of the Tailings

The results indicate that the elements observed in the residues are the same that compose the natural soils of the Ferro–Carvão basin, but in different proportions. The principal are the metals Iron, Aluminium, Silicon and Manganese. All the samples analyzed show that the Brumadinho residues are not dangerous, and also not toxic, according to the standard ABNT NBR 10.004/2004..



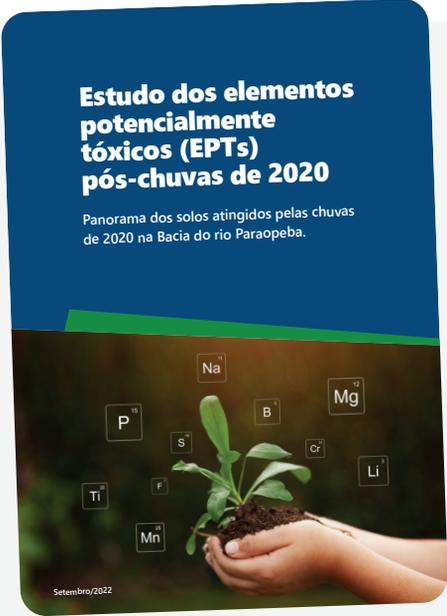
Conheça os rejeitos da barragem B1, em Brumadinho

Setembro/2022



Access the complete booklet:





Estudo dos elementos potencialmente tóxicos (EPTs) pós-chuvas de 2020

Panorama dos solos atingidos pelas chuvas de 2020 na Bacia do rio Paraopeba.

Setembro/2022

Access the complete booklet:



Studies of Potentially Toxic Elements (EPTs) – 2020

Researchers of the Federal University of Lavras (UFLA) have assessed the soils of the areas affected by the rains of 2020, to understand if there were elements compatible with the residues of the B1 dam, and have also investigated if there was any contamination and the build-up of toxic elements in the plants. The reports give evidence that the flood has not contaminated the soil.

Emergency evaluation – 2022

The emergency evaluation performed on the sediments deposited by the floods of 2022 has also determined that no element has exceeded the limits of the agricultural investigation (VI) as established in the DN COPAM 166/11. About the impacts of the residues on the river valley, the effects of the level rise, demonstrated in simulations, were barely perceptible or almost null on most of the flooded area. This means that no significant changes were identified that could worsen the scenario of the floods occurred during the last rainy season.



Resultados do estudo das áreas alagadas pelas enchentes do rio Paraopeba após as chuvas de 2022

Setembro 2022

VALE

Access the complete booklet:



Vale Answers



Does the material dragged by the flood pose any risk for the health of people?

Floods are always a source of potential public health problems and can drag all types of residues that were deposited on the river and on its banks during the last decades. It is always important to be careful and take all possible prevention measures. Most of the material dragged by the floods was analyzed and showed no resemblance with the residue. Its characteristics do not represent any imminent risk for people, the soil and the plants. Specific risks may appear depending on the way how people are exposed to certain substances. However, it is important to stress that the residue was classified as not dangerous and not toxic according to the standards in force.

Mobility Program and Strengthening Program of the Public Service *(Annexes III and IV)*

Keep updated

Annexes	Classification	Amount*	Progress
III – Mobility Program	Obligation to PAY by Vale	R\$ 4.95 billion	Payment made by Vale in 2021 and 2022, in the amount of R\$ 1.8* billion
IV – Strengthening Program of the Public Service	Obligation to PAY by Vale	R\$ 3.65 billion	Payment made by Vale in 2021 and 2022, in the amount of R\$ 2.6* billion

*Amounts corrected by the IPCA, as defined in the Agreement.



Execution of the projects and the actions

it is the responsibility of the **State Executive Power**, through its departments and entities



Several regions of Minas Gerais will receive projects



Monitoring e fiscalization of the construction works

Controller General of the State, Legislative House and Court of Auditors



You can get additional information on the **Framework Agreement of Integral Reparation** on the QR Code at the side or website of the Pró Brumadinho Committee.
Access www.mg.gov.br/pro-brumadinho



Other obligations of the Framework Agreement of Integral Reparation

Keep updated

Annexes	Classification	Amount*	Progress
Funed	Obligation to DO by Vale	R\$ 135 million	Project under analysis by the compromisers
Bio plant	Obligation to DO by Vale		In progress
Agreement Term of the Fire Department of Minas Gerais	Obligation to DO by Vale	R\$71 million	In progress
Agreement Term of the Civil Defense of Minas Gerais	Obligation to DO by Vale	R\$96.6 million	In progress
Temporary hiring/ reimbursement	Obligation to PAY by Vale	R\$310 million	Payment made by Vale in 2021, in the amount of R\$ 325* million
Expenses of administration, auditing, technical consulting and others	Obligation to PAY by Vale	R\$700 million	Payment made by Vale in the amount of R\$ 15 million (services in progress, the payments are made following the execution)

*Amounts corrected by the IPCA, as defined in the Agreement.

Implementation of the Wolbachia Bio plant in Belo Horizonte



Purpose

Building of the bio plant for the production of 2 million *Aedes aegypti* mosquitoes with *Wolbachia*, which do not transmit arbovirus diseases and mitigate the transmission of the viruses of Dengue, Zika, Chikungunya and Mayaro, through the dissemination project in 22 municipalities of the Paraopeba river basin.

Expectation for the reduction of more than 75% of the diseases caused by viruses transmitted by mosquitoes.

Start
Mar 2020*

Conclusion
Mar 2027



* Note: project started before the Agreement and incorporated after the signature.



Follow-up the CBMMG Commitment Term

Signed with the State of Minas Gerais on November 17, 2020, to strengthen the actuation of the Military Fire Brigade of Minas Gerais. Covers the purchase and delivery of trucks, communication equipment, IT and implementation of the radio communication system.

Status: 20% of the execution performed.

Completion Forecast: December 2024.

In progress



Follow-up the Civil Defense Commitment Term

Signed with the State of Minas Gerais on November 20, 2020, to strengthen the actuation of the Military Fire Brigade of Minas Gerais. Covers the purchase and delivery of trucks and materials for the Civil Defense of MG, and also the structuring of the Civil Defense School in the Administrative City.

Status: 99% of the execution performed.

Completion Forecast: December 2022.

In progress

Deliveries performed

513
pickup trucks

513
notebooks

513
electronic measuring tape

2565
civil defense vests

2
aircraft fuelling tank trucks



Delivery of vehicles to the Civil Defense of Minas Gerais.

Photograph: Vale Archive

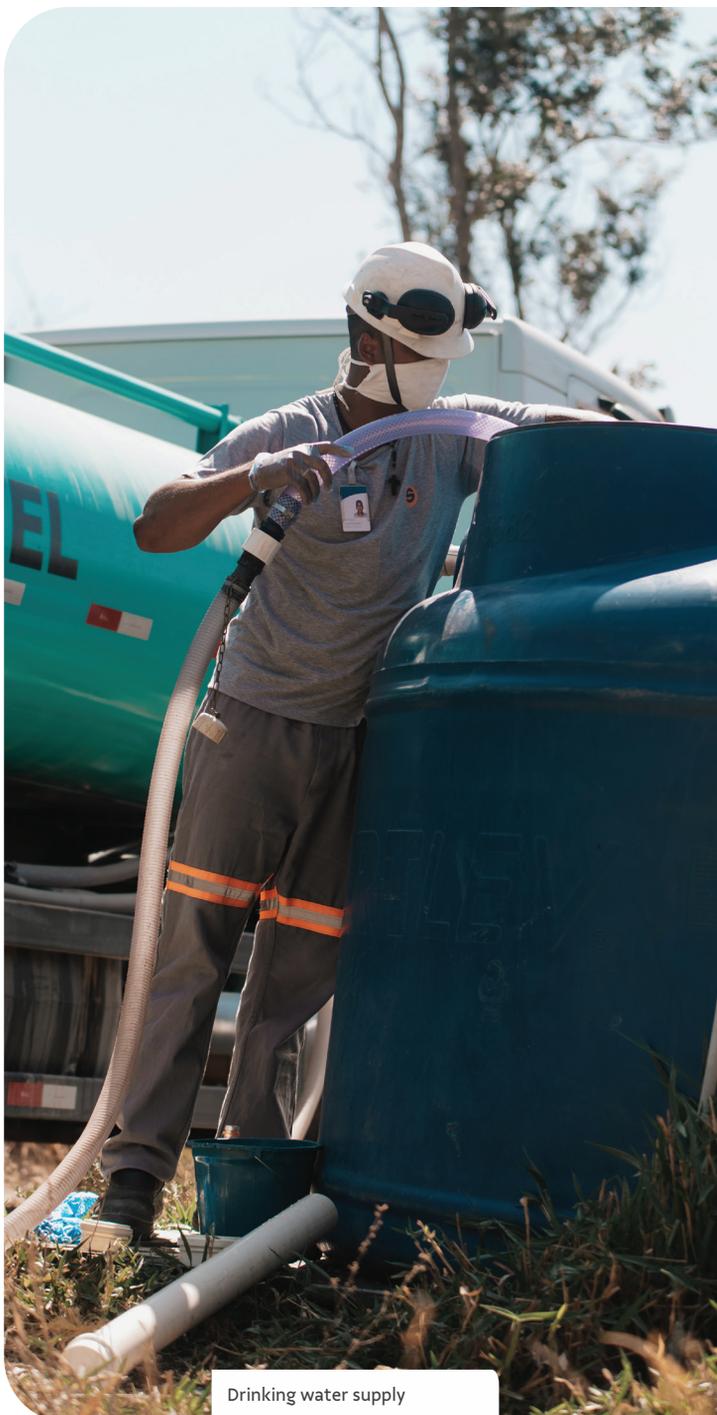
Other initiatives

Learn about the progress of some initiatives that were started at the emergency moment and continue in execution. These are actions intended for the supply, treatment and monitoring of water, social projects and support for the affected people, socioeconomic development and social and urban infrastructure works.

Water

Water supply

Installed or reactivated wells, new structures for water collection and storage, emergency delivery using water trucks, installation of treatment systems. These are several alternatives, completed and in progress, to guarantee that all residents impacted by the collection interruption in the Paraopeba River, between Brumadinho and Pompéu, will get water with the quality and quantity they need.



Drinking water supply

116

underground collections for riverside population and public supply

2

pipeline systems in operation: Brumadinho and Pará de Minas

+3,800

hidraulic and reservation structures (reservoirs, water fountains, water tanks)

80

water trucks running daily for emergency water deliveries

With this structure, already:

5 bn

liters of water for the riverside population, between definitive and emergency measures

204 mn

liters of water per day for public supply, the equivalent to a city with more than 1.3 million residents.

147

water treatment systems being installed

27

water treatment systems (Lajinha) in operation and monitoring

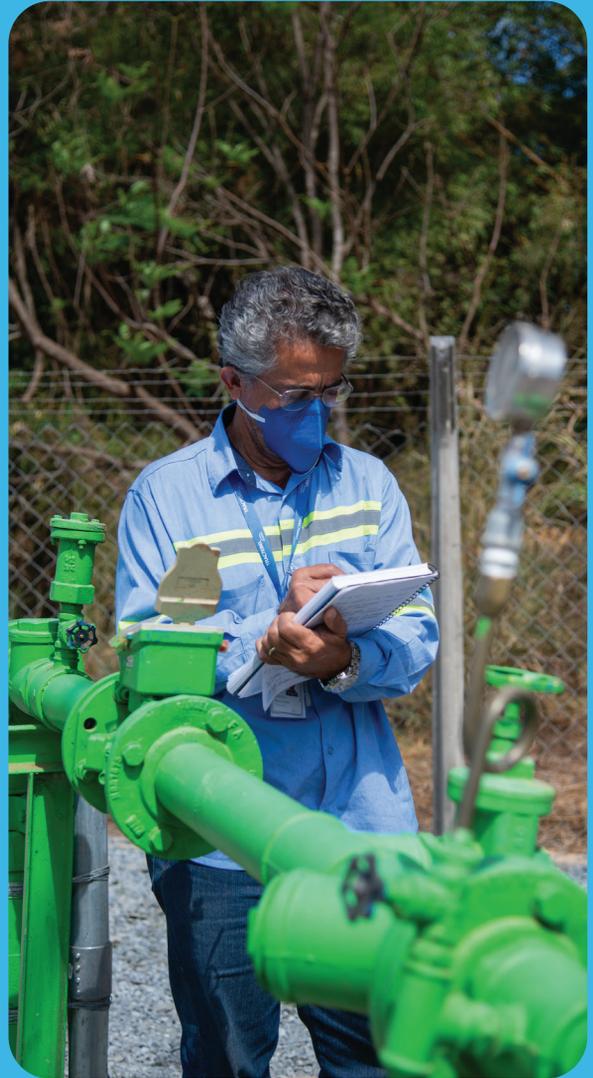
Water monitoring

In order to guarantee quality water, Vale carries out a constant monitoring of the volumes delivered or made available. The monitoring is daily on the water trucks and quarterly on the perforated tubular wells, according to the standards in force. All samples are collected by accredited laboratories. Additionally, there is the monthly water monitoring in the water treatment systems.

The independent technical auditing company contracted to assist the Prosecution Office of the State of Minas Gerais (MPMG) also carries out retesting analyzes and collection auditing in the field.

Water treatment systems

Vale, together with the state and municipal health departments, is installing water treatment systems for the sources agreed with the government. Such systems guarantee the adequate quality for consumption, delivering water free of biological contaminants and metals. The action is planned to be completed until 2024.



Photograph: Vale Archive



Water treatment system installed in Felixlândia

Photograph: Vale Archive

1,434 collection points

27.9 k samples collected

1,720,857 results

126 water treatment systems installed to date

Emergency deliveries to rural producers

In addition to receiving water for the maintenance of their agribusiness activities, the rural producers of the 16 municipalities of the Paraopeba Basin receive regularly products to feed their animals.

In total, more than 237.5 million kilos of several kinds of animal food were already distributed, which have passed through strict quality controls.

To guarantee the correct quantity for each rural producer, a technical team do visits to the properties, also ascertaining other needs, such as hydraulic installations, water fountain or fences.



Delivery of rural food to producers

633 mn

of liters of water
for plantation irrigation

739 mn

of liters of water
for the consumption
of animals

237.5 mn

of kilos
of products for animal feed

686,972

meters of installed fences

995

water fountains delivered

965

hydraulic installations
completed

4,052

visits made

Care with animals

Take Me Home project

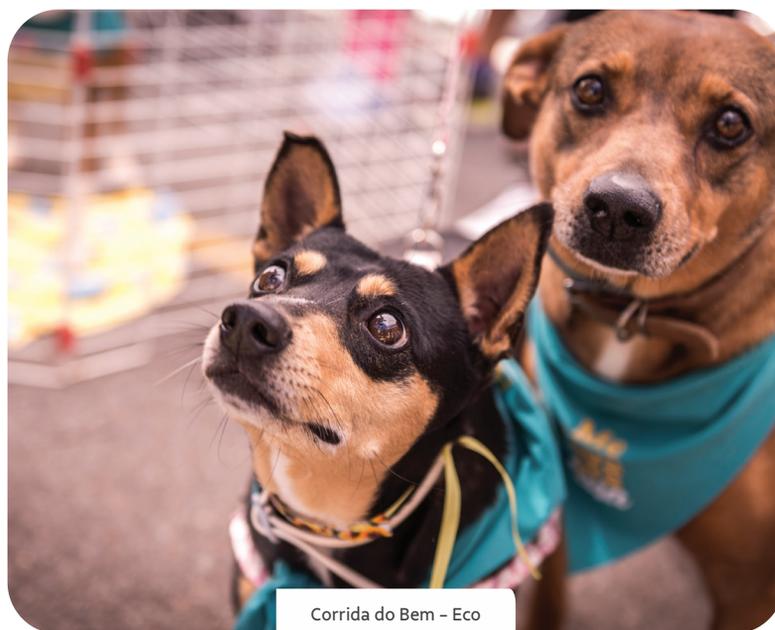
Our team of specialists is steadily committed to find an adequate home for the animals rescued from the areas affected by the breach in Brumadinho and in the territories where emergency evacuations or preventive reallocations took place. Today they receive all the necessary love and care in the farms maintained by Vale and in the convened pet hotels.

More than 400 dogs and cats have already found a new family. In addition to being a result of the radio and television campaigns carried out by Vale, many adoptions took place during the events performed, most of time, in partnership with other projects, as the Corrida do Bem – ECO.

- The pets are vaccinated, de-vermined and are always treated with updated anti-parasites.
- All animals carry microchip identification.
- Adult animals are already castrated and the cubs will be as soon as they reach the ideal age.
- The animals have a known social profile.
- All of them are followed up by a veterinary physician for at least six months after the adoption.



Photograph: Vale Archive



Corrida do Bem – Eco

Photograph: Vale Archive



Learn more about the project in the QR Code or at vale.com/melevapraca. If you prefer, get in contact through the telephones below:

Wildlife Shelter: (31) 97178-0969
Adoption team: (31) 99885-2738
Service Center: 0800 031 0831



Socioeconomics

Território Parque

The restart pillars: improvement of the community life quality, tourism potential for the district and income generation for the residents. With these three pillars, and based on a hearing process for the main claims of the community, an Urban Requalification Project was conceived for Córrego do Feijão. Within this proposal, with the target of favoring the **economic reactivation and the development of tourism, with regard to the local memory and culture**, the Território Parque project in Córrego do Feijão is now arriving to another important stage: the conclusion of the construction of the Central Square, the Community Market and the Culture Center.



“The Território Parque proposal seeks, by means of architectural and urban planning interventions, to accomplish two priority objectives. The first, human, of repairing and allowing the families of the region most impacted by the breach to find a new meaning for their community life, reestablishing their interaction links with the community, strengthening their sense of pertainment, historically built. The second, of generating the local social and economic development. We intend to leave a legacy for this community.”

Gleuza Jesué,
executive Reparation manager



Overall view of the Central Square in Córrego do Feijão.

Central Square

The Central Square counts with structures that act as support, so the **residents are able to share leisure and well-being moments**, as the woods, observation deck reservoir, a circular pergola that will support climbing plants, providing shade for several uses, including events and festivities, following the community traditions. Besides the square, the central area of the community also houses the Community Market and the Center for Culture and Crafts.



Pergula area in the Central Square

Photo: video delivery



Water mirror and gardens



Leisure space

Photos: video delivery

Community Market

The Community Market, in addition to the **trading space for the local products, counts with a bakery, community kitchen, sweet shop and a pizza restaurant**. We have started the mounting of the equipment and furniture of these spaces that, starting in 2023, will be managed by the residents themselves. They are participating, since July 2021, in qualification workshops for the sustainable management of the these spaces.



Overall view of the market area

Photo: video delivery



Structure of the market and gardens



Photos: video delivery

Culture Center

The Culture Center houses **areas of support to cultural activities, workshops and the creation of handcrafted products**, in addition to offering **environments for a library, tutoring and IT classrooms, and also to be used by the community association**. The space was built on different levels to house small patios, so that residents could play outdoors and perform various activities under the shade of the trees.

Occupancy and management: a plan for the occupation and management of the Culture Center and other spaces is being developed, together with the community, a work carried out in partnership with Rede Terra that will soon bear fruit. The purpose is to support the community in absorbing new equipment into their daily lives, with **a management and technical advisory plan** so that local production groups could make full use of all the equipment and furniture installed on site.



View of the upper area of the Culture and Crafts Center

Boosting tourism

Céu de Montanhas

As part of the actions that make up the **Sustainable Tourism Promotion Program**, in September, Brumadinho participated, for the first time, in the ABAV Expo – the largest tourism business fair in Brazil. On the occasion, the city government presented to the public the **Céu de Montanhas Catalog**, which brings together 29 unique tourist experiences in Brumadinho.

Signed by the Minas Gerais designer Ronaldo Fraga, the collection is the result of extensive mapping work, technical advisory and systematization of rural and community-based tourism in the region. There were more than 800 technical advisory hours, 200 technical training hours, 15 months of advisory and monitoring, and 119 people benefited directly through Vale's initiative in partnership with Rede Terra.



Affective map of the Céu de Montanhas catalog brings icons of each of the 28 developments in Brumadinho

Photo: Vale Archives



Institution involved

Rede Terra



In the press

Brumadinho (MG) lança guia turístico com 28 experiências na região

Publicação promove turismo além de Inhotim; entre as opções estão aulas de cerâmica e quilombos



Isac Godinho

BELO HORIZONTE A cidade de Brumadinho, a cerca de 60 Km de Belo Horizonte, atrai viajantes domésticos e internacionais com o Instituto Inhotim, um dos maiores espaços de arte contemporânea a céu aberto do mundo. E, para além das belezas do museu, o turista encontra na cidade muitos outros atrativos, ainda desconhecidos de grande parte dos brasileiros.

Para valorizar e fomentar o turismo rural e de base comunitária na cidade, foi criado o projeto "Céu de Montanhas". Nele, 28 experiências turísticas criadas por empreendedores locais, com curadoria do designer e estilista mineiro Ronaldo Fraga, foram organizadas em um catálogo agora à disposição de quem quer se aprofundar mais na visita a Brumadinho.

Folha de São Paulo

Source: Folha de São Paulo



Discover the new catalog at: [instagram.com/ceudemontanhas/](https://www.instagram.com/ceudemontanhas/) or access the QR Code on the side.



Veredas Project

The Project for **Strengthening the Competitiveness of the Private Tourism Sector** has been working to position the Veredas region as a destination for tourist experiences. This semester, Veredas gained a **new brand** and performed for the first time at Festuris in Gramado (RS), one of the most important Brazilian fairs in the sector.

Qualification and technical consultancy services: to improve the region's tourism offer, the IGR Veredas initiative, in partnership with Vale, has been offering, since 2020, qualification and personalized consultancy service to expand and professionalize the region's tourism offer, thus contributing to its economic development. Currently, the project supports around 90 entrepreneurs in the areas of accommodation, food and beverages, handicrafts, receptionists and tour guides located in the municipalities of Brumadinho, Igarapé, Juatuba, Mário Campos and São Joaquim de Bicas.



Institution involved

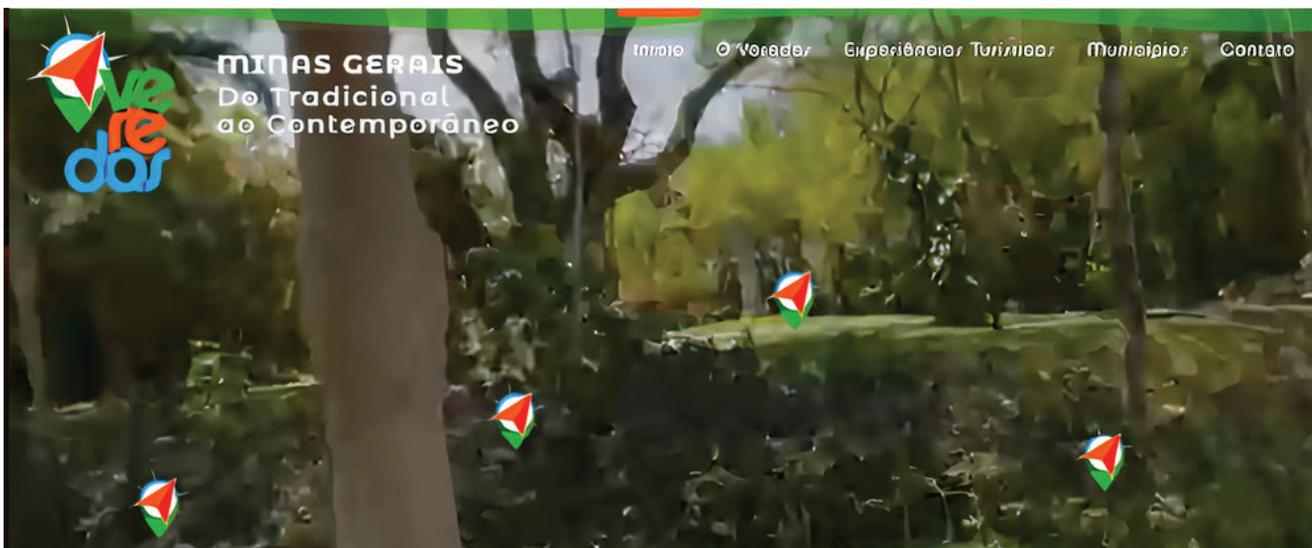
IGR Veredas



“Veredas means path, route, direction. That is why, at Festuris 2022, the Veredas destination booth presented 13 experiences, which perfectly combine the traditional and the contemporary”

Érica Maia,

manager of the Veredas Regional Governance Instance



Discover the new website and learn more about the initiative. Point your camera at the QR Code or visit www.visiteveredas.com.br



Community Entrepreneurship

“Since 2017 I have been attending craft workshops in the community. After the dam breach, I stopped, but I came back with everything in 2021”, says Josefa Josenilda Coelho. She lives in Córrego do Feijão, in Brumadinho, and joined the **Community Social Entrepreneurship Project** almost two years ago, promoted by Vale, which has a partnership with the Kairós Institute in its technical execution. Then, she did not stop.

“I took a course in soap making and aromatic products, I learned how to make soaps, foot baths, sachets, bath salts, incense, all naturally and using products, inputs and herbs from the community’s backyards.” She says that the program’s qualification workshops helped her to resume her life and recover her will to live.

The **Community Social Entrepreneurship** project, which has already brought together six local businesses in the process of being incubated, is currently advising four collective enterprises on structuring their businesses and marketing strategies, capable of keeping productive activities in progress. In addition to social businesses, the project promotes a permanent network of initiatives, which strengthen local knowledge, promote links, and value the community’s creative repertoire. **“Through the project, we also participated in the microproject request for proposals and received funds to invest in the purchase of equipment for our production unit”,** says Josefa.



Institutions involved

Kairós Institute
Cabra Institute



“Before, I just lay at home all day. As for the work team, sometimes you arrive sad and start talking, it distracts your mind and the day is short to do everything we need to do. We wanted it to be every day.”

Josefa Josenilda Coelho,
craftswoman from Córrego do Feijão.



Maria Camilo and Josefa (right), from the Aromas da Serra group, produce incense during the project workshop

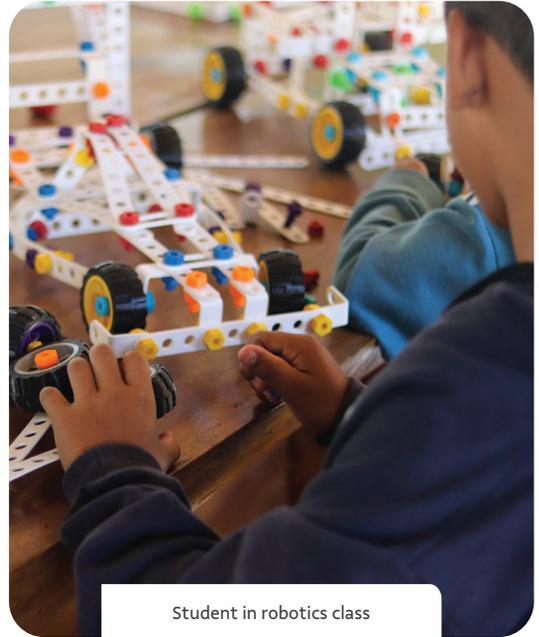
Hands-on!

Experience workshops

Free courses in the areas of programming, robotics, 3D modeling, and Internet of Things were held free of charge for children and youngsters from Betim, aged 7 to 17, between August and December this year through the project **Galera Mão na Massa**.

More than 160 participants from the Colônia Santa Isabel and Citrolândia neighborhoods learned to model and print in 3D, create applications that solve everyday problems and fun robots that interact with the environment through sensors and sustainable virtual reality glasses.

Through a methodology based on experience, the workshops used technology to address topics such as social empowerment, entrepreneurship, science and technology, sustainability and regeneration. Throughout the year, the project also visited Nova Lima (Macacos) and Itabirito.



Student in robotics class

Photo: Vale Archives



Institution involved

Ecocreator



More than 160 children and youngsters participated in maker education workshops in Betim

Photo: Vale Archives

Psychosocial support

Family Referral Program

Since 2019, families directly impacted by the dam breach have received psychosocial assistance, support to overcome the impacts experienced, to restore their autonomy and reframe their means and ways of life through the Family Referral Program.

Monitoring takes place through active and empathetic listening, based on quality and professional ethics, focusing on the needs of each of the more than a thousand families that have already joined the program. Services are provided systematically and continuously by specialized professionals.



1.1 thousand

families joined the program



95%

of completed monitoring



+3.5 thousand

people assisted



+160 thousand

services



Indemnities

So far, Vale has signed more than 6,800 indemnity agreements, including civil and labor, involving more than 13,400 people. At least one family member of each employee, own or outsourced, who died in the B1 dam breach, has already entered into an indemnity agreement with the company. This reaffirms Vale's commitment to quickly and definitively compensate all those who suffered any impact from the dam breach or territory evacuations.



+6.8 k

indemnity agreements, between civil and labor



13.4 k

people involved in the agreements so far



+BRL3.1 bn

in payments made

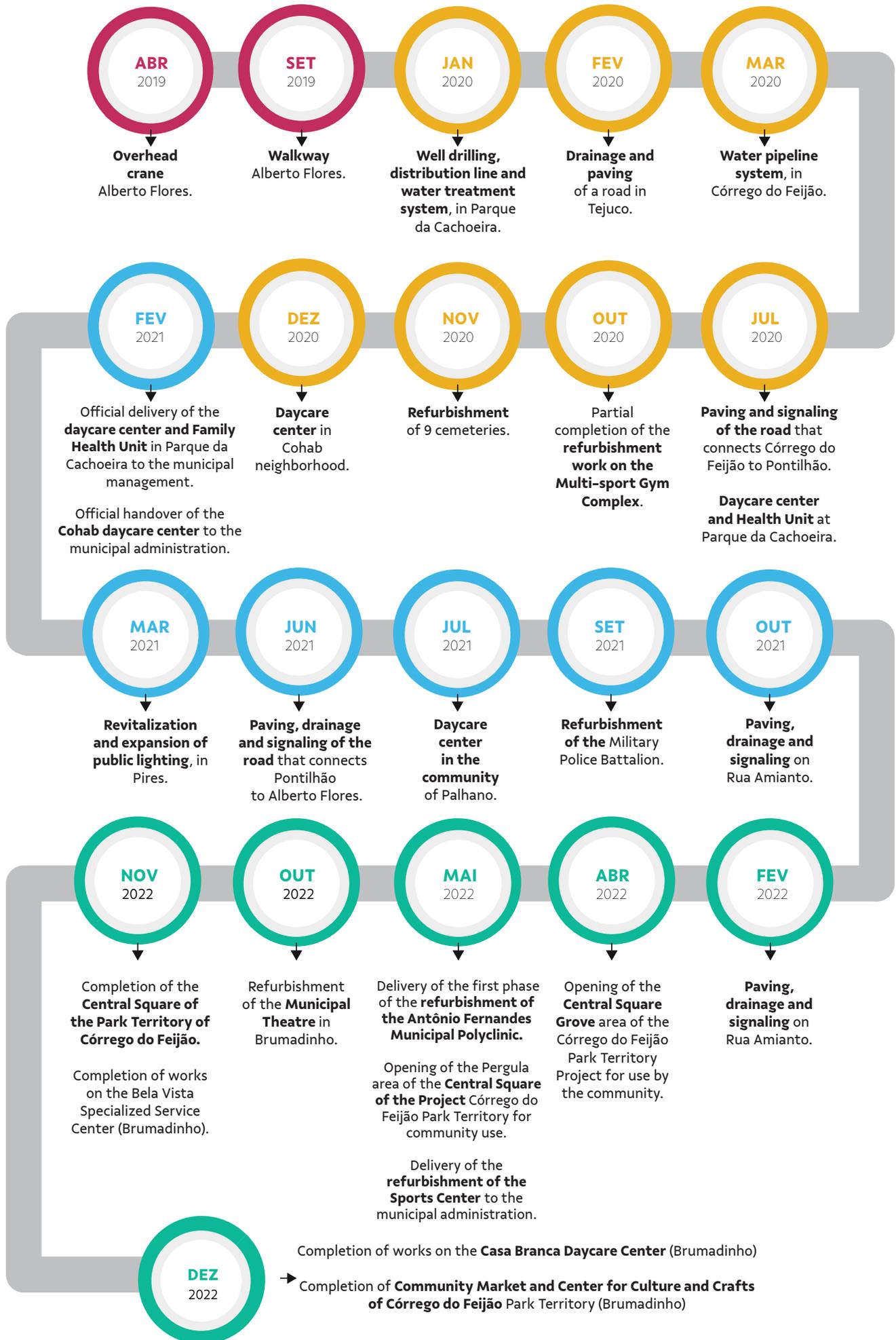
Comprehensive assistance

Our company understands that, in addition to compensation, other actions are required to support the affected families, in order to resume their routine and plan their future lives. Through the **Comprehensive Assistance Program for the Affected Parties (PAIA)** assistance has been offered to more than **4,900 people** to date.

The program continues to offer consultancy service on what the indemnified person needs: support from financial educators to plan and organize finances, support for the purchase of real estate, for the resumption of productive activities and psychosocial assistance.

Social and infrastructure works

Vale has been carrying out social and infrastructure works as part of the process to offset the impacts of the B1 dam breach. The works are defined based on active listening to communities and partnerships with the Government, with a focus on improving the quality of life and collective well-being, seeking to prioritize the hiring of local workforce.



Construction works in progress

See how the works for new public spaces and improvements in urban infrastructure are progressing:

Brumadinho

Sewage Treatment System
Pires
..... **In progress** **85%**

Córrego do Feijão
Park Territory
..... **In progress**
• Soccer field **5%**

Mário Campos

Refurbishment of Lagoa Square

The refurbishment of Lagoa Square is still underway with the construction of the playground, the gym and the water fountain, and the revitalization of the sidewalks and landscaping. The pergola and bike rack have already been completed. The existing bandstand and walkway were completely demolished and their reconstruction is also in progress. The expectation is to complete the works in February 2023.



Photo: Video Delivery

Completed works

Brumadinho

Casa Branca Daycare Center

Rooms: two day care rooms and four kindergarten rooms, with area for sunbathing (solarium) and sanitary facilities.

Shared areas: covered patio, outdoor playground, dining room and restrooms (including those adjusted for people with special needs).

Service areas: kitchen, breast pump room, laundry, staff changing room.

Administrative areas: teachers' lounge, secretariat, reception and board.

Service capacity: 105 children.



Casa Branca Daycare Center

Photo: Video Delivery



Outdoor playground

Photo: Video Delivery



Specialized Service Center – Bela Vista

Photo: Video Delivery

Bela Vista Specialized Service Center

Rooms: two day care rooms and four kindergarten rooms, with area for sunbathing (solarium) and sanitary facilities.

Shared areas: covered patio, outdoor playground, dining room and restrooms (including those adjusted for people with special needs).

Service areas: kitchen, breast pump room, laundry, staff changing room.

Administrative areas: teachers' lounge, secretariat, reception and board.

Service capacity: 102 children.



Outdoor playground



Classroom



Nursery



Kitchen

* **Note:** The delivery process for the new structures for the municipal management of Brumadinho is in progress.

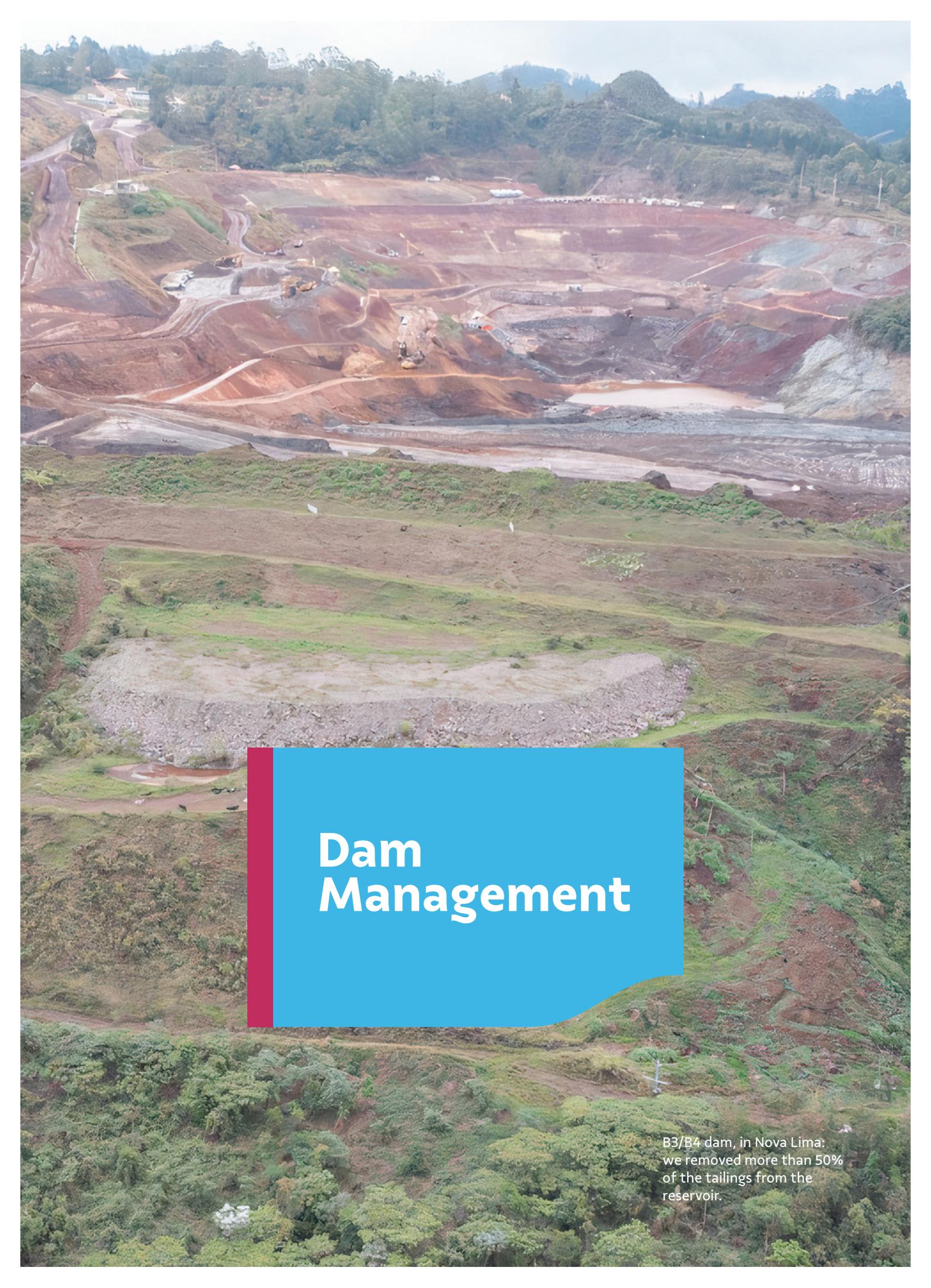
Revitalization of the Municipal Theatre



Revitalization of the Municipal Theatre

The residents of Brumadinho received, in November, the revitalized **Municipal Theatre** of the city. With the conclusion of the works, the population will have at their disposal a theatre with capacity for 510 people. Refurbishments were carried out on the floors, acoustic lining, lighting, replacement and automation of the curtain system and installation of audio, video and air conditioning systems.

The initiative is part of the last stage of the Agreement entered into in 2019 between Vale and the city government, aiming at the restructuring the Sports Center as compensation for the dam breach of the B1 dam, in Córrego do Feijão. The management of the space is the responsibility of the city government.



Dam Management

B3/B4 dam, in Nova Lima:
we removed more than 50%
of the tailings from the
reservoir.

De-characterization of upstream dams

Since the collapse in Brumadinho, Vale has evolved in the management and safety of its dams. In addition to being a legal obligation, the elimination of upstream structures is a commitment we assumed with society.

30 structures

27 Minas Gerais
3 Para

12 completed

9 Minas Gerais
3 Para

18 to complete

in the next few years

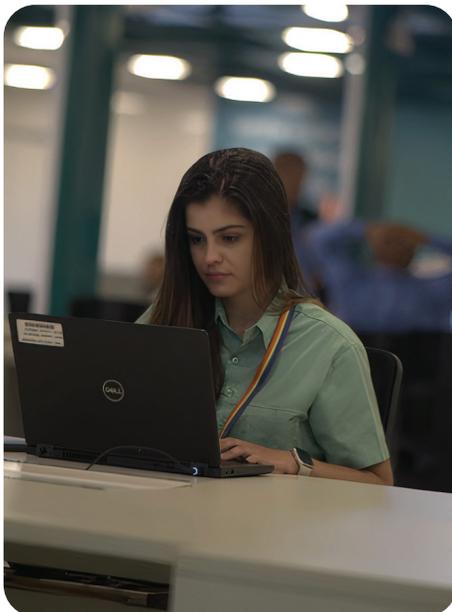


Photo: Miguel Santos



“Decharacterizing a dam is a complex process and our job is to think about how to carry out the project in a safe manner for those working on the construction work, for the environment and for the communities.”

Larissa Rezende, engineer at Vale's Dam De-characterization Department.



Learn more about the program and follow the construction schedule at vale.com/descaracterização or in the QR Code on the side.





In 2022, we concluded the works of elimination of five structures built by the upstream method in Minas Gerais:

- Baixo João Pereira dam*, at Fábrica Mine, in Congonhas
- Auxiliary dike of dam 5, at the Águas Claras Mine, in Nova Lima,
- Dikes 3 and 4 in the Pontal System, at Cauê Mine and the
- Ipoema Dam, at Mina do Meio, these last three structures in Itabira (MG).

60% OF OUR UPSTREAM DAMS WILL BE REMOVED BY 2025 AND 100% BY 2035.

The structures with a longer timeframe are those with higher risk, more complex and involving a larger volume of tailings.

*Last July, the upstream raising works and the starter dam of the Baixo João Pereira dam were removed.

In the press

Nova Lima e Itabira se livram de três barragens a montante

Minas **Passagens**

Nova Lima e Itabira estão livres de mais três barragens antigas construídas pelo método mais inseguro de fabricação a montante (quando a estrutura cresce sobre o próprio depósito de rejeitos ou sedimentos). O anúncio da descharacterização das barragens foi feito pela mineradora Vale, que completou o cronograma de fechamento desse tipo de estrutura em suas minas próximas para este ano. Foram os rios e os barramentos em Itabira (Região Central).

Em total, a mineradora chegou a 12 barragens eliminadas desde 2019, o que representa 80% das 30 estruturas incluídas no programa de descharacterização. O método a montante, hoje considerado inseguro, é o mesmo das barragens que se romperam em Mariana (2015) e Brumadinho (2019), matando 267 pessoas.

As atividades de engenharia e obras já estão em andamento em todas as estruturas do Programa de Descharacterização de Barragens construídas pelo método a montante. A estrutura deste tipo já eliminada recentemente em Minas Gerais (Barragem 08, Dique Bloco 6, Barragem Ferranópolis, Diques 3, 4 e 5, Barragem Pontal, Dique Auxiliar de

Dique 3 do Sistema Pontal é uma das estruturas que a Vale descharacteriza em Itabira: no total, 12 barragens a montante foram eliminadas pela empresa no país desde 2019.

reservatório e é disposto em área próxima à estrutura, conforme autorização prévia dos órgãos competentes. Durante as obras foram gerados cerca de 122 empregos, a maioria para moradores da região.

O Dique 3, que já estava parcialmente erodido, recebeu mais apoios de rejeitos, também não tem mais a função de reter rejeitos. O material (cerca de 900 mil m³) foi movimentado dentro do próprio Sistema Pontal. Cerca de 800 trabalhadores, entre diretos e terceirizados, sendo aproximadamente a metade do total de obra local de Itabira, atuaram nas referidas atividades.

Com a conclusão das obras de descharacterização, as Barragem Ipoema e no Dique 3 do Sistema Pontal, que ainda recebem obras complementares, como a recuperação da área e drenagem, a Vale eliminou metade das 30 estruturas construídas pelo método a montante da empresa em Itabira. As estruturas de disposição de rejeitos da empresa no município são monitoradas permanentemente pelo Centro de Monitoramento Geotécnico (CMG) da empresa.



Do you want to know what actions we took to reduce the risks and impacts of the works? Access the QRCode and watch the videos in the series we created on de-characterization.



To learn how to eliminate upstream dams, watch the following video:



Vale Answers



What is a decharacterized structure? It is a structure that no longer represents a risk to the community and the environment, after being subjected to works that eliminate its function of retaining waste, water or sediment.

Our program in Minas Gerais



Do you want to know more about the process for decharacterizing a structure? Access the QRCode and watch the video below.

1- Itabira/ Piracicaba River/ Santa Bárbara

- Dike 2 – Pontal ✓
- Dike 3 – Pontal ✓
- Dike 4 – Pontal ✓
- Dike 5 – Pontal ✓
- Minervino Dike – Pontal ↗
- (CJ2) Minervino Containment ✓
- D. Cordão Nova Vista – Pontal ↗
- Ipoema ✓
- Dike 1A – Conceição ✓
- Dike 1B – Conceição ✓
- Rio do Peixe Dike. ✓
- ED Vale das Cobras ✓
- ED Monjolo ✓

2- Nova Lima

- Vargem Grande ✓
- Fernandinho ✓
- 8B ✓
- B3/ B4 ↗
- B5 Auxiliary Dike. ✓

3- Barão de Cocais

- Sul Superior ↗

4- Congonhas

- Baixo João Pereira ✓

5- Ouro Preto/ Mariana/ Itabirito

- Group ↗
- Forquilha I ↗
- Forquilha II ↗
- Forquilha III ↗
- IX Area ✓
- Doutor ✓
- Xingu ✓
- Campo Grande ✓

↗ Containment structure completed

✓ De-characterization completed

Itabira

Dike 3 - Pontal

Dike 3 of the Pontal System, at Cauê Mine, which was already shut down and no longer received tailings, also no longer has the function of retaining tailings. The works to de-characterize the structure were completed September last. The material (approximately 900,000 m³) was handled within the Pontal System itself.



Photo: Video Delivery

Ipoema

The Ipoema dam, located in Mina do Meio, in Itabira (MG), closed in 2019. With the de-characterization process, 48,000 m³ of sediments were completely removed from the reservoir and disposed of in an area close to the structure, pursuant to prior authorization from competent agencies. The works were completed in September of this year.



Photo: Video Delivery

With the completion of the de-characterization works at the Ipoema Dam and Dike 3 of the Pontal System, which will still receive additional works, such as revegetation of the area and drainage, **Vale eliminated half of the ten structures of the company built using the upstream method in Itabira.** The company's tailings disposal structures in Itabira are permanently monitored by the company's Geotechnical Monitoring Center (CMG).

Congonhas

Baixo João Pereira

The upstream dam Baixo João Pereira was eliminated in July last.



Photo: Video Delivery

Barão de Cocais

Sul Superior

The works to eliminate the Sul Superior dam, at the Gongo Soco Mine, were resumed in May this year, with the opening of channels for drainage. The work is performed using unmanned, remotely controlled equipment. The de-characterization activities were temporarily suspended, in November 2021, for the conclusion of the technical studies on vibration levels and restarted after the evaluation of the independent technical audits, which accompany the dam elimination process.



Photo: Video Delivery

Ouro Preto/ Mariana/ Itabirito

Forquilha III

At the Forquilhas III dam, at Fábrica Mine, we are in the engineering development phase to determine the best way to de-characterize the structure. We also finished the implementation of a special access system, the Lift Line Spider, so that teams can safely perform essential services at the dam.



Photo: Video Delivery

Doutor

The rehabilitation work on the embankments (slopes) along the spillway of the Doutor dam, at the Timbopeba Mine, continues. The works began in April and involve reducing the slope of the embankments and installing rainwater drainage systems. The expectation is to complete the rehabilitation of the entire area by 2023. The damaged section of the spillway is also being replaced with concrete and other services, such as construction of the jobsite, installation of additional instruments and sediment containment barriers. Moreover, works to de-characterize the structure began in September, with reshaping works in the reservoir (regrade).



Photo: Video Delivery

Nova Lima

Vargem Grande

At the Vargem Grande dam, we have already started removing tailings from one of the areas of the dam where the material is not entrained in the event of a structure failure. There is no increased risk at this stage of the works. Work is also in progress to interconnect the deviation built on the BR-356, which will ensure the safety of people traveling on the highway, when the process of de-characterizing the Vargem Grande dam advances, starting next year.

B3/B4

We have already removed more than 50% of the tailings from the B3/B4 reservoir. Emptying the dam is the main stage of the work to eliminate the structure. The activity is carried out by unmanned equipment (trucks, excavators and tractors) that are remotely operated from a center, installed in Belo Horizonte, approximately 15 km from the dam.

B5 Auxiliary Dike

The de-characterization of the auxiliary dike of dam 5, at the Águas Claras Mine, in Nova Lima, which received no tailings since 2000, was completed in September of this year. In order to perform the works on the B5 Auxiliary Dike, a structure was built preventively on the dam to reinforce safety for the structure during the de-characterization process.



Photo: Video Delivery



Photo: Video Delivery



Photo: Arthur Ribeiro



Downstream containment structures

Increased safety for communities and the environment

In order to minimize the damage caused by a possible dam breach during the de-characterization works, Vale built downstream containment structures for some of the upstream dams that will be eliminated and that represent a higher degree of risk.

Improvements are made to the structure in Macacos

In June, we started work to expand the flow capacity of the containment structure built for the B3/B4 dam, in Macacos. We are building three tunnels to avoid the volume of water accumulated in the structure during periods of heavy rain, such as those that occurred in January of this year. The work is expected to be completed in December.



Vale Answers

What is a Downstream Containment Structure (ECJ)?

It is a large structure implemented below (downstream) dams or dikes to retain tailings in an emergency and; therefore, reduce impacts on the community and the environment. It can be built on concrete, stone or metal pipes. We have these structures already in place for the Sul Superior dam (Barão de Cocais), B3/B4 (Macacos, in Nova Lima), the Minervino and Cordão Nova Vista dams of the Pontal System (Itabira) and for the Forquilhas and Group dams (between Ouro Preto and Itabirito).



Three tunnels were excavated in the containment structure.

Pontal System will receive second containment structure

Vale is preparing to start the second phase of the process of eliminating the structures built using the method upstream of the Pontal System, in the Itabira Complex, in Itabira–MG, which includes the construction of a containment, in the Nova Vista and Bela Vista districts, which will help to increase people's safety during the de-characterization works of the Minervino and Cordão Nova Vista dikes. The entire study process on the new structure is being monitored by an independent technical audit from the Prosecution Office. During the first phase of the Program, still in progress, a first containment was implemented downstream of Coqueirinhos Pond, in the company's area. The work was completed in June last.



Vale Answers

Will there be reallocation of people for the construction of the new structure?

Partial results of studies still under development point to a possible need to relocate families and remove properties. This study has as a technical criterion the layout defined for the construction of the second containment structure. The process is being monitored by the Public Defender's Office of Minas Gerais and by an independent technical audit from the Prosecution Office.



“ECJ Coqueirinho was built with metallic piles, nailed using technology that generates less vibration and noise, thus minimizing impacts on nearby communities”.

Jaqueline Custodio,

Performance Management Analyst at Vale,
in front of the Coqueirinho containment structure.



Photo: Miguel Santos



Want to know more about containment structures?

Access the QRCode and watch the video.

Innovation and technology

Ensuring the safety of people in the community and of our employees and taking care of the environment. With these objectives in mind, we seek whatever is of most modern in the world and invest in technology and innovation in carrying out the de-characterization works.

Lift Line

A pioneering system installed at the Forquilhas III dam provides safe access to employees throughout the dam and enables quick rescue in case of emergency. Similar to a cable car and inspired by the spider cameras used in football match broadcasts, the system encompasses an area equivalent to 25 soccer fields.



Photo: Video Delivery



To learn more about this unprecedented access system in the world, access the QRCode on the side and watch the video.



Photo: Video Delivery



“Working with a system that is unprecedented worldwide is, first of all, a learning experience. These are new security and risk management technologies that add positively to our routine.”

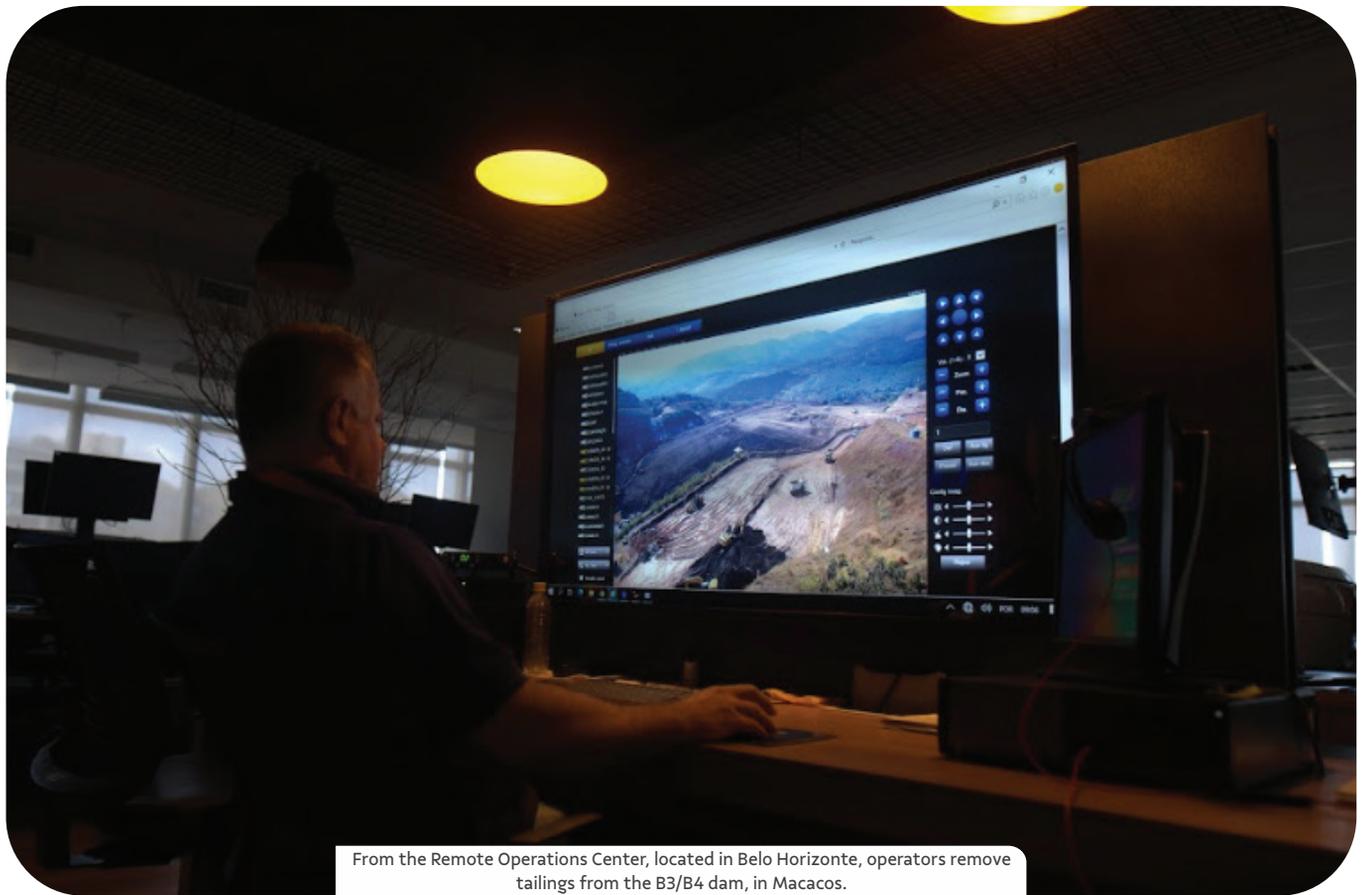
Nubio Gomes,
electrical engineer.

Remote Operation Center

In dams with a critical emergency level, works are carried out using remotely operated equipment (trucks, excavators and tractors). That is, the vehicles operate without the presence of a driver and are controlled by operators who work in a Remote Operations Center.



Learn more about the Remote Operations Center by watching the video on the QR Code.



From the Remote Operations Center, located in Belo Horizonte, operators remove tailings from the B3/B4 dam, in Macacos.

Photo: Miguel Santos

Remote drilling

Remote drilling operation to investigate the tailings and obtain geotechnical data from the structures.



Do you want to know more about these and other technologies used in dam de-characterization works?

Access the QRCode and watch the video:



Dams with emergency levels

Emergency situations in dams are those resulting from adverse events that affect the safety of the structure and that can cause damage to its integrity. Currently, in Minas Gerais, Vale has 23 structures, with different construction methods, in an emergency situation.

Level 1: 14 structures

Level 2: 7 structures

Level 3: 2 structures

Reduction of Emergency Levels



In 2022, 8 Vale dams received their Positive Stability Statement (DCE) and had their emergency level closed: The most recent, in November, was Porteirinha dam (Santa Bárbara). In October, the Sul Inferior (Barão de Cocais), B5/MAC (Nova Lima), Marés II (Belo Vale), Santana (Itabira) dams and Paracatu Dike (Catas Altas) also closed emergency level. In August, Borrachudo II dam (Itabira) had already received its safety certification and, previously, Elefante dam (Piracicaba River). All these structures are located in Minas Gerais.

The stability condition of the structures was attested by independent consultants, after many interventions.

The B5/MAC and Paracatu dams proved to be safer after actions related to the de-characterization works.

At the Santana dam, reinforcement works were developed that made it possible to obtain a DCE (Stability Condition Statement) and consequent elimination of the emergency level.

At the Marés II dam, new instruments were installed and geophysical interventions considered fundamental were implemented. At the Borrachudo II dam, structural improvements were implemented, including adjustment of the dam to extreme rainfall.

B3/B4 dam, located at Mar Azul Mine, in Nova Lima (MG) had its emergency level reduced from 3 to 2, in December. The level reduction occurred due to the progress of the dam de-characterization process, with the removal of more than 50% of the tailings from the reservoir, which led to the improvement of the stability conditions of the structure.



The B5 dam, at the Águas Claras Mine, in Nova Lima, had its emergency level removed after the de-characterization of its auxiliary dike, completed in September.

Photo: Video Delivery



B3/B4 dam, at Mar Azul Mine, in Macacos, Nova Lima (MG), had its emergency level reduced from 3 to 2 due to the progress of the process of de-characterization of the structure.

Photo: Video Delivery

 To learn more about how dam emergency levels are defined, access the QR Code. 

Dam monitoring

We monitor our dams 24 hours a day

It is essential that the removal of upstream dams takes place safely, thus preventing risks for the teams and the community. Therefore, we monitor our dams 24 hours a day.

The Geotechnical Monitoring Centers (CMG), located in Itabira and Nova Lima, have high-tech equipment, such as cameras, a robotic station (capable of detecting millimetre movements in the structure) and automated piezometers – a device that measures temperature, pressure and water volume. Data is collected in real time and the information is reviewed continuously by our professionals, allowing preventive and corrective measures to be taken quickly and safely.



Nova Lima Geotechnical Monitoring Center

Photo: Vale Archives

Virtual visits



Have you ever been curious to visit a dam and find out how these structures are monitored? Try it!

Scan the QR Code to watch or visit visiteavale.com.br





Evacuated Territories

Amanda Silveira, former student and current monitor of the Cozinha Escola Program, in Barão de Cocais

Photo: Camilla Lana

Itabirito



Forquilhas I and III dams, Fábrica mine (emergency level 2 and 3, respectively)



31 indemnity agreements were signed, involving 86 people



28 evacuated families, 16 of which have already returned to their homes (outside the ZAS - Self-Rescue Zone) or completed the compensation process (acquired new real estate properties)



In Itabirito, as of February, teachers from four municipal schools have participated in training provided by the Trilhas do Saber Aprendizagem Criativa program.

Construction Works at the Specialized Rehabilitation Center move forward

The construction works of the new Center Specialized in Restoration (CER) of the APAE (Association of Parents and Friends of Down Syndrome People) of Itabirito are in full swing. The new are will be fully adjusted to the needs of patients and should be ready in 2024.

The work is being developed by APAE, in an area donated by the City Government of Itabirito, and using a contribution in the amount of BRL 6.5 million made by Vale as part of the Compensation and Development Plan of Itabirito.



12%

In progress

Completion projection:

• August 2023



Institutions involved

Association of Parents and Friends of Down Syndrome People (APAE)
City Government of Itabirito

Health Cycle ends operations in Itabirito leaving a legacy of support for basic health

After training over 600 professionals and donating over 460 pieces of equipment in Itabirito, the Health Cycle program, which started in 2020, ended in November of this year.

The last workshops, held in September and October, qualified 58 people – including community health agents, nurses, nursing technicians and management representatives – in the topics of Comprehensive Health of the Black Population and Combined Prevention of HIV/AIDS and other STIs.

70 workshops **611** qualified professionals **462** Donated equipment for:

-  **Development of educational actions**
-  **Quality of the work environment**
-  **Support to the health professional in the diagnosis and assistance to the community**
-  **Strengthening health information systems and permanent communication/education**

100%

Concluded



Institution involved
City Government of Itabirito



In addition to the Health Cycle, other reparation initiatives contributed to the improvement of public health in Itabirito. Since 2019, seven ambulances in the city have been renovated and two new vehicles have been donated to serve the population.



Photo: Vale Archives



Photo: Vale Archives

Asphalt paving in São Gonçalo do Bação will facilitate access for residents

This work offsets the impacts caused during the construction of the Downstream Containment Structure (ECJ) of the Forquilhas and Group dams, at the Fábrica mine, and began in August. The action was the subject of public hearing in 2021 and more than 90% of residents opted for asphalt paving the road.

At this stage of the work, five kilometers are being asphalted, which, together with the section already paved earlier during the ECJ works, completes approximately seven kilometres paved. Improvements were also made to access, stabilization of slopes at risk of landslides, drainage, revegetation, installation of speed reducers and widening of some points on the road, reducing the risk of accidents.



28%

In progress

Completion projection:

• January 2023



Institution involved

City Government of Itabirito

Galera Mão na Massa

Galera Mão na Massa is a Vale project in partnership with the startup EcoCreator, which offers free courses in the areas of programming, robotics, 3D modeling and Internet of Things to children and adolescents aged 7 to 17 years.

The methodology applied by the teachers encourages the use of imagination to create. Approximately 400 young people from Itabirito participated in 21 workshops, on seven themes, which use simple programming techniques and everyday objects to learn about maker culture, technology and sustainability, in a simple and playful way.



Around 400 young people from Itabirito participated in 21 workshops on 7 different themes

Photo: Leo Lopes



“It was really cool and fun.
I learned how to model
objects in apps and how to
program drones.”

Lutty Guilherme,
participated in the workshops of the
Galera Mão na Massa project.



Institution involved
Ecocreator



Photo: Leo Lopes

Family creativity: parents of students participate in a workshop on innovative teaching methodology

Parents, guardians and students from four schools in Itabirito (Laura Queiroz Municipal School, Antonio Toledo Sobrinho Municipal School, Ribeirão do Eixo Municipal School and Padre Antonio Candido Municipal School) participated, on October 4th and 6th, in hands-on workshops on Trilhas do Saber Aprendizagem Criativa Project, developed by Vale in partnership with Faber-Castell. The initiative brings together a set of materials, actions and strategies with the purpose of stimulating and developing the creative potential of children and young people in a learning space that promotes creativity and personal expression.

The workshops contribute, in a teaching manner, to understanding the stages of the project, in addition to allowing them to follow and participate in the creative development of the children and share moments of creative learning.



“It's really cool and important to take advantage of children's creativity. We made a car together and it was really good.”

Rodrigo José Amorim Henriques participated in the workshop with his son Davi dos Santos Amorim, a student at the Ribeirão do Eixo Municipal School.

“I liked the workshop because my father went with us to use our creativity to make the toy. I really like the project because children can use their creativity to create many things. And on this day we did a really cool job”, added Davi.



Institutions involved

Faber Castell
City Government of Itabirito



Photo: Faber-Castell Archive

Horizonte Project

Partum is one of the 10 developments in Itabirito that participated in the Horizonte Project. The application aims at uniting companies that want to work with delivery to people who already work or want to work in this area. Always valuing the versatility, convenience and safety of workers and customers.

The Horizonte Project concluded its actions in November of this year with 35 entrepreneurs trained in Itabirito and 10 accelerated businesses. Approximately 5 businesses started earning money during the Horizonte Project and BRL 500,000.00 in seed capital were invested in businesses in the city.

Launched in March 2021 in Barão de Cocais, Santa Bárbara, Itabirito, Ouro Preto and Macacos (Nova Lima), the initiative helped local entrepreneurs to get their ideas off the ground and shape new ventures. They are businesses in the areas of tourism, gastronomy, handicrafts, agroecology, education, leisure and sports that have in common the fact that they explore the local potential of each of these territories.

100%

Concluded



Institution involved

Semente Negócios



“I think that if it weren't for Projeto Horizonte, we would no longer exist. When we started, we were lay people. As soon as we opened Partum, we received information about the project and we registered. Since then, we have walked together and with the help of the consultants we have been learning how to make decisions to make our business sustainable.”

Matheus Araujo,
entrepreneur from Partum, participated in
the Horizonte Project.



Photo: Creative Frame

Macacos



B3/B4 dam, Mar Azul mine
(Emergency level 3)



637 indemnity agreements
were signed, involving
1,230 people



114 families evacuated,
68 have already returned
to their homes (outside
the ZAS) or completed
the compensation process
(acquired new real estate
properties).



Creative Sewing: residents of Macacos learn different handicraft techniques

100%

Concluded

In eight classes, residents of Macacos practiced various techniques of creative sewing without a machine, painting on MDF and ceramics and customizing clothes. The handicraft course, taught by Wilma Cerqueira and developed in partnership with Vale and Associação Neemias, provided free material for participants to practice at home and start their journey in selling the pieces.

But the goal goes beyond extra income: demand was so great that the 15 vacancies were taken in three hours. "The initiative is especially important for mothers, grandmothers, women who are at home, anxious to distract their heads. People's desire to have something to do is more than evident", says Wilma.



“

“This is a project for the community. The purpose was to teach people that they have potential, encourage them and show that they can also do their projects. Valuing local labor and craftsmen. We have many wonderful craftsmen in Macacos, but there was a lack of incentive.”

Cassilene Ribeiro Oliveira.

“

“I found the course very interesting and rewarding to participate in. We learn new things. Me, my mother and my sister participated together. I am learning how to make it to resell it and have an extra income”.

Roberta da Silva Rodrigues.

“

“I participated in the course to acquire knowledge, to learn new things. We are in a tourist city and this type of activity helps to generate income”.

Mariana Coelho.

Residents and tourists honour the return of the Macacos fair

In September, the Traditional Macacos Fair took place with a program that included entertainment, typical foods and handicrafts on the main access road of Macacos, boosting tourism and the local economy.

The event was financially sponsored by Vale linked to the Commercial and Business Association of Macacos (ACE), the entity responsible for holding and organizing the fair. The amount collected from sales made by local entrepreneurs was reverted to the benefit of the Parish of São Sebastião de Águas Claras. ACE estimates that approximately 3,000 people showed up in the three-day festival.



Institution involved

Macacos Commercial and Business Association (ACE)



“The event was very positive, it demonstrates that Macacos has a tourist vocation and that the local economy can be fostered through the best we have: our residents, our natural beauties, gastronomy and art”.

Francisco Monteiro,
President of ACE Macacos.



Family creativity: parents of students from the Rubem Costa Lima School participate in a workshop on innovative teaching methodology

Parents, guardians and students from the Rubem Costa Lima Municipal School participated, on October 7, in a hands-on workshop on the Trilhas do Saber Aprendizagem Criativa Project, held at the school by Vale in partnership with Faber-Castell. The initiative brings together a set of materials, actions and strategies with the aim of stimulating and developing the creative potential of children and young people in a learning space that promotes creativity and personal expression.

The workshops contribute, in a didactic manner, to understanding the stages of the project, in addition to allowing parents to monitor and participate in the creative development of children and share moments of creative learning.



75%

In progress

Completion projection:

· December 2024



Institutions involved

Faber Castell

City Government of Nova Lima



“I come from the Macacos community and my children are students at the Rubem Costa Lima School. The Creative Learning project captivated me in many ways, as it works on the students' creativity, and adds a family moment with them, where you are able to sit down and slow down a little and experience this moment away from the internet and social media. I would be immensely happy with more projects of this level in our school and in our community. I am so very grateful to Vale and Faber Castell.”

Perla Antonieta Lima
attended the workshop with her children.

Horizonte Project

The Horizonte Project concluded its actions in November of this year with 26 entrepreneurs trained in Macacos and 10 accelerated businesses. Approximately 5 businesses started earning money during the Horizonte Project and BRL 500,000.00 in seed capital were invested in businesses in the district.

Launched in March 2021 in Barão de Cocais, Santa Bárbara, Itabirito, Ouro Preto and Macacos (Nova Lima), the initiative helped local entrepreneurs to get their ideas off the ground and shape new ventures. They are businesses in the areas of tourism, gastronomy, handicrafts, agroecology, education, leisure and sports that have in common the fact that they explore the local potential of each of these territories.

100%

Concluded



Institution involved
Semente Negócios



Visit: www.sementenegocios.com.br/projeto-horizonte

Barão de Cocais



Sul Superior dam,
Gongo Soco mine
(Level 3 emergency)



514 indemnity agreements
have already been signed in the
city, involving 1,560 people



157 families removed



Yasmim Reis, student of the
Preparation Program for the
Labor Market in Barão de
Cocais

Photo: Camilla Lana

Compensation and Development Plan

We remain committed to compensating and contributing to the future of Barão de Cocais through the Compensation and Development Plan. With investments in excess of BRL 70 million, the Plan includes projects in the areas of **education**, **health**, infrastructure and urbanism, **economic development**, sports, environment and watercourses, tourism, culture, public security and social assistance.

After a feasibility study, the actions were defined and we are currently in the execution phase of some and planning to implement others.

Since July, ten new projects have been approved:



Municipal Schools:

donation of financial resources for infrastructure improvements in educational institutions in the city.



Sports Complex:

transfer of funds for the expansion of 2 Irmãos Sports Complex.



Open University of Brazil (UAB): transfer of funds for the execution of building improvements at UAB.



ICU beds:

support for refurbishment and acquisition of equipment.



Olho Vivo:

support in the implementation of the security monitoring system.



Alfa Educar:

donation of material goods for the Alfa Educar program.



Sanitary Landfill:

financial support for the environmental licensing of the municipal sanitary landfill.



Multi-Sport Gym:

Transfer of funds for the refurbishment of the multi-sport gym in Barão de Cocais.



Entrance of the district:

provision of funds for the revitalization of the entrance to the city.



Construction of bridges:

support for the construction of bridges included in the urban mobility plan.

Economic Development

Entrepreneur Project

Approximately 70 companies from Barão de Cocais participate in the Entrepreneur Program, another Vale initiative within the Compensation and Development Plan. This is a cooperative partnership between commercial associations and the German government, which aims at promoting collective actions, improving management and the competitiveness of companies. In June, an agreement was entered into assuring the transfer of BRL 144,000 for the associations to carry out activities over a period of 18 months. Meetings segmented by sector are taking place to prepare an action plan focused on business development.



33%

In progress

Education

Cozinha Escola

The Cozinha Escola Program is being developed in Barão de Cocais, which qualifies and expands opportunities to generate income for local residents, in addition to valuing the region's traditional gastronomic products. The initiative, developed by Vale in partnership with the Joaquim Artes e Ofícios Institution and Barão de Cocais City Government Social Assistance Department, is part of the Compensation and Development Plan. By the end of February 2023, 30 activities will be offered, including courses and a show class, focusing on people in vulnerable situations, totalling over 600 job vacancies offered.



In progress



Amanda leading a Cozinha Escola class

Photo: Camilla Lana



“It was in order to improve myself that I signed up for the program and learned how to decorate and harmonize beautiful party cakes. How tasty and tasty it is to seek learning. Achieving a legacy means never stop working to make your dream come true”

Amanda Silveira,
former student and current supervisor of Cozinha Escola

Job Market Preparation Program

Responding to a demand from the community itself for courses related to professions, Vale, in partnership with Senai and the City Government of Barão de Cocais, implemented the Job Market Preparation Program (PPMT) in Barão de Cocais, ensuring up to 30% of the job vacancies were filled by residents of the Piteira, Socorro, Tabuleiro and Vila do Gongo communities. The initiative aims at providing professional qualification to facilitate the local community's access to employment and income opportunities generated in the territory, providing well-being, development and inclusion of the population. Since the beginning of the courses, approximately 440 students have participated in courses in the following segments: development of games and applications; excellence in service, quality tools, tools for productivity, negotiation, industrial mechanical maintenance, administration, IT for the internet and the environment. The request for proposals with the courses that will be offered for the next year is already being prepared.



Yasmim was a student of the Negotiation Techniques course and is now studying IT Techniques

Photo: Camilla Lana



In progress



“I took the Improvement in Negotiation Techniques course, an incredible opportunity where I was able to improve knowledge to develop in my work environment; and, thus be able to better address my clients and colleagues. In fact, I am already taking another one now, in Computer Technician for the Internet, which is also part of the Program. The PPMT is a unique opportunity for those who cannot afford to pay for a course but are interested in becoming professional and improving their knowledge to work in the job market.

Yasmin,
PPMT student in Barão de Cocais



The funds transferred by Vale will be used to renovate the GRVE headquarters

Photo: Caroline Generoso



“With this support, we are going to make the dream of having a permanent headquarters true, which has been going on for 13 years. Having our activities prioritized by the population is of great satisfaction for us, as it helps us to better assist residents and their demands. We are so thankful!”

Uelinton Silva,
CEO of GRVE

Health

Transfer to the Volunteer Rescue Group

The Voluntary Rescue and Emergencies Group (GRVE) of Barão de Cocais received from Vale, through a donation term, the amount of BRL 300,000 that will be used for the refurbishment of the group's new headquarters, in the old station building railway. The destination of the resource was identified as one of the priorities by the residents of the city government in a public consultation held in 2020. The initiative forms part of the health front of the Compensation and Development Plan.

Reparation and Compensation Plan for the communities of Socorro, Tabuleiro, Piteiras and Vila do Gongo

Territorial Development and Social Transformation Project

Residents of the ZAS da Barragem Sul Superior, in Barão de Cocais, are transforming their technical knowledge and vocations into businesses with the potential to stand out in the market and generate income. The group has received funds from the Territorial Development and Social Transformation Project – Barão de Cocais, an initiative by Vale in partnership with Raízes Desenvolvimento Sustentável, which intends to strengthen female entrepreneurship and gender equality through the creative economy. The project is part of Vale's Reparation and Compensation Plan for the communities of Socorro, Piteira, Tabuleiro and Vila do Gongo, in Barão de Cocais, and responds to a demand from the population itself for actions to support entrepreneurship and income generation. For its implementation, an active mapping was developed involving representatives of approximately 150 families from the ZAS. The study identified potential entrepreneurs and raised the offer of demands and possibilities of existing human capital.



Photo: Raízes Desenvolvimento Sustentável

Institutional strengthening and participatory rural production

The Territorial Development and Social Transformation Project also works to strengthen local governance. Through mentoring, the Community Development Association of Socorro, Tabuleiro and Piteira receives support to achieve its autonomy and build, in a participatory manner, a plan of activities of collective interest. On a third front of action, local rural producers have technical assistance for the resumption of production. The meetings focus on the planning of rural properties from the perspective of agroecology and sustainability. Topics such as crop cultivation and management techniques, innovation, commercialization and marketing are discussed.

Gastronomy Workshop

Play and learn cooking. This was the atmosphere of the gastronomy workshop, held in the second half of July, for children and adolescents from evacuated communities or from the Self-Rescue Zone (ZAS). Instructed by chef Euzi Nascimento, the participants – aged between 5 and 15 years old – had the opportunity to learn about health, healthy eating, food hygiene and safety in the kitchen environment. The workshop is an extra-curricular activity of the Professional Qualification program offered by Vale, also in partnership with the Institution Joaquim Artes e Ofícios, to residents of the communities of Socorro, Piteira, Tabuleiro and Vila do Gongo, which are part of the Self-Rescue Zone of the Sul Superior dam. The program, which integrates Vale's Reparation and Compensation Plan initiatives for these communities, also includes training in the areas of aesthetics, gardening, basic English, totalling 40 courses that were also extended to communities in André do Mato Dentro, Cruz dos Peixotos, Brumal and Barra Feliz.



Almira do Carmo, a former resident of Vila do Gongo, dedicates herself to her embroidery business.

“

“I had been thinking about professionalizing my business for a few years now. Now, with my new workspace and the support I am getting, I want to really dedicate myself to handcrafting. In a year, I hope my studio will be working at full throttle”.

Almira do Carmo,
former resident of Vila do Gongo.



Corridors and Routes Program

Serra do Caraça Territory (Barão de Cocais, Catas Altas and Santa Bárbara)

The Cultural and Natural Corridors and Routes Program is an initiative of the Vale Cultural Institute (ICV) that is being developed in Barão de Cocais, Catas Altas and Santa Bárbara. The initiative aims at contributing to the appreciation of culture, and cultural and natural heritage from the creation, implementation and strengthening of actions aimed at sustainable tourism, which, in turn, contribute to the integration of the productive and value chains of the sectors that make up the economy creative, stimulating socioeconomic development.

Photo: Ricardo Teles



56 institutions mapped



250 cultural and natural assets mapped and systematized



Offering training and professional qualification courses in culture and tourism



Partnership with municipal departments and other projects



Support for events in these locations



Sport Incentive Law

The communities of Barão de Cocais were presented with two projects aimed at the development of sport with transfers of funds from the Vale Foundation to organizations in the city government through the Sports Incentive Law (Law No. 11,438/06).



Futebol de Rua Project: providing socio-educational and sports activities with an exclusive methodology from the Futebol de Rua Institute



Avança na Escola e na Bola: offers of socio-educational activities and sports practice of judo conducted by Associação Argos



80 children and adolescents aged between **07 and 14 years old**



150 children and adolescents aged between **07 and 17 years**

Antônio Pereira



Doutor Dam,
Timbopeba mine
(Level 1 emergency)



132 indemnity
agreements
have already been signed in
the municipality, involving
376 people



184 families reallocated



Project Forming
Champions makes it
possible for teenagers
to practice sports in
Antônio Pereira

Photo: Camilla Lana

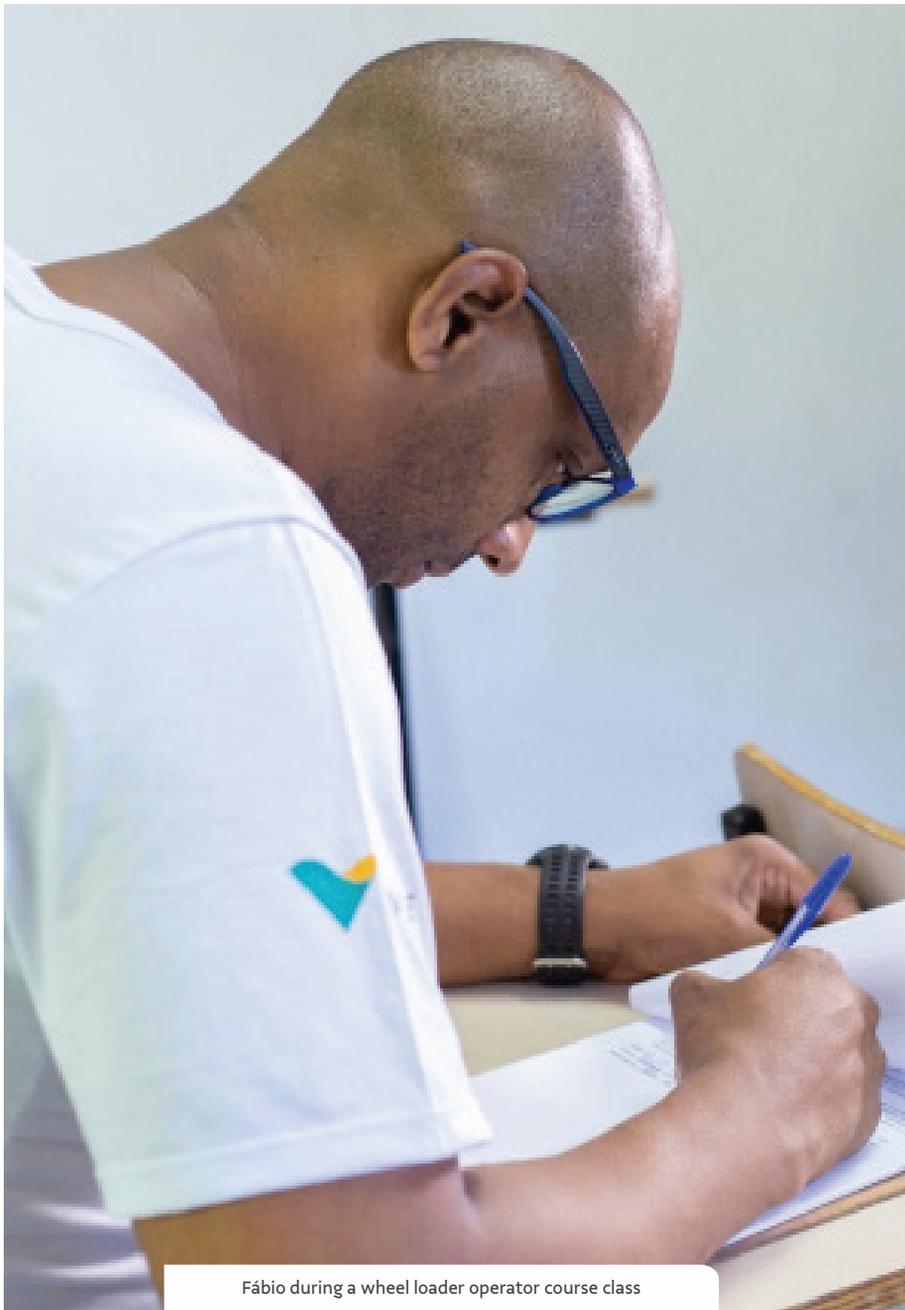
Compensation and Development Plan

After a proceeding that involved public hearing with residents and dozens of meetings of the Antônio Pereira Compensation and Development Plan committee, the group formed by representatives of civil society and Government reached the 30 priority actions for the district. The suggestions were grouped in the areas of infrastructure, health, economic development, tourism and culture, social assistance, sports and leisure, education, environment and watercourses, public safety and agriculture. As a result of the committee's work, the actions are now undergoing a feasibility study, a stage in which it will be reviewed whether it is possible to get the proposals off the paper, in technical and financial terms. In this phase of the Compensation and Development Plan, BRL 30 million will be invested. Another BRL 25 million has been invested in Antônio Pereira as of 2020, adding up to BRL 55 million in construction works and actions defined together with the community and the Government.

Education

Job Market Preparation Program

The Job Market Preparation Program (PPMT) is a Vale initiative that aims at providing professional qualification to facilitate the access of Antônio Pereira residents to employment and income opportunities generated in the territory, promoting well-being, development and inclusion of the local population. Senai is the institutional partner in charge of the execution, training and selection process of the Program. In this edition, 100 vacancies were offered for professional training courses, 84 of which were filled for courses for Administrative Assistant and Wheel Loader and Hydraulic Excavator Operators. There were not enough enrollments for the Improvement in Electricity course to form a class.



Fábio during a wheel loader operator course class



“What motivated me to take the course was the opportunity to learn new skills and be prepared for the job market. This initiative to offer qualification in this and other areas has brought about a new era of change for the community and new opportunities for socioeconomic development in the region.”

Fábio de Almeida Faria,
student on the wheel loader
operator course.

Horizonte Project

The Horizonte Project will conclude its activities in Antônio Pereira in December with fourteen trained entrepreneurs and five accelerated businesses, providing an average revenue increase of 7% in participating companies in the period between November 2021 and October 2022. There were months when it exceeded 200%. In the beginning only one business was generating income, and now we have three businesses generating income. During the acceleration, BRL 250,000.00 were invested in seed capital in the five participating businesses. Launched in March 2021 in Barão de Cocais, Santa Bárbara, Itabirito, Ouro Preto and Macacos (Nova Lima), the initiative supports the development of local entrepreneurs, focusing on positive socio-environmental impact. They are businesses in the areas of tourism, gastronomy, handicrafts, agroecology, education, leisure and sports that have in common the fact that they explore the local potential of each of these territories.



Photo: Camilla Lana



“For us, we learn and also teach, because we know how important Handicrafts are to our community. Today we know that the Horizonte Project provided us with only one seed and that this seed depends on us to bear fruit. Fruit that means to pass on the contents learned by the seed and also our embroidery. The company, Association and community, together, can turn the seed into fruit for a better future”.

Anna Maria Marques,
member of the Arte Mãos e Flores project,
a project encompassed by Horizonte.



“

"I believe that sport has aspects that can provide, in addition to tactical and technical knowledge, the emancipation and formation of critical subjects involved with society. Therefore, the presence of Training Champions project in Antônio Pereira's community, far beyond training athletes, is within the scope of training citizens, that is, the pedagogical aspect that involves the practice of sport, in this case handball, will teach the principles such as cooperation, socialization, respect for diversity and several other points that will benefit and influence the formation of these children as critical and active subjects in society."

Manuele Alexandrina Lima, handball teacher of the Training Champions project

Photo: Camilla Lana

Sports

Training Champions

Adolescents from Antônio Pereira and Vila Residencial Antônio Pereira are taking part in the Training Champions project, which offers volleyball and handball sports practice to local residents aged between 11 and 18 years. Coordinated by Fundação Aleijadinho and sponsored by Vale through the Sports Incentive Law (Law No. 11,438/06), the initiative involves approximately 120 people, including professionals and students. The project encourages inclusive sports practice, with guided and playful work, integrating the learning process with education workshops

Proximity to the community

Community visits and Lecture in schools

Representatives of the Operational Support Center for the Environment of the Prosecution Office of Minas Gerais (Caoma – MPMG) and the community of Antônio Pereira participated on September 29th in a technical visit to the Geotechnical Monitoring Center (CMG) located in Itabira (MG). On that occasion, they were able to learn more about how Vale's dams are monitored in Minas Gerais and also an update on the work schedule for the Doutor dam.

Another visit that took place in October was made by students from the Antônio Pereira State School, who had the opportunity to make a technical visit to the Doutor Dam and learn more about the de-characterization work.

Lecture in schools

On September 28th, a team made up by Vale professionals who work in the Antônio Pereira region, gave a lecture at the Desembargador Horácio de Andrade State School, in Ouro Preto (MG), for students of a technical course in Occupational Safety. On the occasion, the company's employees brought information about the work carried out in the works of de-characterization of dams in order to foster knowledge on the activities carried out in the Doutor structure and demystify the theme of de-characterization itself. The following topics were addressed during the lecture: PAEBM, geotechnics, sustainability, works (de-characterization and infrastructure in the community), occupational safety, reparation and relationship with the community.



Participants were able to learn more about Vale's dam monitoring

Culture

Cinema in Town

Outdoor cinema sessions, musical performances, circus interventions, magic and square dance shows were part of the Cinema in Town program, a free event that changed Antônio Pereira into a true cultural stage. Held on July 22nd and 23rd, on Rua Grande, in front of Igreja Queimada, the show brought entertainment and art to the population with the sponsorship of Vale Cultural Institute, idealization and realization of Universo Produção and support from the government.



The initiative brought entertainment to the residents of Antônio Pereira

Photo: Disclosure Universe Produção



“You look into the eyes of every child and every adult who has never had access to a movie theatre, to a gigantic screen like this one, it is exciting, it is great to see people having fun”.

Marlete Deusdete,
coordinator of Antonio Pereira's
Administrative Center

Festival of Popular Culture

With activities held on September 25th in Antônio Pereira, the Festival of Popular Culture, provided by Agentz Produções Culturais and the Center for Exchange and Cultural Reference (CIRC), was sponsored by the Vale Cultural Institute, and provided to residents of the region a schedule full of cultural diversity with the presentation of the Trampilim circus-theatre group.



Infrastructure works

Repair of roads in Antônio Pereira

The repair of the roads that were used for vehicles of the de-characterization works of the Doutor dam was a commitment signed with the community of Antônio Pereira, in 2021, and continues to advance. Check out the timeframe and next steps.



“Terezinha Pessoa was a dirt street. With this work, we will have less problems with dust and mud, improving our quality of life”.

Adriano Madaleno, resident of Antônio Pereira.

2021



Recovery of blocks on Rua Grande.



Repaving of Lapa Queimada Street and Rua das Flores.



Photo: Video Delivery

2022



Recovery of block paving on Rua Grande that were damaged by the rain in January.



Installation of signs and paintings on Grande, Flores and Lapa Queimada streets. Start of paving on Terezinha Pessoa street.



Beginning of the public lighting work on Terezinha Pessoa street.



Completion of lighting on Terezinha Pessoa street.



Completion of block paving.



Photo: Camilla Lana

Editorial Staff

Half-yearly report of actions of reparation and development of Vale in the areas affected by the collapse of the B1 dam and in evacuated territories.

Date: December 2022

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Service Channels

Official channels

Use these channels to clarify doubts and stay tuned about reparation actions:

www.vale.com/reparacao

www.vale.com/decharacterizacao

0800 031 0831 – Reparation Service Center: for service related to reparation and compensation processes, caused by the dam breach of the Brumadinho (MG), evacuations and preventive reallocations carried out in other territories.

0800 039 6010 – Vale's General Service Center: information on operations and dams, including the Emergency Action Plan Training for Mining Dams (PAEBM).

Offices – Indemnities

Brumadinho

(31) 99600-7242

(31) 99648-6483

Belo Horizonte, Betim and Macacos

(31) 99983-9076

Barão de Cocais

(31) 99944-6773

Antonio Pereira

(31) 99830-5886



Learn more
about the
Reparation.

