

FERTILIZANTES



HERINGER

# INNOVATION AND TECHNOLOGY

Specialty products provide  
higher-yielding crops

**2016 Sustainability Report**



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# ABOUT THE REPORT

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Heringer's economic, social and environmental performance is presented in a systemic manner, in line with the Sustainable Development Goals (SDG). This report describes the actions developed and results achieved in 2016, which are aligned with ethics and innovation.

The "Core" Option chosen complies with the G4 Global Reporting Initiative (GRI) guidelines and includes the material aspects defined by the company. For information on the data herein or to send any questions or suggestions, readers can visit the website [www.heringer.com.br](http://www.heringer.com.br) or contact us by email at [ri@heringer.com.br](mailto:ri@heringer.com.br).

Heringer's performance is presented in line with the SDG. In order to ensure consistency, each indicator reported was evaluated by the Sustainability Committee and the Board of Executive Officers

## Material aspects identified by stakeholders

The process adopted to define the content and limits of material aspects included a preliminary analysis by the Sustainability Committee, interviews with top executives, evaluation by an external consulting firm of previous reports and validation of the materiality conducted in 2014. In order to ensure consistency, each indicator reported was evaluated by the Sustainability Committee and the Board of Executive Officers.

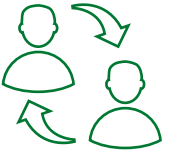




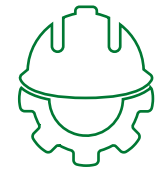

According to the G4 GRI guidelines, the company must consider the impacts of each topic adopted in the materiality process and examine the occurrence of said impacts inside and outside the organization. That assessment helps Heringer monitor its operating units regarding the relevance to the fertilizer industry and the progress of management processes. The goal is to define the areas which require greater attention internally and those which require external strategic actions.





# MATERIALITY MATRIX

**Key:**  
 IL: internal limits  
 EL: external limits

|  |  |
|--|--|
|  <p><b>Communication on the business and its impacts</b><br/>           IL: internal stakeholders<br/>           EL: suppliers, customers, society in general and the environment</p>   |  <p><b>Development of technologies for enhanced product and process efficiency</b><br/>           IL: internal stakeholders<br/>           EL: suppliers, customers, society in general and the environment</p> |
|  <p><b>Role in the community</b><br/>           EL: society in general</p>  |  <p><b>Effluent management</b><br/>           EL: society in general and the environment</p>  |
|  <p><b>Product health and safety</b><br/>           IL: internal stakeholders<br/>           EL: suppliers, customers, society in general and the environment</p>   |  <p><b>Safety at production sites and plants</b><br/>           IL: internal stakeholders<br/>           EL: society in general and the environment</p>   |
| <p>Under the coordination of the Sustainability Committee, the preparation of Sustainability Reports involves executive officers, analysts, managers and area coordinators, as well as the CEO, thus improving and giving more consistency to the indicators and practices mentioned. This report covers the year of 2016.</p> |  <p><b>Proper disposal of packaging</b><br/>           EL: customers, society in general and the environment</p>  |

# MESSAGE FROM THE CEO

|G4-1|

2016 was a positive year for the Brazilian fertilizer market, with deliveries increasing by 12.9%, to record 34.1 million tonnes. Despite the contracting and adverse macroeconomic scenario, Heringer recorded good performance in the period. Total sales reduced, but deliveries of specialty products were record, totaling 2.1 million tonnes, 11.4% more than in 2015.

Such performance can also be perceived in our financial results. EBITDA grew 25% over the previous year, to R\$249.4 million. Net income, in turn, amounted to R\$43.2 million, a hefty increase compared to 2015 and the highest figure since 2011.

Our competitive advantages and soundness are fruit of Heringer's strategic positioning, which aims to develop and offer farmers the best plant nutrition solutions. We maintain an area focused on research and development to create specialty fertilizers, a product line which offers agricultural benefits, such as increased yield, improved final quality of products and, consequently, greater financial returns for producers.

Since we understand that the excellence of our employees is essential to the success of the business, we have highly qualified and specialized professionals, including technicians and agronomists. We value professional growth, so we invest in internship and trainee programs, training and courses, so that employees can boost their chances of development in the company. We are proud to say that 96% of our management is composed of former trainees, highlighting our concern about maintaining a structured career plan.

In order to ensure that all employees follow our principles, we created the Code of Conduct, which gathers guidelines and our positioning on how to act in corporate responsibility-related topics. In 2016, we began to formalize the Compliance Program to ensure even more transparency in our practices.

Due to our concern about sustainability, we improved our actions in 2016. All units were audited by our team to create a database of information on environmental practices and processes. In addition, we took a big step towards purchasing electricity from clean sources and we expect that, in 2017, all units will have incentivized energy supply.

In 2017, we will also focus on offering a broad product portfolio, helping our customers continue achieving the best results. The Brazilian fertilizer market is expected to register yet another record, expanding by approximately 1%. We, at Heringer, will strive to share some of this growth, generating value for our shareholders and contributing to the development of Brazilian agriculture.

**Dalton Carlos Heringer**  
Chief Executive Officer

Deliveries of specialty products were record, totaling 2.1 million tonnes, 11.4% more than in 2015

# 2016 HIGHLIGHTS

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**4.3 million**

tonnes of fertilizer  
delivered to 40,000 clients

EBITDA of  
**R\$249.6 million**

**2.1 million**

tonnes, record deliveries  
of specialty products

Net revenue of  
**R\$5.2 billion**

Net income of  
**R\$43.2 million**



# PROFILE

- 🌿 The Company
- 🌿 Mission, Vision and Values
- 🌿 Our Roots
- 🌿 Operations



## **THE COMPANY** |G4-3|

Being the only company in its sector listed on the Novo Mercado segment of the BM&FBovespa (current B3), Heringer is one of the pioneers in the production, sale and distribution of fertilizers in Brazil. With almost 50 years of existence, Heringer stands out by investing in research and technology and by offering its customers a broad portfolio of products developed with very high standards of quality. In line with its strategic planning, the company delivered record 2.1 million tonnes of specialty fertilizers in 2016.

Heringer stands out by investing in research and technology and by offering its customers a broad portfolio of products developed with very high standards of quality





# **MISSION, VISION AND VALUES**

|G4-56|

## **Mission**

To offer farmers the best plant nutrition solution, with excellent services and innovative quality products, thus meeting the expectations of our customers, shareholders and employees, and helping build an efficient, profitable and sustainable agriculture.

## **Vision**

To be recognized as the best plant nutrition company and a reference in disseminating the use of proper, effective agriculture technology.

## **Values**

- Respect for people
- Respect for and compliance with agreements
- Commitment to that which is true and fair
- Respect for current laws, cultures and customs
- Clear and honest communication
- Commitment to the environment
- Freedom with responsibility
- Innovation and creativity

Heringer's mission is to offer farmers the best plant nutrition solution, with excellent services and quality products

# OUR ROOTS

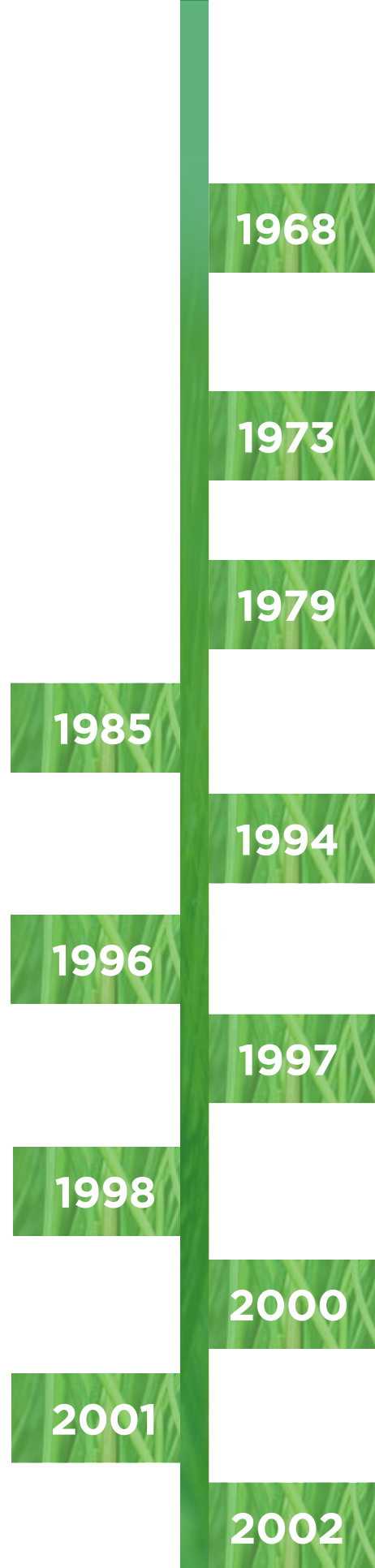
The company was established in 1968 by agronomist Dalton Dias Heringer, originating from a family with a long history of investment and participation in the Brazilian agricultural sector. Operations began in Manhuaçu, Minas Gerais State, where fertilizers were supplied to coffee producers. Since then, the company has worked focusing on developing products that leverage agricultural yield, helping its clients to be more profitable and efficient. See below the details of the nearly 50-year history of success.

Heringer builds a production unit in Paulínia, São Paulo State, enabling the company to serve the entire São Paulo State market.

The new unit in Manhuaçu, Minas Gerais State (more modern and with greater production capacity) goes into operation.

Construction of a production unit in the city of Três Corações, Minas Gerais State, which goes into operation to serve markets in the southern and western parts of the state.

The production unit in Camaçari, Bahia State, goes into operation to serve Bahia State and northern Minas Gerais State.



1968

## 1960s: Constitution of Heringer

Constitution of Fertilizantes Heringer as an individual company.

1973

## 1970s and 1980s: Consolidation of Heringer

Heringer is organized as a Brazilian limited liability company. Heringer leases facilities in Espírito Santo State, near the Port of Vitória, creating the opportunity to serve the states of Bahia and Rio de Janeiro.

1979

The unit in Viana, Espírito Santo State, is built. The company launches operations in São Paulo State.

1985

1994

## 1990s: Modernization of the business

Implementation of CEPEC (*Centro de Pesquisas Cafeeiras Eloy Carlos Heringer*, or Eloy Carlos Heringer Coffee Research Center), in Minas Gerais State.

1996

1997

Fertilizer production starts in Paranaguá, Paraná State.

1998

2000

## 2000s: Achievements

Operational start-up of the production unit in Uberaba, Minas Gerais State, serving our customers and expanding the company's opportunities to the entire Triângulo Mineiro region and Goiás State.

2001

2002

The production unit in Catalão, Goiás State, goes into operation and increases Heringer's market share in the Midwest of Brazil.

CEMAP (*Centro de Manejo e Adubação em Pastagens*, or Pasture Management and Fertilization Center) is created in Viana, Espírito Santo State.

2003

2004

The new production unit in Viana, Espírito Santo State, with higher production capacity, goes into operation.  
Heringer becomes a Corporation.  
AIG Capital Partners buys into the company, thus providing a capital increase.  
Heringer leases the production unit in Rondonópolis, Mato Grosso State, to expand operations in that state.  
CEAGRO (*Centro de Estudos do Agronegócio*, or *Center for Agribusiness Studies*) is established in Vila Velha, Espírito Santo State.

The production unit in Rosário do Catete, Sergipe State, is built.

2005

2006

The production unit in Paranaguá, Paraná State, goes into operation.

Heringer goes public and is listed on Novo Mercado, BM&FBovespa's (*Bolsa de Valores, Mercadorias & Futuros de São Paulo*, or Brazilian Securities, Commodities and Futures Exchange) top corporate governance listing segment.

2007

The units in Bebedouro and Ourinhos, both in São Paulo State, and Rio Brilhante, Mato Grosso do Sul State, go into operation. The units in Manhauçu and Três Corações, both in Minas Gerais State, are enlarged.  
The unit in Porto Alegre, Rio Grande do Sul State, is leased.

2008

The unit in Rio Verde, Goiás State, is acquired and Heringer's own plant in Catalão, Goiás State, is built.  
The single superphosphate (SSP) production unit in Paranaguá, Paraná State, is built.  
The Iguatama unit, in Minas Gerais State, goes into operation.

### 2010s: Innovation

Four fertilizer mixing units go into operation: Dourados, Mato Grosso do Sul State, Anápolis, Goiás State, São João do Manhuaçu, Minas Gerais State and Rio Grande, Rio Grande do Sul State.

2010

2012

The third-party unit in Patos de Minas, Minas Gerais State, goes into operation.  
The company Maxifertil Fertilizantes Ltda., in Porto Alegre, Rio Grande do Sul State, is acquired and merged.  
Establishment of the commercial office in Luís Eduardo Magalhães, Bahia State.

Heringer's own plants in Candeias, Bahia State, and Rio Grande, Rio Grande do Sul State, go into operation.  
The companies OCP and PCS become shareholders of Heringer.

2015

2016

Record deliveries of specialty products.  
Installation of the micronutrient dosers in industrial processes.  
Installation of weight recording systems in the industrial units.  
Automation of the industrial units.

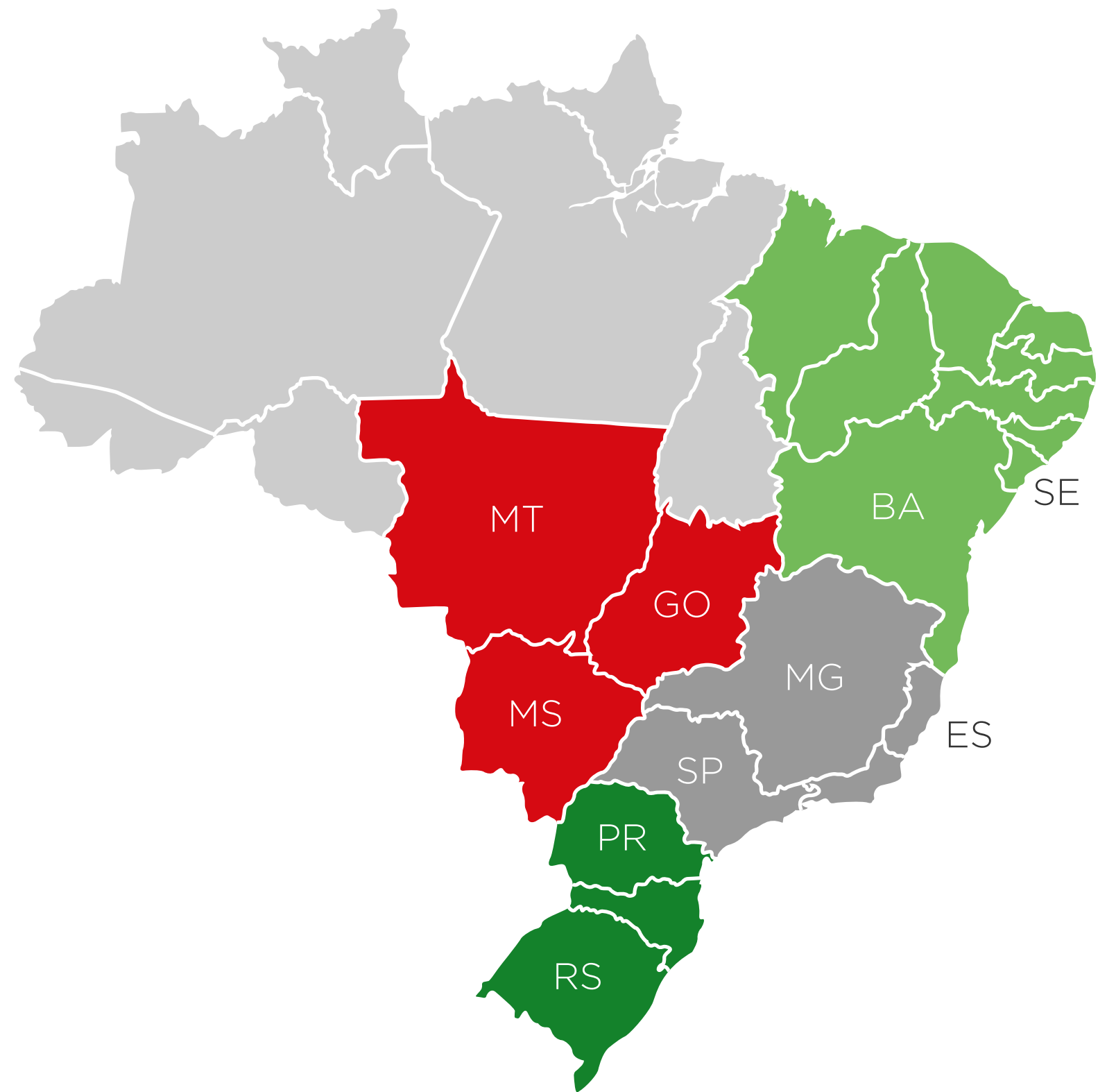
# OPERATIONS

|G4-4, G4-6, G4-8, G4-9, G4-13|

Heringer operates 21 mixing plants: 16 own plants and 5 leased/third-party units, and 2 commercial offices: Anápolis, Goiás State, and Luis Eduardo Magalhães, Bahia State. In 2016, the commercial office in Maringá, Paraná State, was closed, and 3 leased units - Anápolis (Goiás State), Camaçari (Bahia State) and Cubatão (São Paulo State) - stopped operating, in order to increase the efficiency of the company's processes. The production was transferred to Heringer's own plants in Catalão (Goiás State), Candeias (Bahia State) and Paulínia (São Paulo State), respectively.

The company's production units are established in strategic locations in ten Brazilian states in the Midwest, Northeast, Southeast and South regions. The locations have easy access to raw materials and favor the rapid distribution of our fertilizer production.

The company's production units are established in strategic locations in ten Brazilian states



## NORTHEAST

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### Bahia

Competitive advantage: western Bahia stands out in the national landscape as a major soybean producer. Heringer maintains a commercial office in the city of Luis Eduardo Magalhães, the largest agricultural hub of Bahia, a State with cotton, corn, beans and coffee production.

- Candeias
- Luís Eduardo Magalhães\*

### Sergipe

Competitive advantage: operation in the center of Sergipe, favoring deliveries to the states in the Northeast and North of Brazil.

- Rosário do Catete

## SOUTHEAST

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### Espírito Santo

Competitive advantage: operation in a location with easy access to the port of Vitória and the States of Bahia and Rio de Janeiro. Brazil's second largest coffee producer.

- Viana

### Minas Gerais

Competitive advantage: Brazil's largest coffee producer. It also stands out for its expressive production of beans, sugarcane and corn.

- Iguatama
- Manhuaçu
- Patos de Minas
- São João do Manhuaçu
- Três Corações
- Uberaba

### São Paulo

Competitive advantage: leader in the ranking of Brazil's agricultural production value. Operation in a location with easy access to ports and expedited production distribution.

- Bebedouro
- Ourinhos
- Paulínia
- Paulínia II

## MIDWEST

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### Goiás

Competitive advantage: Brazil's second largest sugarcane producer. The production of beans, corn and soybean has significantly increased.

- Anápolis\*
- Catalão
- Rio Verde

### Mato Grosso

Competitive advantage: second place in the ranking of Brazil's agricultural production value. The production of soybean and corn has significantly increased, with a large portion of land planted and use of cutting-edge technology.

- Rondonópolis I
- Rondonópolis II

### Mato Grosso do Sul

Competitive advantage: expanding sugarcane production area; the State's sugarcane plantations are the most productive in the country. It also stands out as a major corn producer.

- Dourados

## SOUTH

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### Paraná

Competitive advantage: operations also serving Santa Catarina State and with easy access to the port of Paranaguá, Brazil's largest exporter of agricultural products. Largest producer of wheat and beans, in addition to its significant share of Brazil's corn and soybean production.

- Paranaguá

### Rio Grande do Sul

Competitive advantage: operation in a location with easy access to the port of Rio Grande and possibility of expanding Heringer's business to the South of Brazil. Most important producer of rice, in addition to its significant share of Brazil's production of soybean, wheat and corn.

- Porto Alegre
- Rio Grande

\*commercial offices

Source: IBGE (Brazilian Institute of Geography and Statistics). **Municipal agricultural production: temporary and permanent crops.** Rio de Janeiro, 2016.



## Paranaguá Unit

The operations of the unit for acidulating, granulating and converting sulfur to produce single superphosphate (SSP) and sulfuric acid in Paranaguá (Paraná State) are still temporarily suspended. Despite that, the plant has maintained adequate maintenance. In addition to the production unit, the industrial complex of Paranaguá includes the fertilizer mixing and storage unit, which is operating normally.

The unit's operational stoppage occurred due to a public civil lawsuit filed by the Paranaguá State and Federal Public Prosecutor's Offices against Heringer and the IAP (Paraná State Environmental Institute), challenging the permitting process and claiming the SSP production plant caused environmental damage. The legal action focuses mainly

### 2004

The permitting procedures for the plant were initiated by the IAP (*Instituto Ambiental do Paraná*, or Paraná State Environmental Institute), a state independent agency responsible for environmental permitting and monitoring.

### 2005

Heringer obtained an Operating Permit for the fertilizer mixing unit, after having duly received the Preliminary and Installation Permit.

### 2008

Heringer obtained an Operating Permit for the SSP Production unit, after having duly received the Preliminary and Installation Permit. The company also submitted the PCA (*Plano de Controle Ambiental*, or Environmental Control Plan), with the technical clarifications and adjustments requested by the IAP.

on the lack of an EIA-RIMA (*Estudo de Impacto Ambiental - Relatório de Impacto Ambiental*, or Environmental Impact Assessment-Environmental Impact Report), which the IAP did not request during the permitting process for the sulfur acidification, granulation and conversion plant.

In an effort to settle the matter, Heringer contracted the development of the EIA-RIMA from experts in environmental law. The document was submitted to the IAP for consideration. In addition, the company invested in improved environmental controls and programs to prevent and mitigate environmental hazards and impacts

### 2010

The court decided to suspend all the activities of the Paranaguá unit in April. The preliminary injunction was partially repealed in July. As a result, the fertilizer mixing units resumed normal operations.

### 2016

The evidentiary stage has been concluded and the case is pending a decision by the judge.



# INNOVATION

-  Business Model Focused on Specialty Fertilizers
-  Product Quality Assessment
-  Research & Development
-  Investments in Automation
-  Focus on the Farmer

# BUSINESS MODEL FOCUSED ON SPECIALTY FERTILIZERS

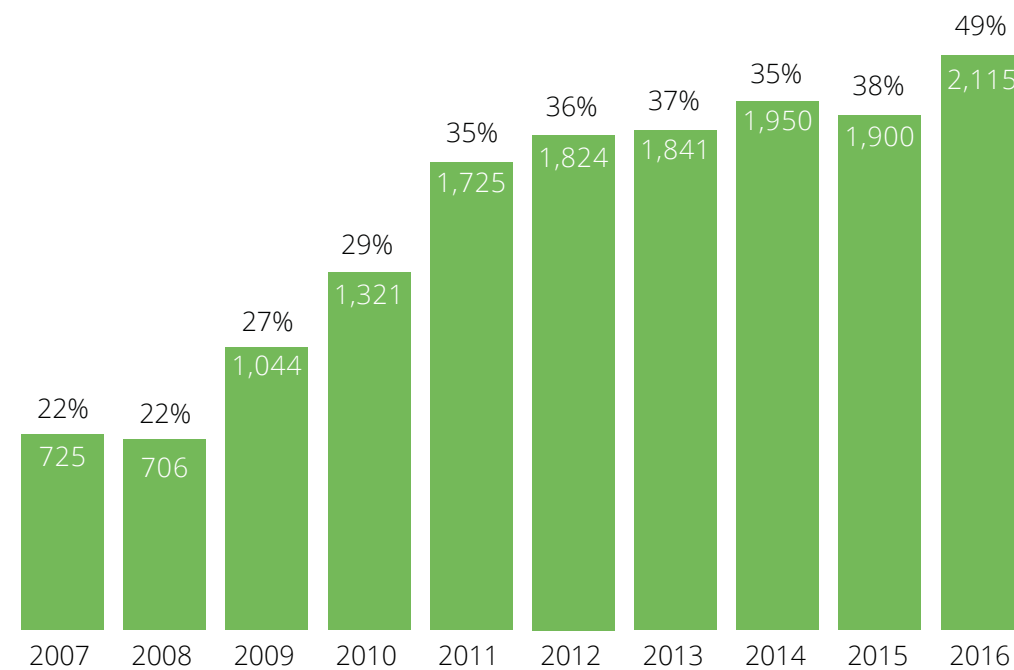
|G4-4|



Heringer invests in research and develops new technologies to provide a wide range of products for its customers. Bearing one of the largest portfolios of specialty fertilizers on the market, the company has worked to be increasingly recognized as a benchmark in the development of these unique high-quality products which boost farmers' production. The higher profitability experienced by producers has been increasing their interest in this product line.

In addition to specialty fertilizers, the company's portfolio encompasses NPK formulas (resulting from the industrial mixture of basic fertilizers) and basic fertilizers – raw materials such as urea, potassium chloride, ammonium sulphate, monoammonium phosphate, triple superphosphate, single superphosphate, reactive natural phosphate, among others.

## Delivery volume and share of specialty products



## Specialty fertilizers

As products with potential application in all crops, specialty fertilizers offer benefits such as higher crop yield for Heringer's customers. These lines are designed to meet the nutritional needs of specific crops, produce higher yield, improve the quality of end products and bring profits for farmers.

Heringer invests in research in order to develop new technologies and products and broaden its portfolio in the three specialty product lines: Soil, Fertigation and Foliar.

Bearing one of the largest portfolios of specialty fertilizers on the market, the company has worked to be increasingly recognized as a benchmark in the development of these products





The main technologies created by Heringer include:



### FH Humics

Developed by Heringer, this technology incorporates humic substances (humic acids, fulvic acids and humins) with micronutrients into NPK formulations. Both the humic substances and the micronutrients are incorporated into all NPK granules as demanded by farmers.



### FH Nitro Mais®

FH Nitro Mais®, a pioneering product in Brazil, was launched in 2007. It is produced with proprietary technology, patented by Heringer, using special micronutrient sources to minimize losses from urea volatilization. The product is well accepted by the market as it provides two important advantages: lower nitrogen loss from volatilization and a high supply of micronutrients for crops.



### FH Micro total

Product line developed through an innovative production process in 2006. The micronutrients incorporated into fertilizer granules make agricultural inputs significantly more effective. This technology is available for all product formulations. To ensure only top quality micronutrients are used, Heringer now develops its micronutrient grinding and mixing process.



### FH Gold

This high-tech product line can include nitrogen, phosphorus and sulfur in order to supply such nutrients to all crops in a balanced manner. Essential for plant development, these nutrients act jointly as the building blocks of proteins in plant nutrition.

# ADVANTAGES OF THE BUSINESS MODEL



## Access to raw material

Raw material supply chain (primary and secondary macronutrients and micronutrients) composed of local, national and international plants.



## Production capacity

Twenty mixing units established in strategic locations, with excellent distribution capacity, due to the proximity to the country's main highways.



## Easy access to the most important Brazilian ports

Heringer's units are established in strategic locations, close to major Brazilian ports, streamlining raw material inflow.

- Aratu, Bahia State
- Barra dos Coqueiros, Sergipe State
- Paranaguá, Paraná State
- Porto Alegre, Rio Grande do Sul State
- Rio Grande, Rio Grande do Sul State
- Santos, São Paulo State
- Vitória, Espírito Santo State



## Portfolio of unique products

Specialty fertilizers are mostly developed by Heringer's internal team. In addition to this line, the company offers basic fertilizers and NPK formulas.



## Customer base diversified by crop

Forty thousand customers from all segments of agribusiness, including farmers, agricultural companies, commercial companies and cooperatives, located in various agricultural areas of the country.



## Research & Development

Skilled technical staff, composed of experts, such as agricultural engineers and zootechnicians, in search of the best solutions in plant nutrition.



## Added value

The company offers its customers specialized and technical guidance, through soil analysis programs, demonstrations and lectures.



## **PRODUCT QUALITY ASSESSMENT**

|G4-DMA CUSTOMER HEALTH AND SAFETY, G4-PR1, G4-PR2,  
G4-DMA PRODUCT AND SERVICE LABELING, G4-PR3, G4-PR4|

Heringer follows special quality standards to develop its products. It assesses results through physical and chemical analyses of the raw materials it receives, as well as of the special and NPK formulations it produces. All the production units send samples to the laboratory in Paulínia II, São Paulo State, which is certified by ANDA's Interlaboratory Analysis Methodology Program (*Associação Nacional para a Difusão de Adubos*, or National Fertilizer Association), which shows it adopts a reliable methodology and has the technical capability to test fertilizers for quality.

Heringer recorded no incidents of non-compliance with regulations and voluntary codes concerning customer health and safety in 2016. We follow all the requirements established by the competent bodies and have a technical sales team of

agronomists who can give our customers recommendations for proper use promptly. Our product labels also have basic recommendations, including transportation and storage guidelines, in accordance with the Brazilian legislation for fertilizers. They all indicate the percentage amount and the total and/or soluble content of each chemical element, the specific physical nature, the use-by date, the batch number, the volume in tonnes and Heringer's contact information. We recorded no incidents of non-compliance with regulations and voluntary codes concerning product labeling in 2016.

We have a technical sales team of agronomists who can give our customers recommendations for proper use of fertilizers



## RESEARCH & DEVELOPMENT

The fact that the company has one of the market's largest portfolios of specialty products is a result of skilled labor and the constant investments in research to develop new technologies that can be applied in the production process. Heringer has a portfolio of unique products and has been working hard to communicate with and be recognized by the market as a company driven by technology.

Each Heringer unit has an agricultural engineer responsible for its technical department. In addition, the structure is completed by zootechnicians and agricultural technicians, who are in constant contact with leading researchers and consultants from the fields of soil fertility and plant nutrition. Therefore, our professionals are always up-to-date with the latest guidelines and parameters for proper crop nutrition and fertilization.

The company establishes partnerships with universities, foundations, professors and researchers so that its researches and solutions have even more credibility. Productivity increases are documented in experiments conducted with research institutions and farmers. We carried out several experiments in partnership with the universities and institutes listed here in order to improve processes. We also held agricultural efficiency tests with our fertilizers, attesting the quality of Heringer's products. In addition, approximately 200 field studies were conducted with farmers.

- Centro de Energia Nuclear na Agricultura (CENA/USP)
- Escola Superior de Agricultura Luiz de Queiroz (ESALQ - USP)
- Faculdade de Zootecnia e Engenharia de Alimentos (FZEA/USP)
- Fito - Desenvolvimento e Produção
- Fundação ABC
- Universidade Estadual de Maringá (UEM)
- Universidade Estadual do Centro-Oeste (UNICENTRO)
- Universidade Federal Rural de Pernambuco (UFRPE)

One of the pillars of the work done by Heringer is the structure available to study and develop new agricultural techniques. Heringer has three R&D centers focusing on coffee crops, pasture management and agribusiness studies. The results achieved by the R&D centers allow the company to maintain closer ties with farmers and provide a technical basis for it to market its specialty products. Internal researches are disclosed by Heringer's technical staff and expert consultants in public talks, field days and other events of the farming industry. In 2016, the results from the studies at Heringer's centers were presented in 49 events, to 2.156 people.

*Skilled labor and investments in research are crucial for the development of new technologies for the production process*



*Cepec is a benchmark in Brazil for technological development in the field of coffee cultivation in hilly areas. Cepec is a benchmark in Brazil for technological development in the field of coffee cultivation in hilly areas.*

### **CEPEC (Centro de Pesquisas Cafeeiras Eloy Carlos Heringer, or Eloy Carlos Heringer Coffee Research Center)**

- Location: Martins Soares, Minas Gerais State
- Inauguration: 1994

CEPEC is a national reference in technological development for growing coffee on hills and the result of a partnership between Heringer, the Ministry of Agriculture, Livestock and Supply and the Pró-Café Foundation, in Varginha, Minas Gerais State. The Center develops studies to find more efficient ways for farmers to produce in hilly areas, where there is few or no mechanization.

CEPEC also offers lectures by professors, researchers and consultants of renowned institutions and companies. Some works are conducted in partnership with other companies of defensive and corrective products, seeking greater efficiency and a cost-benefit ratio more favorable to regional farmers. It also offers an internship program for agronomy students and agricultural technicians in coffee production (*learn more on page 38*).

### **CEMAP (Centro de Manejo e Adubação em Pastagens, or Pasture Management and Fertilization Center)**

- Location: Laranja da Terra, Espírito Santo State
- Inauguration: 2003

CEMAP has been conducting studies on the use of pasture fertilizers to boost efficiency, generating improved yields and economic performance. Pasture replenishing improves livestock farming, as well as protects and preserves green areas. Livestock production in intensive pastures helps increase productivity, reducing costs and increasing efficiency in the use of soil. As a result, there is no need to explore new areas.

### **CEAGRO (Centro de Estudos do Agronegócio, or Center for Agribusiness Studies)**

- Location: Vila Velha, Espírito Santo State
- Inauguration: 2004

CEAGRO has a schedule of conferences and gatherings of different agribusiness professionals – officers, technicians and business people. It traditionally hosts the annual meeting of Heringer’s employees, which brings together the company’s entire sales team – agronomists, zootechnicians and agricultural technicians –, who share experiences and relevant information about the industry to improve their expertise and theoretical background. In 2016, six events were held at CEAGRO, including the launch of the *Cartão Amarelo* (Yellow Card) program (*learn more on page 40*).



Paranaguá Unit (Paraná State)

## **INVESTMENTS IN AUTOMATION**

In 2016, Heringer continued to invest in the automation of its production chain, increasing operational efficiency and enabling production monitoring. During the period, we completed the registration process for recording weight of all raw materials and dosing and measuring micronutrients used in the mixing stage. The automation of production monitoring is expected to be concluded in all units in 2017.

With the support of the Information Technology Department, Heringer also worked using automation to boost efficiency of the administrative area's methodologies, generating cost savings and increased productivity.

In 2016, Heringer continued to invest in the automation of its production chain, enabling production monitoring

### **ERP SYSTEM**

Heringer uses the ERP system (Enterprise Resource Planning), which streamlines procedures and contributes to information security, as it integrates all data in a unified system which can be accessed by all involved, avoiding duplication of information.



## **FOCUS ON THE FARMER**

Seeking to encourage customer loyalty and promote the most appropriate use of fertilizers in order to take the best advantage of their properties, Heringer carries out initiatives focused on farmers, including:

### **Integrated Consultant**

External consultants (university professor, research entity or freelance consultants) visit communities and shares crop farming and technical information about fertilizers and the best options according to the local culture. This service is independent, thus ensuring exempt and impartial consulting services.

### **Soil Analysis**

Heringer encourages its customers to conduct soil analyses by covering part of the costs. Heringer's technicians guide farmers through the purchase of the right fertilizer formula, thus maximizing production and mitigating environmental impact locally. The company's technical staff consists of highly qualified professionals, including agricultural engineers, zoo-technicians and agricultural technicians.

Heringer encourages its customers to conduct soil analyses by covering part of the costs. The company also has external consultants that visit communities and share crop farming information about fertilizers



# CORPORATE GOVERNANCE

-  Structure
-  Capital Market
-  Risk Management
-  Stakeholder Relations

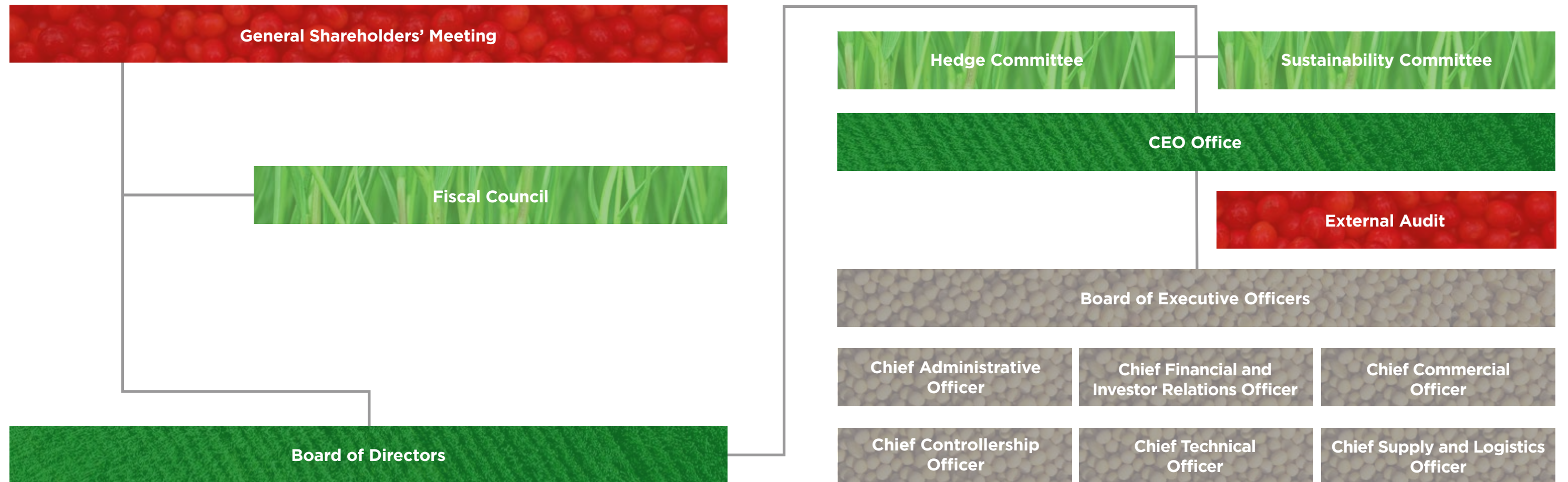


# STRUCTURE

|G4-34|

Heringer's governance structure comprises the Board of Directors, Board of Executive Officers, Sustainability Committee and Hedge Policy Committee. The resumes of board members and executive officers are available on the investor relations website: <http://www.heringer.com.br/ri/>.

The Hedge and Sustainability Committees are part of Heringer's risk management policy



## Board of Directors

Heringer's Bylaws establishes that the Board of Directors will be composed by between five and nine members, all of whom shareholders. They will have a two-year term of office, with possibility of reelection and removal at any time by a Shareholders' Meeting. The Board of Directors will meet, ordinarily four times a year and, extraordinarily, whenever called by the Chairman or Vice-Chairman. The composition of the Board on December 31, 2016 is presented below:

| Name                              | Position                 |
|-----------------------------------|--------------------------|
| Dalton Dias Heringer              | Chairman                 |
| Dalton Carlos Heringer            | Vice-Chairman            |
| Victor Paulo Silva Miranda        | Board member             |
| Roberto Rodrigues                 | Independent Board member |
| Mailson Ferreira da Nóbrega       | Independent Board member |
| Juliana Heringer Rezende          | Board member             |
| Yasmina Triki                     | Board member             |
| Christopher Pringle Reynolds      | Board member             |
| Silvio Claudio Peixoto de Camargo | Independent Board member |

The Hedge and Sustainability Committees, both coordinated by the Board of Directors, are part of Heringer's risk management policy:

- Hedge Policy Committee**

Permanently installed technical and advisory body. The composition of the Committee on December 31, 2016 is presented below:

| Name                            | Position   |
|---------------------------------|--|
| Alfredo Fardin                  | Chief Commercial Officer   |
| Pedro Augusto Lombardi Ferreira | Chief Supply and Logistics Officer                               |
| Rodrigo Bortolini Rezende       | Chief Financial, Controllershship and Investor Relations Officer |

- Sustainability Committee**

The Committee's main responsibilities are planning, implementing and monitoring sustainability initiatives. The composition of the Committee on December 31, 2016 is presented below:

| Name                          | Position                         |
|-------------------------------|----------------------------------|
| Juliana Heringer Rezende      | Member of the Board of Directors |
| Laura Maria Brant de Carvalho | Legal Manager                    |
| José Lucas Alves Rodrigues    | Human Resources Manager          |
| José Paulo Pereira            | Industrial Manager               |

## Board of Executive Officers

Composed by between two and seven members, either or not shareholders, residing in the country and elected by the Board of Directors for a unified two-year term of office, reelection being permitted. The Board of Executive Officers will meet ordinarily at least once a month and, extraordinarily, whenever necessary. The composition of the Board on December 31, 2016 is presented below:

| Name                            | Position   |
|---------------------------------|--|
| Dalton Carlos Heringer          | CEO and Chief Administrative Officer                             |
| Alfredo Fardin                  | Chief Commercial Officer   |
| Rodrigo Bortolini Rezende       | Chief Financial and IR Officer<br>Chief Controllershship Officer |
| Pedro Augusto Lombardi Ferreira | Chief Supply and Logistics Officer                               |
| Ulisses Maestri                 | Chief Technical Officer  |

## Fiscal Council

Corporate body working independently from management and the external auditors. The composition of the Fiscal Council on December 31, 2016 is presented below:

| Name                                 | Position                        |
|--------------------------------------|---------------------------------|
| Alfredo Gonçalves Martins            | Sitting Fiscal Council Member   |
| Pedro Gilberto de Souza Gomes        | Sitting Fiscal Council Member   |
| Peter Edward Cortes Marsden Wilson   | Sitting Fiscal Council Member   |
| Carlos Francisco de Almeida Gastalho | Alternate Fiscal Council Member |
| Fabiano Werdan Fagundes              | Alternate Fiscal Council Member |
| André Gordon                         | Alternate Fiscal Council Member |



# CAPITAL MARKET

|G4-7, G4-13|

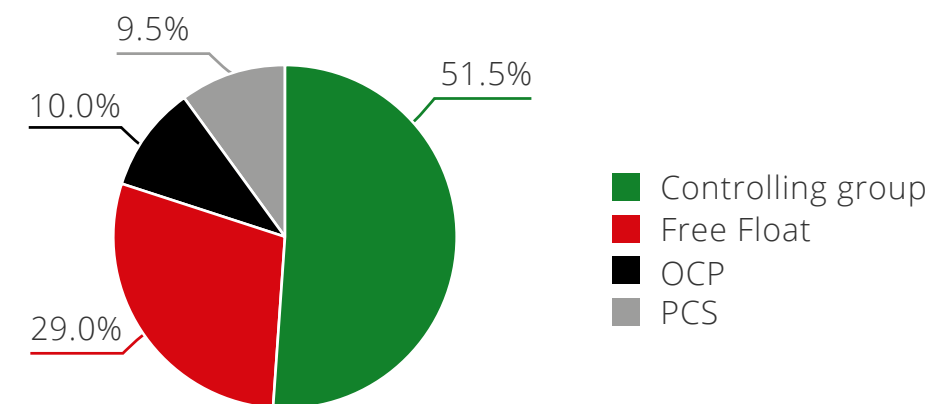
Heringer (FHER3) is the only fertilizer company listed on the BM&FBOVESPA - São Paulo Securities, Commodities and Futures Exchange (current B3), which makes it an attractive investment opportunity. Heringer's shares have been traded on the Novo Mercado segment, the highest corporate governance level of the Bovespa, since 2007.

Heringer's solid fundamentals include: significant growth potential in a competitive market, geographically evenly distributed sales, a diversified client base, focus on retail sales, effective logistics and distribution infrastructure, a highly recognized brand and a broad portfolio of specialty products as well as solid management.

Heringer is the only fertilizer company listed on the BM&FBOVESPA (current B3), which makes it an attractive investment opportunity

Due to the seasonality of fertilizer deliveries in Brazil, the Company's business model should be analyzed on an annual basis.

## Shareholding structure



### Free float

- 91% of Brazilian shareholders
- 9% of foreign shareholders



# RISK MANAGEMENT

|G4-14, G4-56|

The Hedge and Sustainability Committees are responsible for identifying and assessing the company's main financial, environmental and social risks. Accordingly, the committees establish operational, prevention or mitigation measures based on studies and evidence.

In order to ensure the best corporate governance practices and transparent management, Heringer has maintained a Code of Conduct since 2005. The document establishes principles for working with peers, doing business with suppliers and dealing with customers, governments and local communities.

- **Hedge Committee**

The Hedge Committee helps the Board of Directors comply with its responsibilities related to the periodical analyses of Heringer's protection measures against changes in exchange and interest rates and their impacts on the company. For more information on risk factors, please see the 2016 Reference Form available on Heringer's investor relations website: <http://www.heringer.com.br/ri>.

- **Sustainability Committee**

The Sustainability Committee advises the Board of Directors in all sustainability issues by identifying, approaching and dealing with matters that may have a relevant impact on the company's business, results, relationship with stakeholders and image.

Assessing impacts, risks and opportunities is part of Heringer's routine. All the company's businesses must comply with current legislation, the best market practices and internal policies.

## **Ethical principles provided for in the Code of Conduct**

- Respect for human beings, the environment and agreements
- Commitment to that which is true and fair
- Respect for current laws, cultures and customs
- Commitment to the preservation of the company's strategies and confidential information
- Commitment to good practices regarding the value chain
- Clear and honest communication with stakeholders, and
- Transparency, fairness, accountability and corporate responsibility

The main points of the Code of Conduct are presented to new employees during their integration into the company, when they learn about topics such as conflicts of interest and corruption. The Code of Conduct is available to all stakeholders on the "Heringer" section of the website <http://www.heringer.com.br>.

The Code of Conduct is reviewed on a regular basis in order to maintain it constantly updated. The Code is scheduled to be reviewed in 2017. In addition, the company has been working to develop a compliance program, with the support of a specialized consulting firm. The program began to be developed in 2016 and will be formalized in the next reporting cycle. One of the actions will be the expansion of the reporting channel for unethical or corruption-related matters. For that purpose, Heringer currently has the Contact IR channel on its investor relations website.



## **STAKEHOLDER RELATIONS**

### **Suppliers**

[G4-12, G4-DMA PROCUREMENT PRACTICES, G4-EC9]

Human rights, the use of natural resources and waste generation and disposal are some of the aspects Heringer considers most relevant regarding production chain management. In recent years, the company has invested in improving procurement management, indirect material inventory control and its participation in the analysis of providers of services agreements. Heringer's relationship with suppliers is under the responsibility of the Supply Department, through the specific manager of each area.

Heringer's supply chain consisted of 114 companies – 47 foreign suppliers of raw materials and 67 Brazilian providers – at the close of 2016. The company's supplier chain includes other nine companies: customs house brokers, port operators, shipping and storage companies. In 2016, the company had 2,407 national suppliers of raw materials, such as packaging and industrial replacement parts, in addition to 38 fixed providers of services such as reception, employee transportation charter and cleaning.

Human rights, the use of natural resources and waste disposal are some of the aspects Heringer considers most relevant regarding production chain management

### **Membership in Associations**

[G4-16]

Heringer considers it important to be a member of associations that discuss issues relevant to the industry. Heringer is a member of the following associations, among others:

- Abisolo (*Associação Brasileira das Indústrias de Tecnologia em Nutrição Vegetal*, or Brazilian Association of Technology Industries in Plant Nutrition)
- AMA Brasil (*Associação dos Misturadores de Adubo do Brasil*, or Brazilian Association of Fertilizer Mixers)
- Anda (*Associação Nacional para Difusão de Adubos*, or Brazilian National Fertilizer Association)
- Ibef Campinas (*Instituto Brasileiro de Executivos de Finanças*, or Brazilian Institute of Financial Executives)
- IFA (International Fertilizer Industry Association)
- Siacan (*Sindicato da Indústria de Adubos e Corretivos Agrícolas do Nordeste*, or Fertilizer and Agricultural Lime Industry Association of the Northeast)
- Siacesp (*Sindicato da Indústria de Adubos e Corretivos Agrícolas no Estado de São Paulo*, or Fertilizer and Agricultural Lime Industry Association of São Paulo State)
- Siargs (*Sindicato da Indústria de Adubos do Rio Grande do Sul*, or Fertilizer Industry Association of Rio Grande do Sul State)
- Sindac (*Sindicato das Indústrias de Adubos e Corretivos Agrícolas do Estado de Minas Gerais*, or Fertilizer and Agricultural Lime Industry Association of Minas Gerais State)
- Sindiadubos – PR (*Sindicato da Indústria de Adubos e Corretivos Agrícolas no Estado do Paraná*, or Fertilizer and Agricultural Lime Industry Association of Paraná State)
- Sindiquímicos – ES (*Sindicato da Indústria de Produtos Químicos para Fins Industriais do Espírito Santo*, or Industry Association for Chemical Products for Industrial Purposes of Espírito Santo State)
- Sinprifert (*Sindicato Nacional da Indústria de Matérias-Primas para Fertilizantes*, or Brazilian National Fertilizer Raw Material Industry Association)
- TFI (The Fertilizer Institute)



# ECONOMIC PERFORMANCE

- ↑ Industry and Economic Environment
- ↑ Heringer's Performance
- ↑ Prospects for 2017



# INDUSTRY AND ECONOMIC ENVIRONMENT

Fertilizer deliveries in the Brazilian market were once again record in 2016, increasing by 12.9%, to 34.1 million tonnes, according Anda (*Associação Nacional para a Difusão de Adubos*, or National Fertilizer Association). This result is fruit of a favorable barter ratio for most crops.

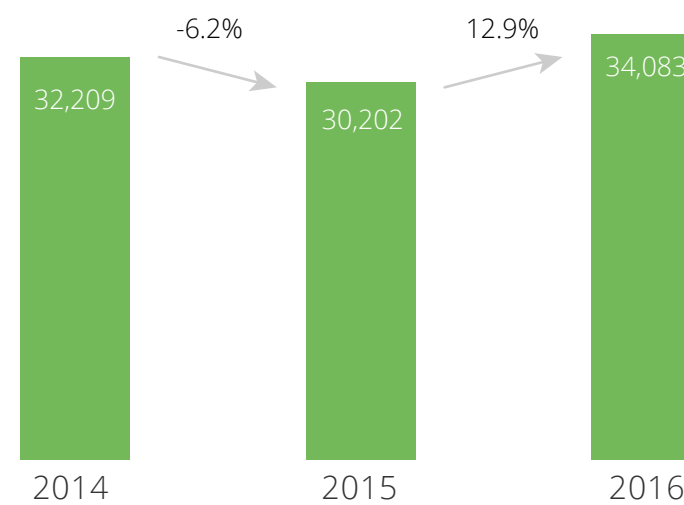
Total deliveries of NPK nutrients also increased, by approximately 15.1%, to 15.0 million tonnes. Deliveries of nitrogen fertilizers (N) grew 23.6% in 2016, to 4.3 million tonnes, due to higher demand for sugarcane, corn, coffee and the anticipation of the second crop corn season.

Deliveries of phosphate fertilizers (P2O5) expanded 13.0%, to 4.9 million tonnes, versus 4.4 million tonnes in 2015, thanks to increased deliveries to soybean and corn crops.

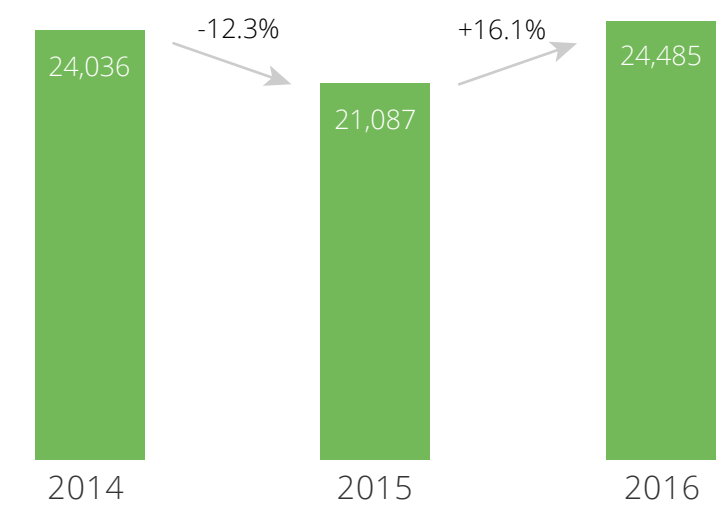
Potassium fertilizer (K2O) deliveries grew 11.0%, to 5.7 million tonnes, fueled by increased demand for corn, soybean, sugarcane and coffee.

Fertilizer inventories ended 2016 with 5.0 million tonnes, 6.2% down on 2015. In the fourth quarter, imports increased to meet the period's substantial demand. As a result, in 2016 imports exceeded the previous 2014 record, reaching 24.4 million tonnes.

**Deliveries in the Brazilian market (in million tonnes)**



**Fertilizer market imports**



Fertilizer deliveries in the Brazilian market were once again record in 2016, to 34.1 million tonnes. This result is fruit of a favorable barter ratio for most crops

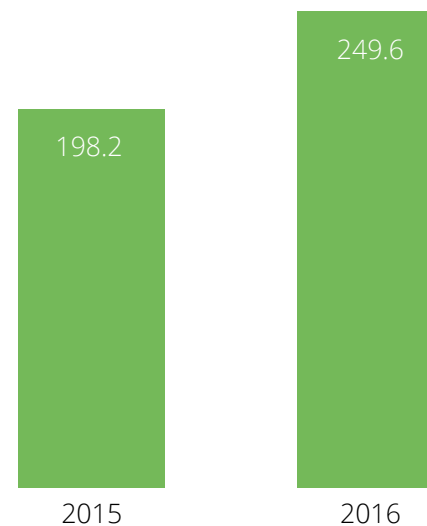


# **HERINGER'S PERFORMANCE**

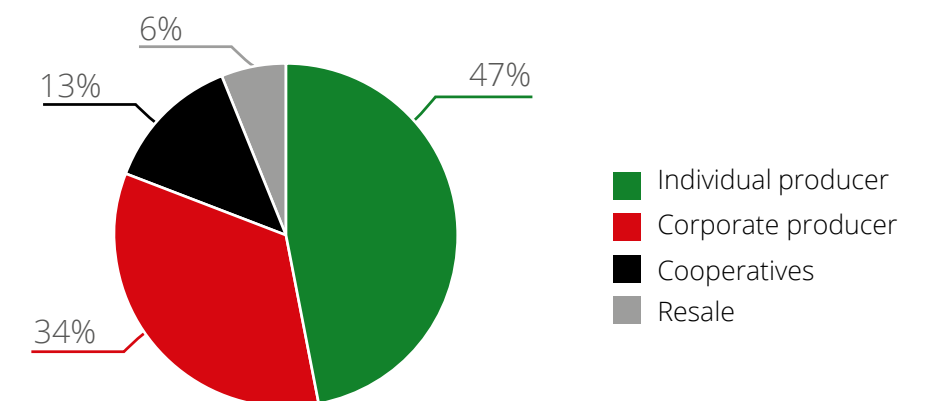
Heringer recorded good performance in 2016, despite the adverse macroeconomic scenario. The company delivered record volume of specialty products while EBITDA came in positive, totaling R\$249.4 million, accompanied by a margin of 4.8%, 25% up on 2015. Net income recorded a hefty increase, from negative R\$335.9 million in 2015, to R\$43.2 million in 2016.

Heringer's market share came to 13% in 2016, with deliveries amounting to 4.3 million tonnes, down by 14% over 2015. Deliveries of conventional products fell 29.5%. The factors leading to the reduction in market share are connected with the strict credit policy the company adopted to keep the number of accounts receivable days low and improve its profitability. Our customer base was comprised of 40,000 customers, 81% of whom were farmers, individuals and legal entities in 2016.

**EBITDA  
(R\$ million)**



**2016 deliveries by segment**



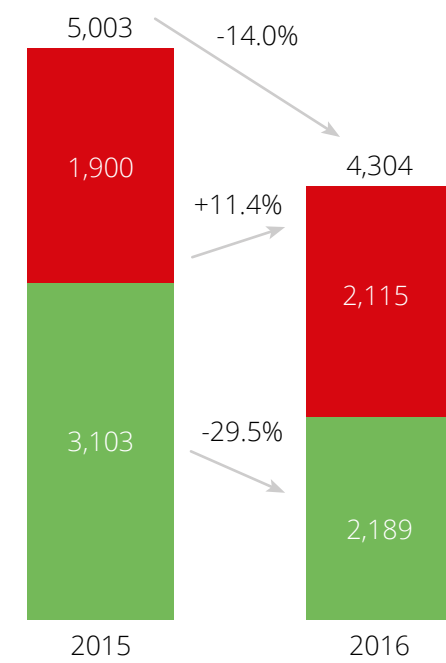




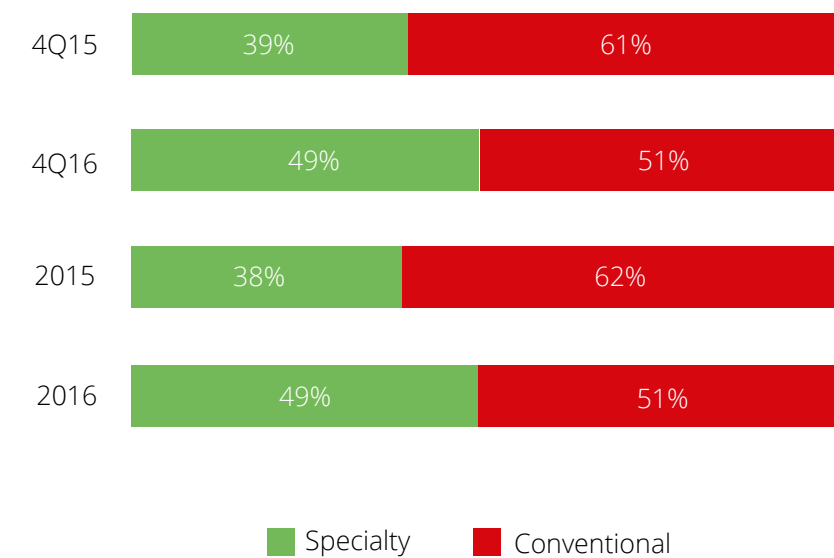
## Record delivery of specialty products

In line with Heringer's strategic plan, deliveries of specialty products (soil, fertigation and foliar lines) grew 11.4%, to record 2.1 million tonnes. The share of specialty products as a percentage of Heringer's total deliveries has grown year after year, contributing to improve margins and encourage customer loyalty.

### Volume of deliveries

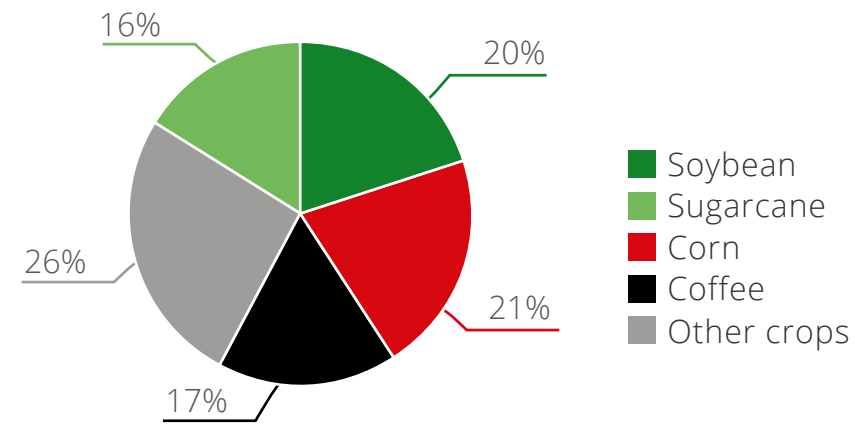


### Share of specialty products

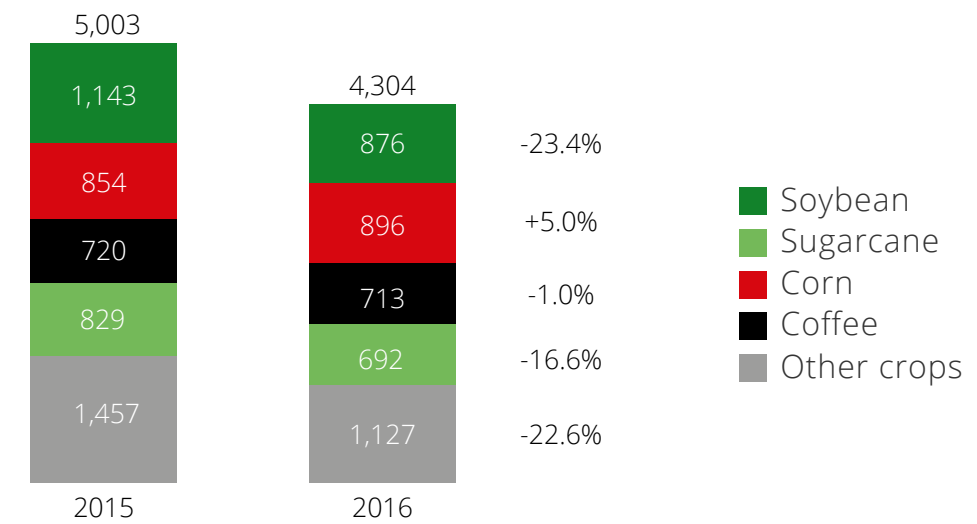


With an installed capacity of 6.5 million tonnes per year, we offer products for dozens of crops, mainly soybean, corn, coffee and sugarcane, in practically all producing regions in Brazil. The fact that Heringer delivers fertilizers for different crops in different regions is one of its distinguishing features and mitigates risks from prices, climate change and pests.

### Heringer's deliveries by crop in 2016



### Volume of deliveries by crop (million tonnes)



In 2016, Heringer benefited from the good barter ratio of agricultural products versus fertilizers, due to agricultural commodity prices and the lower dollar prices of raw materials. As of the second half of the year, raw material prices were less volatile. Therefore, the favorable barter ratio fueled demand for fertilizers in Brazil throughout the year.

The reduction in Heringer's delivery volume impacted 2016 net revenue, which came to R\$5.2 billion, 17.7% down on 2015. Gross profit totaled R\$637.2 million in 2016, 15.5% up on the R\$551.6 million posted in 2015. The gross margin came to 12.3% in 2016, 12.3% higher than the 8.7% recorded in 2015.

With an installed capacity of 6.5 million tonnes per year, Heringer offers products in practically all producing regions in Brazil

Heringer manages its financial risks using hedges to mitigate the impact of foreign exchange risk on its dollar-denominated liabilities arising from raw material imports. Total debt came to 16.2% of gross revenue in the last fiscal year, lower than the 27.3% recorded in the previous year, demonstrating efficient capital management and financial discipline.

In addition, the company received R\$79.6 million related to PIS/Cofins tax credits. In January 2017, the company also received R\$41.5 million related to income and social contribution taxes.

Heringer maintains a strict credit policy in order to keep accounts receivable periods as low as possible through short-term sales and effective credit analysis, thereby reducing the risk of default and losses. The company seeks to diversify deliveries by crop and maintains a diversified customer portfolio; in 2016, Heringer's ten largest customers accounted for approximately 10% of deliveries.





## PROSPECTS FOR 2017




Brazil's GDP (gross domestic product) is expected to resume growth in 2017, with agribusiness playing an important role in the economic recovery, due to the record grain harvest expected for the year, with the maintenance of the barter ratio. Fertilizer deliveries are expected to total 35.0 million tonnes in the Brazilian market, a year-on-year increase of nearly 3%. This estimate is justified not only by the increased grain production, but also due to an increased yield, thanks to a greater use of technology over the years. Fertilizer deliveries are expected to be distributed as follows in 2017: 40% in the first half and 60% in the second half, based on the average figures in recent years.

Heringer is expected to post growth in line with that of the market in 2017, focusing on its strategic plan, which envisages expansion in deliveries of specialty products.

In line with its business plan, the company estimates a Capex of R\$20 million for 2017, as it has an adequate installed capacity equivalent to 6.5 million tonnes.



# WORKFORCE

-  Workforce Profile
-  Training
-  Health and Safety





# WORKFORCE PROFILE

|G4-9, G4-10, G4-11|

Employees are crucial for the production process of the company, which invests in skilled labor with technical expertise and acts in compliance with Brazil's labor legislation (CLT - Consolidation of Labor Laws). On December 31, 2016, Heringer's workforce comprised 3,065 direct employees. It also had 218 outsourced professionals.

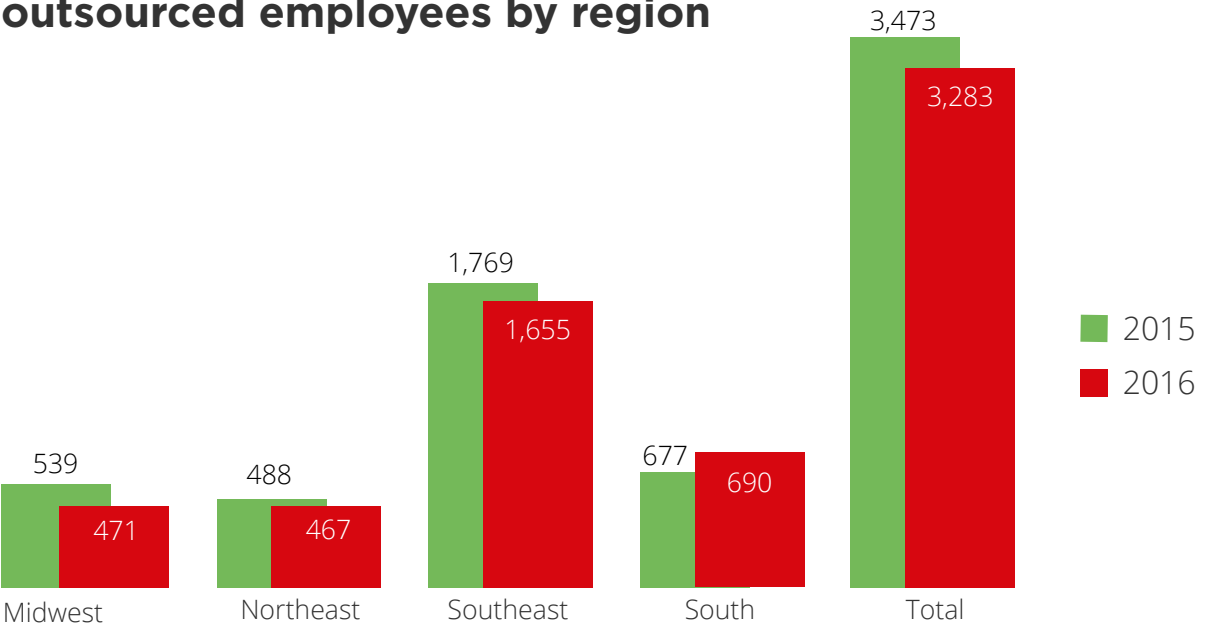
People management is one of Heringer's main concerns, in line with its policy of offering employees a pleasant working environment, capable of retaining the best professionals. In 2016, the company continued working to show how much it values them through initiatives such as leadership training programs and educational projects and benefits, including:

- Health care
- Profit sharing (10% of net income)
- Private Pension Fund
- Life insurance
- Transportation (charter transportation or transportation voucher)
- Meal voucher

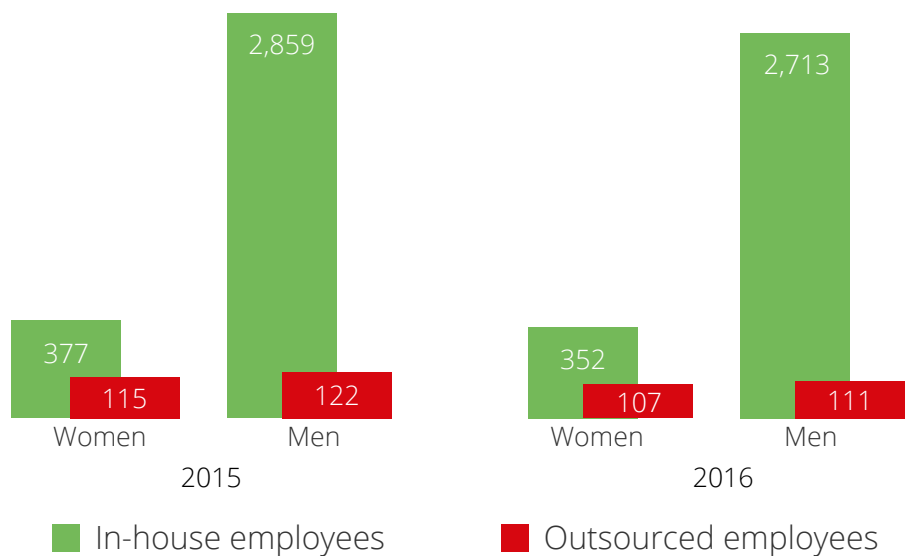
|                         | 2015         | 2016         |
|-------------------------|--------------|--------------|
| Direct employees        | 3,236        | 3,065        |
| Independent contractors | 237          | 218          |
| <b>Total</b>            | <b>3,473</b> | <b>3,283</b> |

*Note: all company employees are covered by collective bargaining agreements and work full time.*

## Breakdown of in-house and outsourced employees by region

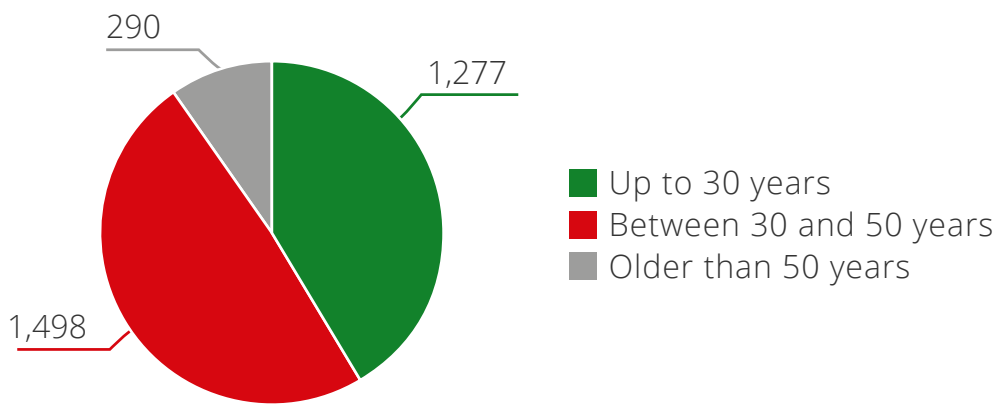


## Breakdown of in-house and outsourced employees by gender

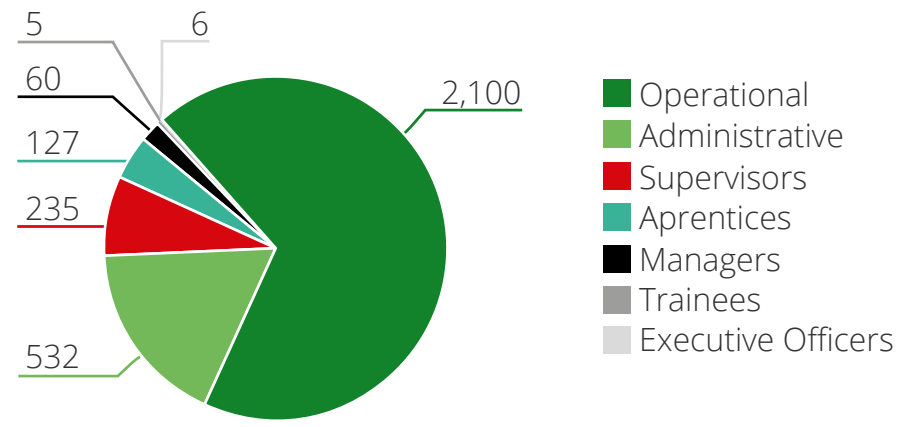




**Breakdown of in-house employees by age in 2016**



**Breakdown of in-house employees by job category in 2016**



**Internship and Trainee Programs**

Heringer values the development of its employees and, therefore, it invests in internship and trainee programs. In 2016, the company had six chemistry trainees in the laboratory of the Paulínia II unit (São Paulo State). In addition, the company increased the number of openings offered to the Eloy Carlos Heringer Coffee Research Center, from 13 interns in 2015, to 18 in 2016. Participants at the CEPEC learn how to design and assess experiments, understand the main challenges related to growing coffee on hills and observe all the operational routine of a farm.

The trainee program, in turn, had 17 recently-graduated participants, versus 14 in 2015. Participants spend time in the sales department of the units of Manhuaçu (Minas Gerais State), Paulínia (São Paulo State) and Viana (Espírito Santo State). Doing training in more than one unit gives employees a holistic and in-depth vision of the company. They can learn more about Heringer's production units, processes and quality area. The company has always maintained the policy of hiring trainees, as our HR culture values career development and retention of professionals. All but 4% of the company's current management team (managers and co-managers) came from trainee programs.



## TRAINING

Heringer has always shown appreciation for its employees. Top management openings are filled preferably by company professionals to honor those building a career and encourage others to follow in their footsteps. We usually offer internal and external leadership training programs.

In 2016, the Paranaguá unit (Paraná State) maintained a partnership with SESI (*Serviço Social da Indústria*, or Industry Social Services) related to the adult and youth educational program (EJA). The purpose is to encourage the learning process of employees who did not have the opportunity to complete their primary and secondary studies at the right age. The Human Resources department announces the course, and workforce members register voluntarily.

As it is going through an adaptation process, the EJA program was not held in Paulínia (São Paulo State) in 2016. Classes will resume as a distance learning program as of 2017. We expect that more employees have interest in participating, as the new format will allow students to organize their schedules and more easily fit the program into their routine.

In 2017, the company will also implement remote training, focused on compliance-related topics, thus contributing to the implementation of the integrity policies which will be introduced with the support of an external consulting firm (*learn more on page 28*).

Top management openings are filled preferably by company professionals to honor those building a career

# HEALTH AND SAFETY

|G4-DMA OCCUPATIONAL HEALTH AND SAFETY,  
G4-LA5, G4-LA6, G4-LA8|

All Heringer's units maintain an occupational medicine program, through which an occupational physician submits employees to medical examinations based on Regulatory Standard number 7 (which establishes the implementation of the Program for Medical Control of Occupational Health - PCMSO).

In addition, the *Comer Bem é Tudo de Bom* program was conducted in 2016, jointly with a leading benefit card company. The initiative offers nutritional advice developed by health consultants and focused on Heringer's employees. At the beginning of the year, a lecture was held on the benefits of adopting healthy eating practices. In addition, employees can ask questions to nutrition experts and are encouraged to add fruits and vegetables to their meals. In order to effectively put food education into practice, all food service providers contracted by Heringer rely on the advice of a nutritionist.

On the other hand, the *Orientação e Apoio* [Guidance and Support] provides psychological, legal and financial guidance to the company's employees and their dependents through a hotline with external consultants. All the issues are dealt with during the calls or submitted to other experts from each respective field.

Heringer invests continuously in improvements in the industrial area, follows all regulatory standards and calculates frequency and severity rates in accordance with the Brazilian Standard for Recording Occupational Accidents (NBR/ABNT 14280/2000) to protect its employees' health and safety.

All units have a risk prevention program based on NR-9 (Regulatory Standard 9), aimed at ensuring employee safety. All activities have workplace safety procedures.

In 2016, the company also launched an occupational safety behavioral system called *Cartão Amarelo* (Yellow Card) program, through which the responsibility for executing internal procedures relies on the leadership of each operating unit. All activities carried out on Heringer's units are submitted to an evaluation process which involves six steps.



**Atenção !**

**Avalie Antes de Agir**

- 1 - Eu tenho Treinamento para realizar esta atividade?
- 2 - Eu tenho o Procedimento por escrito (APR, PTE) ?
- 3 - Eu tenho todos os EPI's? Estão em condições de uso?
- 4 - Minhas ferramentas são adequadas para a execução da atividade e estão em condições de uso?
- 5 - É necessário bloquear e etiquetar? (Elétrico, Mecânico, Pneumático, etc.).
- 6 - A área está segura para a realização da minha atividade?

FERTILIZANTES  
**A**  
HERINGER

The Cartão Amarelo (Yellow Card) program involves six evaluation steps



In addition, the occupational safety team has representatives who conduct training sessions, and integrate and inspect operational areas on a daily basis. Although Heringer has no labor union agreements regarding occupational safety, many of its collective bargaining agreements address the issue.

All the production units have a CIPA (*Comissão Interna de Prevenção de Acidentes*, or Internal Commission for the Prevention of Accidents), comprised of employees elected by direct vote and by company representatives. All direct employees are represented

by the commission. CIPA's members hold monthly meetings to discuss solutions for the irregularities verified during inspection and stipulate action plans to regularize all items.

The employees also participate in the SIPAT (*Semana Interna de Prevenção de Acidentes do Trabalho*, or Internal Occupational Accident Prevention Week), during which they attend talks on STDs (sexually transmitted diseases), alcoholism, smoking, the environment and occupational safety awareness, among other issues.

| Unit           | Gender | Frequency | Injury rate (severity rate) | Occupational diseases rate | Lost day rate | Work-related absentee rate | Work-related fatalities | Number of training hours by employee |
|----------------|--------|-----------|-----------------------------|----------------------------|---------------|----------------------------|-------------------------|--------------------------------------|
| Anápolis       | men    | 0         | 0                           | 0                          | 0             | 0                          | 0                       | 0                                    |
|                | women  | 0         | 0                           | 0                          | 0             | 0                          | 0                       | 0                                    |
| Bebedouro      | men    | 0         | 0                           | 0                          | 0             | 0                          | 0                       | 0                                    |
|                | women  | 0         | 0                           | 0                          | 0             | 0                          | 0                       | 0                                    |
| Camaçari       | men    | 0         | 0                           | 0                          | 0             | 0                          | 0                       | 0                                    |
|                | women  | 0         | 0                           | 0                          | 0             | 0                          | 0                       | 0                                    |
| Catalão        | men    | 28.42     | 99.47                       | 0                          | 21            | 0.02                       | 0                       | 22.6                                 |
|                | women  | 0         | 0                           | 0                          | 0             | 0                          | 0                       | 0                                    |
| Cubatão        | men    | 84        | 0                           | 0                          | 0             | 0                          | 0                       | 0                                    |
|                | women  | 0         | 0                           | 0                          | 0             | 0                          | 0                       | 0                                    |
| Dourados       | men    | 48.17     | 117.75                      | 0                          | 22            | 0.09                       | 0                       | 56.2                                 |
|                | women  | 0         | 0                           | 0                          | 0             | 0                          | 0                       | 0                                    |
| Iguatama       | men    | 0         | 0                           | 0                          | 0             | 0                          | 0                       | 67.3                                 |
|                | women  | 0         | 0                           | 0                          | 0             | 0                          | 0                       | 0                                    |
| Manhuaçu       | men    | 24.48     | 532.52                      | 0                          | 174           | 0.39                       | 0                       | 28.2                                 |
|                | women  | 0         | 0                           | 0                          | 0             | 0                          | 0                       | 0                                    |
| Ourinhos       | men    | 33.76     | 486.72                      | 0                          | 173           | 0.36                       | 0                       | 18.1                                 |
|                | women  | 0         | 0                           | 0                          | 0             | 0                          | 0                       | 0                                    |
| Paranaguá      | men    | 14.71     | 243.93                      | 0                          | 206           | 0.18                       | 0                       | 10.1                                 |
|                | women  | 0         | 0                           | 0                          | 0             | 0                          | 0                       | 0                                    |
| Patos de Minas | men    | 0         | 0                           | 0                          | 0             | 0                          | 0                       | 0                                    |
|                | women  | 0         | 0                           | 0                          | 0             | 0                          | 0                       | 0                                    |

| Unit              | Gender | Frequency | Injury rate (severity rate) | Occupational diseases rate | Lost day rate | Work-related absentee rate | Work-related fatalities | Number of training hours by employee |
|-------------------|--------|-----------|-----------------------------|----------------------------|---------------|----------------------------|-------------------------|--------------------------------------|
| Paulínia I        | men    | 25.03     | 110.86                      | 0                          | 62            | 0.08                       | 0                       | 3.6                                  |
|                   | women  | 0         | 0                           | 0                          | 0             | 0                          | 0                       | 0                                    |
| Paulínia II       | men    | 48.82     | 151.35                      | 0                          | 31            | 0.11                       | 0                       | 24.8                                 |
|                   | women  | 0         | 0                           | 0                          | 0             | 0.00                       | 0                       | 0                                    |
| Porto Alegre      | men    | 20.56     | 267.28                      | 0                          | 52            | 0.20                       | 0                       | 25.6                                 |
|                   | women  | 0         | 0                           | 0                          | 0             | 0                          | 0                       | 0                                    |
| Rio Grande        | men    | 26.02     | 52.04                       | 0                          | 8             | 0.04                       | 0                       | 12.6                                 |
|                   | women  | 0         | 0                           | 0                          | 0             | 0                          | 0                       | 0                                    |
| Rio Verde         | men    | 26.38     | 39.57                       | 0                          | 6             | 0.03                       | 0                       | 34.7                                 |
|                   | women  | 13.19     | 112.1                       | 0                          | 17            | 0.08                       | 0                       | 0                                    |
| Rondonópolis I    | men    | 7.54      | 7.54                        | 0                          | 1             | 0.01                       | 0                       | 3.2                                  |
|                   | women  | 7.54      | 22.63                       | 0                          | 3             | 0.02                       | 0                       | 0                                    |
| Rondonópolis II   | men    | 23.27     | 453.67                      | 0                          | 78            | 0.33                       | 0                       | 3.2                                  |
|                   | women  | 0         | 0                           | 0                          | 0             | 0                          | 0                       | 0                                    |
| Rosário do Catete | men    | 12.73     | 49.11                       | 0                          | 27            | 0.04                       | 0                       | 20.3                                 |
|                   | women  | 0         | 0                           | 0                          | 0             | 0                          | 0                       | 0                                    |
| Três Corações     | men    | 41.82     | 501.83                      | 0                          | 144           | 0.37                       | 0                       | 12.17                                |
|                   | women  | 0         | 0                           | 0                          | 0             | 0                          | 0                       | 0                                    |
| Uberaba           | men    | 3.28      | 9.85                        | 0                          | 3             | 0.01                       | 0                       | 25.1                                 |
|                   | women  | 0         | 0                           | 0                          | 0             | 0                          | 0                       | 0                                    |
| Viana             | men    | 30.53     | 206.05                      | 0                          | 81            | 0.15                       | 0                       | 17.3                                 |
|                   | women  | 0         | 0                           | 0                          | 0             | 0                          | 0                       | 0                                    |
| <b>TOTAL</b>      | men    | 21.82     | 190.15                      | 0                          | 1,089         | 0.140                      | 0                       | 19.29                                |
|                   | women  | 0.52      | 3.50                        | 0                          | 20            | 0.02                       | 0                       | 0                                    |

Notes: 1. The following units were not included: Anápolis (Goiás State), Camaçari (Bahia State), Cubatão (São Paulo State) and Maringá (Paraná State), whose operations were suspended during the period.  
2. The severity rate is calculated by multiplying the number of lost workdays by one million and dividing the result by the man hours of risk exposure.  
3. The injury rate refers to the several types of injuries concerning work-related accidents.

A top-down view of several hands holding different types of grains and beans on a wooden surface. The hands are arranged in a circle, each holding a different variety of food: yellow corn, brown rice, green lentils, dark red beans, yellow soybeans, white rice, black rice, and brown rice. The background is a rustic wooden table.

# SOCIAL AND ENVIRONMENTAL PRACTICES

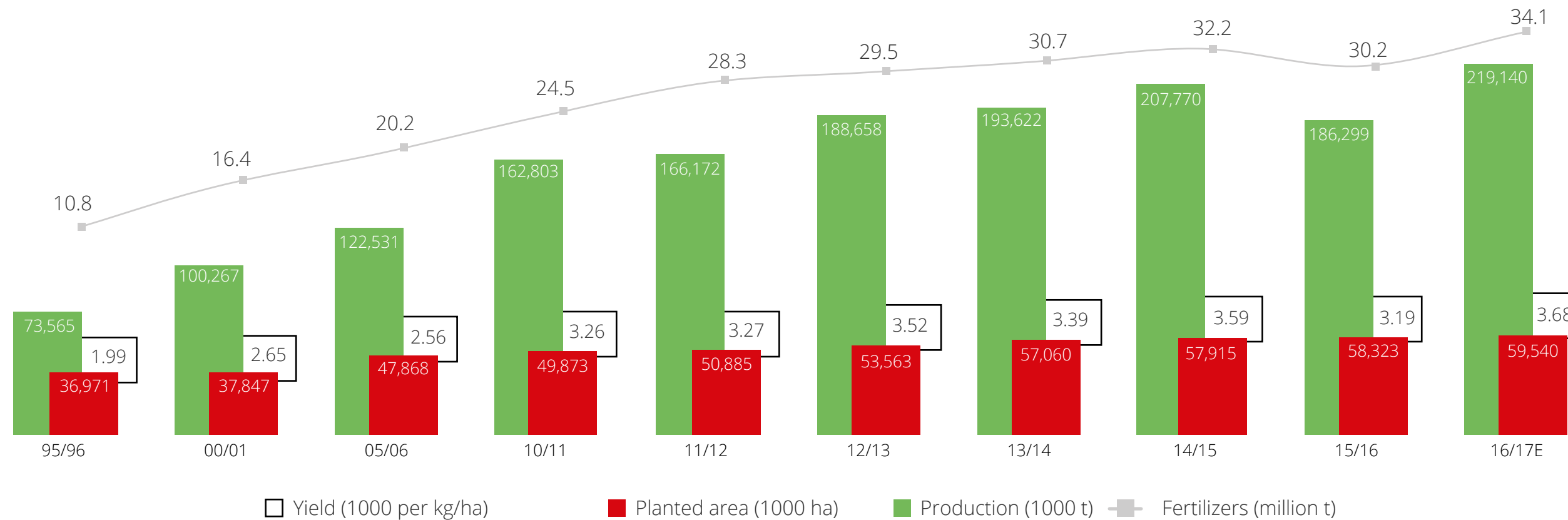
- 🔄 Food Responsibility and more Efficient Production
- 🔄 Global Compact
- 🔄 Environmental Management
- 🔄 Social Engagement

# FOOD RESPONSIBILITY AND MORE EFFICIENT PRODUCTION

The use of fertilizers improves soil fertility and, therefore, has helped farmers increase yield without the need to open new planting areas. According to Conab (*Companhia Nacional de Abastecimento*, or National Supply Company), the Brazilian 2016/2017 grain harvest is expected to reach 219.1 million tonnes, accompanied by a planted area of 59.5 million hectares, yielding 3.68 tonnes per hectare.

Brazil is one of the world's leading agricultural frontiers and, therefore, it will be one of the main producers of food distributed to the world's population, which is expected to reach 9 billion people by 2050, according to the United Nations (UN).

## Grain production, planted area and fertilizer consumption in Brazil



Note: the following crops were included: corn, soybean, rice, beans, sorghum, castor bean, cotton, sunflower, barley, rye, canola, oat, peanut, wheat and triticale.  
Source: Conab

# GLOBAL COMPACT

|G4-15|

Heringer is a signatory of the Global Compact, a volunteering initiative promoted by the United Nations which seeks to provide guidelines for the promotion of sustainable growth and citizenship through committed and innovative corporate leaders. The initiative's goal is to encourage companies to adopt, in their business practices, fundamental and internationally accepted values, reflected in ten principles.

As a Global Compact signatory, Heringer adopts those principles; as a result, the commitments they imply pervade its strategy, culture and operations. In addition, the Ten Principles are an integral part of all the contracts our legal department develops as mandatory provisions.

In 2016, Heringer published the COP (Communication on Progress) on its investor relations website and on the International website of the Global Compact, publicly reinforcing its support to the Ten Principles and sustainable practices.

## THE TEN PRINCIPLES

Based on international declarations, such as:

- Universal Declaration of Human Rights (UDHR)
- Conference of the United Nations on the Environment and Development (Eco-92)
- Convention of the United Nations Against Corruption
- More than 12,000 signatories



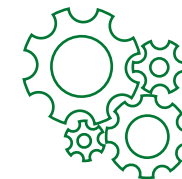
### Human Rights Principles

Businesses should:

1. Support and respect the protection of internationally proclaimed human rights
2. Make sure that they are not complicit in human rights abuses

### Heringer's Actions

- Relationships with suppliers (*learn more on page 29*)



### Occupational Principles

Businesses should uphold:

3. The freedom of association and the effective recognition of the right to collective bargaining
4. The elimination of all forms of forced and compulsory labor
5. The effective abolition of child labor
6. The elimination of discrimination in respect of employment and occupation

### Heringer's Actions

- Workforce Appreciation (*learn more on page 39*)



### Environmental Principles

Businesses should:

7. Support a precautionary approach to environmental challenges
8. Undertake initiatives to promote greater environmental responsibility
9. Encourage the development and diffusion of environmentally friendly technologies

### Heringer's Actions

- Sustainability Committee
- Automation of the production chain
- Audit of 100% of the units



### Principles against corruption

Businesses should:

10. Work against corruption in all its forms, including extortion and bribery

### Heringer's Actions

- Code of Conduct



# ENVIRONMENTAL MANAGEMENT

|G4-DMA PRODUCTS AND SERVICES, G4-EN27|

Currently, the company monitors and mitigates the impact of its activities on the consumption of natural resources, through the inventory of greenhouse gas emissions, environmentally friendly waste disposal, and the treatment and reuse of effluents.

In 2016, Heringer invested in environmental controls in 100% of its units. Documents of all plants were audited by the team responsible.

Heringer has well-structured plants equipped with:

- Solar heating systems for shower water for employees;
- Recycled water;
- Transparent shingles in raw material warehouses to let daylight in;
- Air conditioning systems consuming up to 60% less electricity, and;
- High-performance energy-efficient electric motors.

In addition, impacts caused by shipping goods are mitigated thanks to Heringer's strategic location. Plants are located near the main ports of entry for imported raw materials and inside or close to fertilizer consumer markets. This reduces the distances traveled by train or road, consequently shortening the distance between the company and farmers, reducing greenhouse gas emissions and energy consumption. In addition, the mixing units are installed in industrial districts or in industrial expansion zones, in compliance with the master plans of the municipalities.

Heringer maintains a Sustainability Committee to support the Board of Directors on all environmental aspects. The committee identifies and discusses issues that may impact Heringer's earnings, relationship with stakeholders and the cost-benefit ratio of its business to mitigate any damage to natural resources.



|                                | <b>Our commitments</b>   | <b>Goal</b>  |
|--------------------------------|--|--|
| <b>Environmental</b>           | Consolidate the GHG inventories of all Heringer's own units.   | Attained   |
|                                | Give continuity to the GHG inventory of all Heringer's own units**   | 2017   |
|                                | Relaunch the campaign to increase energy efficiency**  | 2017   |
|                                | Implement alternative sustainable solutions in the Candeias unit (Bahia State)   | 2017   |
|                                | Implement alternative sustainable solutions in Heringer's own units**  | 2019   |
|                                | Carry out an encouragement campaign to reduce scope 1 greenhouse gas emissions of the vehicle fleet**  | 2017   |
|                                | Install a system to withdraw and use rainwater in the Uberaba (Minas Gerais State), Catalão (Goiás State) and Três Corações (Minas Gerais State) units | Partially attained   |
|                                | Install a system to withdraw and use of rainwater in Heringer's own units  | 2018   |
|                                | Reduce effluent disposal by 3%   | Not attained* Goal extended to 2017                                  |
|                                | Reduce water consumption by 5%   | Attained   |
|                                | Reduce water consumption by more than 5%**   | 2017   |
|                                | Relaunch the campaign to increase energy efficiency  | Attained   |
|                                | <b>Social</b>  | Implement the <i>Comer Bem é Tudo de Bom</i> Program                 |
| <b>Strategy and management</b> | Formalize the policies adopted by Heringer   | Not attained. Planning concluded in 2016 and actions started in 2017 |
|                                | Implement the compliance program**   | 2017   |
|                                | <i>Improve the communication between Heringer and its stakeholders</i>   | Partially attained. Goal extended to 2017                            |

\*Increased effluent disposal, driven by the operational start-up of the Rio Grande (Rio Grande do Sul State) and Candeias (Bahia State) units and the higher number of employees during the months of the year with greater fertilizer production.

\*\*Goals established in 2016.



## Energy efficiency [G4-DMA ENERGY]

With regard to energy efficiency, Heringer works with the concept of efficiency, always seeking to adapt its production chain and use new equipment (in the offices and industrial complexes) and improved logistics. In 2016, for example, compressed air was no longer generated by piston compressors, which were replaced with screw compressors, whose performance is superior.

We also initiated the migration of our power supply from the captive to the free market. Based on principles and practices which prioritize sustainability, Heringer

established a premise which envisages that the power supply company should provide clean energy, from an incentivized source, bringing financial gains to the company. Expenses are expected to reduce by approximately 17%. In addition, Heringer reaffirms its commitment to sustainability management, as the generation of clean energy brings benefits and less impact to the environment.

### Understand incentivized generation

It was created to promote the development of alternative electricity generation sources through renewable energy. Electricity is generated using the following sources:

- Solar
- Wind power
- Biomass
- Qualified co-generation with power of up to 30 MW injected into the distribution and/or transmission line

Companies with potential to generate volume lower than or equal to 30MW are entitled to a tariff discount.



## Water efficiency and effluent management

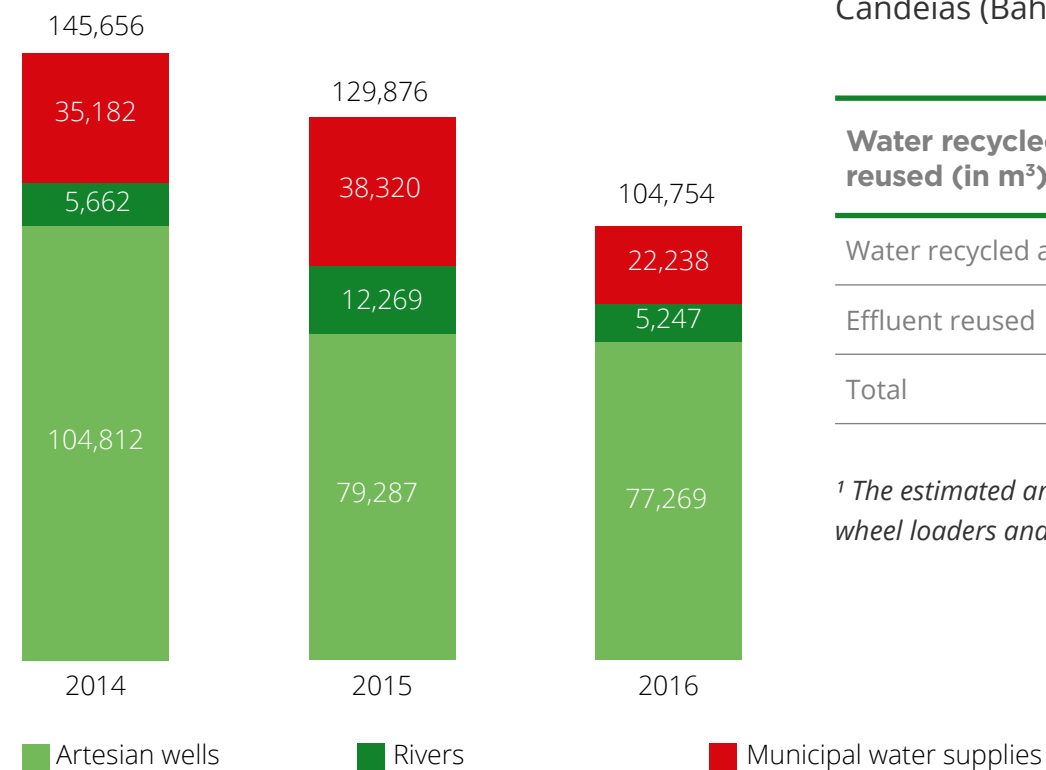
[G4-DMA EFFLUENTS AND WASTE, G4-EN22, G4-EN26]

Heringer withdraws water in compliance with the permits granted by the competent environmental bodies in accordance with the needs of each unit and the features of the water bodies involved. Most water comes from artesian wells, but Heringer also uses water from municipal water supplies and rivers.

Fertilizer mixing processes do not use water. Water is intended for human consumption, maintenance and equipment cleaning. Only reclaimed water is used to clean equipment in all units. Water consumption reduced by 19% in 2016 over 2015, due to the lower production and the awareness campaign held at the company.

Heringer has Sewage Treatment Plants (STP) in seven units, through which the company treats effluents biologically in accordance with the standards set by ABNT (Brazilian National Standards Organization). Effluents are returned to the environment in compliance with the parameters required by the law, capable of being absorbed without causing damage to nature; there is no water or effluent disposal from operational processes. This waste management policy is assessed for effectiveness through internal audits, specific indicators and measurement systems for domestic sewage and parameter evaluations. The information gathered through those processes and procedures serves as the basis for the company's goals and objectives regarding water consumption and effluent disposal. Effluent disposal increased by 17% in 2016 over 2015, due to the operational start-up of the Rio Grande (Rio Grande do Sul State) and Candeias (Bahia State) units.

### Water withdrawal (in m<sup>3</sup>)



| Water recycled and reused (in m <sup>3</sup> ) | 2014   |    | 2015   |    | 2016   |    |
|--|--------|----|--------|----|--------|----|
|  | Total  | %  | Total  | %  | Total  | %  |
| Water recycled and reused <sup>1</sup>         | 3,744  | 23 | 3,744  | 12 | 3,744  | 17 |
| Effluent reused                                | 10,850 | 65 | 24,519 | 81 | 16,650 | 74 |
| Total  | 16,608 |    | 30,278 |    | 22,410 |    |

<sup>1</sup> The estimated amounts of reused water correspond to water consumed locally to wash wheel loaders and in Effluent Treatment Plants equipped with water reuse system.



## Greenhouse Gas Emissions Inventory

In 2016, Heringer reached an important goal, with the consolidation of GHG inventories in all its own units. The company instructs its employees to use fuel from renewable sources in its vehicle fleet. In addition, in 2016, the Rosário do Catete unit (Sergipe State) stopped using bagasse, replacing it with wood chips, thus generating greater energy efficiency due to the biomass. These actions were taken based on the survey and analysis made through the greenhouse gas inventory.

The preparation of the inventory is very important, as it maps Heringer's energy matrix. The inventory began to be prepared in the Paulínia unit, in 2011 and, subsequently, was extended to the plants in Minas Gerais, Goiás, Espírito Santo and the Northeast.

### Greenhouse gas emissions (t)

| Scope                    | 2014  | 2015  | 2016  |
|--------------------------|-------|-------|-------|
| 1 (CO <sub>2</sub> e)    | 7,015 | 4,205 | 5,842 |
| 2 (CO <sub>2</sub> e)    | 1,408 | 318   | 1,332 |
| Biogenic CO <sub>2</sub> | 524   | 4,089 | 4,259 |

*Note: in accordance with the goal established, the company inventoried greenhouse gas emissions of all its operating units. The reduction in scope 1 emissions between 2014 and 2015 reflects Heringer's smaller truck fleet. The increase in scopes 1 and 2 emissions between 2015 and 2016 reflects the inclusion of all units in the GHG inventory.*

## Reverse Logistics

[G4-DMA PRODUCTS AND SERVICES, G4-EN28]

Empty fertilizer containers, mostly reusable, are not classified as hazardous waste; therefore, they do not cause a significant negative environmental impact. The fertilizer industry has no reverse logistics agreements and the company has no product and packaging recovery processes currently in place.

## Solid Waste Management

[G4-DMA EFFLUENTS AND WASTE]

Heringer manages solid waste in all its units. The Environment Department monitors and records all waste generated by each plant every year. With this system, the company is able to dispose of waste properly, keep track of the amount of waste generated and develop a reduction plan.

Solid waste is separated and stored in Temporary Solid Waste Storage Facilities. Those facilities are enclosed and sealed. Afterwards, waste is collected and disposed of by a licensed company, thus ensuring compliance with environmental legislation and minimizing environmental impacts.

This waste management system is assessed for effectiveness through internal audits, indicators, waste weighing systems and parameter evaluation. In 2016, Heringer produced 5% less waste than in 2015.



**Amount of waste generated by type (in tonnes)**

| Type  | 2014  | 2015  | 2016  |
|---|-------|-------|-------|
| Fatty sludge from grease trap                     | 0     | 0     | 53    |
| Fatty sludge from the water-oil separation system | 0     | 0     | 345   |
| Oil and grease containers                         | 0     | 0     | 1     |
| Paint containers                                  | 0     | 0     | 0,49  |
| Debris  | 797   | 983   | 884   |
| Spent PPE   | 0     | 17    | 25    |
| Sandblasting waste                                | 350   | 0     | 0     |
| Cesspit cleaning                                  | 5,529 | 4,981 | 3,886 |
| Cotton wipers used                                | 5     | 3     | 3     |
| Fiberglass  | 1     | 0     | 0     |
| Air filters                                       | 0     | 0     | 0,04  |
| Fluorescent, mercury or sodium vapor lamps        | 1     | 4     | 1     |
| Filter sleeves                                    | 0     | 0     | 0     |
| Oil-contaminated material                         | 236   | 133   | 13    |
| Lubricant oil used                                | 23    | 47    | 19    |
| Other non-hazardous waste                         | 13    | 0     | 0     |
| Batteries   | 0     | 0     | 0,21  |
| Rubber waste                                      | 30    | 34    | 8     |

**Amount of waste generated by type (in tonnes)**

| Type  | 2014         | 2015         | 2016         |
|---|--------------|--------------|--------------|
| ETS waste   | 17           | 18           | 9            |
| Wood waste  | 842          | 1,283        | 918          |
| Paper and cardboard waste                                 | 73           | 70           | 132          |
| Health care waste (infected material, needles, medicines) | 0,2          | 0,1          | 0,002        |
| Asbestos roof tile waste                                  | 12           | 13           | 16           |
| Ink and pigment waste                                     | 16           | 11           | 4            |
| Electronic waste  | 8            | 0            | 1            |
| Liquid laboratory waste                                   | 354          | 66           | 73           |
| Organic waste (such as food waste)                        | 202          | 215          | 215          |
| Plastic waste   | 948          | 886          | 694          |
| Ferrous metal waste                                       | 276          | 362          | 221          |
| Non-ferrous metal waste                                   | 0            | 0            | 0            |
| Laboratory glassware                                      | 16           | 5            | 0            |
| Glass   | 2            | 0            | 2            |
| <b>Total</b>  | <b>9,750</b> | <b>9,130</b> | <b>7,524</b> |

*Notes: 1. Until 2016, data on the fatty sludge from grease trap and water-oil separation system were reported together with the oil-contaminated material.*

*2. Oil-contaminated material includes only solid waste.*

*3. In 2016, the amount of paper and cardboard waste produced was impacted by the increased volume of waste paper.*

# SOCIAL ENGAGEMENT

|G4-DMA INDIRECT ECONOMIC IMPACTS, G4-DMA LOCAL COMMUNITIES, G4-SO1, G4-SO2|

Aware of its responsibility and the positive impact it can generate on local communities, Heringer develops social and environmental responsibility projects to promote local development and a sense of belonging in the community. The initiatives involve different issues such as environmental education, active citizenship, preventive healthcare and cultural incentive. Heringer's activities cause no significant negative impacts on the communities in its area of direct influence.

## Social projects

### Caixa de Cultura

Heringer undertakes the *Caixa de Cultura* [Culture Box] Project jointly with SESI (*Serviço Social da Indústria*, or Industry Social Services) to promote access to culture. Heringer's employees can use a diverse collection of books renewed every four months.

### Casa de Convivência

Since 2013, Heringer contributes to the cultural initiative *Casa de Convivência* (Socialization House) which offers a series of activities for free such as digital inclusion classes, music literacy lessons in guitar, keyboards and singing, as well as drama courses for all ages, in Alexandra (Paranaguá, Paraná State). The space also has a library with a collection of over 1,000 books. Since 2015, it offers courses for adult and youth education (EJA) groups. In 2016, ten students completed high school through the EJA program.

### Centro Infantil Boldrini

Since 2012, Heringer has been supporting the TOP 500 Program of Centro Infantil Boldrini [Boldrini Child Center], a philanthropic hospital located in Campinas, São Paulo State, and specializing in Pediatric Oncology and Hematology. Funded by donations, the institution treats patients from across Brazil. Heringer received the "Seal of Commitment to the Fight against Childhood Cancer" for supporting the hospital.

### Community Vegetable Gardens

Underway since 2011, the program supports *Centro Terapêutico Tese* (Espírito Santo Eternamente Temple) and São Vicente de Paulo Education Center, both in Paranaguá, Paraná State, in developing community vegetable gardens. Heringer donates fertilizer, and company technicians monitor the vegetable gardens on a monthly basis and provide guidance on the best practices for growing vegetables and fertilizer application.

### Três Corações Municipal Garden

Heringer donated fertilizer to the Municipal Garden of Três Corações, Minas Gerais State, in 2016. The Municipal Garden produces and distributes seedlings of native tree species to recover green spaces, increase the urban tree cover and protect parks and gardens in the city.

### Hospital do Câncer de Barretos

Heringer makes annual donations to Hospital de Câncer de Barretos [Barretos Cancer Hospital]. Located in São Paulo State, the hospital is a benchmark for cancer treatment and prevention in Brazil.

### Cereias Project

Heringer helps fund the CEREIAS (*Centro de Reintrodução de Animais Selvagens*, or Center for the Reintroduction of Wild Animals) Project. The initiative is designed to treat and return to the wild birds, mammals and reptiles, thus helping preserve the environment. The project is supported by 17 companies that provide funds, animal feed or gardening services. The initiative resulted from a partnership among the IBAMA, CONSERVE (*Cooperativa de Trabalhadores Conservacionistas*, or Conservationist Workers' Cooperative) and Fibria Celulose.

### Cultura na Estação [Culture at the Station] Project

This initiative is designed to encourage the community of Alexandra, from Paranaguá, Paraná State, to participate in cultural activities. The project comprises music, theater, dance and magic performances, movie showings, photo exhibitions and literature.

### Mar [Sea] Project

In 2016, Heringer continued to support the Mar Project, an initiative of *Folha do Litoral*, from Paranaguá (Paraná State), supported by IBAMA (*Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis*, or Brazilian Institute of Environment and Renewable Natural Resources). The campaign aims to raise awareness of the society, comprising the local population, businesses or tourists, about the importance of preserving water resources and aquatic biodiversity. The initiative is focused on actions geared toward the Itiberê river, Paranaguá, Guaqueçaba, Guaratuba, and Antonina bays and the channel connecting the states of Paraná and São Paulo.



# GRI INDEX

The GRI Contents presented below show the relationship between the indicators and the Sustainable Development Goals (SDG).

## SUSTAINABLE DEVELOPMENT GOALS

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| <b>1</b> NO POVERTY<br>                  | <b>2</b> ZERO HUNGER<br>                     | <b>3</b> GOOD HEALTH AND WELL-BEING<br>              | <b>4</b> QUALITY EDUCATION<br>                       | <b>5</b> GENDER EQUALITY<br>                     | <b>6</b> CLEAN WATER AND SANITATION<br>              |
| <b>7</b> AFFORDABLE AND CLEAN ENERGY<br> | <b>8</b> DECENT WORK AND ECONOMIC GROWTH<br> | <b>9</b> INDUSTRY, INNOVATION AND INFRASTRUCTURE<br> | <b>10</b> REDUCED INEQUALITIES<br>                   | <b>11</b> SUSTAINABLE CITIES AND COMMUNITIES<br> | <b>12</b> RESPONSIBLE CONSUMPTION AND PRODUCTION<br> |
| <b>13</b> CLIMATE ACTION<br>             | <b>14</b> LIFE BELOW WATER<br>               | <b>15</b> LIFE ON LAND<br>                           | <b>16</b> PEACE, JUSTICE AND STRONG INSTITUTIONS<br> | <b>17</b> PARTNERSHIPS FOR THE GOALS<br>         |    |

| Standard General Disclosures                      | Page/<br>Response  | Sustainable<br>Development Goals<br>(SDG) |
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| <b>Organizational Profile</b>                     |  |   |
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| G4-4  | Primary brands, products, and services   | 12, 16                                    |
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| G4-9  | Scale of the organization  | 12, 37, 56                                |
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| G4-14   | Whether and how the precautionary approach or principle is addressed by the organization                                 | 28  |
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| G4-16   | Memberships of associations  | 29, 56                                    |
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| G4-17   | All entities included in the organization's consolidated financial statements or equivalent doc                          | 56  |
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| Standard General Disclosures   | Page/<br>Response  | Sustainable<br>Development Goals<br>(SDG) |
|--------------------------------|--|---|
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| G4-21                          | For each material aspect, the aspect boundary outside the organization   | 3   |
| G4-22                          | Effect of any restatements of information provided in previous reports   | 3   |
| G4-23                          | Significant changes from previous reporting periods in the scope and aspect boundaries                                       | 3   |
| <b>Stakeholders Engagement</b> |  |   |
| G4-24                          | Stakeholder groups engaged by the organization   | 3   |
| G4-25                          | Basis for identifying and selecting stakeholders with whom to engage   | 3   |
| G4-26                          | Organization's approach to stakeholder engagement  | 3   |
| G4-27                          | Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to them | 3   |
| <b>Report Profile</b>          |  |   |
| G4-28                          | Reporting period   | 3   |
| G4-29                          | Date of most recent previous report  | 3   |
| G4-30                          | Reporting cycle  | 3   |
| G4-31                          | Contact point for questions regarding the report or its content  | 3   |
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| G4-33                          | Organization's policy and current practice with regard to seeking external assurance for the report                          | 3   |
| <b>Governance</b>              |  |   |
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| G4-56                          | Organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics              | 9, 28                                     |

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| <b>Aspect: Market Presence</b>  |                   |   |
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| G4-EC6 Proportion of senior management hired from the local community at significant locations of operations  | 56                |   |
| <b>Aspect: Indirect Economic Impacts</b>  |                   |   |
| G4-DMA Type of management   | 52, 56            |   |
| G4-EC7 Development and impact of infrastructure investments and services supported  | 56                |   |
| <b>Aspect: Procurement Practices</b>  |                   |   |
| G4-DMA Type of management   | 29                |   |
| G4-EC9 Proportion of spending on local suppliers at significant locations of operation  | 29                |   |
| <b>Category: Environmental</b>  |                   |   |
| <b>Aspect: Energy</b> 7, 12   |                   |   |
| G4-DMA Type of management   | 48                |   |
| G4-EN3 Energy consumption within the organization   | 56                |   |
| <b>Aspect: Effluents and Waste</b> 6, 12  |                   |   |
| G4-DMA Type of management   | 49, 50            |   |
| G4-EN22 Total water discharge by quality and destination  | 49                |   |
| G4-EN26 Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water and runoff | 49                |   |
| <b>Aspect: Products and Services</b>  |                   |   |
| G4-DMA Type of management   | 46, 50            |   |
| G4-EN27 Extent of impact mitigation of environmental impacts of products and services   | 46                |   |
| G4-EN28 Percentage of products sold and their packaging materials that are reclaimed by category  | 50                |   |

| Specific Standard Disclosures  | Page/<br>Response | Sustainable<br>Development Goals<br>(SDG) |
|--|-------------------|---|
| <b>Category: Social</b>  |                   |   |
| <b>Aspect: Occupational Health and Safety</b> 3, 8   |                   |   |
| G4-DMA Type of management  | 40                |   |
| G4-LA5 Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs  | 40                |   |
| G4-LA6 Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender   | 40                |   |
| G4-LA7 Workers with high incidence or high risk of diseases related to their occupation  | 56                |   |
| G4-LA8 Health and safety topics covered in formal agreements with trade unions   | 40                |   |
| <b>Aspect: Local Communities</b>   |                   |   |
| G4-DMA Type of management  | 52                |   |
| G4-SO1 Percentage of operations with implemented local community engagement, impact assessments, and development programs  | 52                |   |
| G4-SO2 Operations with significant actual or potential negative impacts on local communities   | 52                |   |
| <b>Aspect: Customer Health and Safety</b> 3  |                   |   |
| G4-DMA Type of management  | 19, 56            |   |
| G4-PR1 Percentage of significant product and service categories for which health and safety impacts are assessed for improvement   | 19, 56            |   |
| G4-PR2 Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes   | 19                |   |
| <b>Aspect: Product and Service Labeling</b>  |                   |   |
| G4-DMA Type of management  | 19                |   |
| G4-PR3 Type of product and service information required by the organization's procedures for product and service information and labeling, and percentage of significant product and service categories subject to such information requirements | 19                |   |
| G4-PR4 Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes   | 19                |   |

## ATTACHMENTS TO THE GRI INDEX

### G4-5

Avenida Idalino Carvalho, s/n, Areinha Viana (ES) – CEP: 29135-000

### G4-9

Information about the total number of employees and the total number of operations are presented in the sections Workforce profile and Operations (*learn more on pages 37; and 12 and 13*). Net sales totaled R\$5.2 billion in 2016. Total capitalization broken down in terms of debt and equity stood at R\$2,855,544 thousand whereas cost amounted to R\$4,557,742 thousand in 2016.

### G4-16

Heringer's CEO is the CEO of SIACESP (*Sindicato da Indústria de Adubos e Corretivos Agrícolas do Estado de São Paulo*, or Fertilizer and Agricultural Lime Industry Association of São Paulo State). Heringer's Chief Financial and IR Officer sits on SIACESP's Audit Committee. The company makes no donations to these organizations in addition to the basic membership fees. The associations in which Heringer participates are listed in section Membership in Associations (*learn more on page 29*).

### G4-17

All Heringer's production and distribution units are included in the financial statements; however, their numbers are not broken down and are presented only in a consolidated manner.

### G4-DMA Market presence, G4-EC6

Heringer has no formal policy for recruiting professionals from the areas in which its production units are located. However, it usually hires professionals from local communities provided that there are applicants qualified for the opening. In 2016, there was no local contracting of managers. Managing positions are filled preferably by company professionals.

### G4-DMA Indirect economic impacts, G4-EC7

In 2016, there were no investments in infrastructure or offer of services in the communities where Heringer operates and, therefore, there were no significant changes to the positive and negative economic impacts compared to previous reports

### G4-EN3

#### Electricity consumption by site (in GJ)

| UNIT                                  | 2014          | 2015          | 2016          |
|---------------------------------------|---------------|---------------|---------------|
| Anápolis, Goiás State <sup>1</sup>    | 497           | 582           | 44            |
| Bebedouro, São Paulo State            | 1             | 4             | 2             |
| Candeias, Bahia State                 | 0             | 195           | 2,682         |
| Camaçari, Bahia State <sup>2</sup>    | 3,227         | 2,826         | 0             |
| Catalão, Goiás State                  | 3,144         | 2,748         | 2,615         |
| Cubatão, São Paulo State <sup>2</sup> | 2,332         | 1,507         | 0             |
| Dourados, Mato Grosso do Sul State    | 1,709         | 1,833         | 1,502         |
| Iguatama, Minas Gerais State          | 4,220         | 3,544         | 3,359         |
| Luís Eduardo Magalhães, Bahia State   | 131           | 60            | 57            |
| Manhuaçu, Minas Gerais State          | 3,339         | 3,154         | 3,110         |
| Maringá, Paraná State <sup>2</sup>    | 48            | 48            | 0             |
| Ourinhos, São Paulo State             | 5,551         | 4,578         | 4,209         |
| Paranaguá, Paraná State               | 6,773         | 6,748         | 6,412         |
| Paulínia I, São Paulo State           | 6,862         | 6,403         | 5,601         |
| Paulínia II, São Paulo State          | 1,794         | 2,163         | 2,524         |
| Porto Alegre, Rio Grande do Sul State | 2,563         | 2,739         | 2,497         |
| Rio Grande, Rio Grande do Sul State   | 0             | 429           | 1,679         |
| Rio Verde, Goiás State                | 1,557         | 1,397         | 1,311         |
| Rondonópolis, Mato Grosso State       | 3,931         | 3,258         | 2,516         |
| Rosário do Catete, Sergipe State      | 7,551         | 8,466         | 7,683         |
| Três Corações, Minas Gerais State     | 3,945         | 3,730         | 3,329         |
| Uberaba, Minas Gerais State           | 4,021         | 3,980         | 3,570         |
| Viana, Espírito Santo State           | 4,774         | 4,209         | 4,056         |
| <b>Total</b>                          | <b>67,970</b> | <b>64,600</b> | <b>58,759</b> |

Note:

<sup>1</sup>The Anápolis unit (Goiás State) transferred its production to the Catalão unit (Goiás State) and maintained only the commercial office, significantly reducing energy consumption.

<sup>2</sup>Electricity consumption in 2016 excludes the Camaçari (Bahia State), Cubatão (São Paulo State) and Maringá (Paraná State) units, which were not operational in the period.

### G4-LA7

There are no workers involved in occupational activities who have a high incidence or high risk of specific diseases.

### G4-DMA Customer health and safety, G4-PR1

All products are monitored for possible impacts to consumer health and safety, through information made available on labels (on handling, transport, storage and general care), in invoices, MSDS (Material Safety Data Sheet) and through personal customer services. This information describes the correct ways for handling products, seeking to protect consumer health and safety. The information is clear, easy to understand and is related to the proper use. Heringer does not assess the impacts of its products regarding customer health and safety formally; however, it complies with all the requirements established by the competent bodies.





## **CREDITS**

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### **GRI Consulting, text, editing and English version**

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### **Text and Editing**

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### **Photos**

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