

Society



Taking responsibility toward society is an integral part of our entrepreneurial approach. We are convinced that we can make an important contribution to society with our knowledge, our skills and our products.

Management

Merck KGaA, Darmstadt, Germany sees itself as part of the community, not only at its individual locations, but also globally. In the context of our business activities, we play an important role in the community at our respective locations. We create jobs and invest in the qualification and social security of our employees. Many companies supply us locally with their goods and services. In addition to this, we engage ourselves in charitable initiative – in many cases together with our employees.

Our corporate social responsibility engagement primarily focuses on those areas in which we have specific expertise stemming from our core businesses. We are thus engaged in health care projects and support education, specifically in the natural sciences. We provide disaster relief in emergency situations, especially in those regions in which we also have operations.

To increase the effectiveness of our projects, we have consolidated our resources into three global lighthouse projects:

- Through our Praziquantel Donation Program, we are partnering with the World Health Organization (WHO ) to combat the worm disease schistosomiasis in African school children.
- The Global Pharma Health Fund is a non-profit initiative funded by Merck KGaA, Darmstadt, Germany to fight counterfeit medicines in developing and emerging countries.
- The Deutsche Philharmonie is the musical ambassador of our company.

In addition, our legal entities are engaged in local projects. We have defined criteria for selecting projects, and the decisions concerning specific projects are made by our local legal entities. Our Group Communications in Darmstadt is responsible for coordinating and executing the global lighthouse projects. The Executive Board receives regular reports on the progress of the projects. We conduct annual global surveys in order to ascertain the regional distribution of our social engagement, to determine our goals and focus, and to track the development of our activities over time. In 2011, we invested a total of € 7.9 million in corporate social engagement activities, and in 2012 we invested € 11.8 million.

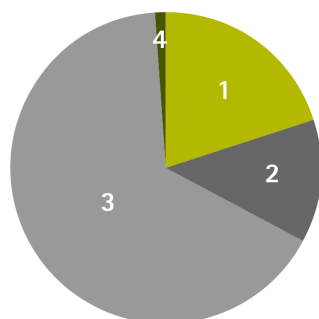
2012

11.8 million

In 2012, we invested a total of € 11.8 million in corporate social engagement activities.

Of the total monetary and supply donations made by our legal entities in 2012, 49% were made in emerging markets (Latin American and Asia, excluding Japan), 41% in Europe, 9% in North America, and 1% in the rest of the world.

Spending on local social engagement by region* in 2012 in %



1 Europe	20%
2 North America	13%
3 Emerging markets	66%
4 Rest of world	1%

* Excluding lighthouse projects.

This figure does not include activities that primarily serve to market our products. We document donations to patient organizations in Europe separately and publish this information on our website.

As part of a Bertelsmann Foundation project on corporate social engagement, we collaborated on the development of the "IOOI" method  (Input, Output, Outcome, Impact), a way of gauging and assessing social engagement. We have applied this method to our donation program to combat schistosomiasis, thus evaluating the progress of the project.

Global projects: Fighting schistosomiasis with praziquantel

Over 200 million people in Africa suffer from the widespread tropical worm disease schistosomiasis. It is estimated that more than 200,000 die each year as a result of this chronic parasitic condition, which makes it the most common tropical disease in Africa after malaria. Schistosomiasis is widespread primarily in the tropical and subtropical areas of sub-Saharan Africa. In these regions, a vast majority of the population has no access to clean water and sanitary installations.

The disease is caused by flatworms and is spread through stagnant water. People become infected by the worm larvae in the water, while bathing, fishing, playing, washing their clothes, or working agricultural land. These larvae penetrate human skin and enter the blood vessels, where they grow into adult worms. The female's eggs infest inner organs such as the intestines, bladder, spleen, or liver, and often cause severe inflammation. Symptoms include severe abdominal pain, diarrhea, and bloody urine or stool. The infection rate is especially high among children, and the chronic symptoms that result are particularly serious. Schistosomiasis stunts growth, causes learning disabilities and leads to anemia.



Merck KGaA, Darmstadt, Germany has been supporting the World Health Organization (WHO ) since 2007 in the fight against schistosomiasis in Africa. Our efforts are thus in line with the United Nations Millennium Development Goals. In addition, they are part of the initiative to fight neglected tropical diseases that was launched by the Bill & Melinda Gates Foundation in early 2012. Merck KGaA, Darmstadt, Germany donates tablets containing the active ingredient praziquantel to WHO, which then distributes these mainly to African school children. Since the start of our Praziquantel Donation Program, over 100 million tablets have been donated. A total of more than 28 million children have been treated. In 2012 alone, Merck KGaA, Darmstadt, Germany supplied WHO with over 27 million praziquantel tablets. In 2012, an estimated seven million children were treated for schistosomiasis (final figures will be available mid-2013).

28 million

28 million children have been treated to date within the scope of our Praziquantel Donation Program to combat schistosomiasis.

Praziquantel is the only active ingredient with which all forms of schistosomiasis can be treated. In addition, praziquantel is well-tolerated. WHO has therefore included it on its Model List of Essential Medicines. Merck KGaA, Darmstadt, Germany developed praziquantel in the 1970s as part of a research collaboration. Our plant in Mexico produces the tablets under the brand name Cesol 600®; we organize and finance the transport to Africa, and WHO coordinates local distribution.

Program expansion

Originally, our program was scheduled to end in 2017. However, Merck KGaA, Darmstadt, Germany decided at the end of 2011 to continue its efforts indefinitely. The goal, agreed upon in conjunction with WHO, is to eliminate the worm disease in Africa. To this end, Merck KGaA, Darmstadt, Germany intends to increase the number of tablets donated in the medium term, raising the total to 250 million annually. This will allow around 100 million children to be treated each year.

This planned donation has a value of approximately US\$ 23 million per year; in 2012, Merck KGaA, Darmstadt, Germany invested US\$ 2.85 million (2011: US\$ 2.3 million) in the donation program. These figures include the logistics costs to ship the tablets from the production site in Mexico to Africa, but not the costs for the awareness program or the research into a pediatric formulation.

→ Global projects: Fighting schistosomiasis with praziquantel

Educating people

In addition to the tablet donation, Merck KGaA, Darmstadt, Germany is also supporting an awareness program at schools in Africa; it uses **comic booklets** and **posters** to explain the causes of schistosomiasis, teaching pupils how to prevent the disease. In 2011, a pilot project was launched at schools in Senegal and Malawi; through 1,100 brochures and 130 posters, the project reached around 1,100 school children. WHO is currently adapting the materials based on the experience gained from the pilot regions. In 2013, the program is being launched in Senegal with 750,000 brochures and in Malawi with 250,000 brochures.

Optimizing the formulation

As part of the donation program expansion, Merck KGaA, Darmstadt, Germany is also working to optimize the formulation of the drug. For instance, pharmaceutical experts are currently developing a fruity coating intended to make it easier for children to take the tablets.

Research

Within the scope of a **public-private partnership (PPP)**, Merck KGaA, Darmstadt, Germany is researching a formulation of praziquantel for small children. Praziquantel tablets in their current form are suitable for adults and children over the age of six; for children younger than six, it is currently not possible to properly treat the disease. We believe that a pediatric formulation of praziquantel will be a significant step toward eliminating schistosomiasis in Africa. The partners of this public-private partnership, which was founded in July 2012, include Merck KGaA, Darmstadt, Germany, **TI Pharma**, Astellas Pharma Inc., and the Swiss Tropical and Public Health Institute ("**Swiss TPH**") in Basel.

Managing and monitoring

Our Praziquantel Donation Program (MPDP) is being conducted in partnership with WHO, with Merck KGaA, Darmstadt, Germany and WHO each contributing their particular expertise. Merck KGaA, Darmstadt, Germany produces the tablets and handles the costs for transporting the tablets to Africa. WHO manages, monitors, and documents the local distribution of the Praziquantel tablets and works with local authorities to implement the treatment at schools. WHO supplies the local data on morbidity rates and treatment frequency in the countries in which our Praziquantel Donation Program has been rolled out. The data for each country can be found in **the WHO PCT databank**. A steering committee consisting of representatives from WHO and Merck KGaA, Darmstadt, Germany convenes several times a year in order to review the program's progress and decide on its future course. The last meeting was held in Kenya in November 2012.

Evaluation

As part of a Bertelsmann Foundation project on corporate social engagement, we collaborated on the development of the "**IOOI**" **method** (Input, Output, Outcome, Impact), a way of gauging and assessing social engagement. We have applied this method to our donation program to combat schistosomiasis, which allows us to evaluate the progress of the project.

Praziquantel: Evaluation

	Indicators	Measuring instruments
Impact	1% infection rate = Schistosomiasis has been eliminated as a public health issue.	Scientific studies conducted by WHO
Outcome	Infection rate	In 2013, WHO is conducting scientific studies in select countries; reviewing the scope of treatment via the WHO PCT online databank.
Output	Number of school children who received praziquantel in one year.	Medical experts and teachers document the treatment of school children. WHO consolidates these data into reports on the distribution of the tablets in the individual countries.

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Praziquantel: Evaluation

	Indicators	Measuring instruments
Input	Number of tablets supplied by Merck KGaA, Darmstadt, Germany to the individual countries.	A logistics partner delivers the tablets to Africa and reports on their distribution.

Goals: Praziquantel

Strategic goal	Action	By?	Status in 2011 and 2012	Status
Eliminate the worm disease schistosomiasis in Africa	Provide tablets containing praziquantel free of charge to treat school children in Africa	Ongoing	More than 100 million tablets were donated from the beginning of the project to the end of 2012. More than 28 million children were treated in total (figure not yet final; figures for 2012 will not be finalized until July 2013). In 2011 and 2012, over seven million children were treated. 2011: 25 million tablets provided to nine countries in Africa 2012: 27 million tablets provided to eight countries in Africa	
	Run an awareness program to explain the causes of schistosomiasis and potential preventive measures.	End of 2013	Until mid-2012, instructional materials were tested in Senegal and Malawi as part of a pilot project. In 2013, the awareness program will be initiated in both countries, taking into account experience from the pilot projects.	
	Incrementally increase the number of tablets donated annually by a factor of ten, up to 250 million	End of 2016	Currently searching for additional API suppliers.	
	Research a new formulation of praziquantel for children under 6 years old		In July 2012, a public-private partnership (PPP) was founded. Milestone: Preclinical development is to be completed by 2014; clinical development is scheduled to start in 2014.	
	Optimize the praziquantel formulation	End of 2014	Development of a film coating to make the tablets easier for patients to swallow and to make them even more resistant to long transport times.	

Legend:  Achieved  In progress  Not achieved  New goal

→ Global projects: Combating counterfeit medicines with the Minilab

Global projects: Combating counterfeit medicines with the Minilab

Substandard and counterfeit medicines pose a deadly hazard. Interpol estimates that up to 30% of all medicines in developing health care systems fall into this category. The Global Pharma Health Fund (GPHF ) , a non-profit initiative funded by Merck KGaA, Darmstadt, Germany, is dedicated to fighting counterfeit medicines: the Minilab developed by the GPHF is able to detect counterfeit medicines quickly, easily and cheaply. Two test kits each weighing around 30 kilograms contain a large number of test methods that state health care workers in developing countries can use to inspect pharmaceuticals. Reference samples are used to test the identity and concentration of altogether 63 active ingredients in total, ranging from anti-malarial drugs to antibiotics up to analgesics and antipyretics.



The GPHF developed the Minilab specifically for use in regions with a simple infrastructure. The rapid analyses do not rely on external power sources and normal drinking water suffices for the tests. There is currently no other product like it. To date, the GPHF has supplied 578 Minilabs at cost to 86 countries. More than half of these countries are in Africa, and one third of them are in Asia. The Minilabs are primarily utilized by local health authorities, often in collaboration with labs for governmental drug inspection centers

Merck KGaA, Darmstadt, Germany participates in external research with the aim of increasing the number of medicines that can be tested. In 2011 and 2012, the GPHF developed testing methods for seven other pharmaceuticals each and updated the user manuals accordingly. The GPHF also offers training courses in order to familiarize users with the test procedures. In 2012, training courses were held in Russia, Myanmar, Angola, Germany, and Indonesia.

A total of 77 Minilabs were supplied in 2011 and 100 in 2012. In addition to selling them at cost, which is handled via a distribution partner, both the GPHF and Merck KGaA, Darmstadt, Germany donate Minilabs in individual cases. In 2012, Merck KGaA, Darmstadt, Germany donated ten Minilabs to the Angolan Ministry of Health, and the GPHF donated five labs to the Ministry of Health of Zambia, five to the Ministry of Health and Welfare of Tanzania, and one to the Ghanaian Ministry of Health.

Goals: Minilab

Strategic goal	Action	By?	Status in 2011 and 2012	Status
Combat counterfeit medicines by providing and further developing the mobile GPHF Minilab	Develop new test methods for five active ingredients and add the descriptions of the new test methods to the user manuals	End of 2011	2011: Seven new test methods were developed. 2012: Five training seminars were conducted on using the GPHF Minilab, and seven new test methods were developed.	
	Conduct three training seminars on using the GPHF Minilab, sell 50 Minilabs, develop seven new test methods	End of 2013		

Legend:  Achieved  In progress  Not achieved  New goal

→ Global projects: Philharmonic Orchestra

Global projects: Philharmonic Orchestra

We also have a long tradition of cultural engagement. We consider classical music in particular to be the universal language that brings people together; as such, it is an important part of our culture, which is represented by Philharmonic Orchestra, our musical ambassador. The concerts of this professional ensemble are highly popular, with more than 20,000 people attending them per year. They represent an integral part of the cultural life in the vicinity of our corporate headquarters in Darmstadt, Germany. Special events for children and youth as well as collaboration with schools, such as the annual orchestra workshop held for the first time in 2010, aim to make classical music more accessible to young people.



Furthermore, Philharmonic Orchestra regularly invites international guest ensembles to Darmstadt and also goes on international concert tours itself.

In 2011, the orchestra toured India, with more than 10,000 people attending the classical music concerts in Mumbai, Pune, New Delhi, Goa, Hyderabad, Bangalore, and Chennai. Our Philharmonic Orchestra thus helps to present our corporate culture to employees, customers and many other people. In summer 2013, our Philharmonic Orchestra will be participating in an international jazz festival in Istanbul.

Local responsibility

It is also imperative to show responsibility at the local level: In accordance with our values, we call upon all of our legal entities to assume responsibility for their local communities. After all, they foster an open dialogue with their neighbors and therefore know where Merck KGaA, Darmstadt, Germany can make the most valuable contributions. The individual companies can orient their activities toward our Group-wide framework, which defines the following areas of focus for local engagement: health, education, environment, culture, and sports in the vicinity of our sites. In 2011 and 2012, the legal entities participated in more than 120 projects. These are often long-term projects that are sponsored by Merck KGaA, Darmstadt, Germany for multiple years. Numerous initiatives are either supported or even started up by employees. In 2011, 3,675 employees strengthened corporate engagement at Merck KGaA, Darmstadt, Germany by making donations or doing volunteer work for charitable purposes, and in 2012 6,987 employees did so.



Examples include constructing and running a hospital on the island of Baba Bhit in Pakistan, as well as sponsoring projects to help integrate disadvantaged youth in Brazil. The legal entities in India and China award scholarships that enable young people to receive a good education, which they could otherwise not afford without support. Employees at our legal entity in Guatemala are building houses for underprivileged people in collaboration with a charitable organization. In addition to this, we provide disaster relief; in 2011, this went to the victims of the earthquake and tsunami in Japan as well as the victims of the flooding in Thailand.

➤ More examples of local engagement can be found on our website [↗](#)