# The Bayer corporation in Mexico

Lucía E. Benavides, Peter Clausing, Giovanna C. Segura López and Sabrina Spitznagel.

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This document summarizes information publicly available (as of February 2021) about past and current human rights and environmental problems linked to the operations of the Bayer corporation in Mexico. The most significant case is that of *Cromatos de México*, a former Bayer subsidiary that operated from 1958 to 1978. It was closed after protests because of severe health problems, including deaths, due to environmental contamination with hexavalent chromium. It seems that the health damages were never compensated, and the case represents a bold example of "risk export" from rich to poor countries. Another example is the marketing of the pesticide carbendazim in Mexico, although it is banned in the European Union because of serious health hazards. The examples from Mexico are put into context with similar situations in other countries of the Global South, specifically Brazil and India.

**Keywords**: Bayer, Human rights, Double Standards, Pesticides, Cromatos de México.

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# Zusammenfassung

#### Der Bayer-Konzern in Mexiko

Dieses Dokument fasst zusammen, was über vergangene und aktuelle Menschenrechtsund Umweltprobleme im Zusammenhang mit dem Bayer-Konzern in Mexiko bekannt ist.
Der bedeutendste Fall ist der von *Cromatos de México*, einer ehemaligen BayerTochtergesellschaft, die von 1958 bis 1978 tätig war. Das Unternehmen wurde nach
Protesten wegen schwerer gesundheitlicher Probleme, darunter Todesfälle, aufgrund von
Umweltkontamination mit sechswertigem Chrom geschlossen. Es scheint, dass für die
Gesundheitsschäden nie Entschädigungen gezahlt wurden, und der Fall stellt ein
drastisches Beispiel für den "Risikoexport" aus reichen in arme Länder dar. Ein weiteres
Beispiel ist die Vermarktung des Pestizids Carbendazim in Mexiko, obwohl es in der
Europäischen Union wegen ernster Gesundheitsgefahren verboten ist. Die Beispiele aus
Mexiko werden in Kontext zu ähnlichen Situationen in anderen Ländern des globalen
Südens gebracht, konkret in Brasilien und Indien.

**Stichworte:** Bayer, Menschenrechte, Doppelte Standards, Pestizide, Cromatos de México.

### Resumen

#### La corporación Bayer en México

En este documento se resume información disponible sobre problemas pasados y actuales ligados a los derechos humanos y el ambiente y en relación con la corporación Bayer en México. El caso más significativo es el de *Cromatos de México*, una antigua filial de Bayer que operó de 1958 a 1978. Fue cerrada después de protestas relacionadas con graves problemas de salud, incluidas algunas muertes, debidos a la contaminación ambiental con cromo hexavalente. Al parecer, los daños a la salud nunca fueron compensados y el caso representa un ejemplo audaz de "exportación de riesgo" de los países ricos a los pobres. Otro ejemplo es la comercialización del plaguicida carbendazim en México, que se continúa vendiendo en México, aunque está prohibido en la Unión Europea debido a los graves riesgos que representa para la salud. Los ejemplos de México se analizan en el contexto de situaciones similares en otros países del Sur Global, concretamente en el Brasil y la India.

**Palabras clave**: Bayer, Derechos humanos, Dobles estándares, Pesticidas, Cromatos de México.

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# The Bayer corporation in Mexico

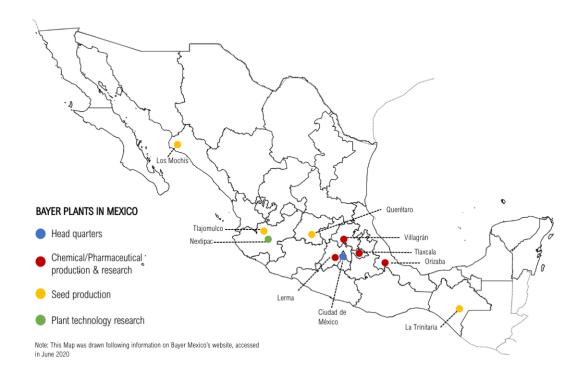
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## 1. General information on the corporation

Bayer is a transnational corporation based out of Germany whose main branches are Bayer HealthCare (pharmaceuticals) and Bayer CropScience (pesticides and seeds, including transgenics). According to its business report, in 2019 it employed more than 103,000 people worldwide, had revenues of 43.5 billion Euros and profit after taxes of 1.6 billion Euros (Bayer, 2019)

In Mexico, Bayer has been active since the 1920s1. It currently has nine facilities, including some former Monsanto sites and its central offices in Mexico City (see map below). Concerning potential environmental pollution, the most relevant sites are Lerma (State of Mexico, production of pharmaceuticals), Ixtacuixtla (Tlaxcala State, producing "agricultural solutions") and Orizaba (Veracruz State, production of steroidal hormones).

<sup>&</sup>lt;sup>1</sup> As stated by the company's own website: https://www.bayer.com/es/mx/mexico-home



## 2. Problems in Mexico<sup>2</sup>

Information on Bayer's activities in Mexico is sparse. This section presents the cases for which information has been found.

#### 2.1. Hazardous waste Incineration

According to a 2001 publication, Bayer operated a facility in Ecatepec, Estado de México, with a permit to incinerate more than 1,700 tons of hazardous waste annually (Acosta & Asociados, 2001). The report states that, in the year 2000, a total of 17 hazardous waste incinerators had operating licenses in Mexico, of which only six submitted emissions monitoring data to the relevant authorities. It is unknown whether the Bayer facility was one of them and therefore, whether it complied with environmental obligations. Likewise, it is unknown whether this site is still operating.

<sup>&</sup>lt;sup>2</sup> The topic of transgenic seeds and plants is excluded from this document.

#### 2.2. Cromatos de México

The former Bayer subsidiary *Cromatos de México* was located in a community called Lechería, in the municipality of Tultitlán, in the State of Mexico (Estado de México) and started operating in 1958. It created a huge, still unresolved environmental problem due to the production of hexavalent chromium and the on-site accumulation of large amounts of toxic residues. Workers and neighbors were exposed to toxics for years. Beginning in 1975, people living in the surrounding area mobilized after several children who attended the nearby school died. The movement received public support and the plant was closed in 1978 (Diaz, 2009). Hexavalent chromium is known to cause lung cancer in humans, among other health problems (NIEHS, n/y).

After closing, between 75,000 and 120,000 tons of toxic hexavalent chromium residues were left behind (Curiel, 2003; Gaceta Parlamentaria, 2004). Since the 1980s, and more intensely between 2000 and 2003, several institutions were involved in characterizing the pollution problem and drawing up a remediation plan (Méndez, 2012). The German Technical Cooperation Agency (GTZ) provided part of the technical and financial support to the Mexican Ministry of Environment (SEMARNAT) (Diaz, 2009). In 2003, 25 years after the facility was shut down, high chromium concentrations in soil, air and drinking water were still found (Gaceta Parlamentaria, 2004). Between 2006 and 2012, SEMARNAT confined the chromium in situ, restored the surrounding soil and set up nine wells to monitor the aquifer. In 2012 it was announced that a recreational park would be established on the rehabilitated site (Mendez 2012). However, five years later, in 2017, the site was still not open to the public and was surrounded by a fence with warning signs (Vázquez, 2019). In the sources reviewed there was no indication that Bayer provided any compensation for the environmental and health damage caused by Cromatos de México.

In the European Union, the use of hexavalent chromium has been restricted beginning in the year 2000 (European Parliament, 2000). Nonetheless, *Cromatos de México* can be considered a case of "risk export" from rich to poor countries (Diaz, 2009). A former CEO of Bayer stated: "The main disadvantage (when staying in Europe) ... are higher labor costs ..., coupled with widespread regulation of environmental affairs by the state" (Watkins, 1995).

## 2.3. Tlaxcala plant

Bayer's facility in the state of Tlaxcala (Ixtacuixtla municipality) produces "biological agricultural solutions". This plant is one of at least 20,400 facilities operating in an industrial belt settled in the Atoyac-Zahuapan river basin (Rosas Landa, 2018). Here, dumping untreated or at best partially treated industrial wastewater into the municipal sewage system or directly into rivers and soils is common practice (TLA, 2018). The Atoyac river receives 778 tons of toxic and dangerous pollutants daily. Its extreme pollution has been acknowledged to be a huge health risk to the population (Rosas Landa, 2018; CNDH, 2017). Extraordinarily high cancer incidence in children and other illnesses in all age groups have been increasingly recorded. The severe health and environmental issues linked to industrial wastewater discharges into the Atoyac river are well documented and known to the relevant authorities and have been repeatedly denounced by civil society (CNDH, 2017; Franco, 2019), with no sign of improvement.

It is known that Bayer discharges wastewater into the municipal sewage system (Usi, 2020). Details on these discharges are not publicly available, but it is known that the number and capacity of sewage treatment plants in the region is overly insufficient (Franco, 2019; Usi, 2020) and the ones existing are not suited to deal with industrial residues (Camarillo, 2017). In addition, local authorities do not monitor discharges with the needed frequency (CNDH, 2017), nor have they resources or technology to deal with the toxins present in the river, some of which are prohibited in Europe (PAN Germany, 2019b).

## 2.4. Bayer's deadly pesticides in Mexico

Another aspect is the marketing of pesticides in Mexico which lost their market approval in the European Union (EU) because of environmental and health concerns. For instance, on its Mexican website<sup>3</sup>, Bayer offers its product *Envidor*, containing spirodiclofen, classified in the EU as "probably carcinogenic for humans" (European Commision, n/y).

In 2016, a large alliance of civil society organizations published a report on human rights violations by corporations in Mexico (Hudlet, 2016). One of

<sup>&</sup>lt;sup>3</sup> https://www.bayer.com/es/mx/productos/mexico-agricultura. Accesed Feb.2021

the cases discussed in the report is Villa Guerrero, a municipality in the State of Mexico, hosting one of the biggest flower production sites in the country and where 1,500 families are involved. Bayer is one of the companies providing the pesticides used. These are linked to significant health and environmental damages because of the failure to provide necessary precautionary measures. Personal protective equipment (PPE) for workers is virtually non-existent, according to the report. Toxic pesticide waste and pesticide containers are simply dumped into the environment. The Food and Agricultural Organization (FAO) in its International Code of Conduct on Pesticide Management<sup>4</sup> (p.15) recommends that companies should promote the use of suitable PPE. Furthermore, services should collect and safely dispose used containers and left-over pesticides. In general, according to the report, such precautions are missing.

## 2.5. The case of Carbendazim

Carbendazim is a fungicide classified in the European Union as "probably mutagenic in humans" and "probably toxic for reproduction in humans", i.e. hazard category 1B for both hazards. Therefore, by the end of 2014, the marketing of products containing carbendazim was prohibited in the European Union. In contrast, Bayer continued to manufacture and market products containing carbendazim in Mexico. At Bayer's stockholder assembly on April 28th, 2020 Werner Baumann, CEO of Bayer, announced the phasing out carbendazim globally by end of the year (Baumannn, 2020). However, based on experience, this needs to be monitored, because it was demonstrated that earlier self-commitments of this type, even when they were confirmed by signature (PAN Germany, 2013) had been violated (PAN Germany, 2015).

Recently, Bayer claimed: "Where the situation changes, we voluntarily withdraw products from the market, as we currently do with the active ingredient carbendazim" (Bayer Spokesperson, 2020). A claim hard to believe, because the "situation" changed already at least since 2016, i.e. when carbendazim became banned in Europe because of the toxic properties of the compound.

<sup>&</sup>lt;sup>4</sup>https://www.fao.org/fileadmin/templates/agphome/documents/Pests\_Pesticides/Code/C ode\_ENG\_2017updated.pdf

# 3. Public support from the German government and lobbying in Europe

During her visit to Mexico in 2008 the German chancellor Angela Merkel, referring to Bayer, claimed: "As German companies and also as German politicians, we have of course <u>always</u> (emphasis added) advocated that certain environmental standards and certain social standards be observed" (own translation from German) (CBG, 2008). Which "certain" environmental and social standards are meant in that statement is not clear. *Cromatos de México* (see above) was not mentioned, but German taxpayers' money seem to have been used (involvement of the GTZ) when the mess left behind by Bayer's subsidiary was partially cleaned up.

In South East Asia, Bayer Cropscience participated in a program called "German Food Partnership" (2012-2015) supported by the German government. Responding to a parliamentary inquiry by the Green Party (Bundesregierung, 2015), the German government stated that the use of Highly Hazardous Pesticides (HHPs) was excluded from the program only as long as the purchased pesticides were financed by the GIZ<sup>5</sup>. In other words, in parts of the program where the GIZ did not directly finance the purchase of pesticides, there was no limitation on the use of HHPs – a very limited way of discouraging the use of HHPs (PAN Germany, 2019b)

In recent years, Bayer CropScience was involved in the building of "Green Innovation Centers" in India, which are financed by the German government, as part of the special initiative launched in 2014 by the German federal government called "One World no Hunger". Part of the aim of these Green Innovations Centers is to train farmers and to use pesticides with the aim of increasing yields (Bundesregierung, 2015). In this context, the German government was criticized because some of the pesticides used are listed in PAN International's List of HHPs. This contradicted the German government's earlier statement that the use of HHPs would be excluded from this project (Bundesregierung, 2016)

Finally, serious concerns arise from Bayer's lobbying activities in Brussels to allow so-called 'import tolerances' for agricultural products imported from outside the European Union (CEO, 2020). Until now,

<sup>&</sup>lt;sup>5</sup> The German development cooperation agency. Deutsche Gesellschaft für Internationale Zusammenarbeit, successor of the GTZ.

agricultural products imported from countries outside the EU must not contain traces above 0.01 mg/kg (or the most sensitive limit of analytical detection) of pesticides banned in EU because of e.g. carcinogenicity or mutagenicity hazards. The "import tolerances" favored by Bayer and other companies would allow considerably higher residues in the imported products at the expense of human health not only in Europe but also in the exporting countries, because a much more intensive use of these HHPs in the producing country could take place.

# 4. Social/environmental conflicts in other countries of the Global South

A major issue with Bayer is the continued marketing of pesticides in countries of the Global South that do not have market approval in the European Union, because of environmental or health concerns. This "double standard" is increasingly criticized by the public and protested against in countries of the Global South.

One example of this problem is a joint study by five organizations conducted in Brazil (Luig, et al., 2020). The report shows that the use of agrochemicals affects the environment and people's health. Bayer sells 12 substances in Brazil that are not permitted in the EU, six of which are considered HHPs according to the PAN-list (see PAN Germany 2019b). Bayer claims to sell these toxic agrochemicals in compliance with national laws. However, these laws were influenced by two agrochemical industry lobby groups. For example, as documented in the report, these lobby groups supported a bill facilitating the registration in Brazil of pesticides considered to be carcinogenic or having other serious long-term effects. In a prominent case, Bayer's product Nativo, containing the toxic active ingredient tebuconazole, was sprayed from an airplane less than 30 meters away from the lodgings of the Tey'i Jusu community in Brazil. The inhabitants consequently suffered from headache, fever, diarrhea, etc. Tebuconazole is considered to have toxic effects on reproduction, among others (Chen, et al., 2019; Machado-Neves, et al., 2018).

Nativo has also been an issue in India. According to a 2016 report (PAN Germany, ECCHR, Kheti Virasad Mission & FIAN, 2016) Bayer produced Nativo 75 WG in Germany and exported it to India in 2015 and 2016, without providing sufficient information about its health risks. When exported, the containers were labeled with risk warning signs. Once in India, the product

was repackaged into smaller bags, without the risk warning labeling concerning reproductive toxicity, although this is required by the Plant Protection Products Act in India. In both Germany and India complaints have been filed against Bayer in this context (PAN Germany, ECCHR, Kheti Virasad Mission & FIAN, 2016)

Another problem with the use of Bayer's toxic agrochemicals in the Global South is groundwater pollution. According to a study conducted from 2014 to 2017 by the Brazilian Water Authority (Sisagua), the highly hazardous carbendazim (see section 2.5 above) was detected in the groundwater of the city of Caarapó (Luig, et al., 2020).

## 5. Conclusions

Bayer enjoys support in various ways by the German government (and German taxpayers' money) but profits from lower standards and weak regulation in other countries. According to a former CEO of Bayer environmental regulations represent an obstacle for the corporation (Watkins, 1995). Examples show that Bayer has "voluntarily" introduced improvements, reluctantly, as a response to social protests and public pressure. Therefore, bounding this and other corporations to clear and compulsory rules is necessary, if human health and the environment are at stake.

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