

## **CASE SUMMARY**

**The facts about pesticides in Punjab: users speak out**

**Report on Bayer and Syngenta submitted to the United Nation's  
Panel of Experts on Pesticide Management.**

*"These are the companies who are drawing profit."*

*"What the farmer gets is the pesticide inside his body and  
illness takes all his money."*

*Two farmers discuss the impact of pesticides, Bhotna Village, Punjab, 14  
March 2015*

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Since the inception of the Green Revolution in the mid 1960s, pesticide use in Punjab, India has attracted significant attention. The so-called Green Revolution was intended to increase crop yields and promote self-sufficiency across the nation. However, the new farming techniques significantly increased inputs such as fertilizer and chemical pesticides. As a result, Punjab is now the second highest consumer of pesticides in the country despite covering only 1.5% of India's land mass. After decades of excessive and indiscriminate use of pesticides, people are seeing serious adverse effects on their health and the surrounding environment.

Pesticide products contain hazardous chemicals that can cause serious damage to human health and the environment. In 1985, the Food and Agriculture Organization (FAO) of the United Nations (UN) established the International Code of Conduct on Pesticide Management (Code of Conduct) to manage the global risks associated with pesticide use. The current version of the Code of Conduct (2013) is also officially supported by the World Health Organization (WHO). The Code of Conduct applies to governments and pesticide companies alike, and industry has fully endorsed the Code. However, evidence from Punjab alleges that Bayer and Syngenta and their subsidiary companies are manufacturing, distributing and selling products in violation of the Code of Conduct. In response, a coalition of organizations from Asia and Europe are demanding that Bayer and Syngenta cease distributing pesticides that

pose an unacceptable risk to human health and environment. The companies deny any wrongdoing. ECCHR want the claims to be fully investigated by the World Health Organisation/FAO.

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## **Context: The global risks of pesticide use**

The World Health Organization (WHO) says that pesticide poisoning affects 3 million people and accounts for 20,000 unintentional deaths a year. The hazards of pesticide use however, disproportionately impact people across the Global South, and it is estimated that 99% of all fatal poisonings take place in developing countries. This is often due to the absence of effective regulatory regimes and a lack of training, which significantly increases the risk of exposure to toxic chemicals.

Pesticides can cause both acute and chronic effects. Acute effects, such as headaches, itching and even death can occur after exposure to a single dose of pesticide. Chronic diseases can develop through repeated, small, doses of pesticide over a long period of time. Chronic effects known to be caused by pesticide exposure include cancer, as well as reproductive disorders and hormonal disruption. Finally, there are environmental effects, such as toxicity to aquatic organisms or bees.

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## **Health concerns associated with pesticide use in Punjab**

Newspaper reports, scientific studies and the government have linked the increase in acute effects and chronic diseases in Punjab with the excessive use of pesticides. Agricultural workers are at risk of being directly exposed to toxic pesticides. However, due to the presence of pesticide residues in the food, water, air and soil, entire families, communities and consumers are at risk of indirect exposure to toxic pesticides. Of particular concern are the severe adverse health effects witnessed in the Malwa region, known as the “cotton belt” of Punjab, where 75% of pesticides used in the entire state are consumed.

Acute symptoms and chronic diseases associated with exposure to pesticides are widespread across the cotton belt. A study conducted with farm workers in the region reported that 94.4% suffered from skin rashes and itchiness and 88.9% experienced nausea and eye itchiness after spraying pesticides. There are also indications that the dramatic increase in cancer rates across Punjab is linked to pesticide use. In 2013, the Government undertook a state wide survey and confirmed that cancer prevalence in Punjab was higher than the national average. Moreover,

scientific studies have also linked exposure to pesticides with reproductive disorders, particularly amongst women, and developmental problems seen in children born in the cotton belt.

In response to these reports, ECCHR commissioned two fact-finding trips to Punjab during which surveys with pesticide users, distributors, dealers and health professionals were conducted. What was observed raised serious concerns regarding how Bayer and Syngenta conduct their commercial operations in the Punjab.

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## **Bayer and Syngenta's responsibilities under the International Code of Conduct on Pesticide Management**

The International Code of Conduct provides minimum safety guidelines to reduce the health and environmental risks of pesticide use. The Code and the accompanying guidelines developed by the FAO establish minimum safety standards in areas such as advertising, labeling and packaging. The pesticide industry should especially rely on the Code when operating in countries that have not yet established or are unable to effectively operate regulatory control over commercial pesticide activity (Art. 3.2). In addition, the Code requires pesticides companies to halt their sales, when relevant national and international standards cannot be met and pesticide use presents an unacceptable risk to the public (Art. 5.2).

Pesticide companies are relied upon to voluntarily integrate the standards in the Code of Conduct into their business practices. However, NGOs are invited to monitor observance of the Code and submit "*Ad Hoc* Monitoring Reports" to the FAO/WHO Panel of Experts. In their yearly meeting, the Panel of Experts is reviewing these reports and makes recommendations for appropriate follow-up actions.

Bayer and Syngenta have committed to implement the Code of Conduct in carrying out their business across the globe. They have pledged to adhere to the Code both through their membership to CropLife and in their commitments contained in their internal management policies. However, despite frequent reports of the negative impact of pesticide use in Punjab, neither Bayer nor Syngenta have intervened to safeguard users, or the public at large. For that reason, ECCHR together with a coalition of organizations from Asia and Europe have submitted a Monitoring Report to the Panel of Experts, to enforce the standards in the

Code of Conduct. The Monitoring Report alleges that Bayer CropScience and Syngenta violated core provisions of the Code of Conduct as evidence of the survey suggests that they fail to ensure adequate labeling and fail to promote the provision of protective clothing for users as well as adequate training of company representatives.

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## **Bayer CropScience and Syngenta and their pesticides**

The two companies were selected for the Monitoring Report because of their dominant market position in Punjab and internationally. Bayer and Syngenta are the top selling pesticides companies that already in 2007 together controlled about 38% of the world market and also in 2014 continued to be the top 2 “crop protection” companies globally.

The Monitoring Report analyses a sample of six products Bayer and Syngenta distribute in Punjab, which have been classified internationally as causing serious acute and chronic effects. The selected products are Confidor, Nativo, Larvin and Regent GR from Bayer CropScience and Gramoxone and Matador from Syngenta. Five of these pesticides contain active ingredients that are classified as “highly hazardous” by the Pesticides Action Network (PAN). The definition of Highly Hazardous Pesticides (HHP) developed by PAN is based on a comprehensive set of hazard criteria used by expert bodies in the UN, the EU and the USA. Using PAN’s list of HHPs, two of the products analyzed are considered to be fatal if inhaled; one is classified as a likely carcinogen; and another is known to disrupt hormones for humans. In addition, five contain active ingredients that have been classified as being highly toxic to bees.

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## **Lack of adequate labeling**

Despite the risk of acute and chronic effects that the products analyzed are known to pose, the Monitoring Report considered that the Bayer and Syngenta products were not adequately labeled, and thus appear to have breached the Code of Conduct. For example, labels and information leaflets of all the products analyzed lacked adequate safety advice or health warnings. Contrary to the Code, the packet of Nativo, manufactured by Bayer CropScience in Germany, omitted the warning phrase “*suspected of damaging the unborn child*”. Nativo is sold in Punjab and the UK, and a comparison between the two labels revealed

that such critical health warnings were missing from the identical product sold in Punjab.

The official language of the state is Punjabi, written in the Gurmukhi script. Hindi is only spoken by approximately 8% of the population. This notwithstanding, of the examined pesticides only one had Punjabi on the label. Highly problematic is also the small font of the text on several of the bottles. The farmers interviewed had great difficulty deciphering the text, and many were not able to read it at all. In a context where users may be unable to understand written health warnings on labels and leaflets, either because they are not written in Punjabi, the writing is too small or the user is illiterate other forms of providing essential information become even more important.

During the survey for the Report, users were asked what the color codes on the packaging of the six products meant. The color code indicates the acute toxic effects in order to alert the user to the level of toxicity of a product – with red indicating the most toxic and green signifying that a product is considered slightly toxic. However, the majority of users interviewed in the survey did not know the correct order nor understand the logic of the color code system. For example, one user believed that: *“yellow is the most dangerous, it works from outside. Red works from inside”*, another thought blue meant the product *“killed everything”* and that products with a green color code increased the yield.



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## Lack of personal protective equipment and adequate training

Contrary to the Code of Conduct, the Monitoring Report claims that Bayer and Syngenta are failing to promote the use of protective clothing to customers and are not providing adequate training to company representatives. The Code of Conduct emphasizes the importance of wearing protective clothing and, as a minimum, both manufacturers

recommend using goggles, gloves and aprons when handling all their products. However, the Report alleges that Bayer and Syngenta are failing to ensure the use of protective equipment in Punjab, either by distributing quality equipment to their customers or by ensuring that it is available to purchase in outlets. One customer is reported as saying:

*“Some time ago some people from either Bayer or Syngenta Company brought this [protective equipment] to our village. But when we tried to ask for some, they said that they only had five sets. They did not have enough for every farmer. They told us that they are so expensive they could not give them to every farmer”*

As a result of the lack of access to protective equipment, the survey conducted revealed that users are forced to apply pesticides in ordinary clothing and often bare foot. Moreover, when users have experienced burning or itching as a result of coming into contact with a pesticide, it was reported that authorized distributors of Bayer and Syngenta advised them to apply mustard oil against acute skin reactions. This form of protection is demonstrably inadequate as a means to protect users from the exposure to pesticides as compared to the equipment recommended by the FAO.



The Monitoring Report raises the question of whether company representatives at various levels may be aware of these apparent violations ongoing in the Punjab. Given their close ties to their

distributors, the companies would be in a position to influence the sales practices yet fail to take the monitoring of health and environmental impacts seriously.

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## **Demands to the FAO/WHO Panel of Experts**

The Monitoring Report has been submitted by a coalition of NGOs from across Europe and Asia, which includes: the ECCHR, Pesticide Action Network Asia Pacific, Bread for the World, the Berne Declaration and Kheti Virasat Mission, an organic farming movement based in the Punjab.

The submitting organizations argue that the alleged violations of the Code of Conduct contribute to the misuse, and overuse, of pesticides in Punjab, thereby increasing the risk of harmful exposure. The Monitoring Report requests that the FAO/WHO Panel of Experts call on Bayer and Syngenta to halt the sale of pesticides without adequate labels and where the use of suitable protective equipment cannot be guaranteed. In accordance with the Code of Conduct, the Report suggests that Bayer and Syngenta should adequately train dealers and offer a disposal scheme for empty containers. The submitting organizations also request the Panel of Experts to call for the prohibition of importation, distribution, sale and purchase of highly hazardous pesticides and to carry out an independent monitoring of pesticide use across Punjab.

The submitting organizations also make suggestions on how to improve the visibility and effectiveness of the monitoring mechanism. The International Code of Conduct includes pesticides users, environmental and consumer groups as well as trade unions among the entities addressed by the Code. These entities are invited to monitor the implementation of the Code of Conduct. However, to date only three monitoring reports have been submitted, with the last submitted in 2007, and NGOs have expressed frustrations with the Panel's failure to address evidence of noncompliance with the Code. Therefore, the Monitoring Report suggests ways to improve transparency of the monitoring process as well as the general visibility of the FAO Code of Conduct.

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**Timeline: (subject to change)**

October 2015: Monitoring Report submitted to the FAO

November 2015 to January 2016: The FAO secretariat provides an opportunity for Bayer, Syngenta and relevant governments to respond to the Monitoring Report.

Spring 2016: The secretariat then prepares an independent report to be discussed at the FAO/WHO Panel of Expert's annual meeting.

October 2016: Monitoring Report and video presented and discussed at FAO/WHO Joint Meeting on Pesticide Management.