



Environment fact sheet: **pesticides**



- Pesticides are useful but they pose threats to health and the environment.
- EU law governs the placing of plant protection products on the market and the monitoring of pesticides residues in water, food and feed.
- The EU has launched a strategy to address the risks entailed by the actual use of pesticides, starting with plant protection products.
- The scope of the strategy may be extended to include the use of biocides.

What the EU has done so far

Existing policies and legislation on pesticides were first introduced at EU level in 1979 and have evolved considerably over the years, culminating in 1991 with the adoption of a directive on the placing of plant protection products on the market. A Community regulation of 2005 sets maximum residue levels of active substances in food and feed.

A number of other pieces of EU legislation and policies also affect the use of pesticides. Environmental concerns have been integrated into the various regulations which make up the common agricultural policy since the mid-1980s.

The water framework directive of 2000 created a framework for assessing, monitoring and managing the ecological and chemical status of all surface and ground water. It established a list of 33 priority substances that are particularly hazardous for water, 13 of which are used as active substances in plant protection products. Empty pesticides packaging and pesticides remnants, as well as unused pesticides that are banned, or past their expiry date, have to be collected and managed according to the provisions of a directive on hazardous waste and a waste framework directive.

Research on pesticides and in particular into reducing and rendering more sustainable the way pesticides are used, has been supported for many years in the context of the EU research and development framework programmes. In 2003, the European Commission adopted a European environment and health strategy which aims to reduce diseases caused by environmental factors, including exposure to chemicals and pesticides.

The use of pesticides is also partly covered by directives that protect the health and safety of workers. However, these do not apply to the largest group of pesticides users, namely self-employed farmers.



Fact 1: Pesticides are useful but they pose threats to health and the environment.

The word 'pesticide' is a very broad term used to describe all substances and products designed for controlling or killing pests (insects, weeds, rodents or fungi). Plant protection products and biocidal products (e.g. disinfectants) are the two major groups of pesticides.

Farmers use pesticides to maintain or further increase the amount and quality of yield by a particular crop. Public authorities use them, for example to kill weeds along the motorways or railway tracks. So does the private sector, for example on leisure developments. Many of us use them in our homes and gardens.

When misused or overused, pesticides can contaminate water, air and soil. They can be harmful to non-target organisms and thus harm wildlife and contribute to biodiversity loss. In addition, they can penetrate food and lead to adverse effects on human health.

Fact 2: EU law governs the placing of plant protection products on the market and the monitoring of pesticides residues in water, food and feed.

Policies and legislation on pesticides were first introduced at EU level in 1979. They focus on controlling the placing on the market of plant protection products and monitoring the residues at the end of the life cycle of pesticides (see box). Plant protection products are also covered by EU legislation on health, agriculture, water, waste and research.

In spite of that, 5 % of food and feed samples controlled by the EU still contain unwanted residues of pesticides in quantities exceeding regulatory levels set by EU legislation, and a high proportion of the water coming from lowland rivers has to undergo expensive pesticide removal treatment before it can be distributed as drinking water.

This may be due to pesticide misuses, including overuses, as EU legislation only addresses the two extremities of the life cycle of pesticides — the placing on the market and the monitoring of the residues — but not the actual use phase, that is, the storage of pesticides in farms, the preparation of the spraying solution, the management/calibration of application equipment, the protection of operators and the application itself.

A few EU Member States have already adopted some measures to address the use issue. If this trend continues, there will be totally different levels of health and environmental protection from one Member State to another. Setting equal standards and objectives to be achieved in all Member States can only be done at EU level.

Fact 3: The EU has launched a strategy to address the risks entailed by the actual use of pesticides, starting with plant protection products.

In 2002, the EU launched a new approach to environmental legislation. It started work on seven 'thematic' strategies (see box), including one on pesticides which was adopted by the European Commission on 12 July 2006 after a thorough development process involving a broad range of stakeholders — Member States, academics, business and trade associations, individual companies, NGOs and other representatives of civil society. It is accompanied by a detailed impact assessment and a legislative proposal to create an overall coherent and consistent policy framework for pesticide use.

The strategy contains a proposal for a framework directive which will oblige Member States to set up national action plans (NAPs), within two years from the adoption of the directive. The NAPs will adapt the strategy to the specific situations in the Member States and set their own objectives. When preparing, implementing and revising their NAPs, Member States will involve all stakeholders and the public at large will be able to participate in the process as early and effectively as possible.

Member States will ensure that professional pesticide users, distributors and advisers have access to the minimum training required by the directive and launch awareness-raising campaigns and disseminate information through the retailers and distributors.

Application equipment must be regularly checked and maintained. The organisational aspects (e.g. public or private inspection systems, quality control of inspection bodies, financing, fees to be paid by owners, etc.) will remain at the discretion of the Member States.

The draft directive also requires Member States to ban aerial spraying. It allows derogations for crops and areas where aerial spraying can bring environmental or health benefits — for example, when it protects the operator's health or responds more quickly to pest forecasts and weather conditions — or where there are no viable alternatives (e.g. on specific crops such as rice, on forests etc.).

A number of pesticides are identified as hazardous substances in the water framework directive. Risk mitigation measures will be strengthened when companies request to place such plant protection products on the market. Member States will be required to establish pollution reduction programmes for areas close to water bodies, including measures such as buffer strips or the use of particular technical equipment to reduce spray drift.

More encouragement will be given to

A new generation of environmental legislation

In 2005 and 2006, the European Commission adopted seven thematic strategies — on pesticides, air pollution, the marine environment, waste prevention and recycling, natural resources, the urban environment and soils.

The thematic strategies are a new, holistic approach to whole topic areas. They contain measures which are destined to be integrated into existing policies and legislation. Only when this is not possible is it necessary to propose new legislation or other appropriate instruments.

They are based on a broad review of existing policy and required several years of scientific and economic analysis together with extensive consultation of stakeholders. They look at pressures and impacts which often cut across those themes. They examine the links between environmental impacts and sectoral policies. They look at a broad range of options and a varied policy mix, including the use of market-based instruments, technology and innovation to deal with the problems identified in a strategic and effective manner. They also take a long-term perspective, setting the framework for EU and Member State action for the next two decades. They propose strategic objectives and explore short- and medium-term measures where appropriate, thus helping to meet the EU's global commitments.

Each strategy takes the form of a package comprising an overall approach towards the thematic issue, presented in a communication that highlights issues and proposed solutions, legislative proposals (for some of them) and an impact assessment.

All seven thematic strategies are now going through the EU decision-making process (Council of Ministers, European Parliament, etc.).



pest control methods that make little or no use of pesticides. Common and harmonised EU-wide indicators for pesticide risk will be developed to measure risk reduction trends within and among the Member States. A consultative forum made up of national authorities, the Commission, farmers, industry and environmental and consumer organisations will be set up. It will help exchanging data, harmonising technical guidelines and agreeing on a set of indicators to measure progress and establish quantitative risk reduction objectives.

Apart from the draft framework directive on the use of pesticides, the Commission adopted a proposal for a regulation on the collection of pesticides statistics which commits Member States to collect data on the placing on the market and use of plant protection products. One additional proposal for a directive laying down essential requirements on environment protection for the placing on the market of new pesticide application equipment and accessories will be adopted by 2008.

Existing EU laws, in particular the directive of 1991 on the placing of plant protection products on the market, will be amended in order to:

- reinforce the way the Member States monitor compliance with requirements regarding the safe use of pesticide;
- encourage the substitution of the more dangerous pesticides by other lower-risk alternatives;
- reinforce residue and environmental monitoring;
- promote research on the potential effects of pesticides on human health — in particular the effects of exposure to multiple substances, the so called 'cocktail' effect.

The EU and its Member States should also improve the way they monitor and assess their exports or donation of chemicals to third countries outside the EU, particularly in developing countries.

Fact 4: The scope of the strategy may be extended to include the use of biocides.

In 1998, the EU adopted a directive on the placing on the market of biocidal products or biocides, such as disinfectants, wood preservatives and antifouling paints, which are used to control other harmful organisms than those damaging crops or controlling plants. Once the impacts of the biocides directive have been evaluated, the scope of the thematic strategy on pesticides may be extended to include biocides.

By and large, the strategy is expected to greatly increase the level of knowledge about the use of pesticides. The overall use of pesticides should decline steadily as better trained users, having optimum application equipment at their disposal, use pesticides more efficiently and reduce losses into the environment. Moreover, promoting pest control methods that use less pesticides and designating zones with reduced or zero pesticides use should also reduce the overall use of pesticides. The percentage of food and feed samples where regulatory maximum residue levels are exceeded is expected to decline. Incidents involving humans or wildlife should also decrease.

The strategy establishes measures which will make it possible to minimise the risks to human health and the environment linked to pesticide use.



Further reading

- Further information on the evaluation and authorisation process for plant protection products can be found at the following Internet address: http://ec.europa.eu/food/plant/protection/evaluation/index_en.htm
- The full text of the strategy and more information, including a brochure entitled *EU pesticides policy — the story behind the strategy*, which relates the process leading to the adoption of the strategy and summarises its content, are available at: <http://ec.europa.eu/environment/ppps/home.htm>