



# écophyto2018

10 September 2008

## CONTENTS

- **THE ECOPHYTO 2018 PLAN FOR THE REDUCTION OF PESTICIDE USE OVER THE PERIOD 2008-2018** **1**
- **FOCUS 1:** Evaluation of progress on reduction of pesticide use **5**
- **FOCUS 2:** Determination and general dissemination of agricultural systems and known methods conducive to reduced pesticide use through the mobilisation of all partners in research, development and knowledge transfer **7**
- **FOCUS 3:** Innovation in the design and development of low-pesticide technical pathways and cropping systems **9**
- **FOCUS 4:** Training in reduced, safe pesticide use **11**
- **FOCUS 5:** Reinforcement of surveillance networks for bioagressors and the unwanted effects of pesticide use **13**
- **FOCUS 6:** Inclusion of the specific features of French overseas *départements* (DOM) **14**
- **FOCUS 7:** Ensuring reduced, safe use of plant protection products in non-agricultural areas **17**
- **FOCUS 8:** Organisation of national monitoring of progress on the plan and its roll-out in the regions, plus communication on the reduced use of plant protection products **19**

## **THE *ECOPHYTO* 2018 PLAN FOR REDUCTION IN PESTICIDE USE OVER THE PERIOD 2008-2018**

In the 20<sup>th</sup> century, agriculture in the countries of the North has made it possible to achieve the goals of food security and food safety for health. Its intensive methods of production make extensive use of inputs, pesticides in particular<sup>1</sup>, to secure yields and eliminate or reduce competition with weeds and to counter the attacks of bioaggressors, along with the control of parasites harmful to human health.

The global context marked by rising demand for food and feed for the human population and for livestock farming, as well as for non-food uses, has brought food security issues once again to the fore. France must for this reason maintain a high level of agricultural production, but it must also ensure better production, preserving ecological balances against the backdrop of climate change and competition for water resources, and taking into account consumer demand for healthy products. A notable prerequisite for this is that farms should become less dependent on pesticides.

Today, the impact on human health (operators and consumers) and the environment of substances which by their very nature affect living organisms is now seen as a core concern for society.

At European level the sustainable use of pesticides is thus one of the seven thematic strategies in the Sixth Environment Action Programme of the European Community 2002-2012. This aims to achieve "a significant overall reduction in the risks and uses of pesticides consistent with the necessary crop protection". Specifically, this strategy was applied where France is concerned in 2006 in the form of the interministerial programme for the reduction of pesticide-related risks (French abbreviation PIRRP), which has enabled the conditions in which pesticides are marketed and used to be improved and made safer.

In the course of the Grenelle consultation process on environmental issues, the more general question of the sustainability of their use was raised. Grenelle Undertaking no. 129 therefore lays down, firstly, the "objective of reducing by half the use of pesticides, accelerating the dissemination of alternative methods, provided however that these can be fully developed". Following Grenelle, the President of the Republic entrusted to the Minister of Food, Agriculture and Fisheries the task of drawing up a plan for the reduction by 50% pesticide use in the space of ten years, if possible.

And secondly, Undertaking no. 129 provides for staged withdrawals over the period from the end of 2008 to the end of 2010 and for a reduction in the use of 53 of the most dangerous molecules.

In addition to risk management measures for pesticides as determined by the assessment of the products concerned and surveillance of their impacts (e.g. improved application, reduction of transfers out of application areas), reductions in the use of plant protection products constitutes the most effective way of reducing the exposure of the population and the environment to what are hazardous substances. Moreover, in a context in which the range of available active substances is being restricted, a lessening of the dependence of cropping systems on plant protection products will guarantee the sustainability of the means of protection by limiting the development of resistance.

---

<sup>1</sup> Pesticides are classed as plant protection pharmaceuticals in the meaning of Article L.253-1 of the *Code Rural*, the French code of rural law.

French farmers, concerned for their own wellbeing and conscious of their role in society, have already adopted progressive schemes. Networks of industry professionals have experimented with innovative systems of production allowing reduced consumption of plant protection products while nevertheless maintaining satisfactory levels of production. The conclusions of the collective scientific evaluation conducted by INRA (the French national institute for agricultural research) and CEMAGREF (the French specialist research centre for environmental sciences and technologies) in 2005 stressed the fact that there is a great deal of room for progress as of now in some cropping systems and that it is possible to build new production systems with less need for pesticides.

In addition to the withdrawal from the market of plant protection products containing the active substances of most concern, the core purpose of the Ecophyto 2018 action plan is to begin immediately to disseminate the best low-pesticide agricultural practice (Focus 2) and to drive innovation based on research directed at new systems of production enabling further reductions and which are viable and lend themselves to dissemination (Focus 3).

Alongside actions for reduced use, the plan's success must involve training and safe pesticide use, these being necessary conditions to be met if these programmes are to win the widest possible acceptance (Focus 4, supplementing the interministerial programme for the reduction of pesticide-related risks (PIRRP).

The plan provides for the strengthening of networks for surveillance of bioaggressors, to ensure that treatments are properly targeted, along with the undesirable effects of pesticide use on crops and the environment (Focus 5).

And lastly, due to the specific situations of French overseas *départements* with regard to the risks associated with plant protection products, one of the plan's core focuses is dedicated entirely to them (Focus 6).

Since the relevance of reducing the use of plant protection products goes beyond the confines of the agricultural world, one strategic focus of the plan is specifically devoted to the issues surrounding reduced, safe use of pesticides in non-agricultural areas (Focus 7).

This new challenge is therefore a major one. It represents a very substantial paradigm shift that can be achieved only with the support of all stakeholders, the latter having already been mobilised for the drafting of the present plan.

A system for quantitative monitoring of progress on the reduction of pesticide use (Focus 1) has been made an integral part of the plan. Specifically, this is based on an indicator (NODU) which is proportional to the number of dosage units represented by sales of active protection substances.

Progress on the plan will be tracked nationally and regionally with input from the same partners through a consultation and monitoring body attached to the Ministry of Agriculture.

The plan will be supplemented by a series of action summaries.

## **CONTENTS**

- FOCUS 1** - Evaluation of progress on reduction of pesticide use
  
- FOCUS 2** - Determination and general dissemination of agricultural systems and known methods conducive to reduced pesticide use through the mobilisation of all partners in research, development and knowledge transfer
  
- FOCUS 3** - Innovation in the design and development of low-pesticide technical pathways and cropping systems
  
- FOCUS 4** - Training in reduced, safe pesticide use
  
- FOCUS 5** - Reinforcement of surveillance networks for bioagressors and the unwanted effects of pesticide use
  
- FOCUS 6** - Inclusion of the specific features of French overseas *départements*
  
- FOCUS 7** - Ensuring reduced, safe use of plant protection products in non-agricultural areas
  
- FOCUS 8** - Organisation of national monitoring of progress on the plan and its roll-out in the regions, plus communication on the reduced use of plant protection products

## **FOCUS 1: EVALUATION OF PROGRESS ON REDUCTION OF PESTICIDE USE**

A battery of intensity indicators for the use of pesticides will be deployed to evaluate the efficacy of the measures adopted under the plan and to allow the public to assess, in a spirit of total transparency, the efforts devoted by the various actors to reducing their use. The yardstick for intensity of pesticide use will be the NODU (*nombre de dose unitaires*/number of dosage units), calculated as the sum of the quantities of the active substances sold, each expressed in terms of its specific dosage unit.

These indicators will make it possible:

- to monitor changes in overall pesticide use on an annual basis,
- to cover the whole range of uses,
- to ensure that the effort is shared,
- to seek to ensure that a reduction in pesticide use is not accompanied by a deterioration in their toxicological profile or their potential for environmental contamination (water, soil, etc.).

It is also necessary to be in a position to connect observed changes in pesticide use with changes in the techniques that have led to those changes and to organise monitoring on a regional basis.

The intention is to add gradually to this battery of indicators other impact, risk and economic indicators. The impact and risk indicators will be in place by 2012 following completion of studies and research.

### **1.1 Better data collection for improved monitoring of pesticide use.**

If annual monitoring of the use of plant protection products over the whole of French national territory is to be provided, it is absolutely necessary for regularly updated data covering all crops and consolidated at national level to be available.

#### **Actions:**

- (1) Creation within the pesticide residue monitoring body of an information system for the calculation of indicators supported, firstly, by a sales database compiled at the level of the branch establishments of approved distributors and, secondly, data on the characteristics of plant protection preparations.
- (2) Extension by 2013 of the collection of the data in the survey of "cropping techniques" conducted by SCEES (the official central survey and statistics department) to arboriculture, fruit and vegetables and crops specific to French overseas *départements*.
- (3) More frequent collection of data on usage.

### **1.2 Annual monitoring of pesticide use across all farmed areas**

The effectiveness of the actions aimed at achieving the goal of reducing pesticide use by half can be measured by evaluating the quantitative intensity of pesticide application based on the data gathered as described above at 1.1, possibly smoothing those data over time using a method determined along with the stakeholders. A battery of intensity indicators will be defined in this way and the indicator of reference, NODU, will enable the public to be kept informed of the efforts deployed.

**Actions:**

- (4) Roll-out of the pesticide use indicators to cover all uses and to ensure that the reduction in pesticide application goes hand in hand with an improvement in the sanitary and environmental profiles of the substances employed.
- (5) Interpretation of the results with due consideration for the economic, phytosanitary and meteorological context and with input from all stakeholders prior to publication.

**1.3 Fine-tuning monitoring to match types of crop**

Nationwide monitoring of changing levels of use of plant protection products also needs to be backed by assistance in modifying techniques on the ground.

**Actions:**

- (6) Assistance for farmers in adopting a programme aimed at reduced pesticide use and evaluation of the newly acquired benchmarks by deploying an intensity indicator based on agricultural techniques broken down by crop category: the treatment frequency indicator (French abbreviation IFT).
- (7) Examination of the feasibility of its deployment for fruit and vegetables in light of the initial results obtained from the usage data collected in technically relevant conditions.
- (8) Regionalisation of this indicator across the major areas typified by soil/climate combinations (in the case of the major field crops), winegrowing areas (for the wine industry) and production areas (in the case of fruit and vegetables) using dedicated expert groups.

**1.4 Development of risk indicators**

If pesticide use is reduced along with simultaneous improvement of the profile of the products this will guarantee the quality of the reduction in their impacts on the various compartments of the environment and on health, but it will not permit predictive quantification of those impacts. This is the purpose of the risk indicators, which are complex, involving a large number of variables and data aggregation methods which will need to be validated in a diverse range of conditions by comparing and contrasting them with actual measurements.

**Actions:**

- (9) Development of risk indicators enabling quantitative evaluation of the reduction of the impact of plant protection products on the various compartments of the environment and on health.
- (10) Tasking the pesticide residue monitoring body with coordination of the definition and implementation of the first risk indicators, using the European projects currently under way as a starting point.

## **1.5 Development of socioeconomic indicators**

Alongside the reduction of the risks and usage of plant protection products, it is necessary to maintain farm revenue and high levels of agricultural production in response to market demand. This entails a need for socioeconomic indicators.

- (11) Development of a battery of socioeconomic indicators consistent with the indicators for intensity and impact of use in order to contribute to interpretation of the latter.

## **FOCUS 2: DETERMINATION AND GENERAL DISSEMINATION OF AGRICULTURAL SYSTEMS AND KNOWN METHODS CONDUCIVE TO REDUCED PESTICIDE USE THROUGH THE MOBILISATION OF ALL PARTNERS IN RESEARCH, DEVELOPMENT AND KNOWLEDGE TRANSFER**

### **2.1 Identification and dissemination of currently available integrated production and protection methods**

Dissemination of information on low-pesticide methods and improvement of current techniques are the first actions to be implemented for achievement of the goal of 50% less pesticide usage within a 10-year timeframe. Specifically, advantage can be usefully taken of the experience acquired in a number of networks and production systems (e.g. organic and sustainable farming), areas outside France included.

#### **Actions:**

- (12) Identification of existing, deployable low-pesticide crop protection strategies.
- (13) Dissemination of the results for the above crop protection strategies requiring only sparing use of plant protection products and assistance for their adoption on farms. Involvement of the Agricultural Council in that dissemination.

### **2.2 Creation of an experimentation, demonstration and benchmarking platform for "low-pesticide" cropping systems dedicated to assisting their adoption**

Discussion and demonstrations relating to new "low-pesticide" methods are essential if their general dissemination is to be facilitated.

#### **Actions:**

- (14) The pooling of benchmarking data on cropping systems requiring only sparing use of plant protection products within a national network covering all production sectors and associating all the various partners, plus an emphasis on the importance of women's contribution to that network.
- (15) Creation of a scheme for recognition of exemplary programmes connected with the Ecophyto 2018 strategy.
- (16) Involvement of teaching and agricultural development farms in playing a systematic driving role in generalising the use of innovative technical pathways and cropping systems.



### **2.3 Deployment of regulatory and incentivising tools for the dissemination of integrated protection and techniques requiring less use of plant protection products**

#### **Actions:**

- (17) Ensuring the availability of farm inputs conducive to reduced use of plant protection products (cf. Undertaking no. 126):
  - by facilitating the availability of seeds allowing low-pesticide cropping systems to be used,
  - by facilitating the marketing of alternative products, especially those for biological control.
- (18) Ensuring the consistency of the various tools incentivising the adoption of low-pesticide cropping systems and technical pathways: environmental certification of farms, cross-compliance for support payments and regulations.
- (19) Improvement of the installed base of agricultural equipment with a view to reducing pesticide use, notably by promoting the pooling arrangements.
- (20) Development of alternatives to aerial treatment with a view to prohibition of the latter under future EU requirements, other than in specific cases.

### **2.4 Implementation of regionalised development actions in conjunction with agricultural development organisations (e.g. chambers of agriculture, technical institutes)**

If “low-pesticide” cropping systems are to be applied more generally, it is imperative that the implementation of actions under the Ecophyto 2018 plan should be adjusted to match the specific characteristics of different geographical areas.

#### **Actions:**

- (21) Targeting of actions on regions or plots on which the effort to reduce pesticide use can be applied on a priority basis, especially through the development of specific water authority programmes in zones supplying water catchment areas.

### **FOCUS 3: INNOVATION IN THE DESIGN AND DEVELOPMENT OF LOW-PESTICIDE TECHNICAL PATHWAYS AND CROPPING SYSTEMS**

#### **3.1 Deployment of tools for guiding research**

The means for the development of the whole range of this research come under Undertaking no. 125:

- immediate recognition of innovative design and development of low-pesticide cropping systems as a strategic focus of target and resource agreements signed with INRA, CEMAGREF, the technical institutes and chambers of agriculture, as well as in the scheduling of their work and their allocation of human resources,
- reinforcement and coordination of the incentive schemes of the Ministry of Higher Education and Research (ANR – French national research agency), the Ministry for Ecology, Energy and the Environment and the Ministry of Agriculture and Fisheries (CASDAR – Special fund allocation account for agricultural and rural development) notably through the definition of common budget envelopes and joint procedures for the evaluation of additional schemes of systemic, interdisciplinary and multi-partner character,
- integration of national research projects into European projects.

In other to develop the above, the following action will also be conducted under Ecophyto 2018:

- (22) Reinforcement of the partnerships between research, development and industry professionals by encouraging development and research bodies to conduct finalised research work via existing combined technology units and networks (UMT, RMT) or new projects, making use of scientific interest groupings (GIS) for example.

#### **3.2 Focusing agricultural research on integrated production with a view to achieving reduced pesticide use**

##### **Actions:**

- (23) Restoration of high priority to agri-ecological approaches for limiting parasitic pressure and improving its management.
- (24) Design and evaluation of agricultural systems requiring reduced farm inputs, conducting research that combine different disciplines: epidemiology, ecology, agronomics, economics and the social sciences, among others.
- (25) Mobilisation of fundamental research into the issues raised by integrated protection and production.
- (26) A refocusing of selective breeding on hardier varieties, with a view to achieving reduced pesticide use.
- (27) Development of research to ensure the availability of substances that can be effective with less impact.

### **3.3 Identification of the levers and barriers to the general use of integrated production**

#### **Actions:**

- (28) Drafting of national scenarios for the reduction of pesticide use by mobilising agronomical expertise for their evaluation in order to guide public policies.
- (29) Reinforcement of socioeconomic research into the levers and barriers to integrated production, based on the definition of a "social sciences and agronomics" research programme.
- (30) Evaluation of the relevance of developing an insurance scheme to encourage the adoption of low-pesticide cropping systems, while also seeking to ensure that the Ecophyto strategy is consistent with European work on crop insurance schemes and taking into account the tools for providing cover for unforeseen adverse events.

### **3.4 Development of research into agricultural equipment and techniques for reduced pesticide use and improved workplace safety.**

#### **Actions:**

- (31) Improvement of application equipment, making it more economical in its consumption of pesticides (e.g. localised application) and adapting it to meet the demands of sustainable development and user safety.
- (32) A search for new technical solutions involving machinery, while at the same time giving due consideration to issues surrounding energy and labour costs, with the aim of reducing pesticide use.
- (33) Mobilisation of research for the development of high-performance Individual Protective Equipment (IPE) and practices that reduce the exposure of users, plus an evaluation of the exposure of operators and the associated sanitary risks (specifically, epidemiological research programmes).

## **FOCUS 4: TRAINING IN REDUCED, SAFE PESTICIDE USE**

### **4.1 Refocusing vocational training on integrated production and protection**

A number of objectives have been identified for the refocusing of vocational training:

- Dissemination of integrated plant protection strategies.
- Use of alternatives to pharmaceuticals in order to reduce the use of the latter.
- Improvements in the application of plant protection products in order to ensure that their use is safe.

#### **4.1.1 Enhanced qualification of professionals using plant protection products**

##### **Actions:**

- (34) Development of a continuous training programme specific to each industry sector and relevant to those concerned in order to encourage reduced, safe pesticide use. This programme will be intended not only for users but also for distributors, advisers and operators, in line with the reform of the official approval procedure for the distribution and application of plant protection products.
- (35) The implementation from 1 January 2010 of a knowledge evaluation scheme for all users, operators and advisers. Success in this evaluation or, failing this, attendance at a training course will lead to the issue of a user certificate that will ultimately (2014) be required for the purchase of plant protection products.
- (36) Promotion of reduced, safe use of pesticides on farms by the actors responsible for development.

#### **4.1.2 Adaptation of the farming profession's qualifications and training**

##### **Actions:**

- (37) Targeted assistance for the introduction of revised vocational qualifications for initial entry into farming from the autumn of 2008. These qualifications will take account of the provisions of the framework directive on vocational training and the diplomas to be reformed in the near future.
- (38) Inclusion in the revision of the relevant qualifications of training goals focused on reduced, safe pesticide use and on the development of non-chemical control methods.
- (39) The creation of specific training programmes for teachers and managers in agricultural training establishments.

#### **4.1.3 Enhanced participation by higher education establishments and the national support system in training schemes for industry professionals and trainers**

##### **Actions:**

- (40) Application of a system for monitoring and communicating on regulatory and technical information relevant to plant production and crop protection.
- (41) Organisation of a platform for information and discussion intended for trainers and based on existing websites (e.g. Galatée pro, Chlorofil), the benchmarking network described at 2.2 above, and agricultural development organisations.
- (42) Organisation of a network for monitoring new developments (technical and higher education establishments) in training methods.
- (43) Promotion of the integration of teaching on reduced, safe pesticide use.

#### **4.2 Professionalisation of plant protection product distribution and advisory services**

##### **Actions:**

- (44) Revision of official approval procedures for distributors and operators for the provision of plant protection product services, basing this on company certification applying reference criteria under the control of independent professional companies approved by the authorities.
- (45) Inclusion of all advisory organisations in a quality-focused approach to include the training of all advisers, and making official approval for such organisations obligatory.

#### **4.3 Implementation of a system to guarantee countrywide availability of reliable advice**

##### **Actions:**

- (46) Ensuring the availability of countrywide surveillance data.
- (47) Creation of a quality label for the publication of recommendation notices.

## **FOCUS 5: REINFORCEMENT OF SURVEILLANCE NETWORKS FOR BIOAGRESSORS AND THE UNWANTED EFFECTS OF PESTICIDE USE**

Controlling pesticide use by:

- detecting, identifying and monitoring emerging phytosanitary risks,
- seeking to maintain a satisfactory level of plant protection across the country while also endeavouring to maintain production capacity that is satisfactory in terms of quality and quantity, along with export capacity,
- detecting and identifying the unwanted effects of plant protection practices in order to ensure the sustainability of production systems.

This involves structuring existing epidemiological surveillance systems and building a new system for surveillance of the unwanted environmental effects of farming practices, in conjunction with, and complementary to existing environmental surveillance systems, with especial emphasis on biodiversity and water quality.

The purpose of setting up the above surveillance networks and their governance is to build harmonised, coordinated benchmarks for the whole of the country, in agricultural and non-agricultural areas, and to centralise those benchmarks in a national database available to operators.

The government must be able to guarantee for industry professionals and the general public the high quality and availability of the phytosanitary risk analyses on which it bases its crop protection decisions.

### **5.1 Building partnerships between stakeholders**

- (48) Creation of a partnership-based organisation between the various stakeholders to allow systematic transfer of plant health information collected in the field into a pooled information system as described at 5.2.

### **5.2 Creation of a common public information system shared by all actors**

- (49) Creation of a system to guarantee the pooling of data across the whole of the country.

### **5.3 Definition of appropriate observation protocols**

- (50) Definition of harmonised protocols for the surveillance of bioagressors, both regulatory and non-regulatory, based on national, EU and international provisions, plus training in their application for all actors.
- (51) Definition of harmonised protocols for the surveillance of undesirable effects on crops and their environment based on national, EU and international provisions, plus training in their application for all actors.
- (52) Definition of post-approval monitoring procedures for agricultural inputs with regard to resistance, water pollution, efficacy, selectivity, maximum residue limits and other unwanted effects, plus training in such monitoring for all actors.

## **FOCUS 6: INCLUSION OF THE SPECIFIC FEATURES OF FRENCH OVERSEAS DÉPARTEMENTS**

Programmes directed at sustainable agriculture have already been set in train, notably involving partnerships between research bodies, chambers of agriculture, producer organisations and farmers for trials of technical pathways and alternative methods, with support from CIRAD (French centre for research into agricultural and development issues), INRA (French national institute for agricultural research) and CEMAGREF (French specialist research centre for environmental sciences and technologies).

The purpose of this plan is to mobilise for the Ecophyto DOM plan all actors in the four French overseas *départements* (DOM) and the island of Mayotte.

### **6.1 Ensuring the availability of indicators appropriate to the specific features of the overseas *départements***

(53) Adaptation of the indicators of metropolitan France to match the needs of the overseas *départements* and Mayotte, including impact indicators, and mobilisation of the available data for the computation of treatment frequency indices.

### **6.2 Ensuring the safety and sustainability of technical pathways**

#### **6.2.1 Provision of treatment solutions**

(54) Inception of a programme of experimentation focused on uses that are not met, inadequately met or met exclusively by means of synthetic chemicals.

(55) Deployment of tools for the exploitation of data from trials conducted in third countries.

(56) Definition of trial protocols of CEB type (*Commission des essais biologiques*/Biological trials commission) for substances of biological origin.

(57) Clarification of the legal conditions governing imports of auxiliary macroorganisms for biological control purposes.

(58) Adaptation or definition of the contents of approval application dossiers and taxes (specifically, pheromones and microorganisms).

(59) Definition of partnerships for the development of products intended for limited markets: support for official approval to meet European requirements applicable to products able to find markets in tropical and Amazonian areas.

#### **6.2.2 Low farm input cropping systems**

(60) Removal of levers and barriers to development of alternative methods (regulatory, technical, financial barriers) (cf. vocational education, agri-environmental measures above).

(61) Initiation of work on a general evaluation of those methods (carbon footprint, water, etc.).

(62) Development of methods for experimentation and demonstration, notably by extending the benchmarking network referred to under Focus 2, currently being structured under Ecophyto R&D, to cover the French overseas *départements* and the island of Mayotte.

(63) Acceleration of transfers to the actors involved.

(64) Development of international partnerships.

(65) Implementation of a plan for provision of support for specific types of equipment.

(66) Development of weed control techniques for reduced herbicide use.

### **6.3 Ensuring safe practice**

- (67) Implementation of a permanent system for the collection of plant protection products no longer suitable for use and surveillance of farm workers' safety [action under the interministerial programme for the reduction of pesticide-related risks – PIRRP].
- (68) Study of sustainable alternatives to aerial treatment and development of those alternatives to ensure that they are affordable for producers with a view to eventual prohibition of aerial treatment other than where specifically authorised.

### **6.4 Focusing research on reducing pesticide use**

- (69) Extension of the prospective component of Ecophyto R&D to include the French overseas *départements* and Mayotte, in partnership with CIRAD (French centre for research into agricultural and development issues).
- (70) Development of avenues to be explored for biological control.
- (71) Refocusing of selective breeding on varieties that reconcile plant quality, production sustainability and productivity.
- (72) Development of knowledge and trials of technical pathways requiring only limited consumption of plant protection products, linked in with Action 10.

### **6.5 Professionalisation of the actors and promoting skill transfer**

- (73) Provision of structure for the actors through a technical platform for the overseas *départements*:
  - based on what already exists (with particular effort in the case of French Guiana where very little exists),
  - maintaining the links between research, development and farmers,
  - based on synergy between industry sectors,
  - allowing provision of a network for trials (cf. Action 10).
- (74) Mobilisation of all actors in agricultural development for the transfer of knowledge of low-pesticide pathways for agricultural systems (tools for dissemination: datasheets, Internet, demonstration platform, notably linked in with Action 10).
- (75) Creation of a programme for the training of farmers, with specific goals:
  - in quantitative terms, taking account of the percentage of the target populations in total population,
  - in qualitative terms, taking account of the percentages of salaried workers, foreigners and illiteracy.

### **6.6 Development of surveillance networks across the relevant territory**

- (76) Organisation of surveillance steering committees linked to the Ecophyto DOM committees already in place.
- (77) Provision of support for the technical committees based on existing structures and FREDONs (*Fédérations Régionales de Défense contre les Organismes Nuisibles*/Regional federations for defence against harmful organisms).
- (78) Organisation of data pooling and sharing.



- (79) Creation of a warning system for all industry sectors.
  - Creation of the system for small-scale sectors occupying specific market niches.
  - Where it already exists, systematic roll-out of the system through technical platforms in the larger industry sectors (e.g. rice, bananas).
- (80) Development of cooperation with neighbouring territories for phytosanitary alerts (participation of the actors in risk analysis).

## **FOCUS 7: - ENSURING REDUCED, SAFE USE OF PLANT PROTECTION PRODUCTS IN NON-AGRICULTURAL AREAS**

The use of plant protection products in non-agricultural areas (e.g. green spaces, public parks & gardens, private gardens, municipalities) accounts for nearly 10% of all pesticide use in France. There is therefore a need to take specific action to reduce pesticide use in this context also and to ensure safe practice in pesticide distribution and application, especially in locations open to the general public.

Protection of the environment and health from chemical pollution entails a need for preventive action in restricting or placing under strict control the use of substances classified as being of extreme concern, especially in public places.

### **7.1 Improving the qualifications with regard to pesticide use of professional operators applying pesticides in non-agricultural areas**

This involves the implementation, as part of the reform of official approval procedures, of a certification requirement for operators acting as service providers in applying pesticides in non-agricultural areas (cf. Focus 4) using a specific set of reference criteria for those areas, and in the case of pesticide-using departments within organisations (e.g. town halls, SNCF, social housing organisations) not subject to official approval, the institution of a scheme to guarantee proper qualification. As in the case of agricultural actors, there will be a need to provide specific training for professional actors in the reduced, safe use of pesticides in non-agricultural areas, as well as in the employment of alternative methods.

- (81) Implementation of a certification scheme for operators acting as service providers in applying pesticides in non-agricultural areas, and a system to guarantee proper qualification of pesticide-using departments within organisations (e.g. town halls, SNCF, social housing management organisations), with due consideration for their respective roles.
- (82) Provision of specific training for professional actors in the reduced, safe use of pesticides in non-agricultural areas, as well as in the application of alternative methods.

### **7.2 Ensuring safe pesticide use by non-professionals**

- (83) Restriction to agricultural professionals and officially approved organisations of sales or supply free of charge of plant protection products that do not bear the description "authorised for garden use".
- (84) Revision of the terms on which the right to use the description "authorised for garden use" is granted; specifically, substances of extreme concern will cease to be authorised for inclusion in such products.
- (85) Revision of the approval procedures for distributors and service providers applying plant protection products intended for non-professional use and basing that approval, in the case of classified products, on certification of the company requiring guaranteed availability of a qualified adviser at all times.

## **7. Strict controls on the use of plant protection products in locations intended for the general public**

- (86) A ban, other than where authorised on an exceptional basis, prohibiting the use in public places of plant protection products containing substances classified as being of extreme concern.

### **7.4 Development and dissemination of specific tools for reduced pesticide use in non-agricultural areas**

- (87) Construction of an indicator specifically intended for monitoring changes in the use of plant protection products in non-agricultural areas, adjusted to allow non-professional uses to be distinguished from professional.
- (88) Development of research and experimentation relating to alternative plant protection methods specifically applicable in non-agricultural areas plus promotion of existing solutions.
- (89) Development of research into the impacts of available alternative solutions, and adjustment of impact indicators for application to non-agricultural areas.
- (90) Development and dissemination of tools for surveillance and diagnostic analysis.
- (91) Formation and structuring of technical platforms for the exchange of good practice in non-agricultural areas.

### **7.5 Development of holistic regional development strategies**

- (92) Raising the awareness and training managers of green spaces in non-agricultural areas (e.g. municipalities, motorways) regarding available alternative methods, modification of plant choices, spatial organisation, the necessity of improved pesticide use, etc.
- (93) Development of research into the design of green and urban spaces for limited pesticide use.
- (94) Communication with the general public on the need to reduce pesticide use in towns and cities and, as a consequence, on the need for "increased weed tolerance".

## **FOCUS 8: - ORGANISATION OF NATIONAL MONITORING OF PROGRESS ON THE PLAN AND ITS ROLL-OUT IN THE REGIONS, PLUS COMMUNICATION ON THE REDUCED USE OF PLANT PROTECTION PRODUCTS**

Consolidation of a new form of governance in the spirit of the Grenelle consultation process and a high level of involvement and mobilisation of public- and private-sector actors alongside non-profit associations are the keys to success that must be formalised under the Ecophyto 2018 plan.

### **8.1 Implementation of national and regional monitoring of progress on the Ecophyto 2018 plan**

#### **8.1.1 Organisation of national governance for Ecophyto 2018**

##### **Actions:**

- (95) To bring together on a monitoring committee led by the minister responsible for agriculture the official, professional and non-professional actors who have already participated in the Ecophyto 2018 steering committee.
- (96) Creation of an "Ecophyto 2018" interministerial committee<sup>2</sup>. This committee will have a permanent secretariat provided by the General Food Directorate.
- (97) Formation or retention of an expert committee reporting to the monitoring committee led jointly by the ministry responsible for the environment and the ministry responsible for agriculture. This committee will, to the extent necessary, make use of the work done by thematic technical working groups and its secretariat will be provided by the permanent secretariat referred to above.

#### **8.1.2 Organisation of the mobilisation of local actors around Ecophyto 2018**

##### **Actions:**

- (98) Monitoring of the regional roll-out of Ecophyto 2018 by deployment of the appropriate indicators across regions and water catchment areas.
- (99) Creation under the chairmanship of the Prefect for the region (DRAAF) of a regional Ecophyto 2018 monitoring committee based essentially on the regional plant protection groups and associating all the concerned regional agencies, especially the DREALs (regional directorates for the environment, regional development and housing) and regional public health agencies, with a view to promoting the mobilisation of all concerned actors and driving collective programmes.

### **8.2 Implementation of a plan for communication on Ecophyto 2018**

##### **Actions:**

- (100) Communication in real time on the implementation of the plan via the official Ecophyto 2018 website managed by the permanent secretariat.
- (101) Execution of a survey of farmers' attitudes in the autumn of 2008 in order to define the most effective arrangements for communication and the arguments to be used to achieve the objectives of communication targeting the professional audience.

---

<sup>2</sup> Involving the ministries responsible for the environment, health, work, consumerism and research.

- (102) Initiation in early 2009 of a communication campaign targeting professionals in the agricultural industry (prescribers, farmers, cooperatives, agrifood companies, distributors and others) in order to raise their awareness of the issues involved and to encourage acceptance of the Ecophyto plan with a view to modifying behaviour with regard to practices and production methods. This campaign will be notably based on the results of the attitude survey conducted in 2008.
- (103) Communication in 2009 and 2010 targeting the managers of public spaces and amateur gardeners, working through partnerships, especially with specialist distributor networks (e.g. garden centres).
- (104) Communication targeting the general public in 2010 in order to highlight the benefits of reduced pesticide use in agricultural and non-agricultural areas, along with the commitment of the farming industry to shouldering its environmental responsibilities, while at the same time generating forward impetus in the farming community.
- (105) Maintenance of the above communication in following years as indicated by the results of previous campaigns.