1. The challenges posed by pesticide use in agriculture to human health and the environment are well documented. The costs involved, including the transfer of costs to the citizen for clean up where such can be achieved are enormous but less well documented. However, it has also to be recognised that pesticides have played a significant role in increasing yields in conventional agricultural systems and notably in arable farming and horticulture and thereby have contributed to lower food prices.

2. The symposium "feeding Europe with less pesticides" organized by IOBC, PAN Europe and IBMA hosted and supported by Bart Staes and the Greens in the European Parliament, Karin Kadenbach and the Group of the Progressive Alliance of Socialists and Democrats in the European Parliament and Sirpa Pietikäinen and the Group of the European People's Party (Christian Democrats) and European Democrats in the European Parliament held at the European Parliament on 5 December 2013 was set against this background and its broad purpose was partly to take stock of efforts to reduce, pesticide use and partly to explore what actions are necessary to ensure that Integrated Pest Management (IPM) can be moved from vision to reality.

3. There are several definitions of IPM ranging from the visionary to the regulatory. The visionary definition is " (definition of Joop Van Lenteren) states that it is - " A durable, environmentally and economically justifiable system in which pest damage is prevented through the use of natural factors limiting pest population growth, IF NEEDED, supplemented with other preferably non chemical methods".

The Sustainable Use Directive on Pesticides (SUDP) states regarding "Integrated pest management"
Member States shall take all necessary measures to promote low pesticide-input pest management, giving wherever possible priority to non-chemical methods, so that professional users of pesticides switch to practices and products with the lowest risk to human health and the environment among those available for the same pest problem. Low pesticide-input pest management includes integrated pest management as well as organic farming according to Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic.

While, inevitably, there is a gap between vision and SUDP there is also a great deal of common ground particularly in favouring "all necessary measures" to promote low pesticide use management. This ambition is central to actions emanating from the SUDP and most particularly the fact that it will become mandatory for farmers to apply IPM from January 2014.

4. Proponents of IPM made the following specific points;
   • The systems are already very well developed and could broadly be applied now. Evidence from the horticultural sector, such as tomatoes from Almeria, shows how quickly IPM can be applied once public and retailer pressure is brought to bear on producers to eliminate pesticide residues.
   • For arable farming, the basic tenets of IPM can also apply now but more rigorous efforts are necessary especially in the area of biological control.
There are a number of significant practical blockages hindering the development of IPM thus preventing it reaching its potential and contributing to major EU commitments such as biodiversity and water protection, resource efficiency and sustainable agriculture. These blockages are detailed in point 7.

5. The chemical pesticides industry indicated;
   - It is interested and investing in biological control methods but
   - It sees biological control as a niche industry rather than relevant to large scale arable production where pesticides are essential.

6. The farm sector indicated;
   - A very big interest in IPM including biological control and other non chemical methods for several reasons including farmer health, consumer confidence and the environmental image of farming but
   - Farmers need to be certain that moving to IPM will not lead to reductions in crop yields or farm income.
   - A very solid training and advisory effort will be required to ensure widespread uptake of IPM.

7. The major blockages to IPM today are seen as;
   - The registration process for pesticides is seen as unfit for biological control and other low risk substances (e.g. semiochemicals). Speakers indicated major blockages arising due to the length of the process which is exceedingly onerous for SMEs. They suggested that the American chemical/biological two stream or EU medical models be examined to see if they are more appropriate. They also said that there is a lack of expertise within registration authorities regarding biological control which needs urgent attention so that there is real, long term knowledge within the regulatory authorities.
   - The lack of research, including publicly funded, into biological control and other non chemical methods which needs to be addressed in both EU and Member States programmes.
   - The absence of biocontrol centres of knowledge and dissemination. This is linked to the lack of knowledge and expertise by advisers and of uptake by farmers. Innovation notably within the Common Agricultural Policy (CAP) should be used to address this deficit.
   - The limited awareness of citizens as to the benefits associated by IPM. The experience on greenhouse crops underlines the need for citizen involvement. Limited interest by several major pesticide companies in IPM due to its inbuilt conflict with pesticide use as a first resort. The non-inclusion of external costs related to pesticide use such as through a pesticides tax may be playing a role in this limited interest.
   - The serious lack of ambition displayed by all Member States with respect to their National Action Plans (NAPs) to be developed under the SUDP. This lack of ambition is seen not just in the fact that many Member States were far behind their time related obligations but also in the extent, clarity and coverage of the plans. What, for
instance are the baselines to apply from 2014 and how comparable are they across both Member States and different crop sectors? In fact, study of the plans could not suggest any commonly set objectives, dates for their achievement nor measures to reach them. Business as usual rather than the achievement of the directive's goals is the only common thread across the plans.

- The lack of dynamism in the latest CAP reform, notably the direct payments pillar, which could have given a major boost to IPM but chose instead postponement in so far as linkage to cross-compliance is concerned despite the obligations being clear from 2014 and did not pursue rotations within greening despite their being a traditional part of good farm practice.

8. How can IPM be promoted now in the EU?

The vision offered by IPM, in both its visionary and regulatory expression, places sustainable farming on a different level to that offered by today's conventional model. This distinction is relevant because the raison d'être of IPM is to treat crop production as a system rather than the sum of independent parts. Thus, basic crop good practice, such as rotations, is a more integral part than the use of pesticides. Basic crop practice was traditionally used by farmers but was reduced in importance by the increasing importance and availability of chemical fertilisers and pesticides. It also involves much greater crop knowledge and expertise than farmers might be expected to have and necessarily this implies much greater effort in training. This training has to extend to advisers giving independent advice. But it also poses a question as to whether current crop varieties are as suitable for IPM as disease resistance has not had as high a priority in crop breeding as crop yield.

So, to help promote IPM, it's clear that crop research has to place the retention of crop health traits at its heart rather than its periphery. IPM has biological control, where available, as a main intervention when necessary rather than recourse to chemical pesticides.

If the benefits claimed are to become realistic, it is essential that the blockages indicated in point 6 above are addressed in a coordinated manner. That task involves not just MS, Parliament and several Commission DGs but also the biocontrol and pesticides industries, farmers and especially citizens.

Each blockage needs to be looked at in detail and especially in the light of a thorough and independent study on the quality of the National Action Plans (the NAPs) which the Commission should undertake as a matter of urgency. Work on this study should not lead to any postponement by the Commission of its pursuance of full implementation of the SUDP including through infringement proceedings and of relevant aspects through the CAP rural programmes.

The Commission should now take an initiative to bring all parties together so that a clear blueprint and timetable can be set out towards the fullest possible achievement of IPM. In doing so, a very positive approach could be to set a series of interim targets such as on registration, research and innovation, the full uptake of good farm practice (learning from the Swiss model, where appropriate), the extent of IPM uptake within the lifetime of current plans and the extent of the use of biological control and reduction of pesticide to be achieved.

Michael Hamell, 5 December 2013.