

Integrated Pest Management – the way forward to Sustainable Agriculture Production

"IPM an essential tool to ensure needed resource efficiency"

Brussels, 19 June

Ladies and Gentlemen

It is a pleasure for me to be here today and to contribute to this conference from the point of view of resource efficiency and environment boundaries.

Resource efficiency is a guiding priority of Environment Commissioner Mr Potočnik. For too long we have treated our economy, environment, and wellbeing as separate issues. Now we face a situation where both our economy and our environment are in a crisis, and consequently our wellbeing is at threat on the long run if not already in the medium term.

We are facing increasing resource constraints and increasing prices of these resources. Resource efficiency is no longer a choice in our society, it has become inevitable. The choice is

more on when we will react: between starting to transform our economies now and to develop greener sources of growth and jobs and improve our resource productivity, or only to react when we are forced to do so by collapses, resource shortages and price-hikes.

The scale of the resource challenge is large, as demonstrated by the agenda set by the Commission's Roadmap on Resource Efficiency. We need to transform areas ranging from energy, transport, construction, manufacturing to agriculture and fisheries. We have to address resources from raw materials, land and water to air, biodiversity and ecosystems. And there are a number of policy processes already on-going at global, European or national level.

For Rio+20, of which high-level segment is ongoing as we speak, the EU has proposed to work on five priority areas:

sustainable energy; 2) water, in particular its efficient use; 3) sustainable land management: this means also stopping land degradation to support sustainable agriculture and help preserve the ecosystem services, on which the poorest in the world

depend for their living; 4) ocean resources; and 5) more resource-efficient and zero waste economy.

These five resources are vital for our wellbeing and our economies. There can be no sustained growth without clean water, air, soils and functioning eco-systems. They are closely linked with food security, poverty reduction and social development. For instance, how can we talk about food security without properly managing our seas, our use of water and how we will tackle the problem of food waste?

According to recent analyses¹ in agriculture improving efficiency and productivity will be a must in future. We will have to produce more food on less land, and to produce it sustainably. Improving the productivity of agriculture will have to come from 1) investments in research and development, 2) improvements in disseminating the existing knowledge into production practice, and 3) as a third area of productivity gains, waste reduction, both along the production chain and storage, and also in the consumption end. Furthermore on crop production, the assessment is that sources of growth can be found in land area in use, water availability and yield levels.

Improvements in technology are needed but any increases of productivity have to take into account not only quantitative, but qualitative expectations, environmental obligations, social and ethical considerations, and the multitude of changing economic, social and environmental conditions.

With regard to these findings and today's discussion on the sustainable agriculture and integrated pest management, I wish to touch upon two of the resources in particular: water, and soil and land use.

Water:

Starting with water as being one of our most valuable resources: it is a finite resource and becoming increasingly scarce due to its inefficient use and to trends such as climate change, economics and population growth. It is estimated that there could be a potential global water gap of 40% between demand and supply by 2030.

Access to sufficient quantities of good quality water is fundamental for the environment, but also for the daily lives of

¹ Ollila J. Agricultural and Food Policies –New Conceptions on Food Security,
http://ec.europa.eu/bepa/pdf/seminars/food_security_seminar_-_background_note.pdf

every human being and for most economic activities. Imbalances between water demand and availability create increasing water scarcity and may increase droughts. This has a direct impact on citizens and economic sectors which use and depend on water, such as agriculture, tourism, water using industry, energy production and inland navigation. Water scarcity and droughts also have broader impacts on natural resources at large, through negative side-effects on biodiversity, water quality, increased risks of forest fires and soil impoverishment.

The contribution of sustainable pest management to water status can be on one hand in quantitative terms (use of water can be significantly reduced by use of modern technologies of spraying, for example), and also in terms of improved quality of water. Besides other chemical pollutants and nutrients, pesticides, end up in ground- and surface water where can consequently cause negative effects on plant and animal species, ecosystems, their biodiversity, soil productivity as well as human health. The area has been addressed by varied programmes and legislative instruments at the EU level, to name only Water Framework directive and Pesticides Framework Directive.

In view of actions identified in the Resource efficiency roadmap, the Commission will work on further integrating resource-

efficiency considerations into water policy, with a Blueprint to safeguard Europe's water defining a cost-effective strategy (ongoing, Blueprint to be ready by the end of this year); work on assessment of River Basin Management Plans with a view to identifying areas where additional action is needed; and assess and propose water efficiency targets and improved water efficiency measures and improving management through economic instruments (pricing, water allocation) and use of labelling and certification schemes measuring life-cycle impact and virtual water content of products.

Land, soil:

Moving on to the second resource, land and soil: Land is a finite and in human terms non-renewable resource. Due to growing population and land degradation, at present there is only just above 2 hectares of arable land available for each of us. It was 4,3 ha in 1960ies and for 2020 it is forecasted to be only 1,8 ha. By 2050, this area is likely to be halved yet again. Agricultural productivity cannot increase at a fast enough rate unless the quality of the land and soil is improved, and the land management techniques are improved. And here is where the Integrated crop and pest management come into picture.

In Europe, land is under pressure due to urbanisation (half of this is sealing), agricultural intensification and abandonment. Soil degradation is also an issue: In 2006, the Commission evaluated that soil degradation in EU-25 was costing the EU economy some €38 billion per year, with the EEA estimating a cost of agricultural land loss of €53/ha/year. Soil quality and water issues are linked – soil organic matter can hold 3-5 times its weight in water, when it is preserved. In addition, a fully functioning soil reduces the risk of floods and protects underground water supplies by neutralising or filtering out potential pollutants.

In this regard, the Resource efficiency roadmap proposes that by 2020, EU policies should take into account their direct and indirect impact on land use in the EU and globally, and the rate of land take would be on track with an aim to achieve no net land take by 2050; soil erosion will be reduced and the soil organic matter increased. Among the actions proposed to achieve these goals are for example:

- developing the scientific knowledge-base on biotic material, land-use effects and trends, leading to a Communication on land use (in 2014);
- addressing the indirect land use change resulting notably from the renewable energy policy and
- European Innovation Partnership on agriculture to tackle also soil functionality.

But where all these resource concerns on soil, water and ecosystems state leave us in terms of the policy making in Europe in near future? In particular regarding the policy that has most impact on achieving sustainable agriculture, that is the future CAP?

The three greening measures – crop diversification, focus areas for biodiversity and maintenance of permanent pastures are designed to bring the environmental value of agriculture production at higher level. For example, EFAs with their buffer strips will definitely help not only in terms of biodiversity but also in terms of soil and water quality improvements. The introduction of Water Framework directive under cross-

compliance should contribute considerably to improve water status in agriculture areas as well as introduction of new GAECs for soil. Further development of farm advisory system to help farmers to apply these steps is also of importance. And there are other impacts of which you will probably hear more later during this conference.

To conclude: from the perspective of resource efficiency, more will need to be produced in future from less land, more crops per drop of water, more yield per unit of fertilisers and pesticides, more food per unit of energy, and more biomass per unit of carbon and environmental footprint. And sustainable crop management, including sustainable pest management, will have an important stake in this race against the time.

Thank you.