



The Benefits of Sustainable Agriculture

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Working with life scientists



Competing or complementary?

- We want food security – affordable, nutritious food in sufficient quantities without interruption of supply.
- But we want it to be produced in a way that does not have harmful side effects on human health and the environment – sustainable crop production

Retaining trust

- The reputation of an industry or firm can easily be damaged, incurring losses of business and substantial financial costs
- Any suspicion that food is not being produced in a way compatible with a healthy lifestyle quickly attracts media attention
- Food is a product unlike others, e.g., cultural significance

The EU response

- The EU has endeavoured to respond to the concerns of its citizens
- Thematic Strategy on Integrated Pest Management and Sustainable Use Directive (2009/128/EC)
- Basic principles of prevention, monitoring and suppression

Principles of IPM

- Prevention: agronomy (e.g., crop rotation), selection of varieties, conservation biocontrol
- Monitoring: good warning and early diagnosis systems
- Suppression: biological and other non-chemical methods must be preferred to chemical methods if they provide satisfactory control

Biocontrol

- Still only 2-3 per cent of global market
- But growing rapidly, 12-15 per cent a year compared with 3-5 per cent for synthetics
- Forecast to be worth \$6bn worldwide by 2019
- Highest growth in Europe, expected to pass North America by 2018
- Big companies move in

Some challenges

- Registration of products still taking too long – about 5 years in EU
- 5 low-risk substances approved
- New zonal system in EU (Reg. 1007/2009) not really working
- Is more knowledge intensive, requires great input by farmers
- Absence of advisory services

Some challenges (2)

- Involves managing and working with complexity, products affected by environmental conditions
- Good links between industry and academia – even social scientists!
- But reliant on back catalogue, cutbacks in basic research could lead to a dip in innovation

The elephant in the room

- The CAP
- Is it sufficiently targeted on good agronomic practice to back up sustainability programmes like IPM?
- Too much still goes in blanket subsidies, 'greening' of last reform unsatisfactory
- Early abandonment of third pillar on climate change

Thanks for your attention

- Visit our website:
- <http://www2.warwick.ac.uk/fac/soc/pais/research/clusters/cpd/biopesticides>