

Programme for Reduction of Chemical Crop Protection in Germany

C. Bruns, P. Lukashyk & E. Ladewig

Institute of Sugar Beet Research, Holtenser Landstraße 77, D-37079 Göttingen



Aims of the Programme for Reduction

The Programme for Reduction of Chemical Crop Protection of the German Government is aimed at reducing the chemical crop protection to the Necessary Level. The Necessary Level describes the intensity of the use of pesticides to ensure cropping, especially under economical considerations. It is assumed that all other practical options to regulate pests and diseases have been exhausted. Furthermore, the demand to protect customers, the environment, and users has to be considered sufficiently.

Implementation of the Programme for Reduction

Action plan:

- ∅ Extension, training and further education of users according to current standard knowledge related to appropriate handling and application of pesticides
- ∅ Site specific documentation by users for optimisation and transparency of pesticide applications
- ∅ Push forward the introduction of innovations and elements of Integrated Plant Protection, particularly non-chemical crop protection methods (e.g. mechanical weed control)
- ∅ Strengthening of research and development (e.g. modern crop protection machinery) for precise and reduced pesticide use
- ∅ Repeatedly survey about the practice of chemical crop protection (NEPTUN)
- ∅ Establishment of a network of farms to determine the Necessary Level of pesticide application within a region

Control of success:

- ∅ Introduction of different indicators for the control of the success of the Programme for Reduction (Figure)

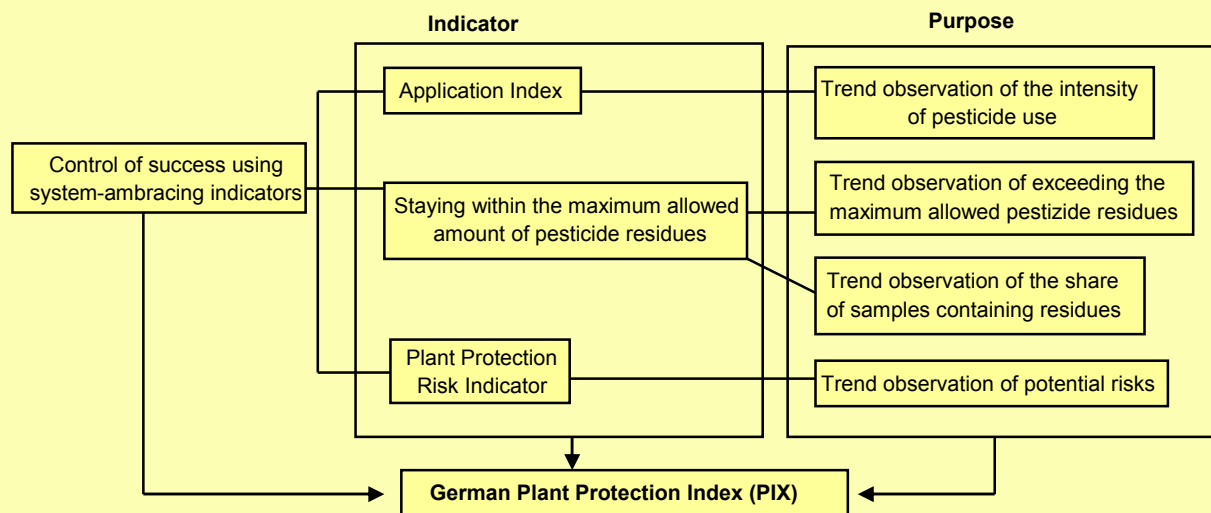


Figure: Indicators of the Programme for Reduction (source: BMVEL <ministry of agriculture> 2003)

- ∅ Nation-wide coordinated control to observe the use of existing guidelines
- ∅ Introduction of the German Crop Protection Index (PIX) to summarize the development of the intensity of pesticide use and risks for customers and the environment . The Index should include:
 - intensity of chemical crop protection generated from a farm survey (NEPTUN) prepared for sugar beet by IfZ in 2005
 - model-simulated environmental risk potential (SYNOPS)
 - findings of plant protection residues in food and feed
- ∅ Publication of an annual report about the progress of the Programme for Reduction by the Federal Biological Research Centre for Agriculture and Forestry