

Co-existence measures in Hungary

Zoltán Bedő

***Agricultural Research Institute of the Hungarian
Academy of Sciences, Martonvásár, Hungary***

Land occupied by various sectors of agriculture in Hungary

(Hungarian Central Office of Statistics)

Sector	2004 (1000 ha)	%
Arable land	4510.3	48.5
Horticulture	96.8	1.0
Orchards	102.6	1.1
Vineyards	94.5	1.0
Grasslands	1059.6	11.4
Total agricultural area	5863.8	63.3
Forests	1775.1	19.1
Fishponds and reedbeds	95.1	1.0
Total production area	7734	83.1
Set-aside land areas	1569.4	16.9
<i>Total land area</i>	<i>9303.0</i>	<i>100.0</i>

Why Hungary needs co-existence?

- **Hungarian agricultural production covers two-thirds of the total area**
- **Rich diversity of regional agroecological conditions**
- **Great differences in farm size**
- **Deep traditions in regional crop production**

Distribution of agricultural areas according to the agroecological conditions

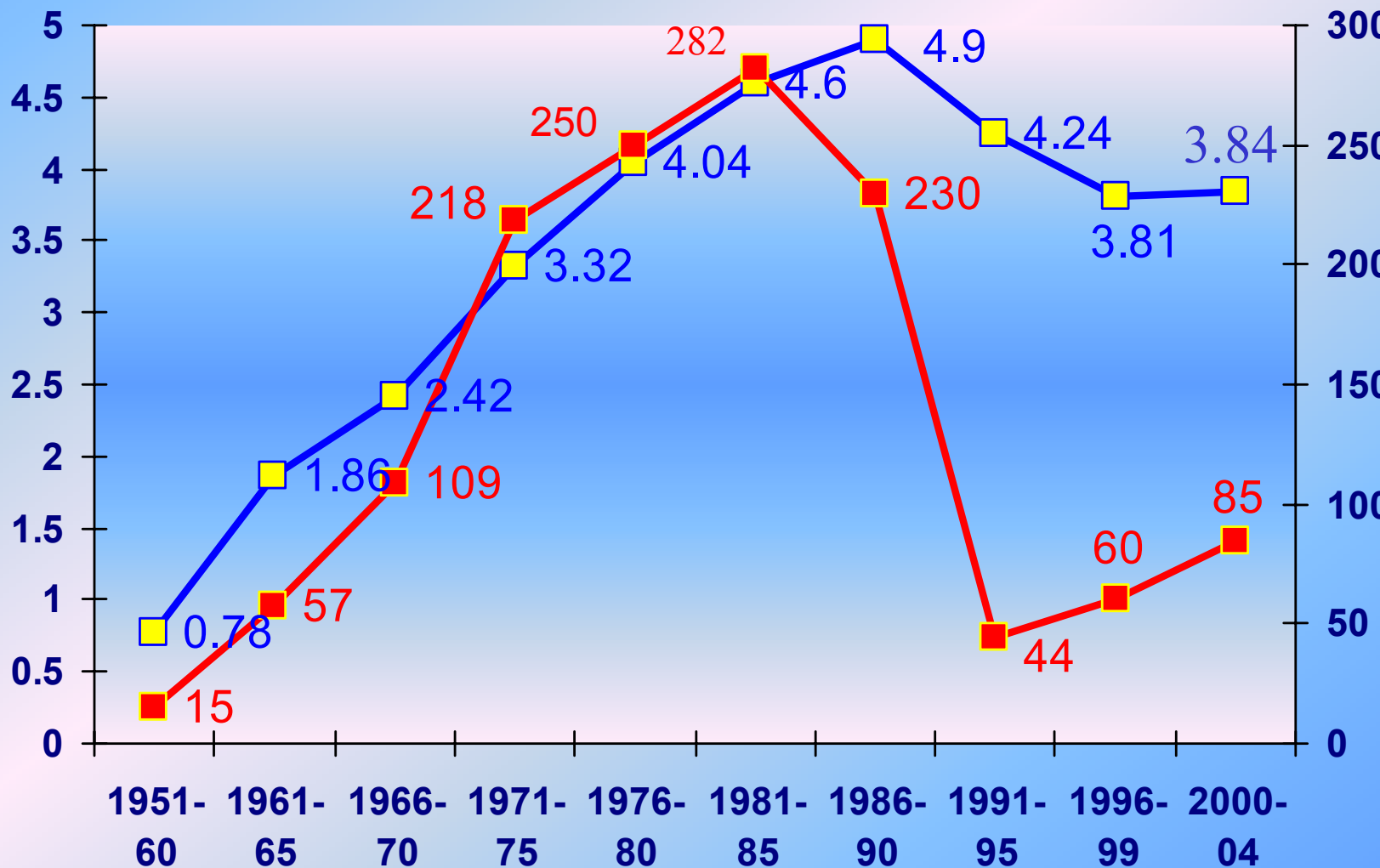
- ☀ 60 - 65 % suitable for market-oriented agricultural production**
- ☀ 15 - 20% ecologically sensitive areas where environmental protection criteria take precedence over agricultural production**
- ☀ 20% areas removed from agricultural production**

Wheat yield averages and fertilizer rates in Hungary

(KSH, FM, STAGEK, AKII) 1951-2004

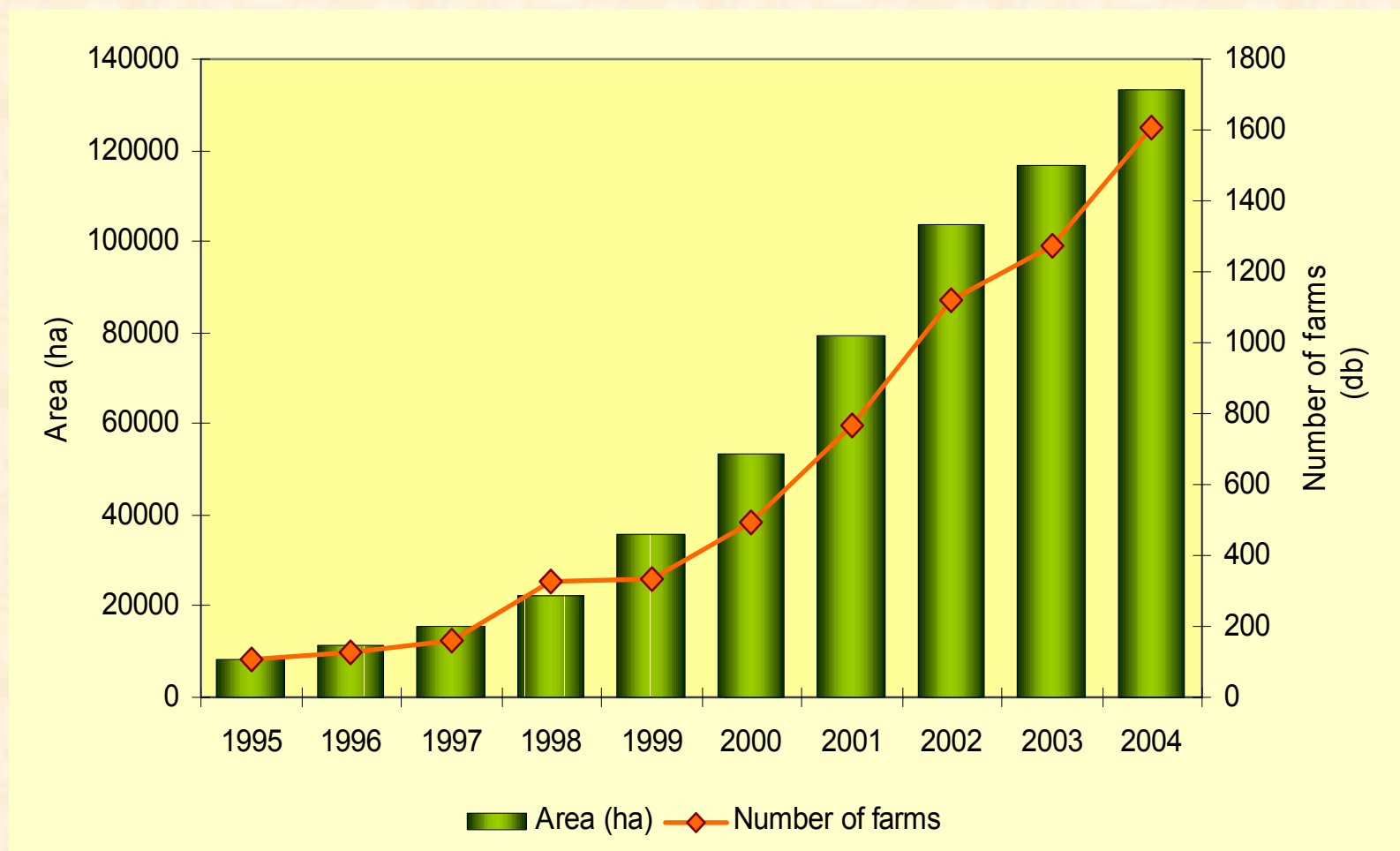
t/ha

NPK kg/ha/ye



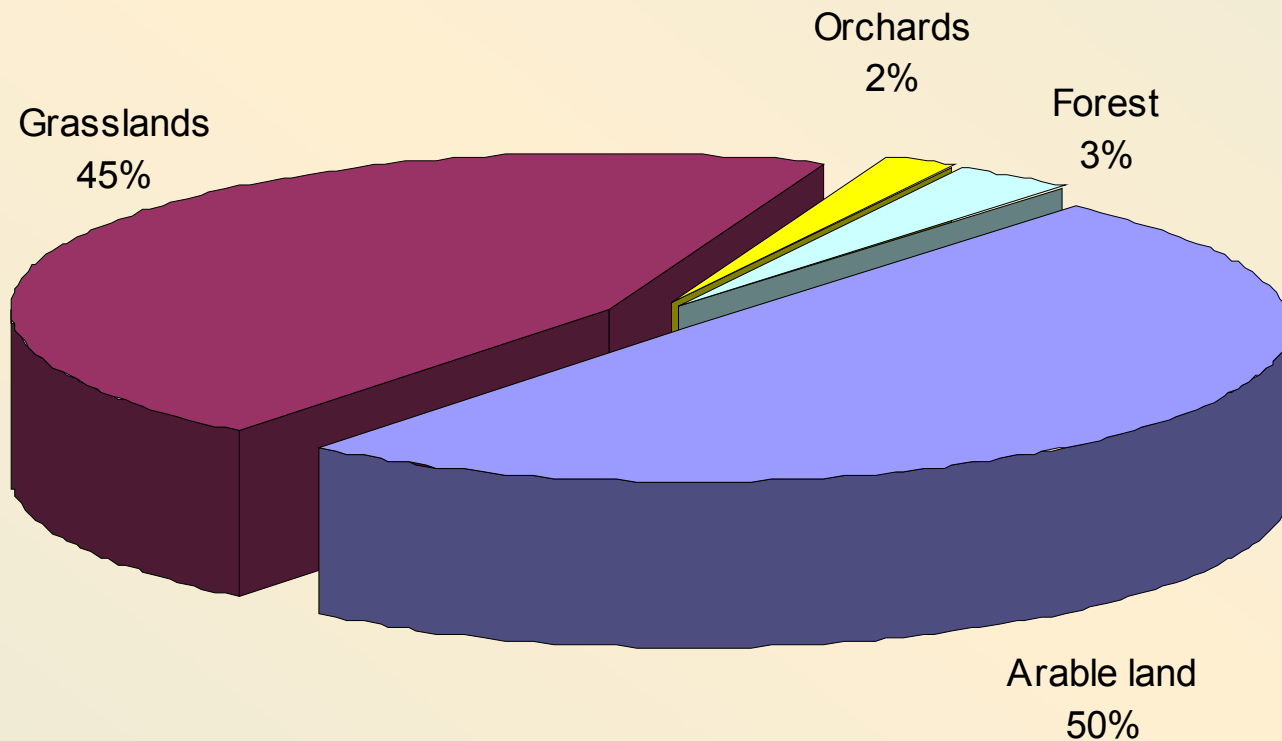
Organic farming in Hungary

1995-2004



Distribution of organic land in Hungary

2004



Basic aims of each technology for food production

- **Profitability of production for the farmers**
- **Satisfies the environmental protection requirements**
- **Production of nutritious food free of substances endangering human health**

Hungarian co-existence proposal

- ✦ **Article 20 of the Hungarian draft amendment wishes to add a new Chapter III to Act XXVII of 1998 on genetic modification technology, that will specify the legislative framework for co-existence between GM plants and those that have been grown by traditional or ecological processes according to the Commission Regulation (EC) No 2003/556**

Hungarian co-existence draft

- ➡ **The legislation aims to prevent any mix up between GM and non-GM plants during natural activities and thereafter**
- ➡ **The draft specifies the conditions required for GM crop production, the transportation and warehousing conditions**
- ➡ **It provides sample documents for licensing and registration**
- ➡ **It specifies the organisation of monitoring**

Licence for GM plant growing

- ➡ **To complete a specialist training course**
- ➡ **To obtain the agreement of the owners and/or users of lands situated within the buffer zone (*neighbourhood*)**
- ➡ **To obtain the approval of the relevant environmental and nature protection authorities**

Isolation distance

- ✿ **The planned isolation distance that must be maintained between GM crops and plants grown by traditional and/or ecological farm cropping methods is at least 400 m in the case of corn production**
- ✿ **If the authorities take into consideration special circumstances they have the right to double the minimum width of the buffer zone**

Obligations and restrictions for GM crop growers

- **The draft specifies reporting and recording obligations not only for producers but also for seed distributors, together with monitoring and sanctioning rules**
- **Liability for damage caused in the course of co-existence shall be subject to the laws regulating damage caused by the operation of so-called “dangerous businesses”**
- **On lands located in regions in which the provisions contained in the prescription shall apply (e.g. nature conservation areas, sensitive areas or NATURA 2000 areas), no cropping of plants modified by gene technology methods shall be authorised**

Special consideration according to the EU guidelines 2003/556

- **seed production and the large-scale production of maize as a commodity crop: both important for the national economy**
- **the structure of agricultural production: many farms with an area of less than 200 ha**
- **special natural features: mainly lowland agriculture**

EU comments on the Hungarian co-existence proposal in general

- ✿ The Hungarian draft does not ensure the co-existence of all types of farming systems and not to stigmatise any one agricultural production system**
- ✿ The submitted co-existence draft reveals an extremely restrictive approach to the production of GMOs in Hungary**
- ✿ The aim of national measures on co-existence is to give consideration to economic aspects, not to replicate the environment protection risk appraisals already harmonised at the EU level**

EU comments on the isolation distance

- ✿ When the crops grown in the buffer zone do not belong to the same species as the GM crop or to a related species, the consent of the owner of land in the buffer zone is not required. A minimum isolation distance of 400 metres seems to be too great for maize
- ✿ When determining isolation distances for other crops in the future, consideration must be given to the special features of the individual crops
- ✿ Arbitrary decisions by the authorities to double the minimum width of the buffer zone may cause legal uncertainty for farmers intending to grow GM crops. The regulations should not lead to disproportionately high minimum distances between GMO lands and those planted with traditional and/or biocrops

Some other EU recommendations to modify the Hungarian draft

- ✿ The draft puts a disproportionate responsibility on GMO farmers, thereby effectively preventing the use of GMOs. The liability system should come into effect if economic losses are suffered by non-GMO producers as the result of the GMO labelling of their products
- ✿ The classification of GMO production as a “dangerous activity” is unacceptable
- ✿ The administrative costs facing farmers who grow GMO crops should be decreased
- ✿ The regulations stating that farmers must present a document certifying their knowledge on co-existence are too strict

Conclusions of the meetings on the co-existence draft

(Dr Béla Akácz, MARD)

- ❖ Debates unworthy of scientific circles are beginning to evolve, as neither side is prepared to reach a compromise
- ❖ Some of those involved in the debate refuse to acknowledge the fact that EU membership involves certain obligations and that the EU insists on adherence to the regulations
- ❖ Many people attend meetings without even the most basic knowledge on the subject in question. In some cases they emphasise that they do not require this knowledge, as they are quite clear about the rights of the case
- ❖ Information in the media is unethical, unprofessional, and designed to shock or cause a sensation. Very few factual articles are published

Dialogue and clear position

(Csabáné Vértés, MARD)

- ✿ **Extend of dialogue with other opinion leaders** (*consumer associations, scientists, EU organizations, other new EU member states, etc.*)
- ✿ **A clear position in line with regulatory agencies, supported by independent scientists and oriented by consumers**

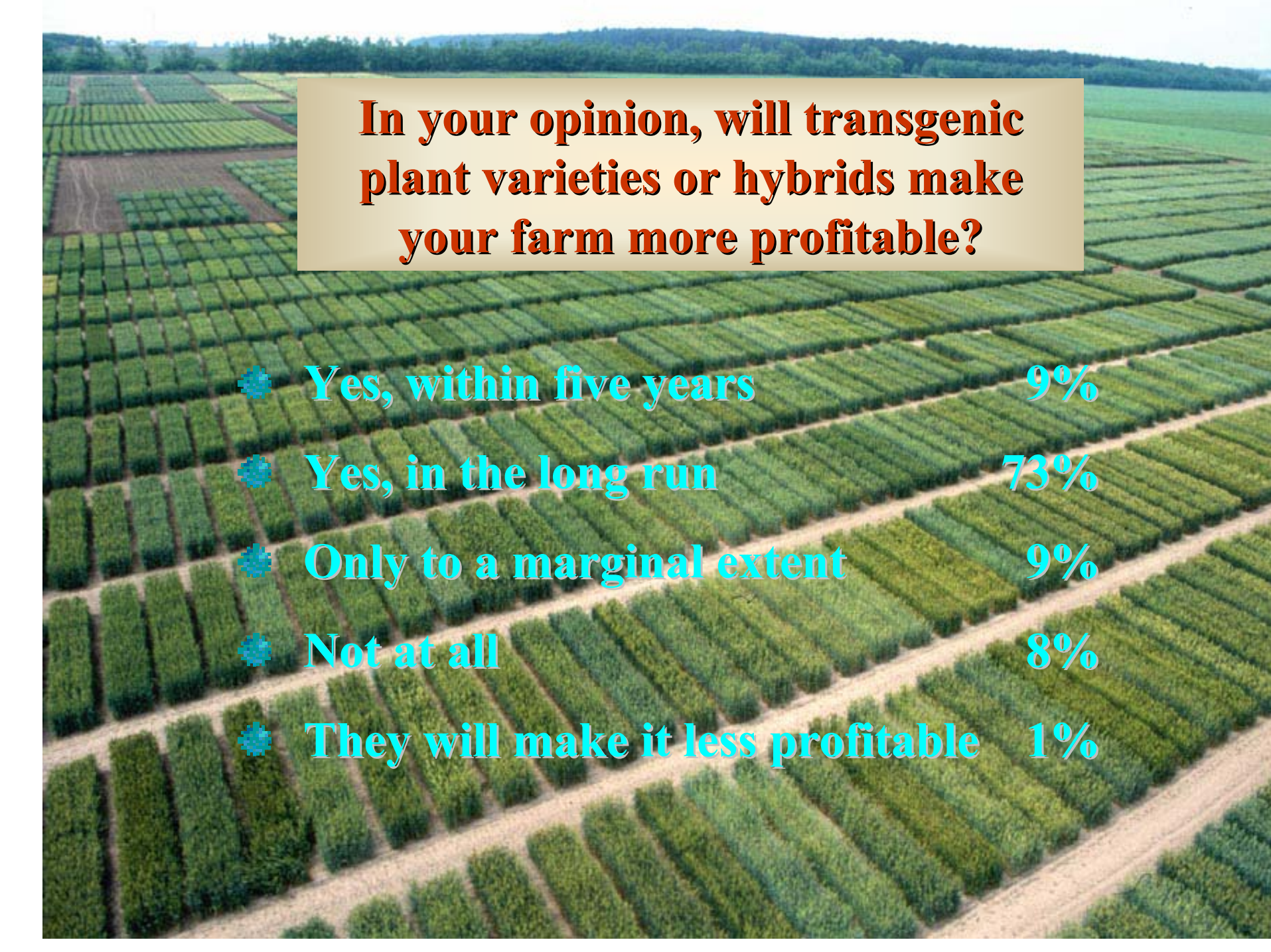
Research aspects

President of the Hungarian Academy of Sciences, Professor Vizi underlines the importance of freedom of research activity



**Survey carried out by the Plant Breeding
Committee of the Hungarian Academy of Sciences
to monitor the opinion of farmers on the future
introduction of GMOs**

Z. Bedő – J. Frank – L. Láng



In your opinion, will transgenic plant varieties or hybrids make your farm more profitable?

- Yes, within five years** 9%
- Yes, in the long run** 73%
- Only to a marginal extent** 9%
- Not at all** 8%
- They will make it less profitable** 1%




Will you buy seed of transgenic plant varieties when they come on the market?

- I shall definitely try them 35%**
- It will depend on what properties are improved by genetic engineering 50%**
- I will wait and see how other farmers think 4%**
- I may try them at some stage, but this is not a major concern at present 9%**
- I have no intention of buying them 2%**

What agronomic properties do you expect the breeding of transgenic plants to improve?

- 
- Yield potential 18%
 - Quality 22%
 - Disease resistance, making chemical control unnecessary 49%
 - Pest resistance 26%
 - Lower fertiliser requirements 3%
 - Cheaper, easier weed control 26%

Do you think the production of genetically manipulated plants should be restricted, as in certain Western European countries, or should they be allowed to spread, as for instance in the United States?

- 
- ➡ If it's all right for the USA, it's all right for us 7%
 - ➡ They should be grown, but with adequate regulations 80%
 - ➡ They may be dangerous even if their production is regulated, but it is worth the risk 8%
 - ➡ The risk is not worth taking, they should be banned completely 4%



Co-existence or total banning?

Thank you for your attention