

Interviews about GMOs in agriculture, data collected by the UZH iGEM team

Note: The interviewees' identities were omitted from this document.

Interviewee (Farms)	Perceptions towards use of GMOs / Use of pesticides	Effects of costs on decision	Anything additionally
Small outdoor farm (Organic production)	Would not use GMOs or synthetic pesticides. Biopesticides yes, but just as much as necessary.	None. Priority is the reduction of synthetic pesticides.	States that farming should be possible without GMOs or synthetic pesticides. Uses beneficial organisms.
Small outdoor farm (conventional)	Is open to use of GMOs but needs to see long term effects of use. Uses phytopharmaceuticals, without which production wouldn't be possible.	Costs are clearly a factor. Uses Glyphosate (Herbicide), which is becoming ever more expensive. Alternatives welcome.	Insects and resistances are the biggest direct challenges.
Indoor growing facility (conventional)	Is open to GMOs and uses phytosanitary products. Sees GMOs as a viable solution at some point in the future to produce more sustainably.	Wouldn't change to organic farming as of now. Would need some kind of security from outside, as it's a financial risk.	States that direction of organic farming is good, but change needs to be done in steps, and not at once.

(Producer/ Distributor)	Perceptions towards use of GMOs / Use of pesticides	Effects of costs on decision	Anything additionally
Large distributor	Is open to new solutions. GMOs might be an efficient way to get rid of a substantial part of crop losses. Legislation is restrictive there; hence phytosanitary products remain the main solution at use.	The more efficient production is, the better it is for the distributor. Reducing crop losses is not only good financially, it's also good for the environment. So having more cost efficient alternatives in terms of price and production costs saved is quite desirable.	It needs to be seen what can be done. The distributor would only use solutions that work already, because developing new ones is not in their interest.

Interviewee (Scientist)	Perceptions towards use of GMOs / Use of pesticides	Effects of costs on decision	Anything additionally
	GMOs as a realistic way to reduce crop losses. A more sustainable agriculture is possible if we are willing to bear the costs. There is only finite land to farm on, so efficiency needs to go up.	Cost of research is a significant factor. Privatising certain research aspects might incentivise innovation.	Synthetic pesticides are clearly an issue, but legislation and perception by consumers that GMOs are not good is an issue. Point is, if GMO products are made, consumers need to buy them.
(Agricultural Researcher)	Perceptions towards use of GMOs / Use of pesticides	Effects of costs on decision	Anything additionally
	No clear stance on GMOs as that is not part of research. Synthetic pesticides need to be reduced. Studies show that even on organic farms there are multiple pesticides still in the soil, even 20 years after switching from more conventional farming.	None really. Focused on research in terms of different pesticides in the soil.	These insights show that pesticides, be it synthetic or bio) stay in the soil considerably longer than expected.

Interviewee (Farming association)	Perceptions towards use of GMOs / Use of pesticides	Effects of costs on decision	Anything additionally
A national association for the production of fruits (organic and conventional)	Producers are fundamentally open to solutions that reduce the use of phytosanitary products. If we want to move toward a more sustainable agriculture, solutions must make economic and ecological sense, be easy to apply and yet not be at a disadvantage in terms of efficiency compared with conventional phytosanitary products.	Cost is clearly one of the, if not the largest factor. Farmers have to live with the financial reality that their products must remain competitive on the market.	Moving toward a more sustainable future is linked to the individual farmers. If they can't work with new solutions, then these will not be implemented.