

Citizens' jury wants gene technology, with provisos

The average person on the street is in favour of novel breeding methods to improve food production, but only under certain conditions, says consumer researcher Arnout Fischer.

Fischer and his colleague Abhishek Nair brought together a citizens' jury this summer that had four half-days to reach a verdict on various new breeding techniques. The jury members were first presented with information from Wageningen plant breeders and a critique of the technology by experts including the Rathenau Institute. The presenters gave an assessment of whether we need the new techniques to increase yields, the

sustainability or the nutritional value of plants, or to make them climate-proof. After much discussion with the speakers and each other, the

jury reached a verdict on the last day. The jury reflected the population and was made up of men and women with varying levels of education.

'The citizens' jury came up with quite a balanced judgement'

Conditions

The citizen's jury was unanimously in favour of new breeding techniques, but 10 out of the 11 members did stipulate conditions. The new crops should be at least as safe and nutritious as the existing varieties, and of obvious benefit to society, through for example resistance to pathogens, heat, salt and drought. The crops must also be accessible and affordable, and an independent organization should monitor whether



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the climate and social goals are met. If not, the government must intervene. 'In short, quite a balanced judgement,' says Fischer.

Polarization

He acknowledges that parties that oppose gene technology, such as Greenpeace, were not invited to speak at the citizen's jury meetings. 'The pros and cons were discussed in factual terms. We did not want to include polarizing or emotional pleas from either techno-optimists or activists, as the discussion would only get bogged down in them.'

Fischer notes that the general public have a mildly negative take on new technology. 'The techno-optimists overlook two things. Mistakes can occur during the breeding process, and criminals can also use this technology. So safety and the use of the technology are important, and people want it subjected to an ethical assessment.' Nair and Fischer will soon run a second citizen's

jury on the same subject in England, in collaboration with Lancaster University.

Cropbooster

The *citizen's jury* is part of the EU project Cropbooster-P, in which 17 European research institutes are working to make crops future-proof. René Klein Lankhorst of WUR, who heads the project, wants to launch an extensive European programme to make crops more resistant to salt, heat, and drought, and to improve their sustainability and photosynthesis. This will boost food production in the face of climate change and yield more plants for the bio-economy. This means putting plants 'on the drawing board', and breeders will need technologies such as CRISPR-Cas, says Klein Lankhorst. **AS**