

In his grandfather's time, he explains in Arabic, planting for the season was a simple matter of harvesting the seeds from the previous crop. For emphasis, he slices open a tomato, pointing to the dozens of seeds in a single fruit. A kilo of seeds would cost his grandfather a few days labor and a few dinars. Currently, it costs more than JD1,000 to buy a kilo of seeds from a seed company.

The seeds he buys now are specially bred to produce better yields with less effort, but the process of growing them, over the years, has changed the chemical balance of the earth, so it can no longer support the seed-saving method.

Qadi is a farmer, not a scientist, but while his analysis of the cause of the situation may be faulty, his understanding of farm life cannot be doubted. Trying to go back to more traditional ways of farming is costly, and most farmers in the valley are already in debt and don't want to incur more.

At nearby Kafa'a, a non-profit organization that promotes water efficient farming methods and technology that is funded by the Ministry of Water and Irrigation and USAID, engineer Mohamed Sha'ban gives a similar assessment. According to him, water quality is decreasing as salinization of local soils increases. The cost of farm inputs like seed and building materials is high, and farmers are seeing their profitability get smaller and smaller.

"Farmers ask me, is there anything new, anything we should try," he says, leaning back in his chair in Kafa'a's tiny office. "I am with trying everything, but not spreading the idea until it proves itself [in the field]."

Jordanian farmers, he believes, have a powerful need for new methods and technologies, but even so, they approach them with caution.

THE REGULATORS

As Jordan and other Middle Eastern nations go through the process of preparing their regulatory frameworks, the difficult question becomes who and what to believe.

The GMO conference, according to the Ministry of Environment's Khalid Majali, in a later interview, addressed the GMO issue only from the point of view of

the advocacy groups, but regulators say their position is more complicated. "We [Jordan] have signed many environmental agreements, and we have signed many economic agreements," he states. "We don't want them to be in conflict with each other."

And some activists say that government regulation of GMOs does not go far enough.

Trying to go back to more traditional ways of farming is costly, and most farmers in the valley are already in debt and don't want to incur more

"What I have heard here is that governments are under very strong pressure from the US to open their borders to any technology imports," says Rottach, after the conference. "Room for maneuvering is very small here."

Many of those who attended the conference were concerned enough with what they saw presented there to decide to push for a moratorium on the importation of GMOs into Jordan. But,

while grassroots opposition to the products has been successful in parts of the EU, even some of those advocating it expressed doubt that a boycott would be effective here.

A second option, participants suggest, would be to push well enforced labeling laws, so that consumers could at least make their own decisions.

CONCLUSIONS

Food and the safety of food are issues that affect people on deep and emotional levels, and perhaps this is part of the reason why the GM debate is so acrimonious. As the scientific debate over the long-term safety of GM gets tangled up with people's fear of being deceived or exploited by big business interests – a fear that seems thoroughly justified by experience – the issue gets even more difficult to handle.

When evidence is limited, inconclusive and often contradictory, people have little to base their judgments upon except deeply held beliefs about how the world works, the things everyone unthinkingly assumes are true.

Every new technology since fire has brought with it both benefits and dangers to humans and the environment, and the mind struggles for an example in which people did not get hurt or killed before both those potentials were understood.

Sadly, the story of GM will probably be no different.