

Breaking research: GM cotton in India has probably reduced farmer suicides not caused them

The correlation between farmers committing suicide in India and the introduction of GMO cotton in the country has become widely accepted. Two documentaries, [Seeds of Suicide](#) and [Bitter Seeds](#) center around the phenomenon. In less direct ways, GMOs are mentioned in nearly every article about these suicides in major media outlets. But a new study from [The Cathie Marsh Centre for Census and Survey Research](#) (PDF) challenges these assumptions and lends more weight to the argument that the correlation is unfounded. But will it make a difference?

The lead author of the study, Ian Pelwis, writes:

The analysis reveals considerable variation in trends in suicide rates across the nine cotton-growing states. The data, although not ideal, and the modeling do not, however, support the claim that GM cotton has led to an increase in farmer suicide rates: if anything the reverse is true.

The Indian farmer suicide story has become received wisdom for some anti-GM campaigners. In fact, we find that the suicide rate for male Indian farmers is slightly lower than the non-farmer rate. And Indian suicide rates as a whole, although contested, do not appear to be notably high in a world context. The pattern of changes in suicide rates over the last 15 years is consistent with a beneficial effect of Bt cotton for India as a whole albeit perhaps not in every cotton-growing state.

This study is not the first of its kind. Back in 2008, the [International Food Policy Research Institute](#) found similar results:

Suicides in general, including farmers' suicides, are a sad and complex phenomenon. Hence, their underlying causes need to be addressed within an equally complex societal framework. Here, we provide a specific case study on the potential link between technological choices and farmer suicides in India. Although officially recognized for having increased production and farmers' income, Bt cotton, genetically modified, insect-resistant cotton, remains highly controversial in India. Among other allegations, it is accused of being the main reason for a resurgence of farmer suicides in India.

We first show that there is no evidence in available data of a "resurgence" of farmer suicides in India in the last five years. Second, we find that Bt cotton technology has been very effective overall in India. However, the context in which Bt cotton was introduced has generated disappointing results in some particular districts and seasons. Third, our analysis clearly shows that Bt cotton is neither a necessary nor a sufficient condition for the occurrence of farmer suicides. In contrast, many other factors have likely played a prominent role. Nevertheless, in

specific regions and years, where Bt cotton may have indirectly contributed to farmer indebtedness, leading to suicides, its failure was mainly the result of the context or environment in which it was planted.

It's a complicated issue and it's perhaps natural to desire a clearcut villain: GMOs. Keith Kloor at Discover Magazine's website wrote in an article last year title: [The Real Seeds of Deception](#):

The truth is that the real causes of farmer suicides in India cannot be pinned on Monsanto, however venal you may regard the company. To discuss those causes you have to wade into a very complex equation that includes institutional, social, and governmental factors in India. Doing this requires a cold objective eye and cultural sensitivity.

So will this new study change the conversation? Perhaps Rubab Abid said it best in her article for [National Post](#) on the topic, "it is a narrative that is hard to break."