

Respected Prime Minister,

I write to you in response to your letter dated 2<sup>nd</sup> July, 2013, enclosing a copy of the letter written to you by Hon'ble Agriculture Minister, Shri Sharad Pawar with regard to scientific research on GM crops, and requesting my comments on the same. At the outset, I express my sincere gratitude to you for having given me this opportunity to express my thoughts on this extremely important issue. However, before placing before you my considered views on the subject I first wish to clarify some issues raised by the Agriculture Minister. Shri Pawar has stated in his letter that the GEAC from my Ministry (MoEF) had cleared field trials of GM crops for Kharif 2013, but that I have put it on hold. The fact of the matter is that the matter is sub judice before the Supreme Court. The Technical Expert Committee (TEC) set up by the Supreme Court is yet to submit its report on the matter, and the case itself is slated for hearing on 19<sup>th</sup> July, 2013. The matter being discussed by the TEC, which now also comprises of a representative nominated by the Agriculture Ministry, is due to submit its report to the Court, and the matter under the active consideration of the Supreme Court is exactly the issue referred to by the Agriculture Minister in his letter to you. I wish to clarify to you, that I have merely noted on file that the matter is sub judice, and is the specific subject matter of litigation before the Supreme Court. Therefore, in order to avoid being in contempt of the Supreme Court, any further decision in the matter should await the final judgement of the Court. This acquires particular significance in the background of the fact that the TEC in its first report had recommended a moratorium of 10 years on all field trials of GM Crops, and this was also the very same recommendation made by the Standing Committee of Parliament on Agriculture. In this background, I felt it important to await the final judgement of the Supreme Court in the matter, and particularly with a view to avoid any disrespect to the Hon'ble Court, I directed that further proceedings may await the decision of the Supreme Court. However, apart from the above, I would like to place my views before you with regard to the actual merits of the matter.

It is the considered view of many respected experts that the safety of genetically modified crops is yet to be proven in a long term perspective, particularly their impact upon biosafety, biodiversity, environment, human and livestock health etc. The scientific community is, in fact split vertically down the centre in their views on this issue, and robust, proven failsafe scientific protocols to prevent damage from GM Crops are yet to be developed in our country. Further, as you are aware, unlike vaccines or pharma products, food crops or genetically modified flora, once introduced in the environment cannot be retrieved from the environment. This is why Maharashtra which is showcased as the success story of Bt cotton the sole transgenic now being commercially cultivated in India is itself having second thoughts on the issue.

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Apart from this primary concern, it is also to be appreciated that the regulatory mechanisms for Genetically Modified Organisms (GMOs) including food crops in our country is still evolving. The GEAC, the RCGM are all working overtime to fill this void but they cannot, in any sense be a substitute to a comprehensive regulatory body. In this regard, the Biotechnology Authority of India Bill (BRAI) has finally been introduced in the Lok Sabha, and once in place, will take care of all regulatory and safety concerns in a holistic and

comprehensive manner. With all respect, I feel that until BRAI is in place, it would be prudent for us to proceed cautiously.

Sir, I feel strongly that food security, as emphasized by the signatories to the enclosed letter is “not a function alone of food production and crop yield growth but about poverty/development access to food etc.” Several international reports see no significant role for GM crops in ensuring food or livelihood security for farmers, but emphasise instead small holder agriculture with access to land, markets and sufficient resources. Further food security cannot be linked to GMOs, since the safety yield and sustainability of GMOs are yet to be proved.

Thus field trials of GM crops should be decided primarily on the basis of bio safety, and robust scientific protocols to ensure the same, which hopefully will be done by BRAI, in a comprehensive way. Until then, my respectful submission is, that it would be unwise to proceed with immediate approvals of field trials of GM crops in India. There is no question of our country losing the scientific edge of R&D in research of GM crops, because the concerns of biosafety, biodiversity, human health and environment have also to be adequately protected first, as otherwise we will expose the country to deleterious consequences which cannot be retrieved. In addition to the above, and the all important consideration of the matter being sub judice in the Supreme Court, I place before you my views on the more general aspects of this matter.

I take this opportunity express to you my earnest request that since MoEF is a regulatory body, and the Ministry of Agriculture, the Ministry promoting GM crops, MoEF may be given the liberty to either await Court judgement in the matter, without expressing a view, or place our own views on record, subject ofcourse to your guidance.

The GEAC, housed, in MoEF, in its meeting on March 22, 2013 provided clearance on technical grounds for

1. Developing field trials of rice, castor, maize cotton and wheat by various private and public sector companies.
2. The Genetic Engineering and Appraisal Committee (GEAC) in its meeting on March 22, 2013 had reconsideration cases and requests for revalidation of the GEAC approval/requests for additional location to undertake field trials for various crops. The reconsideration and revalidation requests were partly made because several

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state governments have expressed their reservations about the field trials, and some like Rajasthan have even withdrawn NOCs which they had earlier given.

3. Besides the several field trials recommended by GEAC in its meeting **there are at least 53 more applications pending before it for appraisal including, several food crops. For some of these India is the centre of origin or diversity.**
4. The decision on the adoption and consequent commercialization of these new technologies must be done on the basis of sound scientific and social review. This review must assess not only the risks associated with the use of technologies but also

the social costs and benefits that would be borne if the government is to take those risks on behalf of the country's citizens.

5. Precisely because the adoption of these technologies could possible impact the lives of millions of our farmers while also holding the challenge to substantially altering our food production and consumption systems the government needs to take an extremely well calibrated and judicious approach.
6. The GEAC is the competent authority under the Union Environment and Forests Ministry (MoEF) to undertake a scientific review of the cases before it but its ambit is restricted to undertaking a purely technical review of the matter **and it is not only the prerogative but the duty of (MoEF) to evaluate the larger risks and social parameters of adoption of the new technology. A positive evaluation has to be based on adequate evidence that the adoption or commercialization of these technologies remains within the safe parameters of the precautionary principles.**
7. It is widely accepted that the question about safety, efficacy and value of the said technologies to ensuring greater food security in the country, benefitting farmers, safeguarding public health and biodiversity in India is not adequately settled.
8. The Second green revolution in the eastern states of India that have recorded a resurgence of agricultural productivity due to the thrust UPA has provided under your guidance is evidence that the potential to harness better food security and greater good of the farmers through less controversial and better tested technological interventions.
9. The efficacy of the new technologies to be safe beyond reasonable doubt and yet deliver greater agricultural productivity or yield under Indian agro-climatic conditions is uncertain at the moment even in the scientific community. **The ministry has received critical comments collectively from more than 150 scientists and academics this year itself questioning the safety aspects as well as the efficacy of the application of these technologies.** Annexed to this letter is only one of the hundreds of representations which I have received. There are as many voices I am sure that speak in favour of the technologies which therefore requires the government to take a considered view before releasing the technology for open disbursal in the environment and farms.
- 10. It is also essential that the government approach the decisions with precaution as the matter relating to regulation and management of specific GM applications is at present also being reviewed by the Honourable Supreme Court.**
11. In fact, there serious questions have been raised about whether GM technology has raised yields and productivity of farms not only in countries with high biodiversity safety related risks but also developed countries. There is a strong counter-opinion of experts that the increased yields in some part is to do with other incremental factors which in the case of India could be as simple as enhanced and effective investments in irrigation and other agricultural extension services.
12. As you are aware, the Honourable supreme Court had appointed a Technical Expert Committee (TEC) on the very matter which had submitted its interim report. The TEC, we are made aware, has now submitted its final report to the Supreme Court and

that it will be available to parties by the middle of this week. The next hearing of the case before the Honourable Supreme Court is listed for July 19.

13. The TEC, in its final report, is expected to present a critical opportunity for the government and the judiciary to settle the debate about the efficacy of the regulatory framework that currently governs testing and commercialization of GM crops in the country. To pre-empt it days before the court report could be a premature move seen to be made for averting the judicial review already underway.
14. The interim TEC report has recommended a moratorium on select GM technologies on grounds of precautionary principle and safety. It has not asked for a stop on the entire gamut of research in the field and therefore the threat of the scientific community feeling deflated even by the critical report does not arise.
15. Even purely on administrative grounds, the deference to a final judicial review of the matter would only help the government as well as the promoters of the technology and the scientific community avoid the uncertainty arising out of greater future litigation. Holding back the decision for the upcoming cropping season in this case, in order to ensure robust confidence in the decision of the government, is a prudent decision that will not only help the farming community but also the businesses involved in GM technology. Some members of our agricultural scientific community

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who look at work in this one emerging sub-field must also be provided future certainty rather than a short term impetus that a hasty decision may give. It would be short-sighted to hasten the process to gain one season of cropping trials at the cost of jeopardizing the investments of the farming community as well as the promoters of the technologies over the long-term and creating uncertainty for them.

Thank you,

With respectful regards,

Yours sincerely,

(Jayanthi Natarajan)

**Dr Manmohan Singh**  
Hon'ble Prime Minister of India  
Prime Minister's Office, South Block,  
New Delhi