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Framing Genetically Modified Food Controversy: A Textual Analysis of Quotations Used in Indian Print Media from 2008 to 2012.

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Abstract: Media plays an important role and acts as a site of contestation for various stakeholders in debates on Science and Technology. Genetically Modified (GM) Food debate can be said to be one such an issue that received significant media coverage in India in the current decade. Various stakeholders competed to put their views on this technology during the debate. As a result of this the debate started to be presented as a controversial issue. There were also difference of opinion on this issue in the scientific community. The scientific community also held plural views over the long term effects of this technology on farmers' livelihood and on consumers' health. This paper tries to answer the question who had better access to media in the Genetically Modified Food Crop debate and how the media framed the debate as a whole. Quotations about GM Food Controversy issue that appeared in selected four newspapers i.e. two English language (The Hindu and The Times of India) and two regional language (Eenadu and Andhra Jyothi) newspapers from 2008 to 2012 were collected and analysed to see how the debate was framed in Indian context. From the analysis of quotations that appeared in four selected newspapers, it was found that the anti-GM groups were quoted more often than the Pro-GM groups as a whole across all the four newspapers studied.

Keywords: Framing GM Food, Media and Scientific Controversy, GM Food, Media coverage, Science and Media.

INTRODUCTION

Media framing of science and technology news has a remarkable impact on how public thinks about an issue (McQuail, 2005). Framing of news story has an impact on public perceptions and also on the development of public policies on science and technology. Framing can been defined as selection of issues to make them more salient in a news story (Entman, 1993, p. 52). The debate on GM Foods is one such an issue that has been framed in different ways in media all across the globe. This research paper examines the role of media in framing the GM Food Controversy by analyzing quotations cited by reporters in the Indian context. Media is seen as "brokers between science and the public, framing the social reality for their readers and shaping the public consciousness about science-related events. They are, for many readers, the only accessible source of information about science and technology" (Nelkin, 2001, p. 205).

Coverage of science and technology news in media in general is low all across the world. Stocking (1990, p. 30) cites that journalists' lack of knowledge about science and technology matters as the prime reason for little and low quality coverage of S&T issues. Within the science news, any issue which involves controversy gets more media space than normal day to day mundane science news (Nelkin, 1995). As in any controversy, there will always be more than two opponent groups fighting to present their narrative to the public via media. This polarization of the various stakeholders in a controversy thus makes it a rich source for media journalists to present a story in a more entertaining and engaging way to its audience. Also, this gives them an opportunity to stick to the journalistic ethic of media objectivity by presenting both the sides in a balanced manner.

The controversy over GM Foods has been in news worldwide in the last decade and still is a much debate topic all across the globe. While the debate in some countries has been vibrant, in others, the debate didn't hit headlines quite often. The debate on GM Foods received huge media attention in UK and US contexts (Gaskell et al, 1999). In the Indian context, the coverage of this issue was very low when compared to the coverage in developed world. GM Food controversy was debated in the Indian media and the coverage reached its peak in Feb 2010 when the government went on for public consultations over approval of GM Foods in the country. After a series of consultations, the then environmental minister of the country, Jairam Ramesh announced moratorium on cultivation of GM Food crops in the country. There were several issues involved in the controversy of GM Foods.

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One of the common concerns in the GM food controversy was about its safety both to farmers and consumers throughout the debate in media.

REVIEW OF LITERATURE

Several scholars have worked on newspaper coverage of GM crops issue in developed countries (Marks, L. A., & Kalaitzandonakes, 2002; Augoustinos et al, 2010; Cook et al, 2006) and in developing countries (Du and Rachul, 2012; Shineha, 2008; Sivakumar, 2004). Of these, most of the studies were done in the European and US context and very few studies were carried out in Asian and African contexts. Content analysed was carried out on the coverage of GMF in newspapers. All the studies focused on how media framed the controversy as a whole. The studies focused on predominantly on different frames employed by newspapers in reporting about the GM Controversy. Previous studies also focused on the tone in which the GM food issue was dealt in newspapers. There have been also studies that have focused particularly on the coverage of risks of GM Foods in the media (Lewison, 2007). All these studies largely projected GM Food as risky food and projected GM Foods as a tool employed by the corporates to gain control over agriculture sector.

Studies were also carried out on how the issue was reported in newspaper editorials and in letter to the editor (Reinhart, 2007). A study was also carried out on the media coverage of GM foods in Television (Crawley, 2007). Scholars like Martin Bauer (1994, 2002, and 2005), etc. conducted studies on the media coverage of biotechnology in the European context. Most of them employed Frame analysis to find out the frames used by media in covering the biotechnology issue. While some studies (Bauer, 2002) studied together the coverage of red and green biotechnologies. Studies in post 2000 mainly focused on coverage of agribiotechnology alone. Recent studies in this area have been focusing specifically on coverage of GM foods alone. All the studies started with similar questions such as what are the dominant frames used, what was the tone used in coverage. Different studies have reported use of different frames over a period of time. And the tone of coverage also varied from nation to nation over the issue. Comparative studies were also carried out to compare the coverage of the issue across different nations.

Even though there are numerous studies on the coverage of GM Food issue in the western context, not many studies were carried out in the Indian context. And also, very few studies have focused on analyzing the quotations cited in newspaper articles. This paper tries to fill the gap by specifically focusing on the quotations carried on the topic in newspapers. Previous studies of GM Food Coverage in particular and studies on agriculture biotechnology in general have not specifically focused on how the issue was framed within the quotations by external sources. All such studies have generally focused on the framing of the issue as a whole in entire newspaper article. This study, rather than using newspaper article as an individual unit of analysis, considers quotation cited in a newspaper by journalists as a unit of analysis for current study.

METHODOLOGY

Quotations form an integral part of a news story. And to an extent, news is nothing but what somebody has said on an issue. Quotations make news article more authentic, without which, there is always a problem of reducing it to mere opinion of reporter. By using quotations in a newspaper article, journalist can stick to the journalistic ethic of being neutral and impersonal. Tuchman (1972, p. 668) says that with the use of quotations in newspaper articles, reporters can remove his/her opinions from the article. However, it has to be noted here that a journalist may not always be objective in the selection of quotations. They may report only certain parts of speech that seem significant to them.

Four daily newspapers, two English language (The Hindu and The Times of India) and two regional language newspaper (Telugu newspapers Eenadu, and Andhra Jyothi) were selected for a period of five years i.e. from Jan 2008 to Dec 2012. All newspaper articles that dealt with Genetically Modified Food Controversy in the selected four newspapers for five year period were manually collected from a library. This search resulted in a total of 343 articles that focused on GM Food Controversy from 2008 to 2012 in the four newspapers. Articles that didn't use any quotations were not taken into considered for analysis in the current study. The search yielded a total 224 quotations in total across all the four newspapers. If a source is quoted more than once in the same article, all such quotations from a single source were considered as a single quotation for the study. All the quotations were noted down for analysis.

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Quotations that discussed about GM Food Controversy issue that appeared in selected four newspapers i.e. two English language (The Hindu and The Times of India) and two regional language (Eenadu and Andhra Jyothi) newspapers from 2008 to 2012 were collected and analysed. All the quotations were clubbed together based on the theme they deal with. Articles that have atleast one external source were manually sorted out from all the newspapers. Based on the column inches covered in newspapers, each article was categorized into small, medium and large articles. Small articles just reported about happenings of GM Food debates. The medium and large articles carried out quotations by officials, scientists, NGO groups and farmer groups. As it is difficult to analyse all the quotations gathered, they were further sampled out to reduce their number to work on using a systematic random sampling method. This further resulted in a total of 38 quotations after selecting every sixth quotation from the entire population of quotations. The quotations in this study are considered as the exact words uttered by the sources not transcribed by the reporter or journalists. The following sections analyses the quotations used in media coverage of GM Food Controversy.

GM AS INFANT & UNNATURAL TECHNOLOGY

GM food technology was projected as a technology that is still in its initial stages of development. An article entitled "GM crops a threat: experts" carried a quotation from Mr. Jack Heinemann, professor of Molecular Biology, of Canterbury Christchurch, New Zealand, stating "GM crops were in use only in about a half-a-dozen countries and it is not a technology that is everywhere but only an experiment" (*The Hindu*, 28 September 2012) stresses the point that GM crops is just in its experimental stage.

The testing of Bt brinjal underwent very serious criticism, particularly from environmental and farmer groups across the country. Political leaders also had serious apprehensions regarding the safety issues of GM crops. A quotation by Union health minister A Ramadoss went on like this "All GM food must undergo tests in Indian conditions before they are allowed into Indian markets. The Bt Brinjal has not been tested in India" (*The Times of India*, 17 December 2008). Here the minister is demanding to carry the test under Indian conditions before they are allowed into the market.

Another quotation in *The Hindu* newspaper went on thus "I don't think the government should promote sales of genetically modified brinjals. Food should be grown according to nature's way and not by manmade practices" said M. Rekha, a homemaker (*The Hindu*, 9 March 2009). GM food here is reported as 'unnatural' and promoting the technology was projected as playing God or tampering with nature for selfish gains. Contradicting the above views senior scientist Anand Kumar was quoted saying "Bt is nature's gift and should not be opposed blindly" (*Eenadu*, 8 March 2010). Here Anand Kumar tries to point that Bt is not natural as being argued by opponents and is instead a gift of nature.

GM IS ALL ABOUT CORPORATIZATION OF SCIENCE

Most of the quotations that appeared in all the four newspapers focused on the issue of "corporatization of science" in the context of GM food crops. An article in *The Hindu* newspaper stated "It is curious that battles over a new technology are being fought by the U.S. and Europe in the corridors of the WTO instead of in labs and seminar rooms" (*The Hindu*, 23 February 2008) positioning this technology as driven mainly by corporates.

In reference to the GEAC decision to approve Bt Brinjal, Baba Ramdev, a well-known spiritual and yoga guru in the country, accused the government alluding with the foreign multinational companies, saying, "By encouraging GM foods we are killing our traditional varieties and letting foreign companies take over our country"(*The Hindu,* 9 February 2010). In this quotation, Baba Ramdev is accusing the government for putting the interests of corporate companies over farmers. He is also holding a view that GM technologies will be a series blow to all the traditional form of agricultural practices in the country.

International committee reports also got reported in the media coverage. A report carried out by International Assessment of Agricultural Science and Technology for Development (IAASTD), concluded that

"There is a growing concern that developing countries have opened their agricultural sector to international competition too extensively. There have been major distributional impacts among countries

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and within countries that in many cases have not been favourable for small-scale farmers and rural livelihoods," (*The Times of India*, 12 April 2008).

This report exposes the vulnerability of poor and marginal farmers of the country in the hands of corporate companies. The report questions the motives behind unconditional welcoming of biotech industries into regional agrarian sectors of developing nations.

Apart from the experts from scientific community and NGO groups, farmers were also quoted in the coverage to be staunchly against GM foods. Sunanda, a woman farmer from a small village was quoted saying, "Who has given any company or any government the right to interfere in farmers' matters? The land is ours and we'll grow our crops as we want. Half of the soil has already been poisoned" (*The Times of India*, 7 February 2010). She blamed the corporate companies for tampering the Mother Nature for their selfish gains.

P M Bhargava, CCMB founding director, blamed the corporates for trying to control Indian agrarian sector by having a monopoly over the seeds. He was quoted saying,

"To gain control over India, USA need not bomb us with atom bombs, they can do control us by controlling Indian agrarian sector on which 64% of its population is dependent. This is the main reason why USA is strategically pushing GM seeds into India" (*Eenadu*, 22 August 2012).

In this quotation, he is cautioning that the risks of GM seeds are far more than the risks of atom bombs. The headline "GM seeds more dangerous than atom bombs" clearly argues that people and governments should be highly cautious in arriving at a decision on this.

Condemning all the opponents who argue that Bt technology will make farmers run after seed companies for seeds every time they need, Akella Vani, a scientist with the Indian Institute of Horticulture Research was quoted saying, "Selling out to Monsanto is not an issue at all. Farmers can save the Bt seed and grow it free of cost. The Bt protein is also highly degradable and it doesn't contaminate other crops easily" (*The Times of India*, 7 February 2010). Akella Vani is raising a counter view to all those who view entry of GM technology as corporatization of agriculture sector. She is saying that Bt seeds can be saved by farmers and can be grown by them at free of cost.

IRREVERSIBLE RISKS

The risk of GM foods has been also one of the major focuses of the debate during the period of study. Kavita Kuruganti of Centre for Sustainable Agriculture (CSA) was quoted as having said "Considering the damage that GM crops do to human beings, we thought it best to draw children into the campaign, indicating the fact that continued use would mean irreversible damage to future generations" (*The Hindu*, 9 April 2008). In this quotation, Kavita Kuruganti addressing a protest group with few small children was warning the crowd about the risks of GM foods on the health of children and future generations. According to her, children are more vulnerable to GM foods and once they are allowed into food chain, cannot be taken back. It is important to note here that Environment and Agricultural NGO groups who have been actively raising their voice on behalf of the farmers, also tried to address the concern of consumers at large. Livelihood risks to farmers along with health risks to consumers have been at the core of their narratives on GM food debate.

In another quotation, Kavita Kuruganti refuted the biotech company's claims as dubious. She was quoted saying, "Biotech companies are claiming that Bt brinjal produces a toxin within a plant to fight certain kind of pests. But several studies have shown that the GM foods have serious negative impacts on human health" (*Andhra Jyothi*, 16 April 2008). It is important to note here that Environment and Agricultural NGO groups who have been actively raising their voice on behalf of the farmers, also tried to address the concern of consumers at large. Livelihood risks to farmers along with health risks to consumers have been at the core of their narratives on GM food debate.

In a news article published in *Eenadu* on 9th Sep 2009, Jayakrishna, Greenpeace representative, India was quoted saying "Genetically modified food products have more adverse effects on children than on adults" (*Eenadu*, 9 September 2009). Jayakrishna was bringing out the possible risks of GM foods if they are released in the market without proper testing. Children, he claims, are going to be more vulnerable to the risks of this technology, which once released cannot be called back.

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Apart from health risks and risk to farmer livelihoods, GM crops are also projected as a threat to biodiversity as whole in the country. Raghunandam, Greenpeace representative was referred to as being specifically concerned about the health risks of consuming GM foods. "International food experts have suggested using GM food crops if and only if they are properly processed. Also, Bt proteins are difficult for human digestion", he added. Here, Raghunandam is warning about the risks that GM foods might have on human health and is terming them as 'indigestible foods' (*Andhra Jyothi*, 10 April 2008).

In several articles Ramesh was blamed as acting an agent of Monsanto especially by opposition party politicians, farmer groups, NGO groups and environmental activists for pushing the GM technology in haste. For instance, Narendra, TDP leader said, "Jairam Ramesh is acting as an agent of Monsanto Company. They are several cases where animals have died eating Bt cotton leaves. There is no need to allow Bt brinjal" (*Andhra Jyothi*, 2 February 2010).

TRADITIONAL IS BETTER

Media articles pitted GM technology with traditional crops and argued that traditional crops are far better than GM technology in several articles. Begari Sammamma, a woman farmer who cultivates her fields in the conventional or traditional system without using any chemical fertilizers, was quoted as having said "We hear that germinate seeds harm the health of our soil, our health and the health of future generations. We will not allow this. We will create awareness among people" (*The Hindu*, 14 February 2009). She was expressing concern over the soil health apart from the issues of health. From the quotation it is evident that she is happy to continue with the traditional farming methods and don't see a point in going for GM technology.

Chhattisgarh agriculture minister Chandrashekhar Sahu argued that there were better ways of feeding the poor and hungry people in the country than GM cropping: "Chhattisgarh government is interested in a pro-nature stand on the matter of GM crops and has been the first state to say no to GM Brinjal. Since our government is ready to formulate an organic policy, it will disallow such trials in the state" (*The Times of India*, 11 August 2011). In this quotation, the health minister is saying that there are other better ways which are natural, such as organic farming, to deal with the problem of food security in the state.

Buddhadeb Bhattacharya, parliamentary Standing Committee member attempted to expose the power of biotech firms in pushing the GM technology. He was quoted saying,

"Farmers didn't get any benefit from Bt cotton cultivation. As 82% of farmers are small and marginal farmers in the country, it would be better not to allow GM in food crop. GM technology won't do any good to a country like India which has huge biodiversity. We are doing well without Bt. like Kerala state, everyone should adopt organic farming" (*Eenadu*, 10 August 2012).

Bhattacharya with the example of Bt cotton which he says had devastating effects on the livelihoods of small and marginal farmers contends that Bt brinjal won't benefit the farmers either.

G V Ramanjaneyulu of Centre for Sustainable Agriculture, Hyderabad opines that there are better alternatives that farmers have been using for centuries. In this context, he raises fundamental question whether a country like India require GM food crop at all. He said "Do we require GM technology in brinjal cultivation? Aren't there any other better alternatives out there? No research has been done so far in this direction" (*Andhra Jyothi,* 10 April 2008). He was demanding repeatedly for a risk assessment study which also considers the socio-economic impacts of the crop on livelihoods of farmers.

PANACEA TO FOOD SECURITY PROBLEM

The proponents mainly focused on the food security problem in the country while opponents have ridiculed all such claims. The traditional technologies were projected as incompetent tools to tackle the growing problem of food security.

For B. Sesikeran, Director, National Institute of Nutrition, food security ensures food accessible to the needy. Sesikeran at length said,

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"Over 50 percent of children below five years in India are underweight. And, escalating food prices have ensured that the poor constantly reduce their intake. Yet, we lag way behind in adopting technology, while countries with surplus and relatively inexpensive food continue to embrace it.....Innovation in food technology is mandatory to ensure food security in our country. It is now time to move from green revolution to a gene revolution" (*The Hindu*, 13 November 2011).

In this quotation, the issue of food security is being raised. Here Sesikeran is saying that even the well developed countries in the world don't have much apprehensions and are welcoming GM foods, whereas India is still pondering about the risks of this technology.

A bench comprising of Supreme Court judges of India opined that GM foods crops are necessary for a country like India and the debates on it are a luxury of elite nations, which India cannot afford. The bench was quoted saying,

"The question before India is to eliminate poverty. Whether it could be done through GM food crops, we are not in a position to determine as we are not experts. Russia, with three times the land mass and one-third of India's population, can afford such luxuries" (*The Times of India*, 14 February 2008).

Here again we can see that the case of eliminating hunger and poverty are pitted against the opponents of GM technologies.

The 'ethical obligation' was commonly used to present GM foods in a positive tone as the only solution to solve the problem of hunger and or else face the dire consequences. For example, a bench comprising of Chief Justice of India was quoted as saying, "We can't allow millions of people in the country to die with hunger" (*Andhra Jyothi*, 14 February 2008). Here GM foods are not presented as one way of cultivating crops, but are seen as the only best method possible to tackle the food problems in the country.

GM CROPS AND FOOD ARE DIFFERENT

Jairam Ramesh, the then Environment Minister of India, was quoted in *The Hindu* newspaper article of 7th June 2009, as having said, "There is a distinction between GM crop and GM food. I am sympathetic towards Bt cotton, but not Bt brinjal as experience with Bt cotton has been very positive in Gujarat" (*The Hindu*, 7 June 2009). Ramesh here clears his stand towards GM technology and argues for case by case decisions over the technologies under debate. In the same newspaper, Ramesh was quoted saying "I have not decided on the future of Bt bhindi or tomato or rice. This is a rejection of this particular case for the time being... [Future proposals] have to be examined and decided case-by-case" (*The Hindu*, 10 February 2010). Ramesh was clearing his stand on moratorium decision taken over Bt Brinjal being just limited to it and wanted a case by case review over the technological applications rather than a blanket approval or ban.

A feature article by Anoop Kohli, a w ell-known neurologist in the country expressed his concern over the easy approval of Bt brinjal. He wants the readers to be more cautious in Bt brinjal case as it is the first food crop to be given approval by GEAC. Unlike Bt Cotton crop, which is a non-food crop, the concerns in Bt brinjal case are to be multiplied, he points. Comparing Bt cotton with Bt brinjal he went on to say, "That doesn't matter for cotton unless you are in the habit of chewing your shirt cuffs" (*The Times of India*, 19 October 2009). By this he implies that Bt cotton and Bt brinjal are two different cases and one should be more cautious in Bt brinjal case.

Dr. Swaminathan, who is considered as the 'father of the green revolution in India' held an opinion that "After all, it is the public who has to consume it, not the government. The risks and benefits should be carefully evaluated" (*The Hindu*, 10 February 2010). He was saying that there is no need to hurry on arriving at decisions on technological matters and advocated the governments to involve all stakeholders to be the part of debate on Bt Brinjal. He was advising the government institutions to transparently carry out the tests to gain public trust and completely share the data with them.

GUINEA PIGS AND LAB RATS OF THE WORLD

On the question of risks and benefits of GM foods, P M Bhargava, a noted microbiologist in the country said,

"The widespread aversion to GM food products also cannot be ignored. A majority in the U.S., the European Union and Japan among others are against it. Even Zambia and Nigeria have stood up against GM food

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products. If India still approves Bt. Brinjal that will be the single, greatest tragedy in the history of independent India"(*The Hindu*, 3 January 2010).

For Bhargava, the whole world, not just India, has serious doubts about GM foods. He cites the example of developed nations and the 3rd world African nations, both being averse to go for GM technology in food crops. It can also be seen that Bhargava's use of the term 'single, greatest tragedy in the history' signals his concern about the irreversible risks that might lead if India adopts GM technology.

G V Ramanjaneyulu, Centre for Sustainable Agriculture, was quoted saying, "Several NGOs and consumer groups across the country are protesting against approval of GM foods as they feel that without proper testing in laboratories, GM foods are directly tested on them as they are tested on lab rats" (*Andhra Jyothi*, 31 January 2010).

Mareck Savatsky, minister for Rural Development, Poland said, "27 countries under European Union have decided to not only to ban GM cultivation but also to stop importing of foods, products and fodder made from GM technology" (*Andhra Jyothi,* 28 August 2011). In this quotation, Poland is raising the issue of loss of export trade if India adopts GM technology in food crops. By citing the decision taken by 27 EU nations, he is alerting the Indian government on not to go for GM food crops if they want to retain export markets in EU.

CULTURE MATTERS

At a press conference held in New Delhi, Jairam Ramesh made a statement thus, "Brinjal is an item of daily consumption here and has cultural connotations too unlike in other countries where it is just an occasional culinary delight" (*The Hindu,* 6 January 2010). In this quotation, Ramesh is saying that Brinjal plant is not just perceived as any other simple culinary diet by Indians and is perceived to have a significant place in the culture of India. Framing brinjal as something has cultural connotations has to be noted here.

The cultural apprehensions have also been raised by several sources in the debate over GM crops in India. Madhya Pradesh state agriculture Minister Ramakrishna Kusmariya was quoted saying, "Use of GM seeds would make every grain and vegetable non-vegetarian and end our vegetarian culture" (*The Times of India*, 30 April 2011). The Minister is worried that with entry of GM crops, the vegetarian culture of the country can be under serious threat. The vegetarian culture of food eating has larger cultural connotations in Indian context.

The cultural question has been also raised on several occasions in the debate. Many sources have expressed concerns about the loss of cultural values if brinjal is modified using Bt technology. To illustrate this, Dr P Saidaiah, senior agriculture scientist was quoted saying, "If consumers can't differentiate between Bt and non-Bt brinjal, then there is a threat that may completely give up eating of brinjal vegetable as whole" (*Eenadu*, 10 February 2010). Here the source Saidaiah is pointing that the entry of Bt technology might even make people stop eating the brinjal vegetable as whole because of the apprehension they have towards this technology.

B Sambasivarao, Farmers union member elaborating the risks of GM technology was quoted saying,

"Brinjal and its plants are used as medicinal plants to cure Asthma and other heart diseases. By directly injecting Bt toxin into a brinjal plant, to produce pest resistance will lead to problems. Brinjal will lose its medicinal value. Animals and humans who eat brinjal and its leaves will also have digestion issues" (*Andhra Jyothi*, 10 June 2009).

Sambasivarao here is expressing the cultural risks associated with GM food technology. He is holding an opinion that once GM technology is allowed in food crops, the cultural value and the medicinal values which natural grown brinjal plants have, will be totally gone.

LABELING ISSUE

Articles concerning the labeling of GM foods are not much visible in the Indian context as it's in the US and UK and other European debates, except few articles reported here and there. The reason for this is that labeling is seen as impracticable and hence not much debate on GM Foods from this perspective. Within the few articles that discuss labeling issues, biotech companies and environmental groups are at the forefront, one for mandatory labeling and the other for voluntary labeling. *The Hindu* Newspaper on 10th October 2010 quoted Gyanendra Shukla, Director (Corporate Affairs), Monsanto India, saying,

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"Monsanto, the biotechnology major, holds the view that mandatory labeling of products made from genetically modified organisms (GMOs) in India would make no sense. It favours options such as companies voluntarily labeling products as not containing GMOs, and individuals making a personal decision not to consume food containing GM ingredients". (The Hindu, 10 October 2010).

Gyanendra Shukla opines that in a developing country like India, mandatory labeling will create unwanted anxieties among the consumers, who he considers to be not well informed unlike the citizens of the developed nations.

Sunita Narain, Director of CSE wants the government to be extremely cautious if they want to introduce labeling of GM products in the country. She was quoted saying,

"Clearance of such a crop requires the authorities to practice extreme caution. Currently in India there is no labeling regime for genetically modified foods which will give consumers a choice whether they want to consume genetically modified food or not. Till the time this is done, regulators should not clear edible GM crops" (*The Times of India*, 16 October 2009).

Sunita Narain is raising her voice for the rights of consumers. In the same article, she is equally apprehensive about the institutional mechanisms followed in the country while approving an emerging technology.

POLITICIZATION BY NGOS

The politicization of the debate by NGO groups was reported in the media debate over GM foods, especially by some members of the scientific community. D Balasubramanian, a scientist, was quoted saying, "Scientists are not trained to hold placards, shout slogans, mobilize crowds, or denigrate their so called opponents, and hence have been unable to match the activists in their strategies and actions" (*The Hindu*, 10 March 2011). He was referring to the moratorium decision taken by Ramesh. Balasubramanian expressed serious apprehensions over the moratorium decision, which he thinks were taken under mere political pressure from NGOs and farmer groups.

Jairam Ramesh, Minister for Environment, GoI was quoted saying "It doesn't seem that farmers are protesting here. Some people here are trying to grab media attention. Those who are creating troubles are leaders from political parties and are creating unnecessary controversy" (*Eenadu*, 1 February 10). Here Ramesh is expressing an opinion that the protests that are being carried in the city are motivated and supported by political groups. Even though he is not clearly indicating to any particular political lobbies, he is implying that NGOs and environmental groups are behind the protests. He wants the farmers realize that some groups want to create an unnecessary controversy over the GM food crops.

CONCLUSIONS

From the analysis of quotations that appeared in four selected newspapers, it is evident that the anti-GM groups were quoted more often than the Pro-GM groups as a whole across all the four newspapers studied. The anti-GM theme dominated the coverage in the Indian context as a whole. The Genetic Modification Technology was presented as a risky technology which is still in its infant stages of testing. The proponents projected GM as solution to food security needs of the country, which was ridiculed by the NGO and farmer groups in the newspaper coverage.

GM Food was also oppose by various stakeholders in the debate citing it as a threat to the Indian culture. The labelling issue which generally finds space in the western context on debates about GM Foods, was sparsely discussed as a feasible solution to the problem of GM Food controversy. The corporate companies weren't quoted much in the media throughout the course of study of this paper.

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