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MANIPULATION OF REALITY INTO THE FOOD OF THE FUTURE

Abstract: For the public to take the right attitude and form an opinion about GMO technology and the consequences of this technology, it needs to have easily understandable and objective information, which should help shed light on the true nature of GMOs. On one side, there are the proponents of GMOs who argue that the new technology is supposed to improve the quality of life and provide sufficient food for all people. Opponents of GMO foods indicate possible consequences on human health and are voicing a concern that the products of these experiments with genetics might end up being the "eliminators" of mankind.

Mass media in the process of recognizing the truth have a very important role. However, as multinational companies exercise their power through the control of three major markets: the market for goods and services, financial market and the information market, we are becoming aware that the media are a means of manipulation, because the whole system is oriented to capital and profit, while other values are being totally marginalized. The media, which are generally owned by powerful companies, are supporting a new form of the global economic conquest of the world and there is a fear that the people of Europe and the rest of the world deprived of the truth about this new way of producing food.

Until geneticists persuade us to the contrary, and the media presents that to the public, GMO remains just a new efficient weapon in the war which ultimate goal is the management of humanity as a whole.

Key words: public, new technology, gmos, media, manipulation

INTRODUCTION

GMOs are the controversy of the modern age, and the society is faced with a new technology that is insufficiently understood and about which there is not enough information.

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Formation of public opinion and perception of risks and benefits of GMO food is a result of collective opinion formed by the media, government and regulating bodies, culture, and the attitude of people towards technology. Increasing differentiation and segmentation of the media in communicating with audience has shaped new forms of mass communication, which is increasingly moving away from communication in the traditional sense. The media are usually serving the interests of special interest groups that exert their influence on the media scene, and thereby elaborate methods for using them.

That situation means that the media are working under the pressure of manipulative methods in order to persuade the global audience that GMO foods are foods that will save our lives and the world at large.

Those who advocate GMOs represent them as organisms whose genetic traits are changed in order to improve their nutritional value and increase resistance to external factors. On the other hand, opponents of GMOs argue that man has no legitimate right in trying to change the nature, and that it will strike back like a boomerang.

However the worldwide scene is different. In the USA people look positively at GMO mostly because they trust their regulatory bodies. The situation is similar in developing countries, where majority of people believe that their government will make the right decision for the people.

Studies in Europe and Japan provide evidence that consumers are willing to take on the unknown risks of consuming genetically modified foods only if these products are offered at significant cost savings over non-GM foods.

If we want to get to the truth, we must establish a public discussion that is based on facts.

1. THEORETICAL BACKGROUND

The media is one of the most important phenomena of mass society. The term "media" means all the ways and channels of information transfer [15], or we can define media as "technical means that allows people to communicate and convey thoughts, regardless of their form and their ultimate goal" [1].

Man cannot live without interacting with other people. In the period of globalization, individuals and groups are becoming more focused on the 'contact' with the media that are transmitting information to them. But, media scene is increasingly serving the interests of the special interest groups that exert their influence on the media, and thereby elaborate methods for using media. Study of the Reuters Institute says that, if the trend continues, we will have media that no longer contains news [11].

Media worldwide are under the pressure of American's media model. This means adopting not only the American model of organizing of communication centers, but production and programming patterns, even in Europe. In relation to the GMO food usage, it means that the media are accepting proven U. S. manipulative methods in order to persuade the global audience that GMO foods are foods that will save our lives and the world at large.

Media has a significant impact on public opinion formation in cases where public knowledge is low, as it is about GMO [13]. Over 90% of consumers receive information about food and biotechnology primarily through the popular press and television [6]. GMO campaign is led by the United States and Canada, while Europe, at some point, will have to give in to their pressure.

But regardless of the prevailing U. S. imposed mode of action of the media, public opinion in the EU is in better position with the opportunity to be informed, to participate in a variety of talk shows and discuss GMOs, unlike the people in USA and development countries.

By the end of the nineties of last century many journalists became increasingly opposed to GMOs **[2]**. However, nowadays, massive corporations are dominating the U. S. media landscape. Through a history of mergers and acquisitions, these companies have concentrated their control over what we see, hear and read. In many cases, these companies are vertically integrated, controlling everything from initial production to final distribution.

2. GMO – TAKE IT OR BAN IT

The society is faced with a new technology that is insufficiently understood and about which there is not enough right information. Opponents of GMOs warn that it is necessary to consider and reflect on the famous myth that the Earth has too many people and not enough food, and that the solution to this situation in the socalled genetic revolution [8].

Genetic engineering can bring enormous benefits, but it may also create residual risks that are not yet fully understood. Scientists are speeding the process by directly altering the genes of a plant or animal rather than waiting through generations of hybrids to achieve results.

The last decade of the last century brought rapid commercialization of research in the field of molecular genetics. GMO (genetically modified organism) crops are becoming an integral part of American agriculture and rapidly spreading over (66.8 million hectares) an increasing percentage of arable land [12].

More than half of the crop in soybean and cotton crops, and about a third of maize in the United States, are occupied by transgenic crops. About 40 species of agricultural, genetic engineered cultures are approved for market in the U. S. and 60–70% of the products in U. S. supermarkets contain components of transgenic organisms. A new era of prosperity or decline of humanity is at the door.

In developing countries people have a positive perception about GE technology. In China, public response to genetically modified crops has been very positive. Only 9.3% of the survey respondents in China had a somewhat negative or very negative opinion concerning the use of biotechnology in foods [3]. Chinese respondents in a 2003 survey were found to be trusting of government regulations concerning the safety of the food supply and very positive towards science, including the use of biotechnology in agriculture. In another study done by the Center for Chinese agricultural policies, a strong correlation was found between trust in the government institutions and the acceptance level of GMO technology [3, 14]. The benefits of genetically modified foods to the developing world comprises food availability, nutrition, and economic advantage. Food availability is a large problem in the developing world. It makes sense that consumers in developing countries would accept GM food products through cost-benefit analysis.

In Europe, there is mistrust in the policies of public authorities and firms involved in the commercialization of GMOs. In a study done in July, 2000, 58% of people disagreed with the opinion that the 'public authorities can be trusted to make good decisions on GMOs [9]. Europe is strongly opposing GM food because it is perceived as an invasion that is uncontrollable, involuntary and a threat to its culture. Moreover, Europeans are often skeptical of new developments.

The scene is different in the States where people look positively at GMOs; people there trust regulatory bodies. The Food and Drug Administration (FDA), the Environmental Protection Agency (EPA), the US Department of Agriculture (USDA) all evaluate GM food, environmental effects and public health safety. Consumers trust these bodies and regulatory actions taken by them. Polls done by Pew GM food survey in August 2003, clearly show that the people have strong faith in the FDA (83% have 'great deal of trust in the source' and only 14% don't trust it) [14].

The other government regulators captured around 63% of the trust in the consumers. The lack of media attention, positive disposition towards scientific innovation, and trust in government regulators concerning food safety, provide evidence for a general acceptance of genetically modified foods [3]. Studies in Europe and Japan provide strong evidence that consumers are willing to take on unknown risks of consuming genetically modified foods only if these products are offered at significant cost savings over non-GM foods. One study conducted in Norway by Grimsrud, McCluskey, Loureiro, and Wahl provide the same evidence for the consumers from Europe [5].

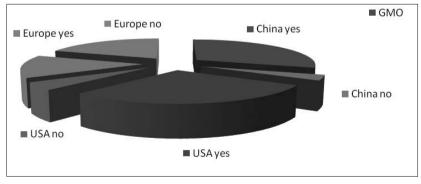


Fig. 1. Worldwide Public perception about GMO Source: Authors

At times when we are lacking scientific evidence for a blanket approval of all uses of GM, as much as we are lacking scientific justification for the blanket ban on their usage, is the only thing we can actually do – to simply ask people for their opinion?

The figure represents the percent of public GMO acceptance: In China 90,7% of population have a positive attitude;

In USA 83,0% of population have positive attitude. The situation is different in Europe where 42,0% of population are willing to accept GMO food.

Most developed nations do not consider GMOs to be safe. In more than 60 countries around the world, including Australia, Japan, and all of the countries of the European Union, there are significant restrictions or outright bans on the production and sale of GMOs.

Serbia already has laws against GMO and is known as a country without GMO. Most developed nations do not consider GMOs to be safe.

In the U. S., the government has approved GMOs based on studies conducted by the same corporations that created them and profit from their sale. Increasingly, Americans are taking matters into their own hands and choosing to opt out of the GMO experiment [7].

3. MASS MEDIA ROLE

The media industry is advertising-based with prices of newspapers kept below the manufacturing costs by advertising income. Multinationals will not support those newspapers which are viewed as critical to their business and such publications are marginalized out. Media scene shows an evident lack of quality. News often have the character of the tabloids, and public is unable to find the necessary information in support of the democratic decision making. process. The threat of withdrawal of advertising is generally sufficient to ensure that the media companies vigilantly filter the stories they present. In cases where a story manages to slip through, business organizations often combine forces to pressurize editors into reviewing the content in question.

Investigative journalism is present in the negligible time slots on public and commercial channels. But, most people still form their opinions on the basis of mass media. As all media organizations are owned by companies with the same interests and have their content dictated by the advertisers and obtain their stories from the same sources, public is easily manipulated.

For example, in USA over 90% of consumers receive information about food and biotechnology primarily through the popular press and television [6]. Trust in media is about 44% in 2013. which indicates a decrease of 9 percent compared to data from 1997.

Results for this Gallup poll are based on telephone interviews conducted Sept. 5–8, 2013, with a random sample of 1,510 adults, aged 18 and older, living in all 50 U. S. states and the District of Columbia [**10**].

In Europe the Standard Eurobarometer 80 survey was conducted between 2 and 17 November 2013 in 34 countries or territories: the European Union's 28 Member

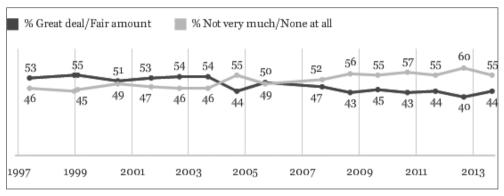


Fig. 2. American's trust in mass media Source: Mendes (2013)

States, the five candidate countries (the former Yugoslav Republic of Macedonia, Turkey, Iceland, Montenegro and Serbia), and in the Turkish Cypriot community in the part of the country that is not controlled by the government of the Republic of Cyprus. This report examines the media use by Europeans and their trust in the media [4].

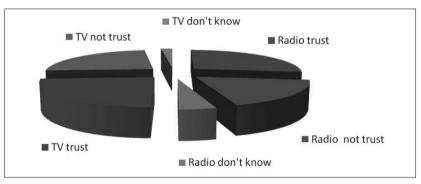


Fig. 3. Europeans trust in mass media (Radio, & TV) Source: Authors

Fig. 3. shows that 54% Europeans trust the Radio, 37% don't trust and 9% don't have any opinion.

Regarding Television programs situation is: 48% trust, 48% don't trust and 4% don't have answer.

In the fig. 4 are shown search results for public opinion concerning their trust in the press and Internet: 40% of Europeans trust the press, 54% don't trust and 6% do not know. The worst situation is with new mass media-Internet: 34% trust, 46% don't trust and 20% do not know.

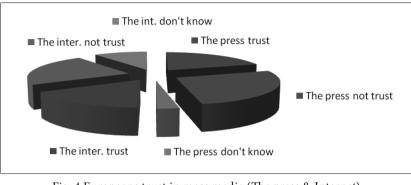


Fig. 4 Europeans trust in mass media (The press & Internet) Source: Authors

A socio-demographic analysis reveals the divisions that were recorded previously for media use: the Internet is preferred by younger respondents, the most educated and managers. In other categories, television is the top choice.

In the candidate countries situation is as follows:

- In Iceland, majorities trust the written press, radio and television, but trust in the Internet is now narrowed to the minority (45% trust).
- In Montenegro, trust in the written press has fallen sharply and is now occupying the minority position (44%). Conversely, trust in the Internet has gained significant ground (49%), as has the distrust (39%), suggesting that opinions are gradually hardening;
- In Turkey, respondents distrust all the media. Distrust in radio has reached 69%;
- The Internet is the only medium which is trusted by a majority, in the former Yugoslav Republic of Macedonia (41% trust) and Serbia (42%): in the latter country, however, a majority distrusted the Internet in autumn 2012 (45% distrust vs 36%) [4].

CONCLUSION

Public can have a right opinion about GMO only if people can reach objective information. As we know, Mass media in the process of recognizing the truth have a very important role. People are largely directed to obtain information only from the media. But, what is situation at a media scene? People still believe that media will tell them the truth. We could see that almost half population believe in the different kind of media. Is such percentage of public confidence fully justified?

Global audience is usually served an overdose of information, but still, there is little information to be found, that is the product of investigative journalism.

In a variety of skillfully orchestrated media manipulations that are driven by the global capital, information and misinformation meet, so that the huge part of mankind remains in unresolved dilemma whether GMO helps humanity to survive or is it simply a genocidal weapon of the global elite clans. If we want to get to the truth, we must establish a public discussion that is based on facts.

Power and many of multinational companies control the information market as well as the other markets (market for goods and services and financial market) and, we are becoming to recognize media as means of manipulation. They know how to 'spin', or change the way journalists approach a story. Their mission is not to debate facts and findings but to influence public opinion.

Scientists need to organize themselves. During GMO campaign they were always on the defensive, and often too busy to respond quickly to news stories.

The real story here is the media manipulation from both sides. Yes, story about GMO still has two sides. One side is against the GMO and the other side is in support. The media, under the intense pressure of powerful companies, are usually supporting this new form of food production, by selectively filtering information without trying to preserve integrity in truth and facts, because media owners and large advertisers promote only one face of the truth: 'The truth is where you earn money'.

We must begin look at the world through our own eyes and not trough the mass media lenses if we want to reclaim the right to know the truth. There is no more a single piece of information to be found outside the controlled context. Global food companies are owners or main advertisers. Media is directly financed from their funds. Majority of journalists are, virtually, on their payroll. Consequently, this turns journalists into media marionettes in the service of public manipulation and corporate benefits of their 'owners'.

And you don't want to bite the hand that feeds you.

REFERENCES

- [1] Bal F. Moć medija. (Media power) Beograd: Klio, 1997, p. 1.
- [2] Bonny S., Why are most Europeans opposed to GMOs? Factors explaining rejection in France and Europe, Electronic Journal of Biotechnology, 6(1) 2003, p. 51–71. http:// www.freepress.net/ownership/chart
- [3] Curtis K. R., McCluskey J. J., and Wahl T. I., Consumer acceptance of genetically modified food products on the developing world, AgBioForum, 7(1–2), 2004. p. 13
- [4] European Commission: Standard Eurobarometer 80 Autumn 2013. MEDIA USE IN THE EUROPEAN UNION REPORT, November 2013
- [5] Grimsrud, K., McCluskey, J. J., Loureiro, M., & Wahl, T. I. Consumer attitudes toward genetically modified food in Norway (IMPACT Center technical working paper). Pullman, WA: International Marketing Program for Agricultural Commodities & Trade, 2003.
- [6] Hoban, T. J., & Kendall, P. A. Consumer attitudes about food biotechnology. Raleigh, NC: North Carolina Cooperative Extension Service, 1993.
- [7] http://inserbia.info Published On: Sat, May 25th, 2013 Belgrade, Serbia.
- [8] Lappe F. M., Collins J.,&. Rosset P. World Hunger: 12 Myths. New York: Grove Press, 1998.

- [9] Marris C., Public views GMOs: deconstructing the myths, EMBO reports, 2(7) 2001. p. 545–548 http://dx.doi.org/10.1093/embo-reports/kve142
- [10] Mendes E., Trust in Media Recovers Slightly From All-Time Low http://www.gallup. com/poll/164459/trust-media-recovers-slightly-time-low.aspx September 19, 2013
- [11] Reuters Institute for the Study of Journalism. 'What's Happening to Our News', Oxford Media Convention 2009.
- [12] Stanković Ž. GMO usevi se u svetu šire, Evropa izuzetak, (GMO crops in the world beyond, Europe exception) Ekologija magazine, 2011). http://www.ekologija.rs/gmo-usevise-u-svetu-sire-evropa-izuzetak
- [13] Ten Eyck T. A., The media and public opinion on genetics and biotechnology: mirrors, windows, or walls? Public Understanding of Science, 14(3): 2005. P. 305–316 http://dx. doi.org/10.1177/0963662505052888
- [14] Teng P. P., An Asian perspective on GMO and biotechnology issues, Asia Pac. J. Clin. Nutr., 17(Sup 1), 2008. p. 237–240
- [15] Wilkinson, P., The Media and Terrorism: A Reassessment, London: Frank Cass, 1997.