



# BIOETHICS IN THE MALAY-MUSLIM COMMUNITY IN MALAYSIA: A STUDY ON THE FORMULATION OF FATWA ON GENETICALLY MODIFIED FOOD BY THE NATIONAL FATWA COUNCIL

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## Keywords

Bioethics,  
Fatwa,  
Malaysia,  
GM food,  
developing world,  
developing world bioethics,  
Malay-Muslim community

## ABSTRACT

The field of bioethics aims to ensure that modern scientific and technological advancements have been primarily developed for the benefits of humankind. This field is deeply rooted in the traditions of Western moral philosophy and socio-political theory. With respect to the view that the practice of bioethics in certain community should incorporate religious and cultural elements, this paper attempts to expound bioethical tradition of the Malay-Muslim community in Malaysia, with shedding light on the mechanism used by the National Fatwa Council to evaluate whether an application of biological sciences is ethical or not. By using the application of the genetically modified food as a case study, this study has found that the council had reviewed the basic guidelines in the main references of shari'ah in order to make decision on the permissibility of the application. The fatwa is made after having consultation with the experts in science field. The council has taken all factors into consideration and given priority to the general aim of shari'ah which to serve the interests of mankind and to save them from harm.

## INTRODUCTION

The year 2013 marks 43 years of the birth of the term bioethics.<sup>1</sup> Seen as a critical field that functions to safeguard the safety of society in the face of the rapid advances of modern biological sciences, bioethics has been introduced to various parts of the world through academic institutions, international non-academic institutions,

policies, rules and regulations, publications and conferences.<sup>2</sup> Apart from the expansion of bioethics as an academic field, many researches have been done to clarify the concept of bioethics from various cultural and religious perspectives, including those from the non-Western cultures which is important so that Western bioethics is not perceived to be the only way that bioethics can be understood and practiced.<sup>3</sup> For example, Tai and Lin in their article opine that Asian people have their traditional values which can be the basis of bioethical decision making and therefore they should develop a bioethics that is culturally relevant to them. In their study they have found that writings on medical ethics in Asia can be found as

<sup>1</sup> The term 'bioethics' was coined in 1970. To be precise, it experienced simultaneous birth through Van Rensselaer Potter from University of Wisconsin, who was the first person who coined the term and used it in publication. Meanwhile, Prof. André Hellegers from Georgetown University was the first person who used the term in the context of academic discourse and institution. He and his associates established The Joseph and Rose Kennedy Institute for the Study of Human Reproduction and Bioethics. For further details, see W.T. Reich. The Word 'Bioethics': Its Birth and the Legacies of Those Who Shaped It. *Kennedy Institute of Ethics Journal* 1994; 4(4): 319–335 and W.T. Reich. The Word 'Bioethics': The Struggle Over Its Earliest Meanings. *Kennedy Institute of Ethics Journal* 1995; 5(1): 19–34.

<sup>2</sup> A.R. Jonsen. 1998. *The Birth of Bioethics*. New York: Oxford University Press: 377.

<sup>3</sup> See for example A.T. Alora and J.M. Lumitao, eds. 2001. *Beyond a Western Bioethics: Voices from the Developing World*. Washington: Georgetown University Press; S.C. Crawford. 2003. *Hindu bioethics for the twenty-first century*. Albany: State University of New York Press.

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Conflict of interest statement: No conflicts declared

early as the 2<sup>nd</sup> century BCE, for example Sun Szu Miao from China wrote about ethics for physicians in the 7<sup>th</sup> century.<sup>4</sup>

Since the world population is diverse in terms of culture and religion, studies on the local wisdom related to bioethical tradition of certain community provide information that can enhance better mutual understanding and respect for the diversity of ethical values upheld by the world's communities, as has been emphasized by the preamble of the *Earth Charter*.<sup>5</sup> Therefore, this article intends to expound bioethical tradition of the Malay-Muslim community in Malaysia. By using the application of genetically modified food (GMF) as a case study, this article describes how an application of biological sciences has been decided as ethical or not by the National Fatwa<sup>6</sup> Council (NFC). Highlight is given to this council since it is an authoritative institution regarding ethical decision-making in the community. Although the given *fatwa* is meant for guidance for all Muslims regardless of their race, this study on the mechanism used by the NFC which consists of Malay-Muslim members can serve as reference to explain the bioethical tradition of the Malay-Muslim community.

## SOURCES OF DATA

The data are derived from library research by using 'Malay ethics', 'Islam', '*fatwa*' and 'GMF' as main keywords. Some of the data on the role of the NFC and mechanism used in the formulation of fatwa are obtained from in-depth interviews as stated in the table 1.

## EXISTING ETHICAL FRAMEWORK OF THE MALAY-MUSLIM COMMUNITY IN MALAYSIA

Malaysia is home to a multicultural, multiethnic and multi-religious society, with the Malay-Muslim commu-

<sup>4</sup> M.C. Tai & C.S. Lin. Developing a culturally relevant bioethics for Asian people. *Journal of Medical Ethics* 2001; 27: 51–54.

<sup>5</sup> The Earth Charter is a declaration of fundamental ethical principles for building a just, sustainable and peaceful global society in the 21st century. The Earth Charter Initiative. Values and Principles. *What is the Earth Charter?* Available at: <http://www.earthcharterinaction.org/content/pages/What-is-the-Earth-Charter%3F.html> [Accessed 19 March 2014].

<sup>6</sup> *Fatwa* can be defined as an explanation made based on the references of *shari'ah* of any Islamic legal issue that has been questioned by an individual or a group. *Fatwa* is regarded as an official standpoint of authoritative Muslim scholars (known as *mufti*) or groups of Muslim scholars (in committee). For further details on *fatwa* see M.J. Al-Qasimi. 1986. *Al-Fatwa fi al-Islam*. Beirut: Dar al-Kutub al-Ilmiah: 46; Y. Al-Qaradawi. 1988. *Al-Fatwa: Baina al-Indibat wa al-Tasayyub*. Cairo: Dar al-Sohwah: 11. [In Arabic language].

Table 1. List of interviewee

No.	Name	Position*
1.	Ms. Wan Morsita Wan Sudin	Head of the <i>Fatwa</i> Management Division, the Department of Islamic Development Malaysia (JAKIM)
2.	Associate Professor Dr Paizah Ismail	Committee member of the NFC; Lecturer at Ahmad Ibrahim Kulliyah of Laws, International Islamic University Malaysia
3.	Associate Professor Dr Suhaimi Napis	Lecturer at Faculty of Biotechnology and Biomolecular Sciences, Universiti Putra Malaysia, who had been invited to brief NFC on the scientific aspects of the GMF

\* Position of the interviewees during interviews held in 2010.

nity being the biggest indigenous group in Malaysia. Article 160 (2) of the Federal Constitution of Malaysia defines the term *Malay* as a person who is a Muslim, habitually speaks Malay language, and practices Malay social norms and cultural traits.<sup>7</sup> The practice of Islamic values is obvious in the daily lives of the Malays since one of the predominant characteristics of the Malay community is their strong adherence to Islam, the official religion of Malaysia.<sup>8</sup> As a consequence, one can observe that the nature of bioethical discourse among Malays is undeniably Islamic. The term 'ethics' has not been widely used among the Malays to describe a particular system to judge what is right and what is wrong. Rather, they often use the term *akhlak*,<sup>9</sup> *adab*,<sup>10</sup> *budi*,<sup>11</sup> *adat*,<sup>12</sup> *shari'ah*,<sup>13</sup> and *fiqh*.<sup>14</sup> These interconnected terms are religiously and culturally embedded, and none of them are more superior than the other.

The term *akhlak* is originated from Arabic word (*akhlaq*) from the root word *kha-la-qa*. The singular word for *akhlaq* is *khuluq* which can be defined as expression of spiritual traits of human in terms of good or bad. The discourse of *akhlak* or *akhlaq* centres on the noble character building and the improvement of daily religious practices in order to get close to the God.<sup>15</sup> The paragon of perfect *akhlak* for the Muslims is the Prophet Muhammad himself. This is because they believe that he was sent to complete the beautiful characters of man.<sup>16</sup> There are

<sup>7</sup> M.S. Hashim. 1976. *An Introduction to the Constitution of Malaysia* (2<sup>nd</sup> ed.). Kuala Lumpur: Government Printers: 291.

<sup>8</sup> H. Musa. 2004. *Encountering the Globalizing West*. Kuala Lumpur: University of Malaya Press & Center for Civilizational Dialogue: 84–85.

<sup>9</sup> Science of innate dispositions.

<sup>10</sup> Right action that springs from self-discipline.

<sup>11</sup> Power of intelligence and reasoning.

<sup>12</sup> Customary practices.

<sup>13</sup> Islamic supreme law revealed by God.

<sup>14</sup> Knowledge of the practical rules of *shari'ah*.

<sup>15</sup> E. Moosa. 2005. Muslim Ethics? In *The Blackwell Companion to Religious Ethics*. W. Schweiker, ed. Malden, MA: Blackwell Publishing. 237–243: 237.

<sup>16</sup> See Qur'an (68:4).

two other terms that are derived from the same root word of *akhlaq* namely *makhluk* (the creatures of God) and *khaliq* (Allah, the Creator).<sup>17</sup> This similarity manifests that there is relationship between these terms whereby *akhlaq* of the Muslims is based on rules revealed by their God which is in accordance with their position as the creatures of the God.

*Adab* can be defined as right action that is based upon knowledge whose source is wisdom.<sup>18</sup> Human soul has two dimensions which are the rational soul and the animal soul. The former is responsible for the good acts, whereas the latter is inclined to evil deeds. An individual that have *adab* is the one who can subdue the animal soul so that it is rendered under control, and put in its proper place just as the rational soul also has its proper place.<sup>19</sup>

The Malay word *budi* is often regarded as encapsulating various elements such as emotion, rationality, good character and ability. It comes from the word *buddhi* which is a Sanskrit word. It can be defined as the 'power of intelligence' as well as 'reasoning'. The Malays refer *budiman* as a Malay person that is thoughtful, considerate and has good conduct. The person who is *budiman* assists his society to further develop.<sup>20</sup> *Budi* has critical place in the Malay thinking and has been considered as part and parcel of the community.<sup>21</sup>

Like other indigenous communities in the world, the Malays strongly uphold *adat* which means customary practices and is an important ordering principle and tradition in the life of the Malays. Their *adat* consists of elements adapted from various other cultures that the Malay people have interacted with over a long period of time. These elements have been carefully and dynamically harmonized with the Islamic values and principles.<sup>22</sup> The most interesting point that can be observed in the practice of *adat* is that it has a robust relationship with *shari'ah*. This is stated in the one of the famous sayings among the Malays in relation to *adat*:<sup>23</sup>

*Adat bersendikan hukum  
Hukum bersendikan syara'*

<sup>17</sup> Musa, *op. cit.* note 8, p. 43.

<sup>18</sup> S.M.N. Al-Attas. 1995. *Prolegomena to the Metaphysics of Islam: An Exposition of the Fundamental Elements of the Worldview of Islam*. Kuala Lumpur: International Institute of Islamic Thought and Civilization: 16.

<sup>19</sup> *Ibid*: 16–17.

<sup>20</sup> K.H. Lim. 2003. *Budi as the Malay Mind: A Philosophical Study of Malay Ways of Reasoning and Emotion in Peribahasa*. Unpublished PhD thesis. Germany: University of Hamburg: 88. Available at: <http://www.sabrizain.org/malaya/library/budi.pdf> [Accessed 19 March 2014].

<sup>21</sup> Hamka. 1983. *Lembaga Budi*. Jakarta: Pustaka Panjimas. As quoted in *Ibid*: 89.

<sup>22</sup> Musa, *op. cit.* note 8, pp. 84–85.

<sup>23</sup> H. Musa. 2008. *Hati Budi Melayu: Pengukuhan Menghadapi Cabaran Abad ke-21 (Budi of the Malays: Encountering Challenges in the 21<sup>st</sup> Century)*. Selangor: Penerbit Universiti Putra Malaysia: 7. [In Malay Language].

*Syara' bersendikan Kitabullah  
Syara' mengata, adat memakai  
Ya kata syarak, benar kata adat.*<sup>24</sup>

*Shari'ah* is often understood as the detailed code of conduct, basis of guidelines for ethics, morality and laws that prescribe judgement of right and wrong.<sup>25</sup> Two principal sources of *shari'ah* are the Qur'an (the Divine revelation) and the *Sunnah* (a collection of the instructions issued or the memoirs of the Prophet Muhammad's conduct and behaviour). Human action in *shari'ah* is not only categorized into good or bad, rather it is divided into five categories namely *wajib* (obligatory), *mandub* (recommended), *mubah* (legally indifferent), *makruh* (discouraged) and *haram* (prohibited).<sup>26</sup> The ultimate goal of *shari'ah* is as a blessing for mankind. This is the primary purpose for which the Prophet Muhammad was sent to this world.<sup>27</sup> One way to realize this goal is to promote the *falah*<sup>28</sup> or real well-being of all the people living on earth.<sup>29</sup> *Shari'ah* is regarded as revelation by the Creator to fulfil the basic human needs, physical and spiritual alike, in order to achieve *falah*. Specifically, the primary purpose of the *shari'ah* is to serve the interests of mankind and to save them from harm.<sup>30</sup> Abu Hamid al-Ghazali (d. 1111 AD), an eminent scholar among Muslims, classified the objectives of *shari'ah* (*maqasid al-shari'ah*) into five major categories. He stated that the objective of *shari'ah* is to promote the well-being of the people, which lies in safeguarding their *din* (faith), *nafs* (self), *'aql* (intellect), *nasl* (posterity) and *mal* (wealth).<sup>31</sup>

*Fiqh* is an expansion of *shari'ah*, which literally means knowledge or deep understanding. It is knowledge of the rules of *shari'ah* as deduced from particular evidences in

<sup>24</sup> It can be literally translated into English language as follows:

*Adat rests on laws  
Laws rest on the shari'ah  
Shari'ah rests on the word of God  
Shari'ah dictates, adat practices  
If shari'ah says yes, adat will allow.*

<sup>25</sup> A.A. Mawdudi. 2010. *Towards Understanding Islam* (Rev. Ed.). Kuala Lumpur: Dar Al Wahi Publication: 150.

<sup>26</sup> A.K. Zaidan. 2001. *Al-Wajiz fi Usul al-Fiqh* (The Digest in Fundamentals of the *Fiqh*). Beirut: Muassasah al-Risalah: 29–30. [In Arabic language].

<sup>27</sup> See Qur'an (21:107).

<sup>28</sup> Literally it means victory.

<sup>29</sup> M.U. Chapra. 2008. *The Islamic Vision of Development in the Light of the Maqasid al-Shari'ah*. Herndon: The International Institute of Islamic Thought: 1. Available at: [http://xa.yimg.com/kq/groups/21494039/1225285914/name/Umer+Chapra+-+The+Islamic+Vision+of+Development+-+Umer+Chapra.pdf\\_%5BXyAx6b%5D.pdf](http://xa.yimg.com/kq/groups/21494039/1225285914/name/Umer+Chapra+-+The+Islamic+Vision+of+Development+-+Umer+Chapra.pdf_%5BXyAx6b%5D.pdf) [Accessed 19 March 2014].

<sup>30</sup> *Ibid*: 4.

<sup>31</sup> A.H. Al-Ghazali. 1992. *Al-Mustasfa min 'ilm al-usul* (Volume 2). Medina: Hamzah bin Zuhair Hafiz: 482. [In Arabic language]

the sources of the Qur'an and the *Sunnah*.<sup>32</sup> It is also regarded as the outcome of the interpretation of the jurists and their understanding of the general guidance found in the sources. Another function of *fiqh* is that it extends the general guidance and message of *shari'ah* to issues which have not been regulated in the Qur'an and the *Sunnah*.<sup>33</sup> Thus the rulings that arise from *fiqh* can occur in two varieties; a) regulations which are based on textual injunctions, such as rules related to the basic guidance of worship; b) regulations related to the things that do not have any direct evidences in the Qur'an and the *Sunnah*, in which intellectual reasoning or *ijtihad* is used.<sup>34</sup> The question regarding permissibility of an application of biological sciences has been discussed under the second category of *fiqh*.

## THE PRACTICE OF *IJTIHAD* BY THE NATIONAL FATWA COUNCIL (NFC)

As aforementioned in previous subtopic, *ijtihad* is used to deduce ruling on issues that so far have no direct guidance in the primary sources of *shari'ah*. The end-product of *ijtihad* is *fatwa*, an explanation from *shari'ah* perspective given by a *mufti*.<sup>35</sup> The practice of *ijtihad* is not new in the Islamic tradition since their beloved Prophet Muhammad (peace be upon Him) was a *mufti* himself. He answered questions that were directly forwarded to him, for example, questions about the rights of an orphan girl to have her inheritance. In the historical situation, a man who was her guardian wanted to marry her because he feared that her inheritance would fall into the hands of an outsider. The source of the given *fatwa* came directly from the All-Knower as revealed in verse 127 chapter al-Nisa'. Its translation is as follows:<sup>36</sup>

They ask your instruction concerning the women. Say: Allah does instruct you about them: and remember

<sup>32</sup> M.H. Kamali. *Fiqh and Adaptation to Social Reality*. *The Muslim World* 1996; 86(1): 62–84: 62.

<sup>33</sup> Ibid: 63–65.

<sup>34</sup> *Ijtihad* can be defined as self-exertion by a *mujtahid* (a qualified scholar who conducts *ijtihad*) to the best of his or her ability in order to deduce the ruling of a particular issue from the evidence that is found in the sources. See Ibid: 81.

<sup>35</sup> According to Al-Harrani, the term *mufti* can be defined as a qualified Muslim scholar, *adil*, legally competent (*mukallaf*), has sound mind and broad knowledge of *shari'ah* (*faqih*) as well as related disciplines and is capable to do *ijtihad*. *Adil* refers to a person who consistently does the obligatory and recommended things and abandon disapproved and forbidden according to the teachings of Islam, always speaks the truth, preserves his dignity, loves to bring good to people and save them from harm. See A.H. Al-Harrani. 1984. *Sifat al-Fatwa wa-al-Mufti wa-al-Mustafti* (Features of the Fatwa, Mufti and People Who Ask for Fatwa). Beirut: al-Maktab al-Islami: 13. [In Arabic language].

<sup>36</sup> J. Al-Suyuti. 2002. *Asbab al-Nuzul*. Beirut: Muassasah al-Kutub al-Thaqafiyah: 94. [In Arabic Language].

what has been rehearsed unto you in the Book, concerning the orphans of women to whom you give not the portions prescribed, and yet whom you desire to marry, as also concerning the children who are weak and oppressed: that you stand firm for justice to orphans. There is not a good deed which you do, but Allah is well-acquainted therewith.<sup>37</sup>

This practice continues till today, where the influence of *fatwa* remains strong in the Muslim community.<sup>38</sup> *Fatawa* (the plural word for *fatwa*) are often sought by the Muslims since they are divinely encouraged to ask guidance from those who are qualified.<sup>39</sup>

Prominent scholars of the Malay-Muslim community have been reactively issuing *fatwa* as guidance for them in dealing with particular issues. The earliest collection of the *fatwa* that can be found is '*al-Fatawa al-Fataniyyah*' by Sheikh Ahmad Muhammad Zain (1856–1906) which was published in about 1903.<sup>40</sup> According to the Federal Constitution of Malaysia, Islam is a state subject, whereby every state has its own religious council to advise the ruler on Muslim matters.<sup>41</sup> Therefore every state has their *mufti* and *fatwa* council which has been appointed by the ruler of the state.<sup>42</sup> The objective of this council is limited to the state religious affair, while the NFC has bigger scope in which it serves as referral council for the Conference of Rulers.<sup>43</sup>

Established in 1970,<sup>44</sup> the NFC uses the *ijtihad jama'i* (collective *ijtihad*) approach<sup>45</sup> whereby it consists of a chairman, a secretary and *muftis* from all the 14 states in Malaysia, five Muslim experts of *shari'ah* and a Muslim

<sup>37</sup> A.Y. Ali. 2007. *The Holy Qur'an: Text and Translation*. Kuala Lumpur: Islamic Book Trust: 108.

<sup>38</sup> The influence of *fatwa* can be seen for example through the writings of Muslims on the issues of science and technology. *Fatwa* is referred to as the Islamic perspective on the issues.

<sup>39</sup> Verse 43 in the chapter 16 (an-Nahl) of the *Qur'an* mentions the Divine encouragement to seek guidance from person who has better knowledge.

<sup>40</sup> B. Hooker. *Fatawa in Malaysia 1960–1985: Third Coulson Memorial Lecture*. *Arab Law Quarterly* 1993; 8(2): 93–105: 96.

<sup>41</sup> Hashim, *op. cit.* note 7, pp. 247–248.

<sup>42</sup> A.M. Yaacob. 1998. *Perkembangan institusi fatwa di Malaysia*. In *Mufti dan fatwa di negara-negara ASEAN*. A.M. Yaacob & W.R.A. Majid, eds. Kuala Lumpur: Institut Kefahaman Islam Malaysia: 127. [In Malay Language].

<sup>43</sup> This conference provides an intimate link between the Federal Government and the State Governments at the highest level. Its meeting attended by the Yang Dipertuan Agong, the Prime Minister, and all state Rulers to discuss matters of common concern that trouble any of them. See Hashim, *op. cit.* note 7, p. 45.

<sup>44</sup> M.A. Rahman. 2006. *Manhaj Fatwa Jawatankuasa Fatwa Kebangsaan* (Mechanism of *Fatwa* Issuance of the NFC). Paper presented in 'Seminar Manhaj Pengeluaran Fatwa Peringkat Kebangsaan', 5–6 December 2006, Kuala Lumpur, Malaysia. [In Malay Language].

<sup>45</sup> This approach has been recommended by many Islamic scholars since it has many advantages, including low possibility to error and produce more vigilant *fatwa*. Al-Bakri Z.M. (2010). *Mufti: Fatwa perseorangan dan majlis*. *Monograf al-Ifia'*. p. 57. [In Malay Language].

law advisor.<sup>46</sup> In the context of bioethics thus far, 62 *fatawa* related to bioethical issues have been declared, with the first *fatwa* being on heart and eye transplantation. Table 2 below shows the list of the topic of the *fatawa*.<sup>47</sup>

The process of *fatwa* making begins with the study on the query that had been forwarded to the council. This query may be lodged by the public, government or private agencies or it may be an initiative taken by the Department of Islamic Development Malaysia (JAKIM).<sup>48</sup> A study on the forwarded issue will be carried out by the Research Unit of the JAKIM. This unit will first find out whether a *fatwa* relating to the issue does exist or not. If no specific *fatwa* related to the issue exists, then a research paper will be prepared. In order to provide that paper, officers attached to that unit will study the related evidences in the main references of Islam namely the Quran, *Sunnah*, *ijma'* (consensus of Muslim scholars) and the *qiyas* (analogical reasoning). They would also refer to the opinions of the Companions of the Prophet (*qaul al-sahabi*), followers of the Companions (*tabi'in*) as well as views of the past and present prominent scholars in *fiqh* on the matters related to the issue.<sup>49</sup> If there are some things that need explanation from the experts in related field, the officers will conduct interviews with them.

The research paper will be presented during the meeting of *Shari'ah* Research Panel.<sup>50</sup> This panel facilitates the preparation of the proposal paper to be forwarded to the NFC. In this meeting, they also invite the experts if further explanation is needed. If the panel decided that the issue can be solved at the panel level and needs no more discussion, a *fatwa* will be issued.<sup>51</sup> But if the panel members think that meeting with the NFC should be held to get more perspectives to solve the issue, a proposal paper will be forwarded to the NFC. The council may invite again the selected experts in order to have a clear understanding of the issue discussed. This meeting may be held several times according to the need. Based on inputs from these experts and references from the Qur'an, *Sunnah*, *ijma'*, *qiyas* and existing *fatawa*, the council strives its best to decide on a new *fatwa*. Among

methods of reasoning that being used in the decision making are *al-masalih al-mursalah* (public interest), *sadd al-zara'i* (prevention of harm) and other principles of *fiqh*.<sup>52</sup> The NFC has also referred to the *fatawa* issued by the other organizations such as Majma' al-Fiqh al-Islami Al-Duali in Jeddah, yet finally decision will be made by taking local need and context into consideration.<sup>53</sup>

According to Associate Professor Dr Paizah Ismail, the council has taken all factors into consideration, including socio-economic factor. In the context of *fatwa* on the issues related to applications of biological sciences, she admits that it is not an easy task to weigh carefully the benefits and the risks of these applications. In general, Muslims are encouraged to adopt technology for their good, but their adoption should be grounded on the revelation and its objectives (*maqasid al-shari'ah*), not just on the logical thinking. This may cause delay for the council to declare *fatwa* in order to comprehend the issue and make the best decision for the benefit of the society.<sup>54</sup> It is noteworthy to mention that *fatwa* is made based on the available scientific findings. There might be changes in the *fatwa* given, if there is new finding available regarding benefit or harm of the application. Apart from that the *fatwa* can be revised based upon request from any party, government or public alike.<sup>55</sup>

The NFC primarily uses the Shafi'i approach in its *ijtihad*. This is as stated in the regulations of the National Council for Islamic Affairs that is established by the Conference of Rulers. Opinions from other schools of *fiqh* will also be taken into considerations if they provide stronger argument in terms of benefit for the society.<sup>56</sup>

## ISSUANCE OF FATWA ON GMF BY THE NFC

The government of Malaysia is positive about the capability of biotechnology to generate wealth and promote societal well being.<sup>57</sup> The Malaysian Agricultural Research and Development Institute (MARDI), one of the key actors in research and development of biotechnology in Malaysia, has developed transgenic papaya which is resistant to papaya ring spot virus and transgenic

<sup>46</sup> *Fatwa* Management Unit. *Mengenai jawatankuasa fatwa MKI* (Regarding the NFC). Available at: <http://www.e-fatwa.gov.my/mengenai-jawatankuasa-fatwa-mki-0> [Accessed 19 March 2013].

<sup>47</sup> This list is made based on the accessible *fatawa* in e-fatwa portal ([www.e-fatwa.gov.my](http://www.e-fatwa.gov.my)) and Department of Islamic Development Malaysia. 2009. *Keputusan muzakarah Jawatankuasa Fatwa Majlis Kebangsaan bagi Hal Ehwal Ugama Islam Malaysia* (Results of the NFC meetings for Islamic Religious Affairs Malaysia). Putrajaya: Department of Islamic Development Malaysia. [In Malay language].

<sup>48</sup> Rahman, op. cit. note 46.

<sup>49</sup> Ibid.

<sup>50</sup> It consists of *muftis*, academicians from local universities and the director of the Research Unit. See Ibid.

<sup>51</sup> Ibid.

<sup>52</sup> See C.H.P. Che Mamat. 2003. *The Role of Halal Division, Department of Islamic Development pertaining to GMO*. Paper presented in 'International Seminar on the Understanding and Acceptability of Biotechnology from the Islamic Perspective', Kuching, Sarawak, Malaysia.

<sup>53</sup> Ismail, P. (June 8, 2010). *Personal communication*; Wan Sudin, W.M. (29 November 2010). *Personal communication*.

<sup>54</sup> Ibid.

<sup>55</sup> Ibid.

<sup>56</sup> Ibid.

<sup>57</sup> Speech by YAB Dato' Seri Abdullah Bin Haji Ahmad Badawi Prime Minister Of Malaysia At The Launch Of Biomalaysia. Available at: <http://www.biotechcorp.com.my/Documents/BiotechnologyInMalaysia/pmspeech.pdf> [Accessed 19 March 2014].

Table 2. Fatawa issued by the NFC regarding bioethical issues

No.	Issue	Date
1.	Heart and eye transplant	23–24 June & 1–2 October 1970, 22 February 1973
2.	Family planning	22 November 1973
3.	Sperm bank	28–29 January 1981
4.	Sex change from man to woman	13–14 April 1982
5.	Blood donation and the use of Muslim blood by the non-Muslim and vice versa	13–14 April 1982 & 10 October 1983
6.	Test-tube baby	10 October 1983
7.	Injection of highly purified insulin from swine	10 October 1983
8.	The use of <i>direct current shock</i>	10 October 1983
9.	Preservation of the corpse	11 October 1983
10.	The use of drug for heart disease patients who are fasting	11–12 April 1984
11.	Post-mortem	24–25 September 1984
12.	Rubella vaccination	12 September 1988
13.	The use of alcohol as stabilizing agent in cordial drink	24 November 1988
14.	The use of electrical stunning in slaughtering animal	24 November 1988
15.	Slaughtering chicken by using water stunner	24 November 1988
16.	Immunization of hepatitis B	24 November 1988
17.	Immunization of measles, tuberculosis, whooping cough, diphtheria, tetanus and polio	5–6 June 1989
18.	Artificial insemination for animal	6 June 1989
19.	Brain death	13 December 1989
20.	Abortion of abnormal fetus	7–8 March 1990
21.	The use of active agent in food	7 March 1990
22.	Norplant implant system in the national family planning program	29 December 1991
23.	The use of cochineal as colouring agent	23 May, 1995, 4 July 2012
24.	The use of tissue graft	21 June 1995
25.	The use of swine PSH-P hormone to increase productivity of livestock	21 September 1995
26.	Biotechnology in food and drink	12 July 1999
27.	Guideline on production, preparation, handling and storage of <i>halal</i> food	April 2000
28.	Human reproduction and therapeutic cloning	11 March 2002
29.	Abortion for thalassaemia carrier and patient	1 July 2002
30.	Abortion for rape victim	1 July 2002
31.	Meningococcal vaccination	27 November 2002
32.	The use of <i>Newater</i>	27 November 2002
33.	Artificial insemination	7 May & 8 April 2003
34.	Post-mortem on non-criminal case related corpse	27 January 2004
35.	The use of bacteria taken from baby faeces as catalyst agent in yogurt	16 March 2004
36.	Therapeutic cloning and stem cell research	22 February 2005
37.	The use of stunning in slaughtering animal	29 September 2005
38.	The use of 'thoracic stiking' method in slaughtering animal	29 September 2005
39.	The use of 'pneumatic percussive stunning'	13 March 2006
40.	Botox injection	4–6 April 2006
41.	Virtual autopsy as an alternative for post-mortem	4–6 April 2006
42.	<i>Halal</i> status of fish that is fed with non- <i>halal</i> feed	4 April 2006
43.	The use of material from non-halal animal (except dog and swine) for cosmetic purposes	25–27 July 2006
44.	Sex ambiguity 'congenital adrenal hyperplasia' and 'testicular feminization syndrome'	21–23 November 2006
45.	Circumcision for hemophilia patient and children with mental disability	10–12 April 2007
46.	Religious practice for patient with colostomy bag	6–8 September 2007
47.	Assisted tools for sexual intercourse	13–15 June 2005
48.	Surrogacy	1–3 February 2008
49.	The use of biothrax and rotate vaccine that its preparation involves swine substance	31 March 2008
50.	Breeding and selling leeches and worms for medical and cosmetic purposes	31 March 2008
51.	Female genital mutilation	21 April 2009
52.	The use Clexane and Fraxiparine	23 June 2009
53.	'Holbein Drawing Ink' for cancer therapy	1 March 2010
54.	Vaccination for Human Papilloma Virus (HPV)	16 December 2010
55.	Meningitis Menveo vaccine	22 April 2011
56.	The consumption of genetically modified food	17 June 2011
57.	Maggot Debridement Therapy	14 February 2012
58.	Alcohol in food, drink, perfume and drugs	15 July 2011
59.	Euthanasia	16 December 2011
60.	Milk bank	16 December 2011
61.	Implantable Collamer Lens for eye treatment	5 May 2012
62.	The use of DNA to determine child's lineage	27 September 2012

pineapples which are resistant to black heart rot.<sup>58</sup> Despite the government's commitment to develop GMF, public have raised ethical concerns about it. One of the most concerned issues is about the *halal* status of the GMF. Apart from that, there are concerns about the potential risks of the GMF. For example, the Consumer Association of Penang, Malaysia had voiced out its objection to GMF since April 1997. It had suggested to the government to hold moratorium on the import, sales and commercial plantation of the genetically modified crops.<sup>59</sup> In December 2007, a resolution was made during the 'National Seminar on Biotechnology in Food and Consumer Products: Islamic Perspective'.<sup>60</sup> It recommends that thorough and independent researches should be carried out on the effects of genetic modification on the human health and environment.

The NFC has issued two *fatawa* regarding the application of GMF. The first *fatwa* declared on the 12<sup>th</sup> July 1999 that materials, food and drink produced from genetic modification that involves swine gene are considered *haram* (unlawful). This *fatwa* was issued after a request had been made by the Food Quality Control Unit under the Ministry of Health Malaysia for the council to declare on the permissibility of the technique applied in the production of GMF, especially when it involves gene transfer from swine to food, drink or plant substances.<sup>61</sup> Islam prescribes certain rules about which foods are permissible and some are not permissible. The consumption of swine is forbidden in Islam, as Allah directly commands in verse 173, chapter al-Baqarah which can be translated as follows:<sup>62</sup>

He has only forbidden you dead meat, and blood, and the flesh of the swine, and that on which any other name has been invoked besides that of Allah. But if one is forced by necessity, without wilful obedience, nor transgressing due limits-then he is guiltless. For Allah is Oft-Forgiving Most Merciful.<sup>63</sup>

<sup>58</sup> C.C. Tan. 2008. Food woes place renewed focus on biotechnology. *New Sunday Times* 4 May: 12–13.

<sup>59</sup> Mohideen Abdul Kader. 2006. A guide to genetically-modified foods in Malaysia. In *Food and technological progress*. S.M.S. Shaikh Mohd Salleh & A. Sobian, eds. Kuala Lumpur: Institute of Islamic Understanding Malaysia & MPH Group Publishing: 141–142.

<sup>60</sup> Held in Kuala Lumpur, this seminar was organized by the Department of Fiqh and Usul al-Fiqh, International Islamic University Malaysia.

<sup>61</sup> M.A. Rahman. 2005. Fatwa-fatwa Sedia Ada Mengenai Makanan Ubah Suai Genetik (Existing *Fatwas* on GMF). In *Sempadan Bioteknologi Menurut Perspektif Islam* (Limitation of Biotechnology in the Islamic Perspective). S.M.S. Shaikh Mohd Salleh, W.R. Wan Abdul Majid & A. Sobian, eds. Kuala Lumpur: Institute of Islamic Understanding: 35–44: 40. [In Malay Language].

<sup>62</sup> This command can also be found in some other verses in the Qur'an such as verse 3 chapter al-Maidah.

<sup>63</sup> Ali, op. cit. note 39, p. 28.

A series of briefing on the scientific process of genetic modification were given by Ms. Mariam Abdul Latiff from the Ministry of Health Malaysia and Associate Professor Dr Suhaimi Napis from Universiti Putra Malaysia in front of the members of the NFC.<sup>64</sup> Among the important points that was explained by Dr. Suhaimi is that animal DNA (deoxyribonucleic acid) which is transferred to the host is no longer an original copy since it had undergone several processes including the cloning of the gene in the bacteria called *E. coli* and gene transfer from the bacteria to plant mediated by *Agrobacterium tumefaciens* or gene gun. During the former process, the original DNA is used to produce new copies of DNA synthesized from the bacteria. The original copy is later metabolized during cell division. After that the latter process will take place whereby the new copy will undergo duplications in the *A. tumefaciens*. Protein synthesis machinery of the recipient plant will transcribe the transferred gene into RNA (ribonucleic acid) using its own ribonucleotides and translate the RNA into protein using its own amino acids. The resulting protein in the genetically modified plant is identical to original protein in donor organism (swine). Therefore, the GMF do not have any physical substance from the swine, but it has donor's copy of the genetic information.<sup>65</sup>

The NFC had reviewed that the method of producing genetically modified plant as aforementioned is not similar to conventional cross breeding of pig with goat and swine hormone injection to cattle; therefore the ruling of these methods cannot be used as analogy (*qiyas*) to provide ruling of the GMF.<sup>66</sup>

The council decided that the DNA copy that is inserted into host plant cannot be considered as being transformed through *istihalah*, a process that changes the nature of forbidden substance to produce a different substance in names, properties and characteristics. This process justifies that prohibited materials can become pure and permissible, for example wine is prohibited but it becomes permissible when it had transformed into vinegar. This decision was made based on the consideration that the copy of the gene in the genetically modified plant still has relation with the original gene in the swine.<sup>67</sup> Therefore the council takes mindful approach for

<sup>64</sup> Rahman, op. cit. note 63.

<sup>65</sup> S. Napis. Gene transfer technology: Is it the physical DNA or its genetic information? Paper presented in the briefing in front of the NFC. This copy of presentation slides were given to the author prior interview with him.

<sup>66</sup> Department of Islamic Development Malaysia. July 1, 1999. *Minit Muzakarah Khas Jawatankuasa Fatwa Majlis Kebangsaan bagi Hal Ehwal Ugama Islam Malaysia*. [In Malay Language].

<sup>67</sup> Department of Islamic Development Malaysia. July 1, 1999; Department of Islamic Development Malaysia. July 12, 1999. *Minit Muzakarah Khas Jawatankuasa Fatwa Majlis Kebangsaan bagi Hal Ehwal Ugama Islam Malaysia*. [In Malay Language]; A.R. Awang. 2011. *Istihalah: Concept and application*. Paper presented in *World*

not declaring that plant as permissible. Swine is classified as highly impure in Islam, and Muslims normally avoid using any products that contain swine substance as far as possible. Therefore the use of swine DNA in the production of GMF can cause bewilderment to the community.<sup>68</sup> This decision is based on the principle 'preventing harm takes precedence over securing benefit' (*daf' al-mafasid aula min jalb al-masalih*). Other principles of *fiqh* that had been considered are 'all things are permissible unless proven to be unlawful' (*al-'asl fī al-ashya' al-ibahah hatta yadullu al-dalil 'ala al-tahrim*) and 'when the lawful and unlawful things are mixed up, the unlawful prevails' (*idha ijta'ma' al-halal wa- al-haram ghuliba al-haram*).<sup>69</sup>

The council had also reviewed the advantage of GMF to overcome food shortage due to increasing world population as well as to alleviate hunger in the Third World. They opined that these problems cannot be used as justification to permit the consumption of GMF that contains swine substance. This is because they believe that root cause of the problems is the unfair distribution of food among the society. The issued *fatwa* is also based on the fact that there are many choices of available halal food and drink for Muslims and that they are not yet in the state of *darurah* (necessity).<sup>70</sup>

Twelve years later (in June 2011), the second *fatwa* was made based on the meeting held to discuss on the ruling of the GMF in the more general context. This *fatwa* states that it is not permissible to use genes from *halal* animal that is not properly slaughtered by using *shari'ah*-compliant method. The productions of GMF that may bring harm to human health and unknown long-term risks on environment are also prohibited. A briefing was given by Prof. Dato' Dr. Yaakob Che Man, the Director of Halal Product Research Institute, Universiti Putra Malaysia. Among the important points that he explained is that *halal* as well as non-*halal* genes have been used in the production of GMF.<sup>71</sup>

The council had reviewed that Islam has put utmost importance on eating of *halal* and *tayyib* food which do not bring harm to human soul and intellect, and the production process of the food does not bring bad impact

to human health and environment. Among the *fiqh* principles that had been considered in the discussion are 'preventing harm takes precedence over securing benefit' (*daf' al-mafasid aula min jalb al-masalih*) and 'permitting the beneficial and prohibiting the harm' (*ibahah al-nafi' wa hazr al-dhar*).<sup>72</sup> The council had also given attention to the issue of using gene from *halal* animal that being slaughtered by using method that is not compliant with *shari'ah*. They decided that GMF which contains this gene is not *halal* because compliant slaughtering method is one big factor that determines the permissibility to eat the *halal* animals.<sup>73</sup>

This *fatwa* had answered ethical question that being raised by the Muslim community on the impact of the potential risks of the GMF on its *halal* status. It is clearly stated that the teachings of Islam promotes preservation of environment. Nevertheless, Muslim scholars do not put much emphasis on causing no harm to environment as one of characteristics of *halal* food. For example, the Trade Description Order (Definition of *halal*) 2011 published by the Attorney General's Chambers Malaysiastates that the definition of *halal* is as follows:<sup>74</sup>

- a) does not consist of or contain any part or matter of an animal that is prohibited by Islamic law for a Muslim to consume or that has not been slaughtered in accordance with Islamic law
- b) does not contain anything which is impure according to Islamic law;
- c) does not intoxicate according to Islamic law
- d) does not contain any part of a human being or its yield which are not allowed by Islamic law
- e) is not poisonous or hazardous to health
- f) has not been prepared, processed or manufactured using any instrument that is contaminated with impure according to Islamic law; and
- g) has not in the course of preparing, processing or storing been in contact with, mixed, or in close proximity to any food that fails to satisfy paragraphs a) and b).

Therefore the latest *fatwa* on GMF issued by the NFC has added new characteristic of *halal* food which is having no high potentiality of causing harm to environment.

## CONCLUSION

As a conclusion, religious element has central influence on the bioethical tradition of the Malay-Muslim

*Halal Research*, Kuala Lumpur, Malaysia. Available at: [http://www.hdcglobal.com/upload-web/cms-editor-files/HDC-122/file/PAPER15-istihalah\\_concept\\_and\\_application.pdf](http://www.hdcglobal.com/upload-web/cms-editor-files/HDC-122/file/PAPER15-istihalah_concept_and_application.pdf) [Accessed 19 March 2014].

<sup>68</sup> Swine flesh is unlawful to Muslims as God has prohibited it in His command in the Qur'an (2: 173); Department of Islamic Development Malaysia. July 12, 1999, *op. cit.* note 70.

<sup>69</sup> Rahman, *op. cit.* note 63, pp. 42–43.

<sup>70</sup> In this case consumption of prohibited foods and drinks is allowed. Department of Islamic Development Malaysia. 12 July 1999, *op. cit.* note 70.

<sup>71</sup> Department of Islamic Development Malaysia. 16–18 June 2011. *Cabutan Minit Muzakarah Jawatankuasa Fatwa Majlis Kebangsaan bagi Hal Ehwal Ugama Islam Malaysia kali ke-95*. [In Malay Language].

<sup>72</sup> Ibid.

<sup>73</sup> See Qur'an (5:3): Ibid.

<sup>74</sup> Attorney General's Chambers. 30 December 2011. Federal Government Gazette. Trade Descriptions (Definition of Halal) Order 2011. (P.U. [A] 430).



community. Its framework is based on the Divine ethics, whereby *shari'ah* and its extension, *fiqh* are the main elements. The National Fatwa Council is an authoritative institution which remains the main referral for the community to know Islamic perspective on any bioethical issue that has no direct evidence in the Qur'an and *Summah*. The council uses a collective approach to produce *fatwa* on the issues related to the application of modern science and technology. This approach involves the prior briefings and discussions with selected experts from related fields of science and technology. In order to declare fatwa relating to application of biological sciences, the council had reviewed the basic guidelines in the main references of *shari'ah*. The council has taken all factors into consideration and given priority to the general aim of *shari'ah* which to serve the interests of mankind and to save them from harm.

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