# Indonesian Moslem Responding to the Environmental Crisis: Notes to Nature Conservation<sup>1</sup>

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## Abstract:

Like other civilized societies, Indonesian Moslems are also participating in the modern world with their own unique way. Two major Islamic organizations, namely the Nahdhaltul Ulama and Muhammadiyah, can be considered as representative of (Indonesian) Islamic thought in terms of its response to environmental issues in Indonesia. This paper explores the moral thoughts of Islam and the response of Moslems in their everyday lives. In practice, the Pesantrens (Islamic Boarding Schools) can be regarded as a community that can represent traditional Indonesian Moslem ideas. Two examples presented here show how influential these ulama (clergymen) from Pesantrens can be. The first is by issuing a decree (Fatwa) concerning The Family Planning Program which successfully slowed down the population explosion; and the second is the respect of Figh into everyday life such as not consuming wild animals which the Shari'ah (Islamic jurisprudence) prohibits.

#### Introduction

Indonesia is a rich country when it comes to biodiversity, therefore, has been named as Megadiversity Country. It is also unquestionably one of the top two countries on Earth for Biodiversity, the richest country in the world in terms of biological wealth, and the leader in marine biodiversity. <sup>4</sup> According to BAPPENAS<sup>5</sup> (2003) Indonesia has among the world's most diverse in biodiversity and ecological systems. Although the archipelago covers only 1.5 percent of the earth's land surface, it includes: ten percent of the world's flowering plant species, 12 percent of all the world's mammals, 16 percent of all the world's reptile and amphibian species, 17 percent of the world's birds and 25 percent of its fresh water and marine fishes.

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<sup>&</sup>lt;sup>4</sup> Mittermeier et. al. 1997. Megadiversity. Earth's Biologically Wealthiest Nation. Cemex. Prado Norte.

<sup>&</sup>lt;sup>5</sup> BAPPENAS.2003. Indonesian Biodiversity Strategy and Action Plan (IBSAP) 2003-2020. Jakarta.p

Indonesia's species-rich forests and great expanses of natural habitat supports the world's greatest diversity of palms, 4,000 species of orchids, more than 400 species of dipterocarps (the most valuable commercial trees in Southeast Asia) and an estimated 25,000 to 30,000 other flowering plants. In addition, the nation's territorial waters contain a variety of coastal and marine ecosystems (including the finest mangrove forests in Asia) and the richest of the Indo-West Pacific seas. Recently Indonesia is included as a part of 'the world biodiversity hotspot': where concentrations of endemic species and undergoing by serious levels of habitat loss. <sup>6</sup>

Indonesia is part of the global biological diversity conservation priorities. According to Mittermeier et al (2004) more than half of the world plant species and more than a third of earth' mammals, birds, reptiles, and amphibian are found in just 2.3 % of its land surface. Most of these areas tropical, like Atlantic forest, the Caribbean, Madagascar, Sundaland, the Philippines, and the Tropical Andes. Two important region has strategically covers Indonesia: Sundaland hotspots (1.5 million km2) and Wallacea hotspot (338 494 km2), this two region has been put as priority setting for biodiversity conservation, to conserve the rest of living heritage in the planet, where biodiversity is besieged.<sup>7</sup>

Although Indonesia has been designated as one of the richest country in biological diversity, the number of threatened animals and plants are also among the highest. More than 130 species of mammals and 90 birds were categorized as threatened and some of them are critical endangered, on the brink to extinction. Therefore, funding for saving Indonesia's flora and fauna from multilateral and bilateral donors has been flowing, although there has been little success in reducing the number of endangered species. The root causes of the problems have been known and the culprits are mostly related to the increase in human population. This has been exacerbated by the unsustainable extraction of natural resources, both by local communities, government and private sectors. The over-extraction of natural resources by local communities has been overlooked, especially whether those are related to the social, religion, cultural preferences.

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<sup>&</sup>lt;sup>6</sup> Myers.N, R.A. Mittermeier, C.G. Mittermeier, G. A.B. da Fonseca & J. Kent. 2000. Biodiversity hotspots for conservation priorities. *Nature*, 402: 853-858.

<sup>&</sup>lt;sup>7</sup> Mittermeier et.al. 2004. Hotspots, Revisited. Cemex. p 19.

In term of religion, Indonesia is a country with a population of more than 177,5 million Moslems.<sup>8</sup> It represents the largest Moslem population country in the world. Therefore Indonesia's Moslem must face the bulk of the most environmental problems as well as the problems in management of its natural resources. The dealing of these issues should constitute a reflection of Moslems as majority in this country. Indonesia is one of the biggest democracy with a Moslem majority. However, it is not a nation implementing the Islamic jurisprudence (shari'ah). Even though mostly in practice, Moslems obey the ritual practice of shari'ah. Islamic ideology is also not implemented as the foundation of the state. It is an Islamic society, but they live in a secular system and in multicultural conditions. Therefore, it is really interesting to review the relation between environmental problems, especially on biodiversity, with the presence of majority Moslems in provinces and districts.

## The picture of Indonesian Moslems

To analyze Islam in Indonesia, we have to look into the two biggest Moslem organizations in Indonesia: Nahdlatul Ulama (NU) and Muhammadiyah. Both organizations are successful in playing a "political role" without being officially political party. In this context, Nahdlatul Ulama and Muhammadiyah can be seen as representative of authoritative non-state powers, either in domestic level, *vis-à-vis* state, or in international level to play '*supra*' power.<sup>9</sup>

The NU has 40 million active members. The foundation of the NU is its Islamic Boarding Schools (pesantren), and its Islamic traditional leaders. According to Department of Religions, in 2001, it accounted about 2.7 million students from a total of 11.312 nationwide<sup>10</sup>. The Muhammadiyah is well known in Indonesia for its extensive network of high quality primary and secondary schools, teachers' colleges, and universities. These institutions admit students regardless of their religious or organizational affiliation, and teach

<sup>8</sup> Department of Religion. 2004. Jumlah Penduduk Menurut Propinsi dan Agama tahun 2004. http://www.depag.go.id/Hal\_1.php

<sup>&</sup>lt;sup>9</sup> Ali.F. Islam dan Pemberdayaan Politik Ummat: Telaah Peran NU dan Muhammadiyah. Paper disampaikan disampaikan dalam program Diskusi Serial bidang Politik *International Institute of Islamic Thought* (IIIT) Indonesia. 16 Januari 2003. online:

http://www.geocities.com/jurnal\_iiitindonesia/nu\_muhammadiyah.htm#\_edn22. accessedn july 22 2005.

<sup>&</sup>lt;sup>10</sup> EMIS. Departemen Agama RI. 2001.

"modern" subjects, but are usually effective in persuading students to adopt Muhammadiyah religious values. To understand the Islamic life in Indonesia, we might agree to S. H. Nasr <sup>11</sup>, that today there are basically three types of Islam: traditionalism, modernism and a variety forms of revivalism usually brought together as fundamentalism.

Until two hundred years ago, said Nasr, in spite of the many schools and interpretations, all Muslims lived within the tradition, with its roots in the Qur'an, *Hadith*, and the *shari'ah*. It was a living tradition, emphasizing the harmony of law, art, and all forms of knowledge. In the eighteenth century modernism, with its roots in secular humanism, entered this world, in all fields from science and philosophy to art, and traditional Islam began to fade. Referring to Nasr, the criterion of NU was trend towards traditionalism and Muhammadiyah is to modernism. Therefore, Indonesia is a nation with a demeanor of an Islamic nation but with secular rules.

As a consequence, if we want to look at how Indonesian Moslems cope with environmental issues we have to look deep into the teaching, viewing and practicing of the followers of those two major organizations. Nevertheless, to the individual Moslem, their condition is rather 'unique,' in practicing their life as a good Moslem. Some find themselves caught between two poles, as reflected in their views and day to day practices: between matters of the hereafter and the material world. For example if you want to be one devoted follower, your place is in the mosques and always pray to God, practice worship individually, remain transient to everyday troubles and forget your shares to the material world, because among eternity (akhirah) and real material world (dunia) there is no linkage at all. This mode of thinking is against the shari'ah mission that teaches the congruence of religious life and worldly life, it can not be dichotomized and should be implemented in practical everyday life<sup>13</sup>.

Allah SWT in the Al-Qur'an stated:

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<sup>&</sup>lt;sup>11</sup> Nasr, conversation with M. Hope and J.Young <u>in</u> Islam and Ecology. <u>http://www.crosscurrents.org/islamecology.htm#TEXT1</u> accessed, July 7, 2005

<sup>12</sup> Ibid p.6

<sup>&</sup>lt;sup>13</sup> F.Mangunjaya. Konservasi Alam dalam Islam. (Yayasan Obor Indonesia, Jakarta. 2005)

"I have only created jinns and men, that they may serve Me." 14

Hence human beings are created destined by religious service to their Almighty God. Its meaning is that there is no dichotomy between reality of life and the life after. <sup>15</sup>

On the other hand, Indonesian Moslem is influenced by "western dogma": separating science from the sacred religious values. If so, this view will also be adopted in how Moslems view environmental issues. This is a reincarnation of failure due to 'modern; secularist views.

In certain ways, the influence of modern lifestyle, western values, has weathered away Islamic wisdom towards the treatment towards nature and the environment. So the modern conditions in Indonesia, is a contrast to Lynn White Jr. statements, stating that what people do about their ecology depends on what they think about themselves in relation to things around them. And human ecology is deeply conditioned by beliefs about our nature and destiny that is, by religion. Some Indonesian Moslems in the cities have been exposed to industrialized communities with the indication of high consumerism, capitalism and materialism. which has been ignoring the environmental crises around them. These behaviors were not inline with Islamic cosmology which tends to see the nature as forming a real verse of existence of God, as His words:

Behold! In the creation of the heavens and the earth, And the alternation of night and day,--there indeed signs for men of understanding,--<sup>17</sup>

Therefore, basic principles of Islam that Moslems should behave as *Khalifatullah fi al-ard* (God vice gerent on the earth), <sup>18</sup> may not be common belief. So, it's true that in many areas Moslem is leading and has power in Indonesia, but, they lost the virtual of the function and practically sometimes disobey the Islamic teaching including in managing the nature and environment.

<sup>16</sup> White Jr.L.The historical roots of our ecological crisis. *Science* 155: 1203-1207.

<sup>&</sup>lt;sup>14</sup> Al-Qur'an Surah (Q.s): 51-56

<sup>&</sup>lt;sup>15</sup> Mangunjaya, op.cit. 2.

<sup>&</sup>lt;sup>17</sup> Qur'an, 3:190.

<sup>&</sup>lt;sup>18</sup> Qur'an, 2:30: "Behold, thy Lord said to the angels:"I will create a vice gerent on earth.' They said: 'Wilt Thou place therein one who will make mischief therein and shed blood? Whilist we do celebrate Thy praises and glorify Thy holy (name)?' He said: 'I know what ye know not'." 2:30

The current situation in Indonesian Moslem, is relatively similar as figured in the other Moslem country such as S.H. Nasr said:

Although many Muslims with whom we have talked are familiar with broad Qur'anic principles, few see any need to move an ecological ethic to the center of their awareness. True, some Muslims have become heads of national and international environmental organizations, but the average citizen is only vaguely aware of the extent of the crisis; most political and educational leaders perceive only a few of the problems, and those in isolation. <sup>19</sup>

Consequently, depiction of Moslem attitude in Indonesia will not fully represent the 'Ideal Islamic Indonesia Ideas,' because the explanation concerning attitude and behavior of Indonesia Moslem is not fully relied on the basis of Islamic shari'ah, hadiths and the command of al-Qur'an.

Ideally, Moslem must return to the nexus and values of Islamic ethic such as: *Tambid* (unity), *khalifa* (trusteeship), and *akhirah* (accountability, or literally, the hereafter). Ziauddin Sardar <sup>20</sup> divided the Islamic ethic as follows:

Tawhid exemplifies the unity of God: the recognition that there is one, absolute, transcendent Creator of the universe and all that it contains. Man is ultimately responsible for all his actions to Him. As an ethical rule, tawhid dictates the acceptance of God as the only source of all values: not to do this would lead to shirk, the negation of tawhid, which is the cardinal sin in Islam. As such, tawhid is the matrix for human thought and action, it is all-pervasive and penetrates every aspect of our endeavor.

Thus conceived, *tawhid*, according to Sardar, it becomes all pervasive, penetrating all aspects of human thought and behavior. It is the guiding principle of religion and ethics, politics and social behavior, epistemology and science, and at the center of Muslim's curiosity regarding nature.<sup>21</sup>

<sup>&</sup>lt;sup>19</sup> SH. Nasr interviewed by M. Hope and J.Young. Islam and Ecology. http://www.crosscurrents.org/islamecology.htm#TEXT1 accessed, July 7, 2005

<sup>&</sup>lt;sup>20</sup> Z. Sardar. *Towards an Islamic Theory of Environment*. in 'Islamic futures: a shape of ideas to come' (Published by Mansell Publishing, London) p 224

<sup>&</sup>lt;sup>21</sup> ibid p 225

From *tawhid* emerge the concepts of khilafah and *amanah*. The entire rationale of an Islamic environmental ethics is based on the Qur'anic concept of khilafah: man's viceregency of trusteeship. Man can use the trust for his benefit but has no absolute right to anything: the trust must be preserved and handed back to its rightful owner. Man is accountable for the misuse of his trust and is liable to pay a price both in this world and the *akhrah* (hereafter).<sup>22</sup>

## Forest, population control and implication of Islamic jurisprudence (fiqh)

Indonesia has better forest covers in the 70s but the size and qualities decreased in the 80s and 90s. The forest loss was due to the need of cash during new order, early of Soeharto Presidency. The timber is the only easy income with not so much needs of investments. According to Forest Watch Indonesia (2001), the highest deforestation rate was happening in 90s:1,445,044 ha/year degraded and 8,899,976 ha totally deforested.<sup>23</sup> The habitat conversion for agriculture especially for transmigration program was very high followed by oil palm plantation, road building etc.

Throughout Indonesia, there has been a dramatic loss in natural habitats, and the archipelago is likely undergoing an extinction crisis. The richest habitats across many islands are under the greatest pressure. Unprotected lowland forests are likely to be completely cleared in the near future extraction of timber, rattan, fisheries, and other biological resources has made major contributions to the national economy, but has not been managed sustainability <sup>24</sup>.

Logging is a very serious threat throughout Indonesia. A June 2000 report by the Ministry of Forestry officially stated an opinion that had been prevalent for some time: Illegal logging is a well-organized criminal enterprise with strong backing and a network that is so extensive, well-established and strong that it is bold enough to resist, threaten, and in fact

<sup>&</sup>lt;sup>22</sup> ibid p 226

<sup>&</sup>lt;sup>23</sup> FWI. 2001. Potret Keadaan Hutan Indonesia. Global Forest Watch & Forest Watch Indonesia.

<sup>&</sup>lt;sup>24</sup> Supriatna, J. I. Wijayanto,B.O. Manullang. D. Anggraeni, Wiratno & S. Ellis. 2002. The State of siege for Sumatra's Forest and Protected Areas: Stakeholders View During Devoltion, and Political Economic Crises in Indonesia. Proc.IUCN/WCPA-East Asia,Taipei:439-456.

physically tyrannize forestry law enforcement authorities. Illegal cutting occurs in concession areas, unallocated forest areas, expired concessions, state forestry concessions, areas of forest slated for conversion, and in conservation areas and protected forests.

Illegal logging is increasing in conservation areas, since these areas have better timber potential than production areas. The actors in illegal logging are: (a) there from other areas; (b) Investors, including traders, concession holders, or laborers from communities in the forest areas and also many who are brought holders of legal timber cutting permits (IPK), and buyers of illegal timber from processing industries; and (c) government officials (both civilian and military), law enforcement personnel, and certain legislators (Dephut 2000)

Most of those forest conversions are located in Java, Sumatra and Kalimantan, where majority Moslems lives. The habitat conversion in the eastern Indonesia is less extensive, coincidently, people there predominantly occupied by non-Moslems We believe that in general no correlation whatsoever of people belief and the nature of forest conversion. Environmental degradation is primarily due to the fact that governments carried out most of policies, plans and implementations not so much communities expect illegal woks.

Some evidence of Islamic community contributed to lessen environment crisis is during Soeharto Presidency when the government facilitated Moslem traditional scholar for gaining Islamic legal view in controlling overpopulation through family planning programs (Keluarga Berencana-KB/FP) in 1980s. The family planning program (FP) claimed to succeed after government involved Moslem scholar with their new interpret the teaching of Prophet to enable planning for one's family in accordance with one's possibility of supporting them<sup>25</sup>. The Moslem Council of Ulama (Majelis Ulama Indonesia—MUI) has cooperatively assist in released a fatwa regarding the population issues<sup>26</sup>.

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At first, several traditional ulama is opposed to the family planning. But Saifudin Zuhri et al: written thoungh about a *Fatwa: Keluarga Berencana Ditinjau dari Segi Syari'at Islam*, [Religious Opinion: Reflections on Family Planning from the Perspective of Muslim Law], Jombang, Indonesia: Lembaga Kemaslahatan Keluarga Nahdlatul Ulama, 1979. The Nahdlatul Ulama released a fatwa [religious instruction] that encouraged family planning for the creation of keluarga maslahah [family welfare]. There were eight parts to the fatwa (1) that family planning should be practiced to space births not to prevent pregnancy, (2) that family planning should emphasize the health and welfare of the mother and children rather than the fear of poverty, (3) that abortion should be prohibited, (4) that permanent severance of any

The FP was successful in the implementation of government programme to control the population growth. As a result Indonesia's annual population growth rate decreased from 2.34% during 1970-1980, to 1.98% during 1980-1990, to approximately 1.66% during the 1990s<sup>27</sup>. In the 2000, Indonesia population is 206,264,595, with population growth rate 1990-2000 approximately: 1.49% annually.<sup>28</sup> So the low population in Indonesia is a positive to response the environmental crisis since it significantly will be able to save the increasing demand of exploiting of natural resources and threat of the environmental degradations which will be much more intensive, compared to if the population explosion not be controlled.

On the other hand, in some place in Indonesia, Moslem still hold on to the positive values of Islam, for example Islamic jurisprudence (*fiqh*) on prohibiting any consumption of wild animals owned jaws<sup>29</sup>-- such as tigers, predatory birds and bears as well as hawks and some other predator animal. This regulation is- giving positive meaning for ecosystem that predators as a regulator in an ecosystem get the best protection in nature. Some taboo has been stated for consuming of primates,<sup>30</sup> which can give important contribution to the protection of all monkeys.

The problems of primate protection are not due the bush meat consumption in a certain location but because of the nature of commercialization of those animals threaten the

part of the body of husband or wife should not be permitted, (5) that family planning must be voluntary, (6) that family planning is to be practiced only with the consent of both husband and wife, (7) that implementation of family planning should be practiced in accordance with Islamic laws and values, and (8) that family planning should not aid acts of immorality. (Zuhri in 1982:68, in Christopher Candland and Siti Nurjanah. Women's Empowerment through Islamic Organizations: The Role of the Indonesia's *Nahdlatul Ulama* in Transforming the Government's Birth Control Program into a Family Welfare Program.

<sup>&</sup>lt;sup>26</sup> See Kumpulan Fatwa Majelis Ulama Indonesia. Keputusan Musyawarah Nasional Ulama Tentang Kependudukan, Kesehatan dan Pembangunan. 13 Muharram 1404/20 Oktober 1983.

www.bps.go.id. In Ministry of Environment Republic of Indonesia (KLH). Council for Sustainable Development: Country Report-Indonesia. 2002. p 14.

<sup>&</sup>lt;sup>28</sup> Population Growth by Province. BPS Statistics Indonesia. http://www.bps.go.id/sector/population/table2.shtml. Accessed July 21, 2005.

Al-hadist: Aqlu qulla jinaabin min assabaai haramun (consuming the wild animals having jaws is prohibited). See Imam Syafii. Mukhtasyar Kitab al-Umm.(Pustaka Azzam: Jakarta) p.774
 B. Galdikas. Adaptasi Orangutan di Suaka Margasatwa Tanjung Puting (UI. Press, Jakarta 2005): p.9
 Ibn Rush. In Bidayat al-Mujtahid, stated: The primate group would not consume as well as do not use for any reason.

animals toward extinction. In 1989, according to Suhartono and Mardiastuti<sup>32</sup>, 16.000 primates have been exported for commercial purposes. While previous year in 1983 reaching 13000. Although the primate exportation is legal by state regulation, however for Moslem this is quite contrary with Islamic judge principle which if they believe in Islam of consumption was prohibited, so the commercial aspect of the trading is also prohibited, yet if the circumstance will extract wildlife from the forest may threaten the wildlife to the extinction.

The shariah actually encourages the conservation of the natural resources and biodiversity: First, Islam prohibits the killing of animals other than for consumption and never for the leisure. Animals that can be consumed in Islam are in average have large populations and not rare animals. Secondly, Islam prohibits animal abuse in any form, be it cruelty or other forms of unethical treatment. Thirdly, Islam encourages the nurture and caring of animals. Fourthly, Islam only permits the destruction of animal only if they pose a threat to human life (al-fawasiiq al-khams). Therefore, Islam supporting the conservation of animals and any illegal wildlife hunting is strictly prohibited in Islam (haram).

## The empty forest syndrome?

The forest degradation is also correlated to the species extinction and decreasing population of species of biodiversity. Recently the bush meat, is also a potential to create a crisis in wildlife and at the end to the nature and ecology. The term bush meat, came from Africa for consuming wild animal ranges from snail to the elephant. The problem increased by bushmeat, become complicated, since there is a problem with the need of poverty, and protein needs and could be a problem for specific species and specific countries. Bush meat comes to commercialization at a local level and a regional scale. Also, the wild meat trade is complex and varies from country to country.

Research on bush meat consumption has not been carried out extensively in Indonesia. In North Sulawesi, data on the wildlife hunting and wildlife sold in markets have been collected by Wildlife Conservation Society. The primary bush meat collected from the

 <sup>&</sup>lt;sup>32</sup>T.Soehartono & A. Mardiastuti. Pelaksanaan Konvensi CITES di Indonesia. (JICA:Jakarta 2003): p167
 <sup>33</sup> Mahrus. A.F. Islam *in* Fenomena Lingkungan Hidup. in. Muhammad.A.S. et al. (eds) *Fiqh al-Biah*. p
 46.

market were north Sulawesi black macaques, babyrusa, anoa, flying foxes those groups being highly preferred animals by hunters. Due to high frequency of hunting, the population densities of those animals declined rapidly especially in the peripheral areas. The hunters have been moving further to the southern tip of North Sulawesi then to Central Sulawesi to get supply of the wildlife meat needs for North Sulawesi. This will create tribal conflicts and further the empty syndrome forest will happen at central Sulawesi, as occurred in most of North Sulawesi regions.<sup>34</sup>

The similar situation has found in Sumatra and Borneo. Tradition of hunting wildlife has been happening for more than 35.000 years. There has not been any restriction for wildlife consumption by indigenous people in those areas. Wildlife hunting in Borneo has created an empty syndrome forest in the Northern, western and central regions. These areas are predominantly occupied by indigenous people. Although their forests condition looks very good, however, not so much wildlife found in those areas, or we called an empty forest syndrome, as expected in undisturbed area. Study shows that when hunting pressure increases, the density of primates, hornbills, sambar deer, barking deer and bearded pigs decreases until, at high hunting pressures, all large animals are locally extirpated. For orangutan hunting problems, Rijksen and Meijaard state that, under persistent hunting pressure for subsistence, by nomadic hunter gatherers, the ape has little change of survival; indeed, the orangutan has been effectively hunted to extinction in Borneo and in Sumatra, wherever these efficient human nomads scoured the forest."

The wildlife hunting in Papua has different magnitude. Papua has less populated then other big islands in Indonesia. The number of intact forest (See table 1), has still more than 90% (23 million ha) with the ration of people and forest is 16.3. While in the North Sulawesi is only 0.15. When the forest is still intact, hunting pressure using traditional techniques such as bow and arrows has seen more sustainable. But when the community get more

<sup>&</sup>lt;sup>34</sup> Lee, R.J. (2000). Market hunting pressures in North Sulawesi, Indonesia. *Tropical Biodiversity* 6: 145-162.

<sup>&</sup>lt;sup>35</sup> Bennett, E.L., Nyaoi, A.J. and Sompud, J. 1999. Saving Borneo's bacon: the sustainability of hunting in Sarawak and Sabah. In: *Hunting for Sustainability in Tropical Forests* (eds. J.G. Robinson and E.L. Bennett), pp. 305-324. Columbia University Press, New York

<sup>&</sup>lt;sup>36</sup> Rikjsen . H.D and E. Meijaards. Our vanishing relative: The status of wild orangutans at the close of the twentieth century. Tropenbos. Kluwer Academic Publisher. London. p 125.

modernized weapons and human population increases, then wildlife hunting is becoming problems: The change to modern technologies (88% of animals killed now die by gunfire), increasing human populations; a change from a mobile to a sedentary life; increased access to all areas through rural flights, outboard motors, and especially logging and other roads; increasing participation in a cash economy; and increasing commercialization of hunting for wildlife trade.

Wildlife hunting is happening in some modernized communities but culture and religion has not given any restriction such as in Bali. In Bali, eating wildlife in a certain time for ceremonial purposes create large problems for turtles that nesting in other areas. The green turtle and the hawksbill are the two most common species in Indonesia, and also the most popular for trade — the green turtle for its meat, and the hawksbill for its shell. It is estimated trades 20,000 per year in Bali in 1986 to 1994. The trade in turtles reached a peak in 1978 when as many as 30,000 turtles were reported to have arrived in Tanjung Benoa. By the mid 1990s this had declined to just over 20,000. In 1990, the governor of Bali set a quota of 5000 green turtles to restrict the hunting of this species, which was still permitted under national law, officially for religious purposes only.<sup>37</sup> However, more than 20,000 green turtles were still caught each year. Recent research has indicated that this turtle fishery affects most of the genetically distinct populations of green turtles in the Indo-Australasian region.<sup>38</sup>

Bali has been called "the centre of the most intensive exploitation of green marine turtles for human consumption in the world. Outcry of international communities on eating migratory species such as turtles has been yearly voiced. It is predicted that these turtles who migrated from Australia and South America will end up dead in Indonesian seas due to the religion purposes. To decrease this destructive behavior, religious approaches must be use to raise people's awareness of this critical situation. Now, approximately half of Kuta's 13 *banjar* (communities) have decided against using turtles in their religious ceremonies. According to

<sup>&</sup>lt;sup>37</sup> Bäckström. J.H. 2004. Turtle satay? Attitudes towards turtle consumption are changing in Bali. Inside Indonesia. Oct-Dec. 2004. p 18-19.

<sup>&</sup>lt;sup>38</sup> Anonimous. 2005. Marine Turtle awareness raising and education campaign and alternative livelihoods. Online: <a href="http://www.ioseaturtles.org/viewproj.php?id=225">http://www.ioseaturtles.org/viewproj.php?id=225</a> accessed August 3, 2005.

the deputy adat leader Ketut Nugra, this signals a change in attitudes and values about what is important in life. Ida Pedanda Gede Ngurah Kaleran, a high priest of southern Denpasar, believes it is not necessary to use turtles in religious ceremonies. Nowhere in the holy book of Veda is it stated that we should eat turtle,' he said, adding that a symbol could be used instead of the real animal to complete the ceremony.<sup>39</sup>

In Africa, study shows that exploitation of bushmeat involved many indigenous and modernized communities and approximately 1-3.4 million ton per year of meat consumed. These are coming from the killing of gorillas, chimpanzees, crocodiles, turtles and tortoises. The same pattern also is happening in south America, where 67 to 164 thousands ton meat per year coming from wildlife hunting. 40 In Asia, the southern China belt, from Tibet to Hong Kong, approximately 200 million people eat wildlife that caused sharp reduction of wildlife population in the southeast Asia countries.

Bäckström. J.H. 2004. op.cit. p 19.
 Anonymous. 2005. The Busmeat trade. Postnote No 236. February 2005. online: www.partliement.uk/post/home.htm

Tabel I
Forest Degraded Forest and Deforested Area Mid 90s
And Moslem Population Percentage in 2004

|                    | Area Forest Natural | Forest Degraded | Area Deforested | Moslem | Other         | Ratio Population   |
|--------------------|---------------------|-----------------|-----------------|--------|---------------|--------------------|
| Province           | (Unallocated) (Ha)  | (Ha)            | (Ha)            | (%)    | Religions (%) | and Natural Forest |
| Aceh               | 2,360,745           | 1,025,858       | 362,835         | 97.30  | 2.70          | 1.36               |
| Bengkulu           | 834,968             | 171,422         | 34,771          | 97.51  | 2.36          | 0.54               |
| Jambi              | 1,197,210           | 1,071,679       | 522,858         | 96.15  | 3.85          | 4.65               |
| Riau               | 1,487,067           | 2,671,417       | 1,705,401       | 88.63  | 7.61          | 0.32               |
| West Sumatra       | 1,784,572           | 498,107         | 139,780         | 97.78  | 2.22          | 0.42               |
| North Sumatra      | 2,183,429           | 386,006         | 365,656         | 65.45  | 34.55         | 0.19               |
| Lampung            | 551,872             | 9,915           | 87,423          | 95.61  | 4.39          | 0.08               |
| West Kalimantan    | 3,928,582           | 2,644,665       | 545,685         | 57.62  | 42.38         | 1.05               |
| South Kalimantan   | 667,951             | 599,666         | 266,169         | 97.05  | 2.03          | 0.23               |
| Central Kalimantan | 536,450             | 8,447,911       | 2,089,952       | 74.14  | 25.86         | 0.30               |
| East Kalimantan    | 5,961,932           | 8,845,655       | 1,368,415       | 85.02  | 14.98         | 2.44               |
| South Sulawesi     | 2,090,449           | 558,778         | 79,184          | 89.20  | 10.80         | 0.27               |
| Central Sulawesi   | 2,986,684           | 937,100         | 75,994          | 78.39  | 21.61         | 1.48               |
| Southeast Sulawesi | 2,402,327           | -               | 34,347          | 95.29  | 2.52          | 1.38               |
| North Sulawesi     | 998,230             | 510,384         | 14,145          | 29.48  | 70.52         | 0.51               |
| Bali               | 76,417              | -               | -               | 10.29  | 89.71         | 0.02               |
| East Tenggara Nusa | 874,752             | -               | -               | 8.80   | 91.20         | 0.23               |
| West Tenggara Nusa | 629,122             | 74,188          | 685             | 96.57  | 3.43          | 0.16               |
| Jaya Irian         | 23,806,213          | 10,287,807      | 1,105,466       | 24.16  | 61.71         | 16.33              |
| Maluku             | 3,142,390           | 2,707,486       | 101,210         | 49.05  | 50.95         | 2.73               |
| TOTAL              | 58,501,362          | 41,448,044      | 8,899,976       |        |               |                    |

Notes: Forest degradation quoted from FWI and Moslem population percentage counted from Dept of Religious Affair 2004.

The role of Moslem in Indonesia to save wildlife is important. Whitten *et al* (1987) argue that the empty forest syndromes are not happening in the areas where Moslems are majority.<sup>41</sup> Hence, we need to ask the fiqh specialist to response to the bushmeat exploitation and how are we going to face with the crisis. Animals such as those live in both aquatic and land or terrestrial such as frogs, turtles, crocodiles are clearly prohibited (haram). We need also to further response to other wildlife such as carnivores, marine animals especially coral reefs and the animals near extinction.

# Beginning in the traditions: Islamic Boarding School Practice

To see the genuine ideas of Indonesia's Moslem community one must look at the traditional practice of Islam. Since, there have been many opinions on environmental ethics, the

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 $<sup>^{\</sup>rm 41}$ Whitten,  $\it et.al.$ 1987. Ecologi Sulawesi. Gajahmada University Press. Yogyakarta.

theoretical Islamic environmental ethics itself is still being explored<sup>42</sup>. The theoretical teaching of Islam regarding the environment is obvious, but determining Indonesian Moslem response to the ecologic crisis is a new challenge.<sup>43</sup>

The traditional Islam has seen the environmental crisis a problem, which calls for answers and responses as it was declared by the Islamic scholar or *ulama*: firstly, Indonesian, specially the Islamic community (*ummali*), should be more actively involved in raising environmental awareness, engage in the policy making of natural resources management, and as observers in the implementation of sustainable development. Second, leaders should put him or herself as a role model regarding environmental conservation. Third, government must persistently build partnerships with all stakeholders to design, implement and monitor the development activities for the sustainability the environment. Finally, government should put more effort in law enforcement.<sup>44</sup>

These *ulamas* recognize that destruction and degradation will cause an imbalance in the environment which will then threatened future live. A major effort should be taken in protecting nature from degradations, recovery, and protecting the existing resources. Every creature belongs to God, which is loaned to us and must be taken care of, managed and use for the sake of all beings. These *ulamas* are also concerned that the welfare (*maslahah*) of the future generations depends on our wisdom in managing natural resources at the present time. So if we inherited a destructed nature, we have corrupted our own future generation.<sup>45</sup>

In practice, the Islamic traditional community in Java—which is represented dominantly by the Islamic Boarding School (Pesantren or Madrasah) community—environmental topics

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<sup>&</sup>lt;sup>42</sup> See. Z.Sardar.1985. Towards of Islamic Theory of Environment; Abu-Sway.M. Towards and Islamic Juristprudence of the Environment (*Fiqh al Biah fil Islam*). Lecture presented at Belfast mosque. February 1998. Mawil Y. Izzi Dien. 1983. Islamic Principles for the Conservation of the Natural Environment. IUCN.2<sup>nd</sup> Ed. Gland, Switzerland. Online at: http://www.islamset.com/env/contenv.html.

<sup>&</sup>lt;sup>43</sup> To involve the Traditional Moslem to the environmental activities, recently we invited Islamic Scholar from Islamic Boarding School (Pesanren) from all over Indonesia to explore Islamic teaching to the Nature Conservation and Environment and produce a report: *Fiqh al-Biah* (Environmental Jurisprudence of Islam). INFORM Publications. 2004.

<sup>&</sup>lt;sup>44</sup> Muhammad. A. S. et al. 2004. Pernyataan bersama Para Ulama Pesantren: Menggagas Fiqh al –Biah. Laporan INFORM. 2004.p 33.

<sup>45</sup> Ibid.

and issues are rarely discussed in the *Pesantrens*<sup>46</sup>. But, some *Pesantrens*, have proven them self with the real best practice in nature and environment such as Pondok Pesantren Annuqayyah, in Madura for their practice of water efficiency and energy, Pesantren Kajen for industrial wastes management, and Pondok Pesantren Pabelan, PP. Cipasung, Garut and PP. Hidayatullah for the management of water catchments and reforestation activities. Because of these initiatives they were awarded by the government with the Kalpataru Environmental Award (a prestigious award from the Ministry of Environment). Some campuses of the school are established under modern environmentally-friendly principle such as Ma'had Al-Zaytun Islamic Boarding School. Ma'had Al-Zaytun, is a typical modern Islamic boarding school and it has placed environment and conservation in their agenda.<sup>47</sup>

Recently, a more intensive initiation program to promote environmental spirit in *Pesantrens* had been facilitated by the Indonesian Institute of Sciences (LIPI), beginning with three schools: Pondok Pesantren Al-Amanah, in Cililin – Kabupaten Bandung Pondok Pesantren Al-Wasilah, in Cipanas, Kabupaten Garut, Pondok Pesantren Ar-Risalah, in Cijantung, Kabupaten Ciamis. These schools have responded to local environmental issues and gained wide support from their surrounding communities. In the Al-Amanah School, LIPI held a tree nursery establishment training for 90 students. In Pesantren Al-Washilah Bandung, lead by KH Thonthowi Musaddad, initiated a conservation movement in 112 village groups in established plantation nurseries targeted for re-greening of about 35.000 ha of critical land. KH Asep Saefulmillah of Pondok Pesantren Ar-Risalah, is in the front lines regarding the regreening of the Citanduy River watershed, in West Java and some locations belonging to Perhutani (a state owned forestry company).<sup>48</sup>

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<sup>&</sup>lt;sup>46</sup> FM have discussed Islam and Environment issue in some Islamic traditional leader (Kiyai), including to the Leader of Pesantren Lirboyo. KH. An'im Falahuddin Mahrus, that Environmental Ethic and Jurisprudence (Fiqh al-Biah) is a new discourses in their community. Hence, then they will put the environment on their agenda of Problem Solving discussion (*Bahsul Masa'il*). The Environment value issues are exist but separated in Islamic traditional text, so threre is a need in compling them together.

<sup>&</sup>lt;sup>47</sup> Ma'had al-Zaytun has planted 207.111 teakwood (Tectona grandis) at surrounding of their campus, since 1997. This Islamic school has 1.200 hectare land, 1000 ha for the supporting land :agriculture, forest and farming areas, the rest is for education campuses. Konservasi Lingkungan dan Emas Hijau. Majalah Bulanan Al-Zaytun Edisi No 34- 2004. p 34-40.

<sup>&</sup>lt;sup>48</sup> A. Budiman and A.J. Arief. Konservasi Berbasis Keimanan. Makalah pada lokakarya "Merumuskan Peran Umat Islam dalam Konservasi Alam dan Lingkungan Hidup", Jakarta, 8 Juni 2005.

Impressively, KH Thonthowi Musaddad, declared a series of Islamic instructions (fatwa): (1) to plant the trees and saving nature is fardhu 'ain'; protection and the rehabilitation of the environment is fardhu kifayah; (2) hence, destroying nature is haram (prohibited) and those activities are criminal and serious sin.<sup>49</sup> Therefore the involvement of these schools as a pioneers in nature conservation must be supported by other institutions, because these schools have an enormous effect in their communities. They are usually respected and considered trustworthy by members of the surrounding communities.

## **Conclusions**

Several main conclusions can be drawn. First, Indonesia with its rich biodiversity and is also considered to be a hotspot should encourage Moslems to participate even more in protecting earth's heritage. Therefore Moslems must unravel the true wisdom and philosophies of Islam towards the environment. Only when this is met that Indonesian Moslems can contribute to this nation or better yet for other nations facing similar environmental problems.

Secondly, traditional Islamic ulema in both Nahdlatul Ulama and Muhamadiyah play an important role in the view and thoughts of Moslems in Indonesia. Both of these large organizations have the capabilities of mobilizing Moslems to care more toward environmental issues and promote nature conservation. These organizations must use their political and religious influence not just towards political life, but they should also be involved directly as a catalyst in society towards mounting environmental problems.

Thirdly, bushmeat consumption should become priority by figh specialist whether we can extend toward more protection avoiding more wildlife extinct due to consumption. It seems that shariah prohibit to eat some wildlife has positive impacts in some area.

Fourthly, more studies and discussions about the environment in *pesantrens* must be promoted. Other Islamic communities must also participate in the awareness towards

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<sup>&</sup>lt;sup>49</sup> ibid. p 6

environmental issues. This is needed because Indonesian Moslems as a major component of this nation can play a bigger role in safeguarding nature and the environment through faith.

Wallahu 'alam.

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