

〔Research Note〕

**ISLAM AND ENVIRONMENTAL IMPROVEMENT IN INDONESIA:  
Field Report on Muslim Activist Efforts at the Grassroots Level<sup>1</sup>****Hisako NAKAMURA & Takenobu AOKI<sup>2</sup>**

〔研究ノート〕

**インドネシアにおけるイスラームと環境改善：草の根レベルにおける  
ムスリム活動家の努力に関する現地報告****中村緋紗子・青木武信****要 旨**

地球環境の劣化阻止と改善の努力の中で、近年、広汎な市民参加を目指して、人々の間に根付いている伝統的な宗教的・倫理的価値を再解釈してアピールし、人々の態度の変化を導く方法の有用性が認識され始めている。このレポートでは、世界最大のムスリム（イスラーム教徒）人口を擁するインドネシアで、イスラームと環境問題がどう結びつけられ、ムスリム活動家が環境改善にどのように取り組んでいるか、現地調査に基づいた観察事例を報告する。

中村はインドネシア最大のムスリム組織であるナフダトゥール・ウラマー（NU）とムハマディヤの婦人部が、ともに、環境問題に真剣に取り組んでいる実態を報告する。とくに、注目される点は、両者ともに、社会教育や学校教育を通して、イスラームの世界観や価値観から見た環境問題へ取り組みを女性や児童に浸透させようとしている事実である。イスラームでは、人間は神の地上における「代理人」（カリファー）とされ、神の被造物である自然の保全に責任を持つとされる。NU女性組織のムスリマートは家庭の主婦用のガイドブックを作成し、全国で3万カ所以上の祈祷グループに配布している。そこでは、イスラームの教義から具体的な家庭ゴミの処理方法までが平易に説明されている。ムハマディヤの婦人組織アイシャーは1万カ所以上の教育施設—幼稚園から大学まで—で使われる環境教育の教科書を準備中である。幼稚園用の教科書では、童謡やお遊戯を通して、児童に環境保護と改善の動気付けが試みられている。数十万人におよぶムスリマートやアイシャーの活動家が全国の草の根レベルで活動しているので、その影響は極めて大きい。

青木は中部ジャワの農村と都市における環境改善の試みについて報告している。活火山ムラピ山麓のサワガン村では、婦人たちのグループが「アリサン」という伝統的な頼母子講とコーラン学習の活動を核にして、さらに環境の改善にも取り組んでおり、具体的には家庭ゴミの分別とリサイクルを実

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<sup>2</sup> Part I of this report was written jointly by the two authors, while Part II by Hisako NAKAMURA and Part III by Takenobu AOKI respectively. Photos are all taken by AOKI.

践している。さらに、近隣のプサントレン（イスラーム宗教塾）では、キャイ（塾長）の指導の元に、サントリ（塾生）たちがコーランやイスラーム学の学習に加えて、牛糞によるバイオガスの発生（塾生のための料理用に使われる）や有機肥料による農業に従事している。古都ジョクジャカルタ郊外の新開地ウンブルハルジョ地区の近隣組織における事例では、多様な宗教的文化的背景をもった住民の中で、ムスリム活動家たちが率先して、「緑の村」運動を積極的に進めている。具体的には、植樹、下水処理施設の建設、河川の浄化、家庭ゴミの分別処理、コンポストの利用、買い物カゴの利用（プラスチックのショッピングは使わない）などの活動である。この近隣組織の代表は2007年末、バリ島で行なわれたCOP13の国際会議に参加した。

## I . Introduction: Religio-ethical Values and Environmental Issues

Today, it is no exaggeration to say that the very foundation of human existence is threatened by environmental deterioration. It has become daily experience all over the world to encounter various phenomena resulting from global warming caused by the increase of GHGs (Green House Gases); serious pollution of air, water and soil; excessive urban waste; hazardous disposal of poisonous substance, and so on. It has also become obvious that such environmental degradation has been caused by humans by themselves. One may say that man's arrogance vis-à-vis nature, which has grown since the industrial revolution, is now inviting its revenge. There is no denial that the consequences of accelerated mass production, mass consumption and mass disposal of the 21<sup>st</sup> century will be bringing about environmental disaster in the near future.

Let us turn our attention to the relevance of religio-ethical values in dealing with environmental problems. Recently, a number of governments and NGOs on environmental affairs are getting increasingly aware that religio-ethical values prevalent among common people are quite relevant as important human factor in dealing with environmental problems. For such values have direct and indirect bearings upon people's worldviews on nature and man, their ways of life, and patterns of human behavior. World-wide challenge of environmental degradation now calls upon a change or reorientation in human behavior on a massive scale. And any change in human behavior entails two processes: i.e. continuity and transformation. In many cases, smooth transformation has been facilitated by the mobilization of traditional values reinterpreted in new contexts. This observation seems to apply in the case of the change of people's attitude vis-à-vis environment to promote popular participation in environmental preservation and improvement.<sup>3</sup> On the basis of this observation, we are now going to talk about the relevance of religio-ethical values for environmental problems in Indonesia.

As is well known, Indonesia hosted the COP 13 Conference on global warming on the island of Bali, December 2007. In Indonesia, tropical forests on Sumatra and Kalimantan islands are rapidly disappearing, causing enormous increase of GHGs and global warming. Also, as is well recognized,

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<sup>3</sup> An obvious example for this in Japan is the activation of the ethical value of "mottainai" for environmental preservation.

Indonesia is the country of the largest Muslim population in the world today. Here, the government and a number of NGOs and civil society organizations (CSOs), many of them Islamic, are working hand in hand to face these environmental challenges. Among them, the most significant is the roles of Nahdlatul Ulama (NU) and Muhammadiyah, the two largest Islamic social movements. So, we will deal with the synergy between government and those Islamic CSOs in dealing with environmental problems. The case of Indonesia indicates very significantly the fact that religion and ethics provide motivation for common people to act on environment. Also, in this process, the role of religious leaders including teachers and grassroots activists is vital as opinion leader and change-agent.

## **II. Islam and Environment in Indonesia (1): The Role of Muslim Women's Organizations in Environmental Education**

This part of the present report deals with situations in which the role of women's sections in Islamic social organizations is very important. As mentioned above, there are two huge Islamic organizations in Indonesia, Muhammadiyah and Nahdlatul Ulama (NU). Both of them are reported to have millions of members and supporters, i.e. Muhammadiyah about 30 (thirty) millions and NU about 40 (forty) millions, totaling about 70 (seventy) millions. The total population of Indonesia today is about 223 (two hundred and twenty-three) millions, in which Muslims' proportion is about 87%, or 193 (one hundred ninety-three) million of individuals. The proportion of those people who are affiliated with or supporting the two Islamic organizations are almost 1 (one) to 2.7 (two point seven) among the total Muslim population. These figures indicate how large those two Islamic organizations are and how important they are in the state and society of Indonesia today.

One of the characteristics of social organizations in general, including Islamic ones, in contemporary Indonesia is the presence and the important role of their women's sections. For example, Muhammadiyah has women's section called 'Aisyiyah from the beginning and NU, too, Muslimat NU. In promoting social and religious campaigns, those women's sections have played important roles. Past experience indicates that they have played a decisive role in implementing government policies in the area of family planning and marriage and divorce counseling. As a result of their cooperation with the Government, the population growth rate dropped drastically starting in the ninety-seventies. So, was the divorce rate, which lowered significantly since mid 1970's. For those Muslim women's organizations have been in direct and constant contact with ordinary housewives and young girls at grassroots level. Therefore, informal, social education through these organizations has proven to be very effective in implementing government reform policies.

Informal, social education of women at a massive scale by those Islamic organizations has been traditionally conducted through small meetings of the Qur'anic recitation and religious learning at hamlet and neighborhood levels. They are called as "pengajian" in the Muhammadiyah and 'Aisyiyah circles, and "majelis taklim" among the NU and Muslimat circles. The latter also includes dzikir meetings, collective prayers, as an important element.

'Aisyiyah as well as Muslimat NU have been trying to build "Happy and Healthy Family" (Keluarga Sakinah) as the foundation of Muslim society. For that, they have tried to provide education for young girls as future mothers, who occupy central position for Muslim families. Muslimat NU in cooperation with NU have built and managed a large number of religious boarding schools (*pesantren*) especially for young girls. Muhammadiyah has built a number of co-educational schools. One of the lasting achievements of the Suharto's regime, with its all merits and demerits, is the development of national education system in cooperation with those religious organizations. Islamic organizations have benefited greatly from this government policy including girls' education.

Our field experience proves those observations. During the ninety-seventies when Nakamura's fieldwork was conducted for the first time on marriage and divorce in the Yogyakarta region of Central Java, Islamic teachings for ordinary women were mostly conducted orally in local language. Marriage and divorce counseling was also given in the same style. In contrast, when another field observation was conducted more recently in Central Java, there found a number of significant changes in the style, especially in the media of communication and teaching. One is the close cooperation with institutions of higher education. A large number of young Muslim girls are now educated at institutions of higher education, including state universities of Islamic studies. The students and graduates are actively engaged in the women's section of Islamic organizations. As a result, an important change has occurred in the medium of teaching. In the past, direct, oral communication in local language was the main medium. That is still important today. However, in addition to it, the women's organizations are using printed material widely as an additional means at present. This is observable in the area of environmental education, too.

For example, Muslimat NU has recently edited a guidebook for housewives on environment in cooperation with the research section of the State Department of Environmental Affairs, Government of Indonesia. The guidebook was published at a large number and distributed through the organization nationally. The book contains basic Islamic teachings on environment and practical guidelines for the proper ways to dispose household waste. The book is illustrated with comics. The book is intended for the training of "missionary (*da'i*) for environment" and to be used at the "majelis taklim" meetings. "Majelis taklim" is the smallest and lowest unit of women's informal religious education for Muslimat NU. It is estimated that they number more than 30, 000 (thirty thousand) units nationally.

'Aisyiyah, the Muhammadiyah's women wing, on the other hand is now preparing a series of textbooks for teachers on environmental education to be used in numerous schools run by 'Aisyiyah and Muhammadiyah nation-wide. Their school system reportedly contains more than 10, 000 (ten thousand) institutions in total, starting with kindergarten up to graduate school of university. We have obtained a draft version of the textbook for kindergarten teachers of 'Aisyiyah during our recent field trip to Indonesia. The book has been edited in cooperation with specialists and scholars at the State University of Islamic Studies, Yogyakarta. This analysis of the content of the book is still tentative. But, it shows well how the teachers of 'Aisyiyah kindergarten are instructed and trained to teach pre-

school children on environment. Similar books are now reportedly prepared for elementary and secondary schools of Muhammadiyah, too.

Let us take a look at some of the significant points of this kindergarten textbook on environment. The book starts with a number of quotations from the Qur'anic verses in Arabic. They include such chapters of the Qur'an as Surah al-Furqan 53, Qaf 7 and 9 to 11, and al-Rum 48, followed by their explanations in Indonesian language. It is emphasized that humankind is created by God as His "khalifah," vicegerent or representative, on earth. God has entrusted humankind all His creations, i.e. nature and creatures, to be taken care of nicely and to be utilized effectively for the wellbeing of humankind. Thus, humankind owes responsibility to God for their preservation.

The book then goes into the importance of water, air and land for humans, animals and plants. The teachers are instructed to start singing with children, the song of "Tik, tik, tik, the sound of rain-drops", a popular song for children. Then, the teachers ask children how many cups of water they drink a day, how they feel if there is no water to drink, and so on. Children are reminded that mother's milk is mostly water, and so is human blood, thus making the point that water is one of the most important elements of life given by God. Children are instructed to take good care of water, not to waste it. They are also instructed not to pollute it by toileting outside proper places. The book then goes on to mention the importance of air, land, plants, animals, and so on in a similar manner, until it ends with the matters of household waste and sanitary care of body in daily life.

To conclude this part of the present report, it can be said that women's Islamic organizations in Indonesia are making serious efforts to spread the importance of environmental education through their informal, social and formal channels of religious education. It is still too early to evaluate the results of their efforts. But, it can be safely predicted that they are likely to achieve significant results as indicated by past examples of success in the family planning program and marriage and divorce counseling. At least, it can be said that their efforts are vital for the success of the government policies to make the entire population become conscious of the environmental threats that Indonesian nation as well as the entire world are facing today.

### **Ⅲ. Islam and Environment in Indonesia (2): Three Cases of Grassroots Efforts for Environmental Improvement**

In this part of the present report, on the basis of recent field research, three cases of grassroots efforts to deal with environmental problems will be introduced. Actors are ordinary Muslims, Islamic teachers and activists in Central Java of Indonesia. Two cases are taken from a rural area, Sawangan subdistrict, Magelang district, the province of Central Java, and another case from an urban area, Umbulharjo subdistrict in the City of Yogyakarta.

## 1. The Case of a Women's Group in Sawangan, Central Java

The Sawangan subdistrict is located in farming area on the northern foot of the mount Merapi, Magelang district, the province of Central Java. The level of economic income in the area is relatively low. In a village in the Sawangan subdistrict, there is a village women's group engaged in "arisan," i.e. micro-credit program for mutual aid to meet economic needs of members. The "arisan" is a traditional social gathering, meeting regularly monthly or most often in the 35 day cycle. The members contribute a certain amount of money and take turns to win an aggregate sum of money. The practice is wide spread throughout Indonesia. The gathering is religious, too. Besides their "arisan", micro-crediting activities, the group holds regular meetings to learn the Qur'an. Sometimes, a religious teacher, called *kyai*, is invited to lecture.

Another important program of the women's group in the Sawangan village is household waste management. They separate garbage and make compost from their kitchen waste. They sell recyclable garbage to buyers from outside in order to reduce the volume of garbage from their household and obtain additional income. The household waste management was originated from the Qur' an learning activities. Now, the waste management program and the Islamic learning program are two main activities of the women's group in the village.

## 2. The Case of Islamic Boarding School, Pesantren At-Tauhid Al-Islamy in Sawangan, Central Java

At an Islamic boarding school, Pesantren At-Tauhid Al-Islamy in Sawangan, about 50 *santri* (students of *pesantren*) have been taught by the *kyai*, the head of *pesantren*, Abdul Aziz Asyhuri. They learn how to engage in organic farming in addition to regular subjects of Islamic learning at the *pesantren*. Many of the students are orphans from the Sawangan area. (See Photo 1-4)



Photo 1: Islamic boarding school, Pesantren At-Tauhid Al-Islamiya in Sawagan



Photo 2: Mosque in Pesantren At-Tauhid Al-Islamy



Photo 3: The head of the boarding school, Kyai Abdul Aziz Asyuri



Photo 4: Santri students in the boarding school, Pesantren At-Tauhid Al-Islamy

At the *pesantren*, the students are growing vegetables and breeding seven cows for their own use. The students feed and milk cows everyday. They use the cows' excrements for small bio-gas plant. The gas from this plant is used for cooking in the kitchen of the *pesantren*. The remnants of cow excrements are used in their field as organic fertilizers. A graduate from this *pesantren* introduced this bio-gas plant system. (See Photo 5-6) Kyai Abdul Aziz says, “*Santri* students can develop their mental skills through this organic farming program in order to be able to survive under any environments in the future.”

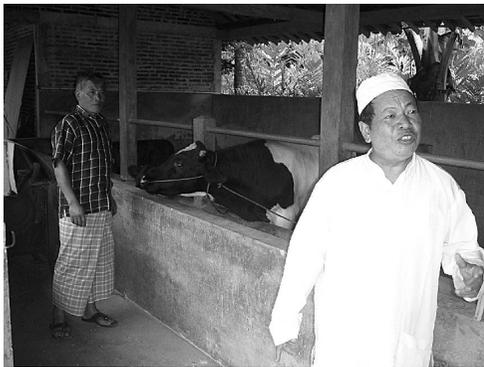


Photo 5: Kyai Abdul Aziz Asyhuri and cows



Photo 6: Bio-gas plant in the boarding school, Pesantren At-Tauhid Al-Islamy

### 3. The Case of “Green Village” (Kampung Hijau) in Umbulharjo, the City of Yogyakarta: Pluralism and Universal Ethics

Yogyakarta is an historical city and one of the centers of Javanese culture. It was established in 1755 as the capital of the Sultanate of Yogyakarta. During the time of Indonesia’s independence struggle against the Dutch from 1946 to 1949, it was made as the temporary capital of the Republic of Indonesia. In 2005, the population of the city of Yogyakarta numbered about two hundred and sixteen thousands.

In the southern part of Yogyakarta city, there is a Neighborhood Organization (called Rukun Tetangga, or RT), No.45. The 45th RT of Padeyan Village in the Umbulharjo Subdistrict is the newest unit established in 1995 in the village. The Umbulharjo area is one of the bed towns for the Yogyakarta city. The RT 45 has a population of 875 from 223 households at the time of our field visit in the spring of 2008. The residents have come from various parts of Indonesia, for example, from West Java, the islands of Sumatra and Kalimantan, and so on. Accordingly, they are ethnically varied. Their religions also are various. The majority of residents are Muslim, but there are also a number of Christians, Buddhists, and Confucians of Chinese decent. This neighborhood is obviously a multi-ethnic and multi-religious community.

The residents have been trying to integrate the residents of the newly born community and to create a new plural and universal culture from their multi-ethnic and multi-religious backgrounds. Those efforts are reflected in their activities for environmental improvement. This neighborhood calls itself as *kampung hijau* (green village). The reason is as follows: They have started their activities for “greening village” in 2006 as part of PKK program (national program of women’s activities for family welfare at village level). Women activists from the Keluarga Sakinah (Happy and Healthy Family) program of the ‘Aisyiyah organization and an Islamic learning circle, “pengajian,” in the neighborhood first promoted the “green village” activities. In the beginning, many villagers were concerned about the pollution of Gadjah Wong River flowing through their village. (See Photo 9) In addition, various environmental problems in their village were discussed from Islamic religious viewpoint in the meeting of “pengajian”, Islamic learning circle. They say they have understood the relationship between the cleanliness and Islamic religious ethics and invited the residents of other religions in terms of universal ethics for environment.

Until now, the residents have engaged in the six points of activities in the green village program as follows:

(1) Building an RT office and a library for community activities. They have built an office with a meeting hall and a library. They call the library “jendela dunia” (window to the world). The library is equipped with a computer with Internet in addition a number of books and journals donated by the residents. This means that, by using this facility, they can have easy access to information from around the world. (See Photo 7-8)

(2) Planting trees in the village:

The residents have already planted 1000 trees in their neighborhood with a financial support from a Buddhist group.

(3) Installing sewage disposal facilities:

In order not to pollute Gadjah Wong River any more, they have installed sewage disposal facilities for the entire neighborhood. They have received a financial and technical support from the local government for this project. (See Photo 9-10)

(4) Management of household wastes:

The neighborhood has 20 garbage boxes to separate household wastes into three types of garbage.



Photo 7: The office of the Green Village, Kampung Hijau, in Umbulharjo, Yogyakarta



Photo 8: Meeting at the Green Village office, and its library in the background



Photo 9: Gajah Wong River, still polluted



Photo 10: Sewage disposal facilities of the Green Village



Photo 11: Garbage boxes in Green Village, separately (from left) for papers, plastics and metal/glasses



Photo 12: Vase for composting

Also ceramic vases for composting kitchen waste have been provided. (See Photo 11-13)

(5) Using own shopping bags:

The residents have decided to take their own shopping bags to traditional markets as well as to modern supermarkets for shopping in order not to use plastic checkout bags any more and thus to reduce plastic garbage.

(6) International presentation: The women activists of the green village program of Umbulharjo were invited to participate in the COP 13 Conference in Bali, December 2008, to introduce their experiments to the international audience. (See Photo 14)



Photo 13: Composting in vase



Photo 14: Women activists for environment in the Green Village including Aisiyyah members

To conclude this report, these three cases of grassroots efforts indicate that Islamic ethics for environmental preservation and betterment are being taught actively and being implemented concretely in the local context of Indonesia today.

