

Environmental Consciousness in Vietnam

PHAM Thi Tuong Vi* and A. Terry RAMBO**

Abstract

This paper presents findings of a preliminary exploration of the environmental consciousness of urban Vietnamese. Based on in-depth interviews in Hanoi with 20 respondents from various walks of life, it finds a high level of awareness of environmental problems and a considerable degree of concern about this issue. Most respondents report that they themselves, and their family members and friends, are concerned about environmental problems, but they believe government officials and leaders of big corporations and enterprises are not concerned. They say that they believe that humans are destroying nature because of the urgent need for resources on the part of the poor and the desire for wealth on the part of the rich and powerful.

The views of respondents about ideal relations between humans and nature can be categorized in terms of two general cultural models. The first model views nature as a limited resource on which humans must rely for their survival. The second model views nature and human beings as having a balanced and interdependent relationship. The models are similar in that both express anthropocentric and utilitarian views. Most lay informants express variants of the first model, saying that human welfare depends on the natural environment. In particular, they stress, physical health concerns. Almost all of the elite interviewees employ variants of the second model, stating that people's activities have impacts on nature, and nature reactively affects the welfare of human beings. Consequently, they perceive a need to maintain ecological balance.

Deforestation is recognized as a serious problem by all respondents but they display considerable differences in their assignment of blame for causing this problem and also in their proposed solutions to this problem. In comparing deforestation with other problems, most consider that deforestation is a more important problem than air pollution, climate change and global warming, and natural disasters, but less important than traffic accidents and the future of the Vietnamese economy.

Keywords: environmental consciousness, Vietnam, cultural models, deforestation, public opinion

* Center for Natural Resources and Environmental Studies, Vietnam National University, Hanoi, 19 Le Thanh Tong Street, Hanoi, Vietnam, e-mail: vipk@netnam.vn

** Center for Southeast Asian Studies, Kyoto University, and Adjunct Senior Fellow, East-West Center, Honolulu, e-mail: rambot@cseas.kyoto-u.ac.jp

In the traditional Vietnamese worldview, people should live in harmony with nature [Le Trong Cuc 1999]. At the same time, however, they must make use of natural resources to provide for their day-to-day survival [Jamieson 1991: 5]. Nature was also seen as a constant threat to human survival, with the frequent occurrence of floods, typhoons, droughts and other natural calamities [Rambo 1982: 410]. Regardless of what relations between Vietnamese people and nature may have really been like in the past, due to growing population pressure and recent rapid economic growth, environmental problems have increased significantly in recent decades. Consequently, environmental protection has become a major concern of the Vietnamese government, as is indicated by the recent formation of a separate Ministry of Environment and Natural Resources. The extent to which the public is concerned about environmental problems has not been known, however, although many officials assume that the public is largely ignorant and unconcerned about matters relating to the environment.

In order to explore public perceptions of environmental problems in Vietnam, information was collected by using a standardized questionnaire similar to that employed by teams in the other countries taking part in this project. Because of limitations of time and funds, it was possible to interview only 20 respondents, all residents of Hanoi, the capital of Vietnam, from September through November in 2000. Respondents, who are identified only by pseudonyms, were selected to represent a range of age, gender, and occupational roles (Table 1). Six of the respondents (R1; R2; R3; R7; R8; R9) are classified as lay people, including housewives, street vendors, and motorbike taxi drivers, while 14 are categorized as members of the elite, including 3 university students (R4; R5; R6) and 11 professionals (R10–20).

Given the difficulties of getting people to agree to be interviewed in Hanoi, our sample was an opportunistic one, with respondents drawn from among people who already knew us and would agree to be interviewed. It is also exclusively made up of urban dwellers, although several respondents had moved to Hanoi from rural areas, where 80 percent of Vietnam's population still resides. Respondents are all also drawn from the Kinh ethnic group (ethnic or lowland Vietnamese), the majority population of the country. Although Vietnam is a multiethnic country, made up of 54 officially recognized ethnic groups, the Kinh account for 86 percent of the total population of 76 million and, consequently, it is the Kinh value system that is dominant in national discourse [Rambo forthcoming].

In this paper we begin by presenting respondents views on the ideal relationship between people and nature and how they see this relationship as it is realized in practice. We then examine their perceptions of environmental problems in general and their assessments of the extent to which they and other people are concerned about these problems. That is followed by their views of deforestation as an environmental problem in Vietnam and their comparison of deforestation to other environmental problems. Finally, we discuss some implications of our findings.

Table 1 Profile of Respondents

Code	Pseudonym	Sex	Age	Education	Birth Place	Occupation
R 1	Mr. Xuan	M	50s	graduated high school	Hanoi	motorbike taxi-driver
R 2	Mrs. Thi	F	52	graduated high school	Hanoi	street vendor
R 3	Mrs. Do	F	35	2nd year primary school	Nam Dinh	junk-buyer
R 4	Mr. Le	M	21	3rd year Commerce University	Hanoi	undergraduate student
R 5	Ms. Dao	F	21	2nd year Geography Faculty, Physical Sciences University	Lai Chau	undergraduate student
R 6	Ms. Nhu	F	21	4th year Environmental Sciences, Physical Sciences University	Binh Dinh	undergraduate student
R 7	Mrs. Van	F	63	graduated high school	Quang Tri	retired housewife
R 8	Mrs. Nguyen	F	44	graduated high school	Hanoi	housewife
R 9	Mrs. Hang	F	32	graduated high school	Hanoi	housewife
R 10	Professor The	M	69	Ph. D. in Agricultural Economics	Hue	senior agronomic expert
R 11	Dr. Trong	M	45	Ph. D. in Ecology	Ha Tinh	ecologist
R 12	Professor Thanh	M	71	Ph. D. in Bio-diversity	Ha Tinh	senior bio-diversity expert
R 13	Mr. Quang	M	41	M. Sc. in Environmental Studies	Hanoi	environmental technical specialist
R 14	Mrs. Ha	F	48	B. Sc. in Forestry	Phu Tho	forestry protection officer
R 15	Mr. Cao	M	50	B. Sc. in Forestry	Hanoi	forestry specialist
R 16	Dr. So	M	46	Ph. D. in Anthropology	Hanoi	anthropologist
R 17	Mrs. Kim	F	38	MA in Gender and Development	Hanoi	gender specialist
R 18	Mr. Po	M	46	MA in Economics	Hanoi	policymaker, Ministry of Agricultural and Rural Development
R 19	Dr. Luc	M	59	Ph. D. in Ecology	Hanoi	policymaker, Ministry of Science, Technology and Environment
R 20	Dr. Gen	F	46	Ph. D. in Agricultural Economics	Hanoi	economist

I The Relationship between People and Nature

In this section we describe the cultural models of the ideal relationship between people and nature that are employed by our respondents and present their views on how contemporary Vietnamese actually relate to the environment.

I-1 *What Is the Relationship Between Humans and Nature?*

The views of the interviewees about ideal relations between humans and nature can be grouped into two general environmental models. The first model views nature as a limited resource on which humans must rely for their survival. The second model views nature and human beings as having a balanced and interdependent relationship. The models are similar in that both express anthropocentric and utilitarian views.

In the view of most lay informants, human welfare depends on the natural environment. In particular, they stress physical health concerns. "If the natural environment is good, people will have good physical health. But if the environment is polluted, it will cause many diseases. [For this reason], people should protect the environment and keep it clean," says Mrs. Thi (R 2), a street vendor. This view is shared by several other lay informants (R 2; R 3; R 7; R 9). Other informants (R 1; R 2; R 3) note that: "Trees release fresh air and oxygen that help us breathe comfortably. So we should protect the environment for our better health." Elite respondents also have anthropocentric and utilitarian views. They say that humans rely upon on nature for the resources needed to support human life. However, nature's ability to support humans is limited, so "humans must protect nature in order to exploit it in the longer term" (R 12; R 18; R 4). For example, Professor Thanh (R 12), a leading bio-diversity expert, expresses the view that "Humans live within nature, while at the same time, humans also exploit nature for their livelihood. Humans must protect nature [which provides limited resources] enabling them to exploit it in the long term." This view is also shared by two policymakers.

Nearly half of the professional respondents, as well as a few lay informants, view the human-nature relationship from ecological-balance perspectives. For instance, Dr. Trong (R 11), an ecologist, said: "Humans are a part of nature. All elements, like humans, ecological systems, water, land, etc., together make up a whole. In order to keep the whole system in balance, each element must be in harmony and balanced with each other." This view is shared by Dr. So (R 16), an anthropologist, who notes that "human beings are a component of the entire system of nature [which is made up of humans and nature]. Humans must live in harmony with nature in order to co-exist." Similarly, Mrs. Nguyen (R 8), a housewife, says that "humans must not hunt animals, birds or whales, etc., which should be protected, otherwise the balance of nature will be disturbed."

Almost all of the elite interviewees believe that the human relationship with nature is interactive. People's activities have impacts on nature, and nature reactively affects the welfare of human beings. For example, Mrs. Ha (R 14), a forest specialist, says: "If humans affect nature positively, it in turn gives us pleasure, such as fresh air and good climate [which create great conditions for agricultural production]. But if our activities impact badly on nature [deforestation as an example], it will negatively affect our livelihoods [for example with droughts or floods]." A similar view is expressed by Ms. Dao (R 5), a geography student, who says that: "Humans impact on nature and nature also affects human beings. If humans destroy nature, they must suffer from negative

reactions from nature.” Dr. Gen (R 20), an agricultural economist, comments that “Human beings and nature have an interactive relationship. For example, the more the environment is degraded, the worse the [agricultural] production conditions become. This results in low productivity [that causes poverty in poor areas]. Therefore, people have to pay high costs to fix environmental degradation.”

I-2 *How Do People Relate to Nature in Reality?*

Almost all informants acknowledge that even though public awareness of the importance of protecting nature and the environment has only developed recently in Vietnam, in reality people still “treat nature without respect” (R 5); they are exhausting natural resources; and they are destroying nature and the environment.

Most elite informants believe that many ordinary people lack appropriate knowledge about the human-nature relationship. For example, Professor Thanh (R 12), a biodiversity expert, points out that: “[In practice], humans behave badly toward nature and the environment, because they do not deeply understand the interdependent relationship between nature and human beings. So they often tend to exploit nature rather than protect it.” Mr. Quang (R 13), an environmental specialist, explains that the concept of environmental problems has been raised fairly recently in Vietnam; therefore many ordinary people perceive environmental issues in terms only of their immediate surroundings that directly impact their health and well-being. Dr. So (R 16), an anthropologist, adds that the lack of broader knowledge of the important relationship between humans and nature is reflected in the lack of concern that many people display about caring for the environment. Some lay informants, on the other hand, give more practical reasons to explain why people in general still have bad behaviors toward nature. For example, Mrs. Do, a junk-buyer, says: “What can you do when there are too many people in the city [Hanoi], but a lack of rubbish dumping places?”

Another argument made by many elite respondents is that economic interests cause people to over-exploit the environment. For example, one-third of the elite informants say: “People are ‘running to follow’ their short-term economic profits. Therefore, they use up natural resources. This leads to destruction of the environment” (R 11; R 14; R 15; R 17; R 18). Moreover, some elite respondents point out that the main reason that poor people exploit nature is to meet their needs for economic survival. For instance, Dr. Gen (R 20), an agricultural economist, explains that: “I think the poor understand [the importance of maintaining a healthy environment]. However, their survival is the most important thing for them. Thus, they are forced to exploit nature. For example, [the locals] know if they destroy the forest, they will directly suffer from drought or floods or soil erosion. But if they do not cut down trees to sell for food, they have nothing to eat. Of course they prefer to die a bit later [due to natural disasters] than die now [from hunger].”

II Public Concern about Environmental Problems in Vietnam

In this section we describe the extent to which our informants state that they are personally concerned about environmental problems and present their assessment of the extent to which other people are also concerned.

II-1 *Are People Concerned about the Environment?*

Almost all of the respondents answer that they are themselves concerned about the environment, though the levels of their concern are varied. Most of the interviewees believe that many of their family members and friends are also concerned about the environment. A few, however, say that their friends think that environmental issues are “only of concern to the rich.” Most say that the general public in Vietnam has recently paid attention to environmental issues. In contrast, most respondents say that few government officials, and no businesspeople, are at all concerned about environmental problems (Table 2).

Most of the respondents express concerns about the environment but they display different levels of concern. The majority of informants say that the environment is important because it directly affects their quality of life or relates to their work. A few interviewees, however, say that they are “not very much” concerned about the environment. Mr. Le (R 4), a university student of commerce, for instance, expresses his concern about the environment: “Yes, I think that I am concerned about the environment but not very much. I am concerned about water pollution, for example, just because I have had an assignment about this issue. Since I know about problems of water pollution through my study reading materials, I think I should be concerned about this issue a little bit.” Ms. Dao (R 5), a university student of geography, says that she is somewhat concerned about the environmental problems “but not necessarily. I have other more important things relating to my life to be concerned with.”

Table 2 Summary of Respondents' Perceptions of Those Who Are Concerned about the Environment and Those Who Are Not Concerned

Individuals Who Are Concerned about the Environment	Individuals Who Are Not Concerned about the Environment
Almost all of the respondents	Only a few of the respondents
Most of the respondents' friends and their families	A few of the respondents' friends
A large share of the general public of Vietnam	Some members of the general public
A small number of government officials	Most government officials
No business-people	All business-people heading corporations and enterprises

II-2 *What Environmental Issues Are of Greatest Concern to the Interviewees and What Are the Reasons for Their Concerns?*

Many informants identify air pollution and water problems in urban areas as serious environmental problems that have stimulated their concern about the environment. Deforestation, environmental problems associated with natural resources, and various other environmental problems related to some informants' work such as soil erosion, solid waste pollution, lack of environmental planning, imbalance of ecosystems, poverty relating to environmental problems, and so on, are mentioned as their greatest concerns about the environment. Additionally, quite a few respondents point out that safe food and hygienic conditions are their greatest concerns regarding "environmental problems."

More than half of the respondents say that they have concerns for the environment because they worry that environmental problems would have negative impacts on their health. In the case of Ms. Dao (R 5), a student in the second year at Physical Sciences University, her greatest concerns are about air and water pollution because she believes such environmental problems "impact on my health and everyone else's health as well." Mrs. Thi (R 2), a street vendor, observes: "The tap water in my home used to be yellowish and now it sometimes contains too much chlorine. But clean water is the most important factor in human health." These issues are making her quite concerned about the environment.

A minority of the interviewees say that their concern about the environment, especially air and water pollution, is very much a reflection of their (subjective) experiences. For instance, Mr. Xuan (R 1), a motorbike taxi-driver, observes: "I am on the road everyday. I can see many motorbikes, cars and trucks release their emissions into the air. When traffic congestion occurs, smoke from these vehicles is all over the place." Mrs. Kim (R 17), a gender analyst, speaks out from her own experience: "Air pollution must currently be at its worst. My house here is not so close to Thuong Dinh industrial zone. However, emissions from the tobacco plant and the rubber factory [in the zone] blow up during windy days and make us very uncomfortable. In addition, if I come home from work after struggling with a traffic jam, my son says that even my clothes and skin smell terrible like smoke released from burnt petrol in motorbikes." Similarly, Dr. Gen (R 20), an economist, points out: "When I drive past the industrial zone on my way home on hot summer days, tears come out non-stop from my eyes. If it is rainy on these hot days, a disgusting smell is emitted from the river [located in front of her house], which makes us sick." Ms. Nhu (R 6), an undergraduate student who is studying environmental sciences in the fourth year of Physical Sciences University, says that her main concern about the environment is air pollution because: "Air pollution such as dust or smoke from vehicles in our city is so obvious. You can see and smell it."

Information about environmental problems that is delivered in the mass media also influences people's concerns about the environment. Some interviewees explain that they are concerned about the environment because they have learned from the media

that some environmental problems have occurred and affected people's livelihood. By way of example, Mrs. Van (R 7), a retired housewife, points out that: "In some areas of our city, residents have to use drinking water from their individual wells. News on television says that drinking water tested in some wells contains some heavy metal agents that cause cancer. This makes me have the greatest concern about water pollution." Dr. So (R 16), an anthropologist, says that: "I have read an article about cancer being related to environmental problems. The article has shocked me a bit. It makes me feel that a lot of things such as drinking water, and particularly food now cannot be trusted." He says that this has caused him to be concerned about the environment.

A significant number of professionals say that they are concerned about the environment because their work somehow relates to environmental issues. Professor The (R 10), a senior agronomist, says: "My research is about issues relating to sustainable rural development. Of course, I must be concerned about the environment because in order to develop rural areas in a sustainable way, environment issues need to be taken into consideration." In the case of Professor Thanh (R 12), an expert on bio-diversity, he has the greatest concern for environmental issues associated with natural resources and bio-diversity because "these are the issues that I am specialized in and I think they are the most important environmental matters in Vietnam." Likewise, Dr. Luc (R 19), the head of the environmental policy department, explains his concerns about the environment as being "based on my position as an environmental policymaker." Mrs. Ha (R 14), a forest protection officer, has a similar explanation about deforestation as her greatest environmental concern, "because environmental issues associated with the forest relate to my work."

II-3 *What Environmental Issues Do the Interviewees Think Are of Greatest Concern to Other People?*

Most of the interviewees say that they believe their family members and friends are concerned about environmental problems but say that they are mostly concerned about specific problems that directly affect their lives in general and their personal health in particular. For example, Ms. Dao (R 5), the geography student, states: "The overwhelming majority of my friends are only concerned about whichever environmental problems directly affect their health. They do not care about other environmental problems which impact in the long term, because they have too many other things relating to their daily lives to worry about." Mrs. Kim (R 17), the gender specialist, thinks her family members have the greatest concern about water and air pollution because: "Air pollution created from the industrial area located nearby our place could impact negatively on our lungs. Also, the tap water in our home sometimes is yellowish and unclear. All these problems would make our health weaker over time." Mrs. Ha (R 14), an officer from the department of forest protection, says that: "Our family members are very much concerned about waste water problems. There used to be an open sewer running in front of our house.

The horrible smell from the sewage used to make us sick most of the time.”

Some respondents believe that their family members have become concerned about the environment because they learn from the mass media that environmental problems would have negative effects on their lives. By way of example, Ms. Dao (R 5), the geography student, explains the reason that her family members are concerned about water and air pollution: “Due to the mass media distributing information and reports about these issues [water and air pollution], my family understands the environmental problems so they are concerned about them.” Agreeing with Ms. Dao, Ms. Nhu (R 6), the environmental student, says: “My family members are concerned about air pollution and problems of clean food, because they have watched the reports about these problems on television.” According to Mr. Le (R 4), a student who is studying commerce, his parents’ greatest concern is about deforestation, because: “There is very much recently said about problems of deforestation in the newspapers.”

Some respondents admit that they do not discuss environmental issues in daily conversations with their friends or colleagues at work. Mrs. Kim (R 17), a gender specialist, says: “My colleagues do not often discuss environmental issues in our office. Environmental issues are not a topic mentioned in our daily conversation at the work place.” Mr. Le (R 4), the commerce student, admits: “I do not know if my friends are concerned about the environment because we neither talk about it nor do any of my friends mention such issues.” In the case of Dr. Trong (R 11), an ecologist, a few friends of his do not care about the environment because: “They consider that the environment is not a matter for them to be concerned about but is a matter for the rich.”

Many respondents believe that the Vietnamese people in general have begun to have more concerns about environmental issues in recent years. The reasons for their concern about the environment are, according to most respondents, the introduction of the first environmental law (1994), the increasing number of environmental risks (water pollution, heavy floods, etc.) having negative effects on people, and the increased coverage of environmental problems in the mass media. Professor Thanh (R 12), the bio-diversity specialist, suggests that personal experiences have made people more concerned about environmental protection: “Through doing my recent development projects, I have learned that more and more people are concerned about the environment. Most people involved in my current project used to over-exploit the forest because they were very poor. When their livelihoods are improved by economic and technical support from the development project, they are the people who voluntarily protect the forest the most; because they strongly understand how important it is to their lives to conserve the forest.”

Even though they state that an increasing number of Vietnamese people are concerned about the environment, some elite respondents say that the level of this concern varies among different groups of people. They believe that people having higher economic status, with higher education and so greater access to the information are more

concerned about environmental issues, whereas people having a low economic level, lower education and poor access to information are thought to have “little” concern about the issue. Dr. So (R 16), an anthropologist, comments: “Intellectuals have more concern about the environment; because not only do they have knowledge of environmental problems, but they also have better economic conditions in which to do so. On the other hand, for the ‘working class’, their [poor] economic conditions constrain them from being concerned about environmental issues.” Mrs. Van (R 7), a retired housewife, says: “Farmers who are street vendors in my street pick up broken rubber wheels to use for cooking. I don’t think they have the information to understand that the smoke from burning the rubber is harmful to their health, their community and other people.”

Most of the interviewees believe that government officials in general have only limited or no concern about the environment. Ms. Nhu (R 6), the environment student, for instance, says: “I think government officials in general have little concern about environmental problems. Government officials are only concerned about something urgent, therefore they do not pay enough attention to such issues as the environment.” More negatively, commerce student Mr. Le (R 4) says “I do not think that government officials are concerned about environmental issues. Because if they were concerned about these issues, there would not be so many illegal cases of timber exploitation.” Moreover, many respondents think that environmental issues are granted only second priority in the thoughts of government officials. For example, Professor Thanh (R 12) considers that government officials have so many concerns about other issues than the environment; they, hence, do not see the importance of environmental issues; “for them, issues such as poverty alleviation, building infrastructure or education and health-care are more important than environmental issues.”

A few respondents think that even if government officials are concerned about the environment, they do not have the long-term vision to deal with environmental problems. For example, Mr. Po (R 18), a policymaker, states: “Those people who are responsible for the forest, for instance, only care about deforestation problems, but they do not care about bio-diversity or soil erosion. They do not link development with protection. Additionally, they deal with environmental problems in a passive way. They act like officials of the fire brigade who only stop a fire after the flames have been created.” Professor Thanh (R 12) adds that: “government officials often say in the media that they are concerned about the environment. However, in practice, their actions show that their concern is still at a low level.”

Finally, almost all interviewees believe that business-people of both private and state corporations and enterprises are not concerned about the environment and are only concerned for “their own profits.” For instance, Mrs. Thi (R 2), a street vendor, comments: “Corporations and enterprises are not concerned about the environment. For example, many factories have discharged hazardous smoke, untreated wastewater, and untreated industrial waste. They do not care about communities living around the factories. They

only care about their own profits.” In the same way, Mr. Po (R 18), an agricultural and rural development policymaker, adds: “Profits are the first priority of corporations and enterprises. If they are concerned about the environment, this concern is only at the bottom of their priority ranking.” Some respondents have no doubt that corporations and enterprises will show their concern about the environment only “when they are required by law to do so” or “their concerns [about the environment] are only to cope according to the pressure of mass media reports.” According to Mr. Po (R 18), business-people are not concerned because of “lack of good regulations related to issues such as environmental tax or environmental penalties to deal with environmental problems,” while “poor regulations regarding environmental impact assessment” are said by Dr. Trong (R 11), an ecologist, to be the reason that “corporations and big enterprises do not consider issues of environmental protection.”

II-4 *Why Should We Protect the Environment?*

Many informants say that we need to protect the environment because environmental problems impact directly on their quality of life as well as the well-being of future generations. Ms. Nhu (R 6), the environment student, says: “Environmental problems have an immediate impact on our lives. Thus, protection of the environment is necessary to improve our quality of life.” Similarly, Mr. Cao (R 15), a forest specialist, explains simply: “In order to have a high quality of life and to have a long life, there is no other way than to protect the environment.” Dr. Gen (R 20), an economist, agrees with Mr. Cao: “Environment protection is quite an important issue to improve the quality of life.” In addition, Ms. Dao (R 5), the geography student, says: “Not only do we protect the environment to improve our quality of life, but we also do so for the good of future generations.”

Some lay people think that we should protect the environment to enable themselves and the community to have “comfortable lives.” For example, Mr. Xuan (R 1), the motorbike taxi-driver, and Mrs. Do (R 3), a junk-buyer, express similar reasons for protecting the environment: “We should protect the environment in order to have fresh air and a clean environment [meaning good hygienic conditions] so that we ourselves as well as our communities can live comfortably.” Moreover, many informants believe that a degraded environment has an impact on human health, thus we should protect the environment. For example, Mrs. Nguyen (R 8), a housewife, responds to the question of why we should protect the environment: “Because if we do so it means we keep air always fresh, for instance.”

The majority of elite respondents cite the need of people for natural resources as a justification for protecting the environment. Thus, Professor The (R 10), a senior agronomist, says: “On the one hand, environmental destruction results in reducing natural resources. On the other hand, production is based on natural resources. Therefore, lack of natural resources leads to crisis in production.” Along the same lines, Mr. Po (R 18), the

agricultural development policymaker, states that: "It is clear that we should protect the environment in order to have natural resources in the long term. To develop in a sustainable and safe way, and in the long term, people have to do so [protect the environment so preserve natural resources]."

Only few informants offer a moral rationale for the need to protect the environment. For example, Mr. Quang (R 13), an environmental technical specialist, believes: "Environmental protection has also a deep meaning of equality among different generations. The environment protected today is also preserved for the next generation. Otherwise, our children's generation will suffer." He explains that his belief is based on a social moral in which he follows "the philosophy: 'we live not only for our generation but also for our future generations.'"

III Perceptions of Deforestation as an Environmental Problem

Because of the importance of forest resources for rural livelihoods in Vietnam and the great attention paid to loss of forests by Vietnam's mass media, we selected deforestation as the focal environmental concern for our interviews.

III-1 Have People Heard about Deforestation?

All respondents say that they have heard about the problem of deforestation prior to the interview, although most of them identified other environmental problems as having made them concerned about the environment. Almost all of the respondents believe that an increased number of natural disasters, such as floods and droughts, in recent decades is associated with deforestation. Some specialists state that deforestation results in loss of bio-diversity, land degradation and soil erosion.

The mass media have a strong influence on the awareness of the interviewees. All of the interviewees say they have learned about problems of deforestation from television, radio or newspapers. "The mass media even releases more reports and speaks out more about cases of destroyed forest than responsible people," comments Mr. Cao (R 15), the forest specialist. Professor Thanh (R 12), a bio-diversity specialist, expresses doubt about the accuracy of media reports, however "in practice, problems of deforestation are much more serious compared with what has been said in the mass media." Most elite respondents have also come across the problem of deforestation one way or another through their related work. Interestingly, one lay interviewee says that she has heard about problems of deforestation from talking to her friends.

III-2 Perceived Causes and Agents of Deforestation

Most of the respondents say that illegal logging organized by outsiders on a large scale is a major cause of deforestation. Mrs. Ha (R 14), the forest protection officer, explains:

“Illegal logging is organized by the people having money. They don’t themselves do the logging but they conduct it distantly.” Like many respondents, Mrs. Thi (R 2), the street vendor, points out that “high profit from trading timber encourages illegal logging.” On the same line, Mr. Cao (R 15), the forestry specialist, suggests that “it is necessary to review the ‘closed natural forests’ policy of the government” because this policy allows the exploitation of “only 300,000 cubic meters of timber per year but the timber demand is 3 million cubic meters per year.” He concludes “the big gap between the demand side and supply side of the timber market allows the timber smugglers to obtain super profits” which leads to an increase in illegal logging. Moreover, a few respondents such as Ms. Dao (R 5), the geography student, say that the existing forest protection law and its enforcement are not good enough, so “illegal logging occurs easily.” In addition, some respondents acknowledge that poverty is also a factor that drives the poor to be involving in illegal logging.

Half of the respondents believe that shifting cultivation by ethnic minorities also contributes to deforestation. Some elite interviewees mention that clearance of land to cultivate industrial crops, mainly in the Central Highlands of Vietnam, causes forest loss, but no lay interviewee mentions this issue (although it is now acknowledged by the government forestry authorities to be the largest single cause of deforestation). Mrs. Ha (R 14), a forest protection officer, says: “All trees from the natural forest [in some areas] have been cut down [in order to have land] to cultivate coffee, rubber and cashew nut trees. This is a problem.” Along the same lines, Dr. Luc (R 19), the environmental policymaker, adds: “Nowadays a lot of forest is cleared for planting industrial crops. This is a problem [resulting in deforestation].”

In addition, spontaneous migration is claimed by some of the interviewed specialists to cause deforestation. For instance, Dr. So (R 16), the anthropologist, lists spontaneous migration as the third most important cause of deforestation. He says that “they [some spontaneous migrants] have destroyed the forest in Tay Nguyen (the Central Highlands) to occupy the land.” According to Professor Thanh (R 12), the senior bio-diversity specialist: “There are many spontaneous migrants at the present time. They are out of control. If there is the forest available where they have been, they just instantly cut the trees. For example, the forest has been destroyed massively in Tay Nguyen.”

It is surprising that only a few respondents make any reference to population pressure as a critical cause of deforestation. This factor is mentioned only by Professor Thanh (R 12), the senior bio-diversity specialist, and professor The (R 10), the senior agronomist.

Some interviewees from the lay group do not use “scientific” words such as “spontaneous immigration,” “pressure of high population growth,” or “shifting cultivation,” but that does not mean that they do not know about these issues. For example, Mrs. Do (R 3), the junk-buyer, says that she has heard: “A lot of people migrate from other places to live in the forest” [meaning spontaneous immigration]. There are more and more people

[meaning population growth]. They [spontaneous migrants] have exploited the forest [meaning clearance of land] to plant food crops, and coffee, cassava, and cashew nut trees.” Mr. Xuan (R 1), a motorbike taxi-driver, is referring to shifting cultivation when he says that: “Burning forest is the major cause of deforestation. Because they burn trees in an area of the forest. After burning, they use that land for planting something, for example crops. This piece of land could be a small plot or a farm.”

III-3 *Who Is Responsible for Solving the Problem of Deforestation?*

While some informants say that all people, including local communities in the forest areas, government forest management agencies, state forest enterprises, businesses, and the public, are responsible for solving the problem, most informants say that the government is most responsible for dealing with deforestation.

Most lay respondents believe that the government would be able to solve the problem if forest management agencies did their work well, and the forest protection regulations were seriously enforced. They also believe that the government should have development programs to improve the livelihoods of communities living around the forest. For example, Mrs. Thi (R 2), a street vendor, says: “[The government] should produce stricter regulations [of forest protection]. They should enforce them as strongly as possible. The government should also have responsibilities to improve the livelihoods of the people over there [around forest areas].”

Many professionals, however, think that it is very difficult for the government to deal with deforestation problems. Dr. So (R 16), an anthropologist, says: “I don’t think the government can deal with the problem in the near future. We have just started protecting the forest, though we have spelt out slogans [about forest protection] for a long time. In order to deal with the problem, there needs to be a thoughtful, sustainable, suitable, reasonable strategy, and good social management. However, we have not had these.” Mr. Po (R 18), the agricultural development policymaker, is very cynical about whether either the government or ordinary people could deal with the problem of deforestation. He says: “It [forest] will continue to be destroyed until it becomes a disaster. Then they [the government and maybe ordinary people] would be concerned.” Professor The (R 10), an agricultural economist, suggests: “I don’t think only the government can deal with the problem, but there needs to be additional social pressure to push the government into taking actions. For example, research organizations should provide knowledge, reports [about problems of deforestation] for National Assembly members in order for them to debate with the government.”

Some professionals, as a result of their work experiences, perceive poor institutional management of the forest and ineffectiveness of reforestation programs as problems that relate to deforestation. Mr. Cao (R 15), the forest specialist, gives an example of poor public administration system of the natural forest in an area in the south of Vietnam. He says: “Yen Lap Protection Forest Management Board is responsible for managing 26,000

hectares of natural forest. However, the Board has only seven people so how they could control the area? Even if one officer is given to manage 1,000 hectares of the forest, he/she would not have controlled it.” He wonders “if the government still manages the forest [the mentioned area] like that [in such an institutional way], how could they handle it?” A policymaker, Mr. Po (R 18), from the Ministry of Agriculture and Rural Development, criticizes reforestation programs (that often are undertaken following policies from the ministry): “Planting programs are important. But activities of replanting do not often generate profits [in the way they are implemented now]. If forest planting is not a beneficial enterprise, people will never be involved in it. [This means that] they would never involve themselves in replanting forest or protecting forest.”

III-4 *Assessing the Impacts of Deforestation*

Almost all interviewees state that deforestation has affected them in some way or other. Some declare that deforestation has had a direct impact on their financial situation. For example, Professor The (R 10), an agricultural economist, complains “the price of timber had increased rapidly when I built my house.” Many people state that deforestation directly affects their lives because it results in natural disasters such as floods and storms and also reduces supplies of water. Mrs. Thi (R 2), a street vendor, says: “It [deforestation] results in floods and typhoons that would threaten our lives. Many people have been killed by flooding [in the country].”

Some interviewees believe that deforestation has impacts on Vietnam’s economy so it indirectly affects their living standards. For example, Mr. Quang (R 13), the environmental technical specialist, says that: “As a result of deforestation, flood or drought occurs in a large area. As a consequence, crops in the area are lost. This leads to weakening the country’s economy so it negatively impacts our living standards.”

III-5 *Respondents’ Comments on Proposed Solutions to the Problem of Deforestation*

Nine alternative proposals for dealing with the deforestation problem were read to the interviewees who were then asked to comment on these proposals.

Proposal 1

Deforestation is a necessary evil in order to maintain our lifestyle involving the use of timber products, and to maintain the livelihoods of one-third of the country’s population living on/nearby the forest and depending on collecting forest products and cultivating swidden fields. Therefore, there is not much we can do about that.

Almost none of the interviewees agree with such a view. They believe something can be done to reduce deforestation. Their comments regarding this proposal are different, however. Some strongly disagree with the view that deforestation is necessary partly to maintain the livelihoods of people living around the forest. Most interviewees suggest that the government should be committed to creating more effective development

programs or projects to improve the livelihoods of the population living around the forest. Mr. Cao (R 15), the forest specialist, says: "I don't agree with such a view. Some lowland people [for their own profits] are primarily responsible for destroying the forest. The upland people [who are living around the forest] have done [less damage]." He suggests that: "They [the government] should have good policies to enable them [the upland people] to have stable livelihoods. Then, I am very sure that they will be the most responsible people to protect the forest. In practice, such projects and programs have been successful." Some other interviewees recommend that a change from using timber products to other products can help to reduce deforestation. Dr. So (R 16), the anthropologist, suggests "it is possible to switch from producing timber products from natural forest to planted timber products to reduce deforestation."

Both Mrs. Do (R 3), the junk-buyer, and Mrs. Hang (R 9), a housewife, agree with the proposal, but Mrs. Do objects to the idea that highland people destroy the forest by their practice of swidden agriculture. She says: "They [people living around the forest] have to cut trees in order to [have land] to cultivate their crops, so we can not do anything about that. However, they reserve [the forest] at a level that keeps both old and young trees; they only cut down trees that are too old."

Proposal 2

There is much we do not know about the effects of deforestation on human livelihoods. Before we undertake any concrete action, we should invest our money and time in research on this topic.

There are two contrary positions regarding this proposal. While all interviewees in the lay group, and some students, agree with the proposal, only a few professionals hold this view. The few professionals that do agree say that the general public lacks knowledge about the long-term effects of deforestation on people's livelihoods, therefore more research should be done on the topic so that its results can be made known to everyone. Ms. Nhu (R 6), the environmental student, holds this position: "It [research about the effects of deforestation] is necessary. Because before carrying out a project, we need to enhance awareness about the project issues. This can help us to implement the project better."

Most of the professionals, however, believe that ordinary people are already aware of deforestation impacts. Hence, research about this topic is not needed. Dr. So (R 16), an anthropologist, strongly rejects this proposal: "It is not appropriate in what you want to do research about. I think they [upland people living around the forest] are aware of the importance of deforestation because it directly affects their livelihoods. However, they have no other way to live. They must worry immediately about their survival so they have to do swidden agriculture. By doing this, they destroy the forest." Moreover, Mr. Cao (R 15), our forest specialist, adds: "Documents related to effects of deforestation, or even forest policy oriented documents, can be piled up as high as a mountain. However,

the matter is that we should apply them [such documents] in practice. We also lack investment for people's livelihoods in upland areas."

Proposal 3

We can reduce deforestation by strictly regulating the exploitation of timber products.

Most interviewees think that this proposed solution is necessary but not adequate. Some of them suggest that forest exploitation regulations need to be strictly integrated with other practical solutions such as creation of a suitable timber market, reforestation, allocation of land and forest to households and so on. Professor The (R 10) comments: "It [the above proposal] is insufficient. It is necessary to have a suitable market for trading timber. At the same time, we need to replant trees for producing timber. Also, it is necessary to manufacture suitable non-timber products to replace timber products." However, a few interviewees have a totally different opinion. Mr. Cao (R 15), the forest specialist, says "the more strict the regulations [of timber exploitation] are, the more serious deforestation is." As he has explained earlier, if strict regulations reduce the volume of timber cut legally, then illegal logging would occur more aggressively so it is difficult to control.

Proposal 4

We should tax timber exploitation highly.

Almost all respondents say that this proposal is not useful for reducing deforestation. Many respondents anticipate that once the timber exploitation tax is increased, the extra cost would mean "the users pay" so this produced tax would not help to reduce forest exploitation. Some other respondents believe that an increased tax on timber exploitation even encourages illegal logging. Thus, the above proposal may have an opposite effect to that intended. Mr. Quang (R 13), the environmental technical specialist, holds the view: "With existing systems of forest management in Vietnam being weakly interconnected, if timber exploitation is taxed highly, this would lead to tax-evasion so illegal logging would occur."

Proposal 5

We can reduce the pressure for over-exploitation of timber by expanding and promoting the use of non-timber products.

Most interviewees do not see any problem with using non-timber products instead of timber. However, some of them are concerned that it would be difficult to accept the use of non-timber products if they have a higher price and if they do not last as long as timber. Mr. Cao (R 15), the forest specialist, wonders if the existing technology in Vietnam is ready to produce as non-timber products of as good quality as timber products. Interestingly, Ms. Dao (R 5), the geography student, suggests another consideration: "Non-timber products [she would use] must be environmentally friendly."

Proposal 6

We can reduce exploitation of forest by improving the livelihood of people who live in/nearby the forest through other development activities to replace forest exploitation.

While all of the informants agree that improvement of the livelihoods of ordinary people living around the forest would help to decrease over-exploitation of the forest, some point out that only carrying out such development activities/programs to improve forest-dwelling people's livelihoods is not effective enough to reduce deforestation. These programs ought to be implemented together with programs of education and public awareness propaganda regarding forest protection. Ms. Dao (R 5), the geography student, says: "The proposal is partly accurate. Improving their [people living around the forest] livelihoods is important because if their livelihoods are difficult they destroy the forest. However, if they are not aware of the importance of the forest, they may still exploit the forest even when their lives are better. Therefore, improving livelihoods is necessary but needs to be done together with propaganda and education [about forest protection]." Furthermore, Dr. Luc (R 19), the environmental policymaker, adds: "I agree [with the proposal]. However, it needs to be integrated with increasing the strength of [forest protection] regulations and empowering management forces."

Proposal 7

We can stop deforestation by giving local communities management responsibility for forest-land.

Regardless of social background of the interviewees, almost all of them agree that giving rights to local communities to manage forestland is good in principle. However, many elite interviewees hold the view that to ensure the effectiveness of the proposal "macro" policies by the government such as market policy, monitoring of forest management, and improving management capacities of local communities need to be coordinated with assigning management responsibilities to local communities. For example, Dr. Trong (R 11), the ecologist, comments: "It is a good idea. Also, it is necessary to have a clear policy about their [local communities] rights and obligations [in managing the forest and land forest]. However, it needs to have a good mechanism to monitor their management; otherwise after allocating [the forest and forest land] they would exploit more timber if the timber price is very high in the market." Moreover, Dr. So (R 16), the anthropologist, thinks that the model of community management of forestland should only be applied in those communities where the traditional forest management model is still strong. He explains that: "traditionally, a community was made up of only one ethnic group and only had basic needs so it was easy to manage. A community nowadays is different. Commonly, several groups of people with different ethnic backgrounds live in the same community; consequently social management is complicated. I think community management of forest land should take place, but issues such as where it should be implemented, with which ethnic group and when should be taken

into account carefully.”

Proposal 8

We can stop deforestation by increasing the strength and authority of the Forest Protection Offices.

Almost none of the informants support the view that the forest protection offices would be able to stop deforestation even if they were given more power or authority. At the same time, however, they acknowledge that forest protection officers do help to reduce deforestation and favor increasing their authority to enable them to enforce forest protection regulations more strongly and more productively. For instance, Mr. Quang (R 13), the environmentalist, says: “A ‘plague’ of illegal logging is recently spreading out to destroy the forest. This happens intensively because, I think, the forest protection force is ‘thin’ [inadequate]; and their power is limited. Experience from several cases [illegal logging] shows that they have very great difficulty in doing their job. So I think this work [increasing the strength and authority of the Forest Protection Offices] is needed.”

Proposal 9

We can increase forest cover by implementing projects on reforestation (for example: the Vietnamese government is implementing a project to plant 5 million hectares of forest in order to increase the forest cover of the country from 25 percent to 40 percent).

All interviewees agree that the proposal on reforestation is a necessity. However, they recognize that replanting projects should be carried out together with other projects as a whole in order to develop the forest. Professor The (R 10), an agricultural economist, says: “It is not only reforestation [to increase the forest cover]. Parallel to replanting, it needs to have an all-sided rural development planning, including cultivation of annual crops and permanent trees, of swidden and paddy fields, of livestock, services, tourism, and other off-farm activities that create employment, etc.” Moreover, some interviewees point out that it is not easy to implement reforestation projects because “it takes time for trees to grow [to make forest],” Ms. Dao (R 5) comments; or “where can you find such big money to invest [in reforestation].”

IV Comparisons of Deforestation with Other Environmental Risks

Interviewees were asked whether they are more concerned about deforestation or other problems such as air pollution, climate change and global warming, natural disasters, traffic accidents, or the future of the Vietnamese economy.

IV-1 Deforestation Compared with Air Pollution

Some respondents are more concerned about deforestation than air pollution and some

have more concern about air pollution, but almost half say that they are concerned about both problems. Professor Thanh (R 12), the bio-diversity expert, who is more concerned with forest degradation, offers this explanation: “Deforestation, I consider, is the most important issue in Vietnam. At the present, it is a serious problem. Two-thirds of the country’s total land area contains forests and mountains. The loss of forest leads to losing land and water becomes scare. Without forest, water is lost. Our country relies very much on agriculture. Without water how can we cultivate crops? Drought and flood [resulting from deforestation] cause loss of crops. This results in hunger.” Several other ecological-oriented specialists share similar views with Professor Thanh. For example, Dr. Trong (R 11), the ecologist, says: “Overall, deforestation is still the most important issue in Vietnam. Air pollution is an environmental problem in urban areas only.”

Mrs. Do (R 3) is more concerned about air pollution than deforestation, “because it [air pollution] directly affects you. Everyday, you need air to live.” For Mr. Quang (R 13), “it [air pollution] is a practical problem affecting directly, specifically and immediately the quality of life.” Ms. Dao (R 5), the geography student, and the two other students, Mr. Le (R 4) and Ms. Nhu (R 6), share the same view: “I can feel it [air pollution] immediately. But about deforestation, I live here [in the city] so I cannot see directly [problems related deforestation]. Also, my knowledge of deforestation is limited.”

Almost half of the respondents are equally concerned about deforestation and air pollution because, according to them, the two problems are both serious in Vietnam and they have an interrelationship. For example, Dr. So (R 16), the anthropologist, says: “I am concerned about both problems, because at present they are very serious. They affect each other. If the forest is kept in a good condition, it limits air pollution.”

IV-2 *Deforestation Compared with Climate Change and Global Warming*

Most respondents are more concerned about deforestation than climate change and global warming. A minority believes that deforestation is related to climate change and global warming. For example, Mrs. Ha (R 14), the forest protection officer, says: “I am more concerned about deforestation because it is related to climate change. The forest makes climate equable.” Some others have a different reason to be more concerned about deforestation. Mr. Quang (R 13), the environmentalist, who is representative of this group, says: “[This is] because it [deforestation] is national issue and we can think of solutions to deal with it. But for a small country like ours, if you are concerned about global warming, it is for fun [meaning one country cannot individually deal with the issue].” Mrs. Thi (R 2), the street vendor, expresses a somewhat similar rationale: “I am more concerned about deforestation because it directly affects my well-being. But climate change is a job of heavenly spirits. Who knows [what could be done to fix it]?”

For most of the lay interviewees, “climate change” means simply that the weather is changing rapidly. Therefore, they are more concerned about climate change than

deforestation, because they believe that the former directly affects their health.¹⁾ For example, Mr. Xuan (R 1), the motorbike taxi driver, gives a reason for his being more concerned about climate change: “because it [climate change] makes people tired, and unusual weather, higgledy-piggledy cold and hot.”

IV-3 *Deforestation Compared with Natural Disasters*

Almost all respondents say that they are more concerned about deforestation than natural disasters because they believe that deforestation results in natural disasters like floods and typhoons. Dr. So (R 16), the anthropologist, says: “Deforestation is one of factors causing natural disasters. Deforestation also results from social problems, so it can be controlled.” On the other hand, Mr. Xuan (R 1), the driver, and Mrs. Do (R 3), the junk-buyer, are more concerned about natural disasters because “floods and typhoons could destroy houses, crops, forest trees,” as Mrs. Do says.

IV-4 *Deforestation Compared with Traffic Accidents*

A little more than a half of the respondents are more concerned about traffic accidents than deforestation.²⁾ A common response is that the impacts from traffic accidents are much more visible and immediate than those created by deforestation. For example, Mrs. Nguyen (R 8), a housewife, says that she is concerned more about traffic accidents because “they are very dangerous [to people]. I am frightened. They are catastrophic and happening in front of you.”

The rest of the respondents find it difficult to compare the two problems. They are equally concerned about deforestation and traffic accidents because traffic accidents are a serious problem in cities and thus concern urban people such as they themselves, but deforestation impacts people in the whole country. For example Mrs. Kim (R 17), the gender specialist, says: “Comparison [of the two problems] is difficult. Traffic accidents are local problems, for example in this city or another city. But deforestation impacts on everybody.”

IV-5 *Deforestation Compared with the Future of the Vietnamese Economy*

Most respondents reply that they are more concerned about the future of Vietnam's economy than deforestation. A common view of lay respondents is that “I am more concerned about the economy, because it impacts directly on us. Everybody must worry about economics first. ‘If the country is rich, its people will be strong’” says Mrs. Nguyen

1) Most Vietnamese believe that rapid changes in the weather result in illness such as colds and the flu.

2) Because of the recent explosive increase in the number of motor vehicles, the generally poor condition of the roads, and the lack of driving skill, Vietnam has one of the world's highest rates of traffic accidents.

(R 8), a housewife, reciting one of the country's official development slogans. Mrs. Ha (R 14), the forest protection specialist, offers a different explanation: "Realistically, everyone is concerned about how Vietnam's economy will develop in the near future. I am most concerned about economic development because this includes forest development."

Slightly less than half of the respondents say that they are concerned about both the future of the country's economy and deforestation, because they see these two problems as being related to each other. However, they say that they are a little more concerned about deforestation. For example, Professor Thanh (R 12), the bio-diversity expert, says: "Forest is Vietnam's economy. If there is not any forest [left], the economy is difficult to develop in the long term. If drought and flood occur 'everyday' [often] what is left to develop? Money spent on that cost much more than what would have obtained from selling timber." Dr. Luc (R 19), the environmental policymaker, says that he is concerned about both issues because: "They are related. Good forest management is basic to developing the economy well."

Summary and Conclusions

Environmental problems have increased significantly in recent decades due to population growth and rapid economic growth. However, public awareness of environmental problems has developed much more recently. This research has been undertaken to understand public perception of environmental problems in general and deforestation in particular.

We have identified two closely related but somewhat different cultural models of human relations with nature that are employed by Vietnamese. The first model views nature as a limited resource on which humans must rely for their survival. The second model views nature and human beings as having a balanced and interdependent relationship. The models are similar in that both are anthropocentric and utilitarian in orientation.

Most lay informants employ the first model of human-nature relations, in which human welfare depends on the natural environment. They say that we need to protect the environment because "this means to protect ourselves"—if we damage the environment, then environmental problems will impact on our quality of life, our comfort, and our health. Thus, their evaluation of the environment is conditioned by their concerns about their personal well-being. Elite respondents are more likely to believe that, because people are part of the entire natural system, human activities will cause significant changes to nature. Therefore, humans should live in harmony with nature in order to "co-exist"; otherwise nature would react unfavorably to humans' disrespect toward it. For most elite respondents, a degraded environment will lead to a production crisis, because agricultural production in Vietnam very much relies on natural resources.

Almost all of the respondents see themselves, their family members and the majority of their friends, as being concerned about the environment. At the same time, they believe that most government officials and all officers of big corporations and enterprises do not care about the environment. They believe that the general public in Vietnam has only recently begun to pay attention to environmental issues.

Respondents' concerns about the environment are based primarily on their own personal experiences and observations. In other words, they are concerned about environmental problems that they can directly sense (e.g., smell, see) or that directly affect their health and lives. Thus, they believe that if an environmental problem impacts their health or well-being, it also affects others who are living in similar conditions with them. It is for this reason that they consider their family members and close friends to be as concerned about the environment as they are themselves. The mass media in Vietnam have recently begun to distribute a large quantity of news related to various environmental problems [Le Thi Van Hue 1999: 111]. Therefore, the respondents' own concerns are very much influenced by the media and they think it also influences the wider public's concerns about the environment. Moreover, some elite respondents are concerned about the environment because their professional work relates to environmental issues.

Moral values, especially concerns for inter-generational equity, influence some respondents to support environmental protection. They seem to have the philosophy that "we live not only for our generation but also for our future generations."

Regarding the issue of deforestation, all respondents have heard about the problem in the mass media (and some elite respondents have also read technical reports about the problem). They say that they believe the problem is a real one because they "can see it visually" (meaning they see the news and documentaries on television or pictures in newspapers). Lay respondents and some students display considerable faith that the government will respond effectively to deforestation. Professional respondents are less sure of this.

The findings regarding the binary comparisons of deforestation with other risks indicate that the choices of respondents reflect their perceptions of which risks pose immediate threats to themselves according to their individual knowledge of the risks.

It is what we did not find that is most surprising. Despite well-documented evidence that in the traditional Vietnamese worldview, nature was conceived of as having a large supernatural component, with the relationship between people and the natural environment one in which supernatural beings and spirits played an important role [Le Trong Cuc 1999: 69; Rambo 1982], references to heaven or spirits are almost wholly absent from the responses of our interviewees.³⁾ Of course, public discourse in Vietnam has been

3) The sole exception is the remark by Mrs. Thi, a street vendor, that she is "more concerned about deforestation because it directly affects my well-being. But climate change is the job ↗

deeply influenced by the official atheism of the socialist regime that has been in power in Hanoi for half-a-century but, given the recent revival of religion and the very deep roots of animistic views in Vietnamese thought, the absence of references to the supernatural in respondents' comments is difficult to explain.

It is also surprising, given the important place that natural phenomena hold in traditional painting and poetry (although less so in the contemporary arts, which tend to focus on human subjects), that none of the respondents express any aesthetic reasons for protecting the environment. Nature is important to people for the resources it provides and the damage it can cause to them if abused; it is not seen as having intrinsic value for its beauty. Nor, is there any evidence of respondents holding bio-centric views in which other species are seen as having an equal right to existence with humans.

Because our sample is small and wholly urban, we are reluctant to claim that our findings are representative of all Vietnamese since 80 percent of the population still lives in rural areas. Other research suggests, however, that rural Vietnamese, both members of the Kinh (ethnic Vietnamese) majority and ethnic minorities, also show a generally high level of awareness of environmental problems and are able to readily identify environmental problems affecting their lives [Le Quang Trung and Rambo 2001].⁴⁾ The many informal discussions of the environment that we have engaged in with rural Vietnamese over the years suggest that they largely share the cultural model of human relations with nature that we identified for our lay urban sample: Nature is seen as a source both of the resources that support human life and of the natural disasters and health problems that make life so difficult. Their views are anthropocentric and utilitarian, not based on any moral linkage between people and nature. Certainly, in their actual behavior towards the environment, rural people display few signs of the supposedly dominant traditional Vietnamese cultural value that people should live in harmony with nature. Instead, rural Vietnamese have often engaged in quite destructive behavior toward their environment [Jamieson 1991]. Thus, we believe that findings of our exploratory study are likely to be supported by more systematic research with rural Vietnamese. But clearly, a much broader survey is needed before we can claim to

↘ of heavenly spirits." Her statement may reflect belief in the power of the spirits but more probably is a metaphorical way of saying that climate change occurs on such a large scale that it cannot be influenced by the actions of an individual person such as her.

4) A recent study of five villages in Vietnam's Northern Mountain Region found that "people's perceptions of the term 'environment' are simple. People mention one or more of these elements: trees, forest, land and soil, water, humans, social relations, things surrounding humans, etc. Most of the people say that the 'environment' consists of trees and forests" [Le Quang Trung and Rambo 2001: 219]. Respondents were also able to readily identify many environmental problems that affect their lives including water pollution, forest destruction, droughts, floods, and other natural disasters, declining soil fertility, and environmental health. Air pollution, however, was mentioned by only a minority of respondents in most communities [*ibid.*: 221–222].

understand the character of environmental consciousness in Vietnam.

Acknowledgements

Funding for this research was provided by the Institute for Global Environmental Strategies and administered by Mahidol University. Core support for the authors' work in Vietnam was provided by a Ford Foundation grant to the East-West Center. We received valuable logistical and administrative support from the Upland Working Group of the Center for Natural Resources and Environmental Studies, Vietnam National University, Hanoi. We deeply appreciate the continued interest in our research shown by Prof. Le Trong Cuc, Coordinator of the CRES Upland Working Group.

Assistance in some interviews and in preparing the transcripts of the interviews was provided by Le Tri Chung and Hoang Thu Ha, to whom the authors wish to express their sincere thanks.

References

- Jamieson, Neil. 1991. *Culture and Development in Vietnam*. Indochina Initiative Working Paper Series No. 1. Honolulu: East-West Center.
- Le Quang Trung; and Rambo, A. Terry. 2001. Individual Perceptions of Personal Life Situation and Environmental Conditions. In *Bright Peaks, Dark Valleys: A Comparative Analysis of Environmental and Social Conditions and Development Trends in Five Communities in Vietnam's Northern Mountain Region*, edited by Le Trong Cuc and A. T. Rambo, pp. 209–231. Hanoi: National Political Publishing House.
- Le Thi Van Hue. 1999. Coverage of Resource and Environment Issues in the Vietnamese Press. *Asian Geographer* 18 (1–2): 111–122.
- Le Trong Cuc. 1999. Vietnam: Traditional Cultural Concepts of Human Relations with the Natural Environment. *Asian Geographer* 18 (1–2): 67–74.
- Rambo, A. Terry. 1982. Vietnam: Searching for Integration. In *Religion and Societies: Asia and the Middle East*, edited by C. Caldarola, pp. 407–444. Berlin: Mouton.
- . forthcoming. Vietnam. In *Ethnicity in Asia*, edited by C. MacKerras. London: Routledge (in press).