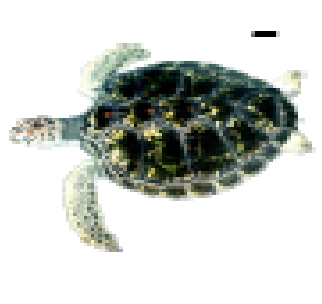


Marine Turtle Cross-Country Study: From the world of the academe to the world of conservation

Do People Care About Turtles ?

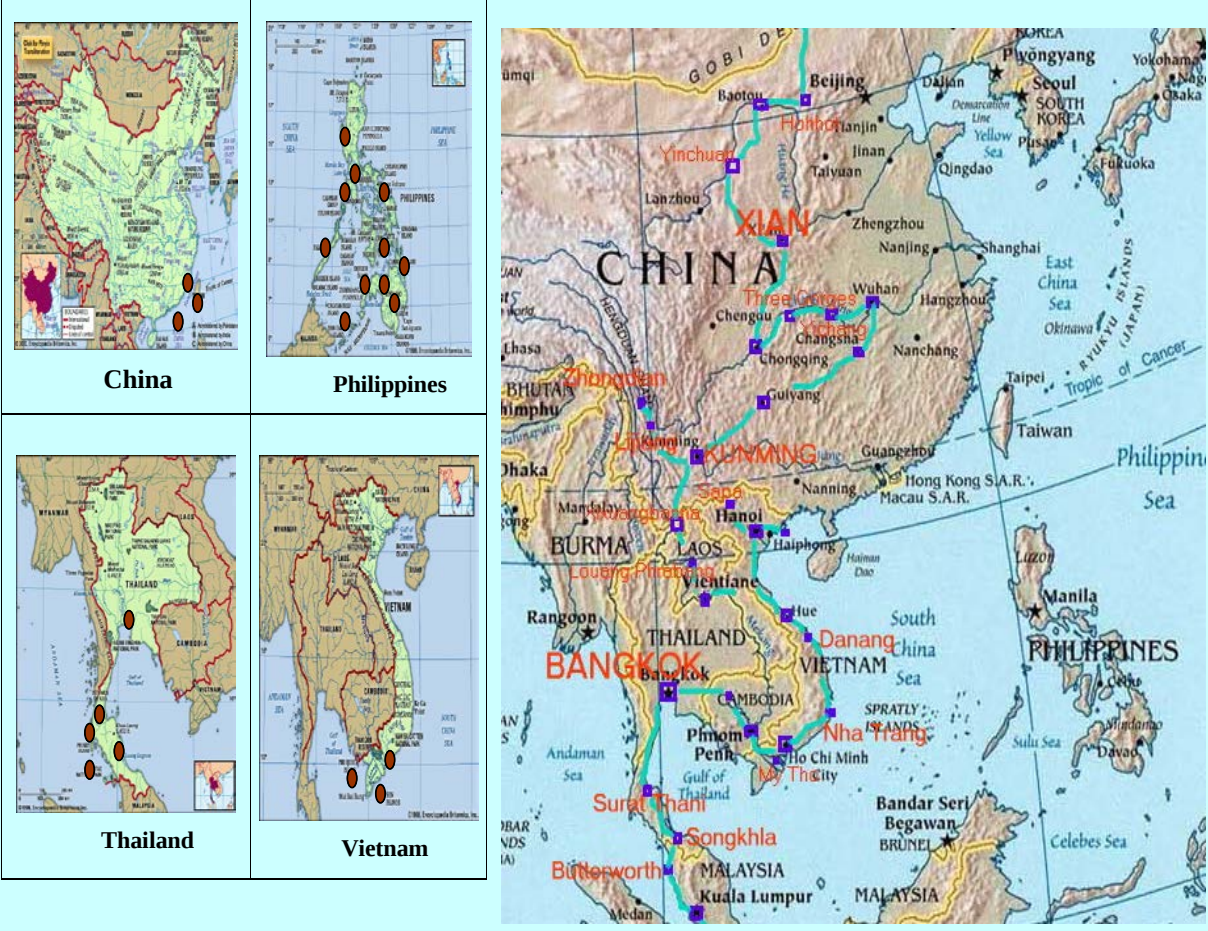


The marine turtle's status in Asia is of interest for two reasons.

- First, human activity in the region presents a wide variety of threats, including excessive and illegal harvesting for meat, shells, skin and eggs; habitat loss from development of beaches; destructive fishing methods such as dynamite fishing and use of drift nets; and pollution from shipping and tourism. Many of these threats are increasing rapidly with economic growth.
- Second, marine turtles are a migratory species; their habitat is shared among a large number of countries such as China, the Philippines, Cambodia, Thailand, Malaysia, Vietnam and Indonesia.
- Coordinated policies to conserve marine turtles are thus more likely to be effective than those pursued by countries on their own. There is evidence of the willingness of countries in East and Southeast Asia to collaborate but so far the measures taken have not been adequate to the challenge.

In this study EEPSEA explores this issue in a comparative framework in China, Thailand, the Philippines and Vietnam. It assesses the prospects for increased regional or national efforts to conserve marine turtles in Asia: whether Asians value turtles more for their use as food, shells, etc., than for non-use values; whether Asians are aware of marine turtles and their plight; and whether there is sufficient local willingness to pay to support larger conservation efforts.

Using a common survey instrument, the research team applied the contingent valuation method (CVM) to assess the willingness of local populations to pay for the conservation of marine turtles. The survey explored how a variety of payment vehicles affected people's decisions to support national and regional conservation plans and included an extensive set of attitudinal questions. That allowed the researchers to assess the relationship between respondents' attitudes, socioeconomic characteristics and willingness to pay.



The surveys were administered by dropping off questionnaires at people's residences. Altogether 3,680 respondents participated in the survey; these were randomly selected across all administrative districts in Beijing, Ho Chi Minh City, Hanoi, Bangkok and Davao City.



- Among 10 public policy issues: economic problems, poverty, education, health, crime/violence/inequality, government/good governance, infrastructure, environment, terrorism, and relations with other countries, the survey revealed that people in all four countries accord relatively low priority to environmental protection. Only in Beijing does it appear among people's top three concerns.
- Nevertheless over 70% of the respondents in all four countries agree that environmental problems are not properly taken care of.
- Many studies have highlighted that conservation efforts for less-known species have less public appeal than species that are more charismatic, cute or familiar.
- If this is the case, marine turtles may have fairly strong appeal-they are not an obscure species.
- Asians are familiar with them, although they may not have seen live turtles, or consumed their meat or eggs.

What do people care about most ?

Rank	Beijing (n = 600)	Davao City (n = 847)	Bangkok (n = 789)	Ho Chi Minh City / Hanoi (n = 1,444)
1	Economic problems	Economic problems	Economic problems	Economic problems
2	Good Governance	Poverty	Poverty	Good Governance
3	Environment	Good Governance	Good Governance	Education



An individual may be concerned about endangered animals, without taking action to prevent their extinction. He or she may assume that someone else will or should solve the problem. There is some evidence of this in the survey results.



Between 57% and 65% of respondents strongly agreed that "it is everyone's duty to ensure that plants and animals as we know them today will exist for mankind in the future".



When making personal trade-offs, however, there was a notable drop in supporting opinions. Only 4% of the respondents in Davao strongly agreed that "governments should raise taxes for more endangered species protection". The percentage of "strongly agree" in the other cities was similarly low.

The number of respondents saying "Yes" to each bid under the Regional Mandatory Program

Bid (US\$/month/hh)	Beijing	Davao City	Bangkok	Ho Chi Minh City / Hanoi
(.02 USD)	30 (75)	32 (56)	39 (67)	78 (81)
0.1		30 (56)		
0.25			37 (66)	
0.5	19 (48)			68 (69)
(1 USD)	16 (40)	17 (28)	20 (36)	44 (44)
2 USD		17 (31)		
2.5 USD			18 (33)	
(5 USD)	8 (20)	11 (20)	7 (13)	17 (17)
7.5 USD	2 (5)			20 (21)

The shaded rows are the three common bid values used in all four countries. However, Bids 2 and 4 are set differently. Figures in parenthesis are percentages of "Yes" responses from the number of respondents in the split sample.

- ### ...And Are They Willing To Pay For Them ?
- To assess willingness to pay (WTP), the research team constructed a hypothetical marine turtle conservation program which included:
 - Information about the importance of marine turtles to coastal and oceans ecosystems;
 - Description of the threats and risks of extinction;
 - A hypothetical marine conservation program.
 - They then asked respondents whether they would be willing to contribute to the program by paying a monthly surcharge on their electricity bills for a period of five years.
 - Separate groups of respondents were asked their willingness to pay for one of three marine turtle conservation packages: (i) a region-wide program financed through a mandatory charge, (ii) a region-wide program financed through voluntary contributions, and (iii) a national program financed through a mandatory charge.
 - Respondents were familiar with marine turtles and believed them to be important but were not concerned enough to make personal trade-offs through private contributions. Only the lowest surcharge (0.02 USD per household per month) would pass a referendum in all four countries. For Davao City, Bangkok, Hanoi and Ho Chi Minh City, the referendum would also pass at next lowest bid prices which were 0.1 USD, 0.25 USD and 0.5 USD respectively. At bids of 1 USD and above, the referendum would not pass in any of the countries.
 - In each city surveyed, respondents were willing to make only small payments. For the Regional Mandatory Conservation Program, the mean WTP for Davao City was 0.17 USD/household/month; for Ho Chi Minh City and Hanoi it was 0.83 USD/household/month. Mean WTP for the two higher income cities was 1.16 USD and 1.41 USD/household/month (for Beijing and Bangkok respectively). The pattern of response to the Regional Voluntary Program was similar.

Is the glass half full of half empty?

- The cross-country study have generated experiences for the researchers and demonstrated the potential for cross-country collaboration in undertaking a regional scale research using identical research tool.
- Outside of the academe, what contributions have our findings made?

because the majority of the urban residents did not value marine turtles enough to vote in favour of the referendum?



...was it a message of despair?

...or because a percentage of the respondents were willing to voluntarily contribute...

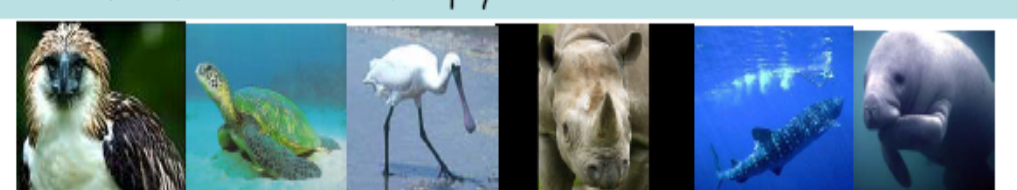
...was it a message of hope

Whatever the interpretation, the fact that the glass itself is not empty brings across a message that there is non-use values for public goods and the existence of meaningful partnerships in conservation efforts that can be reached.

A Role For Voluntary Contributions ?

- The results provide some support for the proposition that voluntary contributions could provide considerable sums for marine turtle conservation.
- The potential revenue, based on the percentages of respondents in the cities who would voluntarily pay 1 USD/month, would be around 50 million USD/year.
- This is much less than what could be mobilized were the mandatory payment referenda passed in the four countries surveyed (135 million USD).
- But it is more than the current global expenditures on marine turtle conservation of 162 conservation organizations combined, estimated at some 20 million USD per year.

The harsh reality is that actually mobilizing these contributions would be difficult. The voluntary payment vehicle explored was a "check-off" for a marine turtle conservation program on a household's monthly electricity bill. While this might work once, it is not feasible to put check-off boxes on utility bills for every species or environmental cause. In the long run, these efforts must be financed primarily out of general government revenue or "user-pay" schemes like environmental service payments.



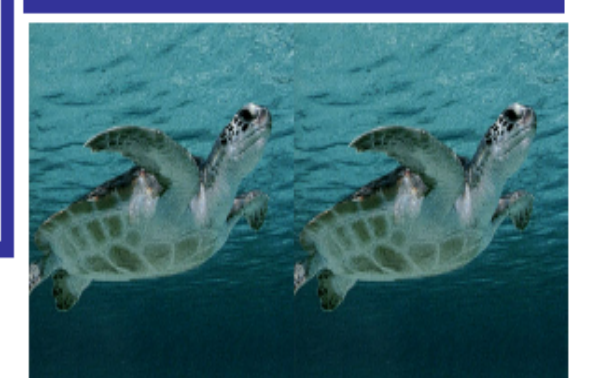
Awareness Is Not The Problem ?

- People in Asia are already well-informed about the existence and plight of marine turtles
- Traditional prescription of "raising awareness" is therefore unlikely to yield results.. Efforts to develop conservation finance mechanisms should therefore be directed in a different and more difficult direction: improving the trustworthiness of government tax collection and expenditure systems.
- Conservation agencies might play a role in this by working with governments to set up trust funds in which public funds could be deposited with confidence. Charities could also explore the potential for voluntary contributions revealed by this study; their efforts should go primarily into identifying the relatively small segment of the population that is willing to contribute and to developing cost-effective ways of collecting payments.
- Eventually, as incomes rise and governance improves, Asia's ability to pay for conservation will increase. In the meantime, contributions from the international community will continue to be important in conserving what is, after all, a global resource.

Policy has to be target group specific

- Need to focus on those who are most likely to contribute
 - The higher income
 - The more educated
 - The younger people
 - Those who are already members of environmental organizations

- Need to address the credibility and trustworthiness of the collecting agency and the institutions to manage the fund
- Bringing private partnerships



Sharing the message

Marine turtle makes the news in Thailand

- The July conference was reported in the national English newspaper, *The Nation*. A short article also appeared in a Thai magazine, *Madame Figaro*.
- Dr. Douglas Hykle from IOSEA wrote a summary article titled "Taxing Electricity to Help Conserve Turtles in Asia."



Reaching out to the private sector

News of the conference attracted the attention of a private sector who was already involved in marine turtle conservation.

The findings were presented at the Gala Dinner Talk at Aleanta Resort and Spa in Phangnga on November 24, 2007. Aleanta works with the Hoad Taimuang National Park in managing the Marine Turtle Sanctuary. The dinner talk was part of Aleanta's efforts to mobilize extra funds for turtle conservation activities. The Gala dinner raised 500,000 Baht.



Bringing in the stakeholders

To share the findings with audiences outside of the academe, On July 23, 2007, EEPSEA held a conference at the Siam City Hotel in Bangkok. The conference was attended by 40 participants from relevant government and international agencies, wildlife protection NGOs, academia and journalists.



Sharing information in development and academic circles

- July 2006: The Third World Congress of Environmental and Resource Economists, Kyoto, Japan
- January 2008: Environmental Economics for Development Policy. Training course jointly organized by the World Bank Institute, ADB, IUCN, EEPSEA and SANDEE
- September 2008: ECONOMIC DEVELOPMENT, POVERTY REDUCTION, ENVIRONMENT AND CLIMATE CHANGE ENVIRONMENTAL ECONOMICS FOR POLICY MAKERS organized by the United Nations Development Programme (UNDP)-United Nations Environment Programme (UNEP), Poverty Environment Initiative (PEI), Economy and Environment Program for South East Asia (EEPSEA) and the Asian Development Bank's (ADB) Greater Mekong Subregion Environment Operations Centre (GMS-EOC)
- April 2008: IWLEARN Regional Workshop on Payments for Environmental Services organized by IUCN and the WBI to participated Hanoi, Vietnam.
- October 2008: Environment and Climate Change Seminar Series, organized by ISEAS in Singapore
- April 2009: The Science, Economics and Institutions of Managing and Paying for Ecosystem Services. Training EEPSEA co-hosted with SANDEE and ICRAFT
- May 2009: An Introductory Course in Environmental and Natural Resource Economics organized by SANDEE, AIT, Bangkok, Thailand

The methodology and lessons learnt have also been used for EEPSEA in-country training courses in Lao PDR, Indonesia and Thailand as well Prince of Songkhla University

