Economic Potential and Environmental Attitudes of Asian Urban Middle Class

Khalid Saeed and Douglas Webster

Research Report Series # 2
1992
# Table of Contents

Abstract .............................................................................................................................................. 1
Introduction ......................................................................................................................................... 1
Theoretical Perspectives on the Middle Class .................................................................................. 2
Methodology ....................................................................................................................................... 4
Middle Class Size and Economy Capacity ....................................................................................... 5
Middle Class Profile Indicated by Survey ....................................................................................... 6
Living Group Profile .......................................................................................................................... 9
Vocationational Profile ..................................................................................................................... 12
Environmental Attitudes .................................................................................................................. 14
Implications for Development Policy ............................................................................................... 15
Conclusion ......................................................................................................................................... 15
References ......................................................................................................................................... 17
Appendix .......................................................................................................................................... 20
The Sustainable Development Policy Institute is an independent, non-profit, non-government policy research institute, meant to provide expert advice to the government (at all levels), public interest and political organizations, and the mass media. It is administered by an independent Board of Governors.

**Board of Governors:**

Mr V. A. Jafarey  
*Chairman of the Board*

Khalid Ahmed  
Editor, AAJ KAL

Syed Babar Ali  
Advisor, Packages Ltd.

Dr Tariq Banuri  
Executive Director, SDPI

Dr Parvez Hassan  
Senior Partner, Hassan & Hassan Advocates

Aban Marker Kabraji  
Country Representative, IUCN-Pakistan

Sohaib Sultan Khan  
Senior Advisor, NRSP

Dr G. M. Khattak  
Co-ordinator, Sarhad Provincial Conservation Strategy

Abdul Rahim Mahsud  
Regional Representative for West Asia, Nippon Gieken Associates

Dr Atta-ur-Rahman  
Director, HEJ Research Institute, Karachi University

Dr Arshad Zaman  
Former Chief Economist to the Government of Pakistan

In the Research Report Series, the SDPI publishes finished research papers written either by the regular staff of the Institute or affiliated researchers. These papers present research findings directly or indirectly related to sustainable and just development. These findings are meant to provide insights into economic, political, social and other issues in the context of sustainable development.
Economic Potential and Environmental Attitude of Asian Urban Middle Class
Khalid Saeed and Douglas Webster

Abstract

This paper presents partial results of an opinion survey conducted by the authors in four south and southeast Asian countries to understand the characteristics of the urban middle class and its potential for supporting initiatives for economic development and environmental sustainability. The urban middle class in these countries appears to be relatively affluent, well educated, debt-free and supportive of special justice. Its members seem to recognize environmental issues and to place a high priority on addressing them, although this attitude is correlated to some degree with education and income level. They also seem to aspire to entrepreneurial roles, but see many institutional impediments to discharging such roles. The urban middle class appears to offer an important resource for fostering environmentally sensible economic development. There is a need, however, to tap its potential through institutional reform supporting middle class aspirations.

Key Words: Economic Development, Environment, Public Policy, Entrepreneurship, Middle Class, Urban Development, Population.

Introduction

The aggregate models of economic growth have rarely considered the social groupings in a society, whose forms are vital to the smooth functioning of economic growth and the disbursement of its benefits. Thus, economic development policies implemented without attention to social class structure have often created tensions and disrupted the development process in many countries [Streeten 1979, Saeed 1990]. It has been observed that income differences are exacerbated by economic growth fuelled by a large-scale formal sector eliciting participation from a small number of upper income households. These income differences cause widespread feelings of deprivation and also eventually stagnate demand because disposable income does not expand proportionally [McKinnon 1973, Lipton 1977, Griffin 1977]. Based on a rather small catchment of human talent, such growth might also severely limit entrepreneurial activities and innovations, which are critical for economic growth [Quinn 1979, 1985, Saeed 1991a]. In designing development plans, it is therefore important to consider the participation of various cross-sections of society in economic activity. It is equally imperative to understand the environmental consequences of this participation since indiscriminate expansion in economic activity may consume resources, thus rendering growth unsustainable. Theoretical work on the middle class’ potential to engage in entrepreneurial activity and innovation has been sporadic. A few innovative studies have been carried out, mainly by

---

1 Khalid Saeed is a Professor of Natural Development and Management at Asian Institute of Technology. Douglas Webster is a Professor of Environment Planning at University of Calgary. The research for this paper was supported by a grant from Canadian International Development Agency.
behavioural scientists in developed countries [Roberts 1969, 1991, Boswell 1972, Maidique 1980], but the data is scarce for developing countries.

In addition, there are almost no appraisals of the environmental attitude of this very important cross-section of society. This paper attempts to assess the strengths, weaknesses and future promise of the Asian urban middle class in playing a productive entrepreneurial role in environmentally sound and sustainable economic growth. This assessment is based on a preliminary analysis of approximately 1000 interviews with urban middle class correspondents, conducted by the authors, in four countries in south and southeast Asia--Pakistan, the Philippines, Indonesia and Thailand.

Although the per capita income in these countries ranges from less than $500 in Pakistan to more than $1500 in Thailand, the living standards and values of the middle class in all four countries are remarkably similar. In fact, middle class living standards in the low and middle income Asian countries are comparable to those of middle income groups in developed countries in terms of home and automobile ownership and other facilities. The Asian middle class is also well educated, aware of environmental issues, largely debt-free and strongly inclined to enter into an entrepreneurial role. These characteristics indicate that the middle class can play a substantial part in supporting environmentally sound economic development policies in developing countries. However, the concentration of income into a small cross-section of households not only limits the size of middle income groups, but it also leaves them with inadequate financial resources to participate in entrepreneurial activity even when governments attempt to encourage it. Furthermore, the potential of these groups has not been realised due to the absence of reliable institutions delivering civil rights, social justice and infrastructure.

Theoretical Perspectives on the Middle Class

Macroeconomic analyses of industrialized countries show that technological innovation is one of the most important sources of growth [Denison 1974, Solow 1957, 1988]. Studies conducted at the organizational level in industrialized countries also show that technological innovations originate largely with small, often middle class, entrepreneurs [Roberts 1991]. To some extent, similar patterns have also been observed in developing countries [MacCleland and Winter 1971]. Such entrepreneurial activity is often credited with raising productivity through technical and business-related innovations [Baumol 1988].

Nevertheless, business and industry in developing countries have been dominated by large and often highly centralized and vertically integrated companies. Technologies of production as well as management methods have mostly been borrowed from the west, and indigenous innovation and technological development have had a poor track record [APO 1985]. Many of the households in these countries lack the resources to participate effectively in any form of entrepreneurial activity [Tiffin 1988]. Since innovation is a probabilistic process, limited participation drastically restricts its scope.

Contemporary economic models have viewed the role of the middle class in economic development from several different perspectives (Saeed 1989, 1991). Neo-classical economic theory, the basis for the capitalist model, is silent on the ownership of capital resources, often assuming them to be widely distributed. Thus, the labor-wage rate, which is determined by the marginal revenue product of workers modulated by the labor market conditions, may have little relation to the income of
households, who are also the recipients of profits. Since there is no distinction, at least in theory, between the workers and the owners of capital, most households are assumed to be middle class and to have the ability to accumulate capital as well as become assetless [Barro 1984]. Private ownership of productive resources by these middle class households is a means of entry into the market, which creates unlimited potential for economic growth. Entrepreneurship is considered important in economic activity, and innovation created through such participation is supposed to benefit society through increased productivity [Skinner/Smith 1974, Schumpeter 1950].

Marxist economic theory, which underpins the socialist model, assumes that capital tends to be owned by a minority, thereby excluding the workers, and that most households receive no part of the rents and profits. Thus, wage payments, which are determined by the consumption necessary for a worker to support production modulated by labor market conditions, have a strong effect on household income. The middle class is viewed as the petty bourgeoisie, who aspire to the ranks of the capitalists, the exploiters of the working classes. Entrepreneurship is viewed as a social activity, and innovation is viewed as originating from the need to boost falling returns on capital [Pack 1985].

The macro and micro level analyses in the literature appear to be linked with temporally and geographically specific empirical evidence. They consider technological innovation in their respective models, although in different ways. The neo-classical literature views it as an entrepreneurial quality in an economic system which consists of artisan-owners of production units; since innovation increases productivity, neo-classical economists place high value on private ownership and laissez faire [Skinner/Smith 1974]. Marxist economists, on the other hand, view innovation as a facet of the capitalist institution, consisting largely of absentee owners, that facilitates exploitation of the workers by creating labor-saving capital [Marx 1891, Pack 1985]. Given these assumptions, the socialist system assigns control of the economy to the government.

In developing countries, opportunity is often linked with social class and the family, while the motivations for entrepreneurship may stem from a commitment to support the extended family. The investments are financed largely through household savings, and marketing opportunities are determined by household disposable income, both depending on the distribution of income and wealth [McKinnon 1973, ESCAP 1989]. The strong hold of the bureaucracy in the developing countries, whose members are often related to the rich, has also led to systematic discrimination against the average-income household from where entrepreneurial activity may originate [White 1981]. Finally, the political instability of authoritarian regimes creates much risk, which discourages entrepreneurial ventures [Saeed 1986, 1990].

These two views of technological innovation, although poles apart, nevertheless take into account the empirical evidence in the scenarios considered by Adam Smith and Karl Marx. Adam Smith based his postulates on the experience of the newly-created artisan economy that emerged at the start of the industrial revolution, whereas Karl Marx was evidently influenced by the feudal agricultural and industrial systems in which ownership was separated from the workers and concentrated in a small feudal sector. As postulated in neo-classical macro-economic theory, technological innovations will indeed be directed at increasing productivity in an artisan factory setting and creating new goods and services that fill newly-identified market niches for the small entrepreneur, when capital ownership is widely distributed. However, when capital ownership is separated from the workers, the technological developments would be directed at creating labor saving capital to further increase profit, as postulated by the Marxist analyses [Saeed 1988].
Both models seem to agree on the economic structure of the middle class, which is characterized by participation in the production process and the disappearance of the capitalist/worker dichotomy in its vocational pursuits. Indeed, the state of the middle class might determine the nature and extent of a society's transition. The transition creates the possibility of either the widespread affluence implied by the market system or the impoverishment of the majority, with income concentrated in the hands of a few.

According to neo-classical theories of income distribution, the middle class represents the merging of rent-earning capitalists and wage-earning workers [Hicks 1963]. It may include both wage earners and rent earners, or both in the form of the self-employed. Financially, these households would have incomes above the subsistence level but a propensity to consume when income rises. The middle class, thus, represents a transformation stage with a high degree of interest in upward mobility and little cultural entrapment in a particular level in the social hierarchy. The size of the middle class also preserves the equality of income distribution since a large middle class would imply limited numbers of the very rich and very poor [Saeed 1988]. Its drive to consume and ability to undertake entrepreneurial ventures create powerful growth processes that are not clearly captured in the models of economic growth focusing on formal enterprise [Eisner 1989].

The motivational and organizational mechanisms driving middle class entrepreneurship differ in the industrialized and developing countries. In the west, individual initiative may contribute greatly to creating an opportunity, while individual motivation may be shaped by frustrations in family relationships and an urge to prove oneself. Furthermore, because most venture capital comes from institutional sources, capital availability may depend on the discriminating behavior of the financial institutions. Finally, marketing opportunities may be created with relative ease by introducing new products and advertising since the disposable income of households is much above subsistence level.

Thus, western theories may not be directly applied to policy formulation for developing countries; empirical information must complement theory for effective development strategies. The patterns in the survey data reported in this paper provide this empirical complement to existing western theoretical premises.

**Methodology**

Our survey of 1000 interviews attempted to discern the economic fabric and the family structure of the middle class and obtain the opinions of its members on social, economic and environmental issues. To ensure an adequate sample size for the target group, the sampling procedure excluded other income classes and targeted middle class households. Within the targeted group, inclusion in a particular income category in the interview was a matter of self-identity, although housing type, amenities, asset ownership and expenditure patterns were used to cross check self-identified income category. We attempted to assess the relative size and the financial ability of the middle class from the secondary data on income distribution. It is widely known that the Asian middle class is limited both in size and financial ability by pervasive inequality of income and asset distribution--a fact that must not be ignored while formulating economic and entrepreneurial development policies.

Six cities were identified for interviewing to represent major urban population clusters. Since in Thailand, Malaysia and the Philippines, the capital cities are the dominant urban centers, interviews were conducted only in the capital cities in those countries. Pakistan's urban population, on the other
hand, is spread over a number of large cities. The three largest cities of Pakistan, Karachi, Lahore and Rawalpindi were selected for interviewing. Interviews were conducted in the vernaculars, and the data was later translated into English. The questionnaire employed is given in the appendix.

There were minor differences in the interviewing format between Pakistan and the other countries for operational reasons. Interviews in Pakistan were conducted by the staff of Gallup-Pakistan at the respondents' houses with a predetermined neighborhood and gender composition. In the other countries, AIT graduate students conducted interviews in public places frequented by the middle class. The sample was evenly divided between males and females in all cases, although most of the females interviewed in Pakistani cities were housewives while those in the other countries were working women. The fact that the interviews were conducted in houses in Pakistan and at public places in the other countries during working hours might have created this difference; the limited participation of urban Pakistani women in the workforce possibly further contributed to this disparity. Data was computerized using Dbase3. A non-parametric statistical analysis using the SPSS package was performed on the data, which was categorised by country.

**Middle Class Size and Economy Capacity**

Membership in a social class is more of a matter of self-identification than a function of rigidly defined economic attributes. When middle class is viewed as a matter of self identify, the relative size of the middle class would be a function of the income distribution. Figure 1 shows the percentages of household income by quintiles in each country.

Income distribution appears to be relatively most unequal in Thailand and least unequal in Indonesia, although there are only minor differences among the four countries in the relative income shares of the five categories of households. The income shares of the first three quintiles are lower than their respective sizes. Since the average income of their members would be lower than the per capita income, these must be viewed as low income categories. The fourth quintile might barely qualify as middle class since its income share is almost compatible with its relative size (except in Thailand). The income of this quintile is tied to the average per capita income, estimated at between $1700-$2200 by the World Bank, although the reported GNP per capita figures are much lower [World Bank Report 1991]. This income may be inadequate for significant participation in entrepreneurial ventures or bearing cost for environmental responsibility.

The income shares of the highest 10% (31.3%, 32.1%, 26.5% and 42.8% respectively for Pakistan, Philippines, Indonesia and Thailand), on the other hand, might enable this much smaller cross-section to participate in economic activity, although the members of this class may not place themselves in the middle income category. Table 1 estimates the size of the fourth urban quintile (middle class in self-perception) and the top 10% (financially able class) and their respective household incomes from the secondary data.

While the estimated households in the urban second highest income quintile (4th), who might categorize themselves middle class, ranges between three million in Thailand to over eleven million in Indonesia, their income ($9,000-11,000) constrains their participation in entrepreneurial activity. On the other hand, the top 10%, a much smaller number of households, have enough income for entrepreneurial ventures. This income pattern clearly explains that limited participation by middle income groups and domination by the affluent have restrained entrepreneurial activity in a number of
developing countries. Unfortunately, this participation pattern has often led to social conflict and demand-side limitations [White 1974, Streeten 1979].

Figure 1: Income Distribution in the Countries of Survey

Middle Class Profile Indicated by Survey

In the belief that membership in an income class might best be self-determined, our interviewers invited respondents to place themselves in the lower-middle, middle or upper-middle income class. This self-identity turned out to be invariably accurate when cross-checked against the information supplied on living standard and consumption pattern.

Figure 2: Personal Information and Class Identity
Figure 2 summarises the middle class profile indicated in the responses. The largest number of respondents were in the 21-30 age group. The next most significant age group was 31-40 years. Most had university education, although a significant percentage of Pakistani respondents had completed only high school, which is a manifestation of a generally low literacy level in Pakistan. Most of the respondents saw themselves as middle class. There were, however, some differences between the countries in the self-identity of the respondents. While 81% of the respondents placed themselves in the middle class category in Pakistan, a significant number placed themselves in the lower middle class category in the Philippines, Indonesia and Thailand, where the middle class self-identify percentages were, respectively, 52%, 47% and 43%.

Table 1: Estimates of size and income of middle-class

<table>
<thead>
<tr>
<th>Country</th>
<th>Pakistan</th>
<th>Philippines</th>
<th>Indonesia</th>
<th>Thailand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (million)</td>
<td>110</td>
<td>60</td>
<td>178</td>
<td>55</td>
</tr>
<tr>
<td>% Urban (%)</td>
<td>32</td>
<td>42</td>
<td>30</td>
<td>22</td>
</tr>
<tr>
<td>Urban Household Size (persons)</td>
<td>$6.61^1$</td>
<td>$5.5^1$</td>
<td>$4.7^2$</td>
<td>$3.8^3$</td>
</tr>
<tr>
<td>Urban Households (million)$^4$</td>
<td>5.3</td>
<td>4.6</td>
<td>11.4</td>
<td>3.2</td>
</tr>
<tr>
<td>Avg. Income Urban Households (million)$^5$</td>
<td>1.1</td>
<td>0.9</td>
<td>2.3</td>
<td>0.6</td>
</tr>
</tbody>
</table>

Continued
Economic Potential and Environmental Attitude of Asian Urban

<table>
<thead>
<tr>
<th>Country</th>
<th>Pakistan</th>
<th>Philippines</th>
<th>Indonesia</th>
<th>Thailand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg. Urban Household Income ($US/year)</td>
<td>9,010</td>
<td>10,488</td>
<td>NA</td>
<td>11,400(^3)</td>
</tr>
<tr>
<td>Top 10% Urban Households (million)</td>
<td>0.5</td>
<td>0.5</td>
<td>1.1</td>
<td>0.3</td>
</tr>
<tr>
<td>Top 10% Household Income ($US/year)</td>
<td>35,119</td>
<td>33,667</td>
<td>NA</td>
<td>41,088</td>
</tr>
</tbody>
</table>

Sources:
1. = Habitat (1990)
2. = Statistical Yearbook of Indonesia (1987)
4. = Population % urban household size
5. = Income quintile with size and income share compatibility, which is also the second highest
6. = Estimated GDP per capita size
7.0.1* = urban households
8. = Average income household income - % income held by to 10%/10%
All others: World Bank (1991)

These differences may also result from the disparity in the locations of the interviews. Since neighbourhoods were pre-selected in Pakistan, uniformity in the income class of the households was guaranteed. Elsewhere, some diversity was expected since interviews were held in public places. Notwithstanding the differences, members of the middle class in all four countries share striking similarities. They are relatively young, well-educated, and conscious of their economic role. These observations are discussed further below:

Figure 3: Household Living Group Profile

<table>
<thead>
<tr>
<th>Household size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan</td>
</tr>
<tr>
<td>Philippine</td>
</tr>
<tr>
<td>Indonesia</td>
</tr>
<tr>
<td>Thailand</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Income Earners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan</td>
</tr>
<tr>
<td>Philippine</td>
</tr>
<tr>
<td>Indonesia</td>
</tr>
<tr>
<td>Thailand</td>
</tr>
</tbody>
</table>
Living Group Profile

The household living group profile is illustrated in Figure 3. Single person households were few in all countries, while the median household size was the highest in Pakistan (8 and above). Elsewhere, households ranged in size from 4 to 8 and above in the Philippines and 2 to 7 in Indonesia and Thailand.

The number of income earners per household varied more in Pakistan than in other countries, although the median is 2 to 3 in all countries. A significant number of households had a single earner in Pakistan and Indonesia, while single earner households were few in the Philippines and Thailand. This could be due to the limited participation of women in the labor force in Pakistan and Indonesia on account of the cultural perceptions of the social role of women as housewives and mothers.

Nuclear families formed the majority of households in all countries, although they only slightly outnumbered extended families, except in the Philippines. The median household size was 8 in all countries with the median number of income earners at 5 or greater (although the secondary data in Table 1 reports a smaller average household size in all cases). It is inferred from the median household size and the number of income earners that the median number of minor children in the household is two in Pakistan, where the majority of urban women are not in the workforce, and three in the other countries. This implies that family planning is quite successful in middle class urban households across the board, although the reported overall population growth rates vary quite widely.

The large number of nuclear families shows that the household is undergoing social transformation, which will tend to increase individual mobility but limit the social security services internalised into the household through the extended family system. This, on the one hand, may signal a tendency towards a structural charge in family composition that may facilitate growth of the formal sector. On the other hand, as suggested by Schumpeter (1950), the weakening of the extended family may limit entrepreneurial energy since nuclear families may be expected to be more risk averse than the extended families, who can disperse risk widely. Also the need to assume an entrepreneurial role for supporting the family may be expected to be higher in extended families than in nuclear families. These propositions are supported by our interview data. A cross-tabulation of family type with the difficulties faced in undertaking entrepreneurial endeavors showed that significantly more nuclear than extended families referred to financial problems and fear of failure. The transition to a predominantly nuclear household may, therefore, drain some entrepreneurial energy and also require governments to take on responsibility for social-security services previously borne by the extended household.
Figure 4 and Table 2 attempt to assess the living standard of middle class households, which appears comparable across the board regardless of the money values of the incomes earned. It is also mostly comparable to industrialized countries in terms of home ownership and facilities enjoyed.

Figure 4: Monthly Expenditure Pattern

- **Monthly Expenditure on Food**
  - Pakistan: 35
  - Philippine: 91
  - Indonesia: 57
  - Thailand: 70

- **Monthly Expenditure on Education of Children**
  - Pakistan: 28
  - Philippine: 31
  - Indonesia: 23
  - Thailand: 35

- **Monthly Savings**
  - Pakistan: 51
  - Philippine: 26
  - Indonesia: 40
  - Thailand: 33
Home ownership varies from 61% in Indonesia to 83% in Thailand, with homes being detached or semi-detached. Automobile ownership is lowest in Pakistan (48%) and highest in Thailand (82%). The highest number of telephones are installed in Thai middle class homes (85%), followed by Pakistan (60%) and Indonesia and the Philippines (53%). Except for automobile ownership, these percentages are not correlated with per capita income levels, indicating that they might be influenced by availability.

While the median expenditures on food, children's education, and savings are comparable in Philippines, Indonesia and Thailand, food expenditure of Pakistani households seems to have a higher median value as well as a wider range. Pakistani households also save considerably lower proportions of their incomes than the other countries.

Table 2: Living Standard

<table>
<thead>
<tr>
<th>Attribute*</th>
<th>Pakistan</th>
<th>Philippines</th>
<th>Indonesia</th>
<th>Thailand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Ownership</td>
<td>78</td>
<td>67</td>
<td>61</td>
<td>83</td>
</tr>
<tr>
<td>House Type (Fully/Semi-detached)</td>
<td>40/57</td>
<td>55/18</td>
<td>75/15</td>
<td>22/63</td>
</tr>
<tr>
<td>Automobile Ownership</td>
<td>48</td>
<td>55</td>
<td>60</td>
<td>82</td>
</tr>
<tr>
<td>Telephone</td>
<td>60</td>
<td>53</td>
<td>53</td>
<td>85</td>
</tr>
</tbody>
</table>

Note: * = All figures are percentages.

The authors tend to attribute the increased expenditure on food to the gastronomic decadence of Pakistani households rather than to income limitations. In extended informal discussions of the survey results, several middle class Pakistanis expressed their belief that this difference results from lower absolute income levels in Pakistan. However, given that the living standards of the middle class households in the four countries are quite comparable, the former proposition is more plausible. An informal survey of a cross-section of graduate students at AIT receiving the same bursary showed that Pakistani students spent far more on food than other nationalities. A cultural tendency towards food decadence might call for paying special attention to the development and management of agricultural resources [Saeed 1992, Yatopoulous 1985].

In all countries, the middle class is remarkably debt free. Ninety-eight percent of Thai and 77% of Pakistani households have no loan or interest payment liability as shown in Figure 4. These percentages are 64% and 68% respectively for the Philippines and Indonesia. The very high proportion of debt-free households in Thailand appears in the face of an oversupply of credit at the time of the survey, although the high proportion in Pakistan might partly be due to a tight credit market. In both cases, cultural and religious norms might also encourage reliance on household saving rather than credit.
A cross-tabulation of loan interest liability with education also shows that liability rises with education. This indicates that access to the formal banking system might be limited to the educated elite, who might not need much debt financing, which might also have limited the liability of the urban middle class.

**Vocational Profile**

Table 3 gives the vocations of middle class households. Employment is evenly distributed among government service, private company service and self-employment in Pakistan, Philippines and Thailand, although there is a large proportion of housewives among the Pakistani respondents, which is due to the limited workforce participation in Pakistan of urban women and the fact that the interviews in Pakistan were conducted in homes rather than public places as in the other cases. Self-employment is significantly less frequent in Indonesia, indicating an emphasis on the formal sector.

<table>
<thead>
<tr>
<th>Type</th>
<th>% in Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pakistan</td>
</tr>
<tr>
<td>Government Service</td>
<td>16</td>
</tr>
<tr>
<td>Company Employment</td>
<td>16</td>
</tr>
<tr>
<td>Self-Owned Business</td>
<td>16</td>
</tr>
<tr>
<td>House Work</td>
<td>27</td>
</tr>
</tbody>
</table>

Note: * = Percent of sample. Percentages do not add up to 100 since minor categories are excluded from the table.

Interestingly, a very large proportion of those currently not self-employed aspire to start their own businesses. This indicates healthy entrepreneurial spirit. Table 4 shows the percentages of those who desire self-employment and their perception of the major impediments to that end. Finance appears to be the most important impediment, followed by know-how (personal confidence) except in Pakistan, where dealing with government regulations is named the second major difficulty. Know-how is nonetheless the third most important factor in Pakistan. Labor-related problems are mentioned as the next most important obstacle to self-employment, although in Thailand, this might refer to a tight labor market while in the Philippines and Indonesia to labor management.

Cross-tabulating the perceived difficulties in starting entrepreneurial ventures with various other attributes revealed many interesting observations. Extended families were less apprehensive about labor management and less fearful of failure than nuclear families. This indicated the ability of the extended family to internalise labor as well as to disperse risk. University educated people appeared to be more risk averse than others, perhaps due to their better access to wage-employment opportunities in the formal sector. Finally, younger people were less risk averse than older interviewees. The most likely candidates for entrepreneurial roles seem to be young and moderately educated members of extended families. There is widespread interest in entrepreneurial activities, which can be facilitated by credit facilities, training in self-confidence, and infrastructure development.
Table 4: Entrepreneurship

<table>
<thead>
<tr>
<th>Attribute*</th>
<th>Pakistan</th>
<th>Philippines</th>
<th>Indonesia</th>
<th>Thailand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest in self-owned business as alternate employment</td>
<td>35</td>
<td>75</td>
<td>47</td>
<td>51</td>
</tr>
<tr>
<td>Primary problem in starting self-owned business</td>
<td>Finance</td>
<td>Finance</td>
<td>Finance</td>
<td>Finance</td>
</tr>
<tr>
<td>Other problems in starting self-owned business</td>
<td>i) Government (24)</td>
<td>Know-how (25)</td>
<td>Know-how (31)</td>
<td>Know-how (29)</td>
</tr>
<tr>
<td></td>
<td>ii) Know-how (19)</td>
<td>Labor (22)</td>
<td>Labor (27)</td>
<td>Labor (27)</td>
</tr>
</tbody>
</table>

Note: * = All numbers are percentages.

Figure 5: Public Issues

Most Important Public Issue

Pakistan: Inflation (33%)
Philippine: Inflation (25%)
Indonesia: Law & Order (22%)
Thailand: Traffic (88%)

2nd Important Public Issue

Pakistan: Inflation (27%)
Philippine: Law/Order (23%)
Indonesia: Public Transp. (18%)
Thailand: Corruption (22%)
Figure 5 ranks public issues considered important. While there is some variation in the order of importance from country to country, these issues are largely related to day to day problems of survival, such as inflation, law and order, transportation, corruption, education of children, job availability and drinking water.

These concerns might indicate that these governments are so preoccupied with political manoeuvres that they are grossly ignoring public welfare. This proposition is further supported by the information in Table 5, which ranks middle class expectations from the government. Justice, civil rights, provision of economic opportunity and services are the most important expectations followed by the improvement of the environment. Perhaps increasing government accountability to the public through a democratic process would facilitate the delivery of welfare and social justice.

Table 5: Middle Class Expectations of Government

<table>
<thead>
<tr>
<th>Issue Rank*</th>
<th>Pakistan</th>
<th>Philippines</th>
<th>Indonesia</th>
<th>Thailand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most important</td>
<td>Justice (38)</td>
<td>Services (39)</td>
<td>Civil rights (28)</td>
<td>Civil rights (63)</td>
</tr>
<tr>
<td>2nd most important</td>
<td>Economic opportunity (29)</td>
<td>Services (30)</td>
<td>Services (37)</td>
<td>Services (49)</td>
</tr>
<tr>
<td>3rd most important</td>
<td>Services (23)</td>
<td>Environmental quality (24)</td>
<td>Environmental quality (48)</td>
<td>Environmental quality (50)</td>
</tr>
</tbody>
</table>

Note: * = All numbers are percentages.

Environmental Attitudes

In our preliminary analysis, environmental attitudes were assessed by studying the pattern of responses to the questions on recognition of and commitment to the environmental problem. Table 6 summarises the responses to the questions eliciting awareness of the environmental problem. While the seriousness of the air pollution problem is recognized across the board, relatively fewer Pakistanis and Indonesians felt that their environment is deteriorating. Since environmental quality is comprised of many facets, including traffic congestion, cleanliness, garbage collection, water quality, etc., this pattern of responses might imply that the environment in Pakistan and Indonesia is not as corrupted as in Thailand and the Philippines. However, the
comparative lack of knowledge about urban and rural environmental issues in Pakistan and Indonesia implies that the public is less educated about these issues than in the Philippines and Thailand. Since all respondents named television as their most important source of environmental information, differences in television programming might explain the variance in environmental awareness. Cross tabulation of education and income level with the perception that environmental quality is deteriorating showed that this perception rises both with education and income levels, which might also explain the differences among the countries.

Table 6: Recognition of Environmental Problems

<table>
<thead>
<tr>
<th>Environmental problem*</th>
<th>Pakistan</th>
<th>Philippines</th>
<th>Indonesia</th>
<th>Thailand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment getting worse</td>
<td>42</td>
<td>88</td>
<td>39</td>
<td>96</td>
</tr>
<tr>
<td>Air pollution</td>
<td>93</td>
<td>99</td>
<td>95</td>
<td>99</td>
</tr>
<tr>
<td>Urban environmental issues</td>
<td>83</td>
<td>96</td>
<td>86</td>
<td>97</td>
</tr>
<tr>
<td>Rural environmental issues</td>
<td>53</td>
<td>98</td>
<td>79</td>
<td>90</td>
</tr>
</tbody>
</table>

Note: * = Percent recognizing problem

Table 7 summarizes commitment to environmental agendas. The categories include extent of concern about the environment, willingness to cooperate in recycling, and willingness to pay additional taxes for improving the environment. Although concern about the environment varies considerably, commitment to recycling and willingness to shoulder additional financial burden for a clean-up are high across the board, correlated to some degree with the recognition pattern shown in Table 6.

In a cross-tabulation of the aggregated data of the four countries, all vocational groups seemed to recognize the environmental problem equally well and showed identical levels of willingness to pay additional taxes, except for housewives, whose commitment lagged far behind their awareness. This implies that a change in vocational structure to privatization and entrepreneurial development may not threaten the environment. In fact, 85% of those aspiring to be self-employed were willing to pay more taxes for the environment, indicating that entrepreneurial aspirations were highly correlated with the commitment to the environment, which should further allay fears of environmental degradation from an escalation of entrepreneurial activity. The low commitment of housewives to pay more in taxes might be due to the presence of a patriarchal culture in which financial decisions are male-dominated.

Table 7: Commitment to Environment

<table>
<thead>
<tr>
<th>Commitment indicator*</th>
<th>Pakistan</th>
<th>Philippines</th>
<th>Indonesia</th>
<th>Thailand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expressed deep concern</td>
<td>28</td>
<td>71</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>Willing to cooperate in recycling</td>
<td>92</td>
<td>98</td>
<td>87</td>
<td>94</td>
</tr>
<tr>
<td>Willing to pay additional taxes to improve environment</td>
<td>68</td>
<td>94</td>
<td>83</td>
<td>93</td>
</tr>
</tbody>
</table>

Note: * = Percentage of respondents

Our cross tabulations also showed that nuclear families were more concerned about the environment and more willing to pay taxes than the extended families. Given that the proportion of nuclear families is on the rise in the urban population, this might also spell good news for the environmental agenda.

**Implications for Development Policy**

Sustainable economic development is primarily propelled by the entrepreneurial but prudent participation of a wide cross-section of households in economic activity, which is possible only if most households are committed and able to improve their standard of living, are concerned about the environmental agenda, have
access to capital resources and have a growing market for their products. A healthy middle class contributes to all these processes in many ways. First, mere membership in the middle class may create many entrepreneurial opportunities from family linkages and informal interaction with a heterogeneous social group possessing a large variety of resources and skills. Second, the existence of a strong family unit may create a commitment to the welfare of this unit and an aspiration to succeed economically [Schumpeter 1950]. Third, membership in the middle class might also provide an opportunity to mobilise household savings for self-financing productive investments and disperse risk. Fourth, the growth in the income of a consumption oriented middle class may generate many marketing opportunities for entrepreneurs [McKinnon 1973, ESCAP 1989]. Finally, as an opinion leader, an enterprising and affluent middle class may be able to provide guardianship for the environment.

The size of the middle class and the extent of its household income may depend on the extent of self-employment, which is a function of the extent to which assets are distributed and productively employed through entrepreneurial efforts. The extent of self-employment would determine the opportunity cost of supplying wage labor, and hence increased self-employment would also raise the income of households depending on wage work. An affluent middle class, with much self-employment, would mean higher wage rates [Saeed 1988].

Figure 6 illustrates how social and organizational factors limit the extent of entrepreneurial activity in developing countries before any infrastructure development policies facilitate the performance of the active participants.

Figure 6: Factors Affecting Entrepreneurship Participation and Performance
If the middle class is smaller, there will be fewer potential entrepreneurs; moreover, risk aversion and perceived difficulties in conducting business will discourage entrepreneurial activity. Finally, the development of appropriate infrastructure will increase entrepreneurial activity. Since innovation and productivity growth are dependent on the volume of entrepreneurial activity, the yield of infrastructure development policies will be low when entrepreneurial activity is limited.

**Conclusion**

The middle class bridges the rich and poor cross-sections of society, providing social mobility and opportunity to cross class barriers. An egalitarian and tension-free society would ideally consist predominantly of middle class households, providing unlimited economic opportunity and freedom to all its members. In less than ideal cases, the relative size of the middle class determines income distribution, the potential volume of demand for goods and services, and latent entrepreneurial ability. Finally, as an opinion leader, the middle class could influence institutional priorities for the allocation of resources, the disbursement of benefits and the maintenance of the environment. Its values and attitudes would help create a progressive and sustainable community.

The middle class in developing countries is an important institution. Although its size is often limited, its members are well-educated and enjoy a reasonable living standard. This class aspires to an entrepreneurial role, if afforded an opportunity, although it is apprehensive about the difficulties of operating in the existing institutional structure. Since the middle class expects the government to deliver welfare and social justice, expanding its membership should bring both prosperity and political stability. The middle class is also well aware of environmental problems and reasonably committed to addressing them even if it means shouldering additional financial responsibility. Economic reform which redistributes income should help to expand the membership and income level of the middle class while a democratic political tradition would help create a system that continuously lives up to the expectations of a dynamic and vibrant middle class.

**References**


Appendix

Questionnaire

Asian Institute of Technology
Middle Class Opinion Survey, December 1991
Douglas Webster/Khalid Saeed

PART A:

INDIVIDUAL
1. Respondent information: Please circle, check or give information as appropriate

1.1 Personal:
   male/female  married/single/divorced/widowed  age:

1.2 Education completed:
   a) primary school
   b) high school
   c) university
   d) other post high school training

1.3 Current primary work
   a) government
   b) Private or state-owned company
   c) self-owned business
   d) Non-profit organization or NGO

2. LIVING STANDARD
How would you place your household with respect to others in your city in the following income categories?
   a) low
   b) lower middle
   c) middle
   d) upper
   e) high
STOP AND ABORT IF ANSWER TO 2 IS LOW, OTHERWISE GO TO NEXT PAGE
Webster-Saeed Urban Middle Class Opinion Survey

PART B:

HOUSEHOLD

3. Living Group

3.1 How many people live in your housing unit? Exclude non-resident members.

Male_____________  Female_____________

3.2 What is the family structure in your housing unit?

- nuclear family
- extended family
- coop
- single

(Combinations of relatives) (friends)

4. Financial Structure

4.1 What is the financial structure of your family including household resident (R) and non-resident members (NR)? Please state numbers of the following types of members.

Male members: a) financially contributing (R)_____ (NR)______
  b) financially dependent (R)_____ (NR)______

Female members: a) financially contributing (R)_____ (NR)______
  b) financially dependent (R)_____ (NR)______

4.2 Please check your own financial role in the household defined in 4.1.

- head______  b) financially contributing______  c) financially dependent______

5. Housing

5.1 Please check type of housing you live in

5.1.1 a) owned______  b) rented______  c) official______
     (By a household member)

5.1.2 a) detached______  b) semi-detached______  c) apartment or flat_____

5.1.3 a) inner city______  b) extended city______  c) outskirts/suburbs_____

5.2 Please check amenities in your household (living group)

- piped water______  b) flush toilets______  c) refrigerator______
- air conditioners______  e) water heaters______  f) telephone______
- automobile______  h) motorbike______  i) television______
- video______  k) camera______
- personal computer______
- sports equipment______ (e.g. tennis/golf/exercise)
- space heaters______
6.1 Composition of household (living group) monthly income.

6.1.1 Does your household receive income from the following source?
   a) wages
   b) rents and dividends
   c) self-employed income
   d) remittance from
   e) other
   f) non-resident members
   
   (Please specify)

6.1.2 Please give income composition of your household in approximate percentages.
   a) wages %
   b) rents and dividends %
   c) self-employed income %
   d) remittance from %
   e) other %
   f) non-resident members %

6.2 Composition of value of household (living group) assets

6.2.1 Do you or other members of your household own the following assets?
   a) agricultural land/property
   b) urban land/property
   c) stocks and shares
   d) business investment
   e) cash savings
   f) gold/jewellery
   g) other

6.2.2 Please give household asset composition in approximate percentages
   a) agricultural land/property %
   b) urban land/property %
   c) stocks and shares %
   d) business investment %
   e) cash savings %
   f) gold/jewellery %
   g) other %

6.3 Composition of household (living group) expenditure.

In a typical month what % of your household expenditure is on the following?
   a) rent/mortgage %
   b) loan/interest payments %
   c) food %
   d) clothing %
   e) entertainment/travel %
   f) utilities % (electricity, Gas, phone, etc)
   g) education of children %
   h) other %
   i) monthly saving %
PART C: SOCIAL/ECONOMIC OPINIONS (of individual responding)

7. Vocation-related

7.1 Are you satisfied with your current work?
   a) not satisfied ______  b) satisfied ______  c) very satisfied ______

7.2 Please check the one most important reasons for satisfaction or dissatisfaction in your work.
   a) income ________  b) prestige ________
   c) work environment ________  d) personal fulfilment ________

7.3 If you had the option to change work, which of the following types of employment would you choose?
   a) government ________  b) private or state-owned company ________
   c) self-owned business ________  d) non-profit organization or NGO ________

7.4 If you were to start your own business or industry, which of the following major problems do you foresee? Please rank the three most important:
   a) capital finance ________  b) labor management ________
   c) dealing with govt ________  d) business know how ________
   e) technical know how ________  f) fear of failure ________
   g) other (specify) ________

8. Public Issues

8.1 Check the public issues which you consider important. Please rank the three most important:
   a) law and order ________  b) high prices ________
   c) public transportation ________  d) traffic congestion ________
   e) telephone service ________  f) pollution ________
   g) drinking water ________  h) children's education ________
   i) national security ________  j) political stability ________
   k) corruption ________  l) job opportunities ________
   m) sanitation ________

8.2 Please check benefits you expect from the government. Please rank the three most important:
   a) civil rights ________  b) public services ________
   c) economic opportunity ________  d) justice ________
   e) maintaining quality of environment ________
PART D: ENVIRONMENTAL ROLE/OPINIONS (of individual responding)

Note: Before asking the following questions, the interviewer will explain what we mean by the term environment. Basically, we are referring to one's surroundings outside one's home and place of work.


9.1 In your opinion, has the quality of the environment in this city improved, become worse or remained the same over the last five years?
(a) improved ____  (b) become worse ____  (c) remained the same ____

9.2 If (b), does this concern you?
(a) a lot ____  (b) somewhat _____  (c) a little _____  (d) not at all _____

10. Travel mode

10.1 How do you travel to work or studies (if student)?
(a) own or official car ____  (b) public transit ____  (c) official bus or van ____
(d) own motorcycle ____ (e) bicycle ____  (f) walk ____
(g) taxi ____ (any type)  (h) other ____

10.2 If you travel to work by own or official car (a), how many people normally travel in your vehicle (excluding driver if you have a driver)? ____

11. Fuel preference (for ASEAN countries only)

11.1 If you operate a vehicle, do you purchase lead free fuel?
(a) yes ___  (b) no ____  (c) not applicable (no car) ____

11.2 If yes, what is the primary reason why you purchased lead free fuel for your automobile?
(a) concern with air quality ____  (b) to save money (c) better for engine______
(d) other reason ____

12. Volunteer activity

12.1 Do you belong to one or more volunteer, community, or non-governmental groups involved in improving the environment?
(a) yes ____  (b) no ____

12.2 If yes, when did you first join such a group? year ____

13. Are you concerned with pesticide residues on food you purchase to be eaten by you and your family?
(a) yes ____  (b) no ____  (c) no opinion ____

13.1 Are you concerned with pesticide residues on food you purchase to be eaten by you and your family?
(a) yes ____  (b) no ____  (c) no opinion ____

13.2 Do you purposely purchase vegetable and fruits grown under low pesticide conditions?
(a) yes ____  (b) no ____

13.3 If yes, what is the primary reason for doing so?
(a) concerns re family members' health _____
(b) concerns re farmers' health ______
(c) concerns re the environment in your country _____
(d) other _____

13.4 If no, why not?
a) high price ____ b) non-availability ____ c) poor appearance ____
d) short life of produce ____ e) other ____

14. Air Quality

14.1 Are you concerned about air pollution in this city?
(a) yes ____ (b) no ____ (c) no opinion ____

14.2 If yes, why?
a) own health ____ b) children's health ____ c) aesthetics ____
d) cleaning problems ____ e) other ____

15. "Green" concern

15.1 How many times in a month do you normally use public parks in your city? ______ times

15.2 Do you feel that there is sufficient park (green space) and in your city?
(a) yes ____ (b) no ____

15.3 Would you be willing to pay a moderate entrance fee to use public parks in your city?
(a) yes ____ (b) no ______

16. Information

16.1 Do you read stories about environmental issues in the newspapers and magazines that you normally read?
(a) often ____ (b) sometimes ____ (c) seldom ____ (d) never ____

16.2 What other sources provide you information about environmental issues?
a) Radio ____ b) TV ____ c) Cinema ____
d) books ____ e) interest group meetings ____
f) formal education courses ____ g) political speeches ____ h) other ____

17. Financial commitment to environment

17.1 Would you be willing to pay additional taxes if the money collected were effectively spent to improve the environment in your city?
a) yes ____ b) no ____
17.2 If yes, what percentage of your monthly income? ____%

18. Voting Behaviour

18.1 When you vote in elections, is your voting decision influenced by the candidates position on environmental issues?
   a) yes ____  b) no ____

18.2 If yes, to what extent are the environmental factors important in your voting behaviour compared with other factors, such as economic opportunity, etc.?
   (a) very important ____  (b) somewhat important ____  (c) slightly important ____

Are you of the opinion that fast economic growth in your city is endangering the environment?
   (a) yes ____  (b) no ____  (c) no opinion ____