

Impact of Socio-cultural Factors on Industrialization and Agricultural Development in Sri Lanka: A Comparative Analysis of Three Asian Countries

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Summary

The development of domestic industries is vital to improve the agricultural productivity of any nation. The development of domestic industries is, however, largely dependent upon the economic, technological, institutional and socio-cultural endowments of the given nation. Although the importance of the first three factors for industrialization has been extensively studied, the latter has seldom been supported with empirical research. Therefore, this study attempts to investigate the socio-cultural impact on industrialization of three nations; a less industrialized country (Sri Lanka), a newly industrialized country (Republic of Korea), and a highly industrialized country (Japan). In this respect, six major socio-cultural endowments, namely socio-economic structure, social organization, education, mass communication, fertility rate, and cultural homogeneity & social tension of the three nations were analyzed and compared to ascertain their impact on the development of domestic industries. This research is mainly based on secondary data from the recent publications of the World Bank, UNDP, FAO, ADB, and country studies. In addition, some country experts were interviewed where judgmental information was required.

The inter-country comparison showed a significant variation in the socio-cultural endowments of the three nations. The socio-cultural characteristics such as the size of the agricultural sector, extent of urbanization, gender inequality, orientation towards science and technology education, mass communication, and most of all, the cultural heterogeneity and related violence, which have both direct and indirect influences on the industrialization process, were significantly different among the three nations. The impact of these socio-cultural variations was also straightforward. There were marked differences in the industrial and agricultural growth and productivity, and consequently on the economic development of the said nations. Therefore, there is an urgent need to re-construct the socio-cultural endowments of Sri Lanka, if it wishes to foster faster development of its industrial and agricultural sectors and consequently to achieve economic progress.

Key words: Industry, Agriculture, Development, Socio-cultural Factors, and Sri Lanka

Introduction

Domestic industries have played a vital role in development, especially during the transitional period from a predominant agricultural economy to an industrial economy. Domestic industries create larger markets and higher prices for agricultural products, stimulating the activities of both sectors. The absorption of surplus agricultural labor as well as the supply of technical

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inputs and technologies through research and development by the industrial sector act as major means of enhancing productivity of the agricultural sector. This relationship has major importance for developing countries like Sri Lanka, where 75 percent of the population still lives in rural areas depending on agriculture related activities for their livelihood (Central Bank, 1998).

Historically, Sri Lankans have had great feats in industrial arts that they can still be proud of. The dry zone civilization (200 BC-AD 1200)¹ of Sri Lanka was famous for its technological innovations, especially in irrigation engineering. During that period, technologies and the irrigation network formed the basis for a thriving economy with a large agricultural surplus. Unfortunately, those technologies were lost in the collapse of the civilization due to reasons that are still not well defined. Then, up to the colonial period, Sri Lanka was characterized by rather mediocre rates of both industrial and agricultural development. During this period, industries were stigmatized by attaching them to various socio-cultural institutions including the caste system. Some believe it was due to the poor leadership and the absence of a powerful king to rule the country.

Modern industries began to enter the island along with the expansion of European presence from around 1505, but they were merely in extractive and plantation sectors. From a quiet colonial background, Sri Lankans began to thrust into the 'modern' world through technological revolution² from the late 1940's, with early steps towards de-colonization and political independence. However, the path towards a higher degree of industrialization was mainly through technological imports and aid, with minimal attention given to the development of its domestic industrial sector. Efforts to develop domestic industries through the two broad policy approaches adopted in the postcolonial era, the Import Substitution Industrialization (1957-1977) and Export Oriented Industrialization (from 1978), have met with little success. As a result, today Sri Lanka shows one of the lowest rates of industrial and agricultural development in Asia and its standards are far below that of the Asian NIEs.

The development of industries is largely dependent upon the socio-cultural endowments of a given nation, apart from the economic, technological, and institutional factors. In neoclassical economics, many analysts have attempted to explain industrial and economic progress from their socio-cultural perspectives, although they carry little empirical content (Hoselitz, 1952; Higgins; 1959; Adelman and Morris, 1971; Hayami and Ruttan, 1991). For instance, the importance of these socio-cultural aspects has been manifested in Sombart's 'Spirit of Capitalism', Tawney's 'Protestant Work Ethics', as well as Japan's unprecedented economic success in the post World War II period and the recent development of the Asian NIEs. In these examples, the development of the nations has been attributed to their socio-cultural endowments that have consistently favored the domestic industrialization process. Nevertheless, these relationships between socio-cultural endowments and development³ of a nation have seldom been supported with empirical research.

¹ The ancient civilization of Sri Lanka emerged and flourished in the island's dry zone, mainly in the northern plain region with capitals at Anuradhapura and Polonnaruwa.

² For example, commissioning of Laxapana station (1950) to generate hydropower, setting up of Six Year Development Plan (1951-1957) and Six Year Programme of Investment (1954-1959) to develop agricultural infrastructure and private sector industries, etc. (Central Bank of Sri Lanka, 1998: 13)

³ Hereafter, in this study development is referred to as the growth in the productivity of industrial and agricultural sectors of a country.

Therefore, this study attempts to analyze and compare the socio-cultural impact on the industrialization process of three nations namely; a less industrialized country (Sri Lanka), a newly industrialized country - NIE (Republic of Korea), and a highly industrialized country (Japan). The study hypothesizes that a sound industrialization process requires the nations to possess socio-cultural⁴ endowments that facilitate individual behavior and institutional processes toward change, adapt, and develop. Six major socio-cultural variables namely socio-economic structure, social organization, education, mass communication, fertility rate, and cultural homogeneity & social tension of the three nations were analyzed to ascertain their impact on the development of domestic industries. The research is mainly based on secondary data from the recent publications of the World Bank, UNDP, FAO, ADB, and country studies. In situations where subjective information was required, some interviews were carried out with the respective country experts.

An Overview of Socio-cultural Endowments Affecting Industrialization

i) Socio-economic Structure:

In the process of industrialization, a major population movement from a traditional subsistent agricultural sector to an urban industrial sector can be observed. This transition leads to the reduction of the sectoral, geographic, and technological cleavage between a traditional subsistent sector and a modern commercial sector. In addition, it also leads to a reduction of poverty and the disparity of income between rich and poor. In order to analyze these transformations, four indicators were employed namely, the size of the agricultural sector, extent of urbanization, extent of dualism, and the extent of poverty and income disparity.

- *Size of agricultural sector:* In historical studies, it has been proven that with industrialization, the size of the agricultural sector declines. The agricultural sector should release labor required for industrial expansion. Consequently, it helps to improve agricultural productivity, by disposing surplus labor in the agricultural sector, which is believed to have a zero marginal product (Arthur Lewis, 1954).
- *Extent of urbanization:* The cities provide a concentration of population from which industrial labor can be drawn and they also contain a greater variety of skills and resources than do rural areas. Thus, industrialization requires a certain degree of urbanization.
- *Extent of dualism:* Dualism is referred to as 'a marked contrast in social organization, cultural style, and technologies between the traditional subsistence and modern commercial sectors'. The extent of dualism declines with industrialization. During the early stages of industrialization, the subsistence agriculture sector helps the modern commercial sector to develop through providing its surplus labor. Then, the benefits created by the commercial sector will eventually trickle down to traditional sectors, thus the extent of dualism declines. In less industrialized nations, a predominant traditional sector exists side by side with an insignificant modern sector with limited interaction between them.
- *Extent of poverty and income disparity:* Nations characterized by extreme poverty find it difficult to allocate sufficient funds for industrial activities. These countries spend most of

⁴ Accepting the manifold problems with the definition of culture, this study defines culture as 'the acquired and shared values and norms that people use to interpret experience and generate social behavior'.

their income for food and other necessities rather than for investment goods. Another characteristic of less industrialized nations is high income disparity between rich and poor that has worsened the poverty level of majority of the population. Industrial productivity suffers due to a labor force that cannot even satisfy its basic needs, including food and shelter.

ii) Social Organization:

The long run industrial development has almost invariably been accompanied by significant transformation in the pattern of social organization, including kinship, gender, and class relationships. Four indicators were employed in analyzing the social organization of the three nations namely; kinship relationships, gender inequality, indigenous middle class, and social mobility.

- *Kinship relationships*: Historically, industrialization is associated with transformation from a traditional society with tribal, clan, or extended family units into a modern society in which the dominant kinship unit is a nuclear family. In an extended family, the fruits of special individual efforts are distributed among the group or community. This tends to diminish incentives for individuals to perform risk-taking activities and thus has an adverse effect upon investment. In contrast, the small nuclear family system facilitates the linking of personal efforts to rewards. In nuclear families, individual performance is evaluated on the basis of merit rather than status, as in the extended families.
- *Gender inequality*: Societies in the less industrialized nations tend to be male dominated, with a strong division of labor by sex and a tendency to stigmatize female roles. Women are not permitted to engage in economic roles and traditionally a family loses status if women are permitted to engage in extra-domestic economic roles. In these societies, only a tiny minority of women receives an advanced education. Women generally assume that active social participation and decision making is a male prerogative. However, it has been proved that industrial advancement is easier if women are free to make the most of their abilities (Hunt, 1966: 407-417).
- *Indigenous middle class*: An aspect of social organization commonly associated with industrialization is the availability of a pool of commercial, entrepreneurial, professional, and technical talents (*i.e.* a middle class). Historically, in the economic development of Western Europe, the middle class was a driving force in the growth of business enterprise. In less industrialized countries, however, indigenous middle class is either small in proportion or has less opportunities to provide the leadership for economic change. Furthermore, to an even greater extent, a larger part of the available talents important for industrial activities is often found among expatriate groups in the population that characteristically tend to concentrate their efforts within the existing modern sectors.
- *Social mobility*: A positive association between social mobility and industrialization has often been emphasized. Less industrialized nations have relatively rigid patterns of social stratification and social values. The social values associated with family, ethnicity, caste and class structures form a barrier to individual initiatives and economic achievements. Social mobility is determined by attitudes towards the extent of opportunity for an individual to advance by means of ability rather than social status. A significant aspect of social mobility is the extent of opportunity in a society to obtain skills and education.

Inevitably, a narrow educational base limits the scope for individual improvement in status. The expansion of industry normally entrains an increase in opportunities to advance into middle class occupations. However, the presence or absence of prohibitive cultural barriers (e.g. ethnic, caste, etc.) will govern this upward social movement.

iii) Education:

Education has a role in the social development of a nation, which determines its rate of industrialization. Literacy is an economic asset in industrial urban occupations facilitating the training of unskilled as well as skilled workers. Literacy is the basic personal skill underlying the whole process of modernization. However, industrialized nations have gone far beyond achieving mere literacy and have emphasized science and technology education at secondary and tertiary levels. At the same time, these nations have provided adequate opportunities to its intellectually talented people, in order to get their maximum potentials for national development efforts. For education, therefore, three indicators were employed, namely; primary & adult literacy rate, science & technology education, and graduate employment.

- *Primary education and adult literacy:* While less industrialized countries stress the importance of primary education and its key product, literacy, in industrialized countries a considerable weight is given to expansions in secondary and tertiary education as a source of the rise in aggregate productivity.
- *Science and technology education:* Less industrialized nations are desperately short of specialists, which require advanced educational preparation. In most of these less industrialized countries, school and university curriculums are aimed at imparting a sound classical and liberal arts education. The provision of scientific and technical knowledge, and therefore the manpower in these areas is in short supply.
- *Graduate employment:* Less industrialized countries are paradoxically characterized by a considerable number of unemployed university graduates and at the same time, are short of various types of skilled manpower. Their universities have failed to create functionally literate graduates who have the right knowledge, skills, and attitudes needed by contemporary industries.

iv) Mass Communication:

Modern media systems are an important mechanism for diffusing modern thought patterns, increasing demand for industrial products, and for inducing greater participation in national political systems. Close relationships between the evolution of mass media and other indicators of urbanization and industrialization are underlined by statistical analyses. A positive association has been found between daily newspaper circulation per 1000 population and employment in industry as a percentage of working age population; per capita GNP; adult literacy rate; and urbanization (Russett, *et al.*, 1964). In industrialized nations, both the amount and the quality of information presented in the mass media are comparatively higher than that of less industrialized nations.

v) Fertility Rate:

Decline in the rate of fertility is a result of a complex of interrelated institutional and socio-

cultural changes, which accompany the process of industrialization and urbanization. The spread of the market and the concomitant improvement in opportunities for geographic and occupational mobility, tend to create economic advantages for smaller families. In an urban setting, in contrast to rural areas, having a large number of children becomes more of a direct burden than a benefit. Too many family obligations, including feeding, clothing and educating children, restrict people from investment activities. The attitudinal changes associated with industrialization and urbanization, in particular the application of rational thought patterns to everyday decisions, tend to generate preferences for a lower family size. Therefore, in industrialized nations the rate of fertility or the number of children per family tends to be lower than that of a less industrialized country.

vi) Cultural Homogeneity and Social Tension:

A familiar characteristic of many less industrialized countries is the presence of diversity in socio-cultural institutions including ethnicity, religion, class, language, and caste. Consequently, these countries are characterized by a continuous presence of extreme and widespread social tensions that relate to these socio-cultural institutions.

- *Cultural homogeneity:* Among countries at the earliest stage of social and economic development, the "primordial attachments" of race, religion, class, language, and caste tend to be very strong. The antagonistic perceptions derived from such primordial attachments have resulted in a lack of social and economic integration that contribute to their difficulties in initiating a process of industrialization. In addition, these primordial attachments characteristically come into sever conflict with the requirements for effective social integration and, in particular, with the need for more generalized commitments to a relatively impersonal nation-wide civil order. In general, it seem reasonable to conclude that, other things being equal, relatively homogeneous societies with respect to cultural characteristics are less hampered in the achievement of social and political integration and in the initiation of continuous industrialization and economic growth than more heterogeneous societies.
- *Social tension:* There are contrasting views on the relationship between social tension and economic development. Some believe that the strains and conflicts of change can become important mechanisms for inducing further economic and social transformations. In industrialized nations, the frequent occurrence of serious social tension and social conflict in their early stages of industrialization, urbanization, and modernization has often been noted. In the first place, the breakup of the traditional kinship and tribal groups that are characteristic of low-income countries produce tensions, both personal and social. A number of sociologists view social disturbances and outbreaks as often being intimately related to the processes of differentiation of socio-economic structure and of its subsequent reintegration. According to these views, one would expect a positive association, at least in the short-run, between social tension and rapid economic growth.

However, it is self-evident that at all stages of socio-economic evolution the continued presence of extreme social tension, accompanied by widespread and violent outbreaks, inevitably hampers industrial development because of their adverse effect on risk-taking activities and thereby investment. Thus, one would anticipate a long-run positive

relationship between better industrial growth and the absence of extreme and widespread social tensions.

Socio-cultural Variations Among the Three Nations:

In this study, emphasis will be given to discuss Sri Lankan socio-cultural endowments compared to the other two nations. The socio-cultural indicators of Republic of Korea and Japan are presented only as a guide and to understand how industrialized countries are oriented towards their industrialization process. Thus, the scope of this study is limited to examining how the six socio-cultural endowments have been created and maintained in Sri Lanka but not to explain each and every variable in all three nations.

In order to understand these six socio-cultural endowments and their indicators, as many variables as possible (both quantitative and qualitative) were analyzed and compared. For instance, 12 different variables were used to understand the concept of gender inequality among the three nations. The comparison of quantitative data is not an issue as clear numerical values are already available. However, in order to compare the three nations' qualitative (judgmental) variables, such characteristics were first specified in numerical terms. It is obvious, of course, that the choice of a numerical scale for qualitative indicators is arbitrary. The scale we chose was a simple linear one, which ranged from 1 to 4. We assigned a score of 4 for the characteristics that were most favorable for industrialization, and a score of 1 for characteristics that were least favorable or unfavorable for industrialization. When the characteristics lie in between or the difference was not clear-cut, a score of 0.5 was added to the original score.

i) Socio-economic Structure:

As in Table 1, in Sri Lanka, compared to the other two countries, a large proportion of its population live in relatively self-contained agricultural communities in which production is primarily for local consumption⁵. These communities cultivate their land using traditional techniques of production, which are largely determined by inherited social values and organization. This has resulted in a lack of agricultural surplus to be sold in the market, thus a low income for the farm families. In order to increase agricultural productivity, this sector should release labor to industry for its expansion. However, the low income of the farm families does not allow them to educate their children who will continue to depend on farming for their livelihood and consequently further reduce productivity and farm income due to the fragmentation of land, which will continue as a vicious cycle.

The importance of expanding agricultural output lies partly in the need to provide increased food supplies to growing urban areas. Nevertheless, the expansion rate of urban areas in Sri Lanka is one of the lowest in the world. Only about one quarter of the population lives in the cities of Sri Lanka, while it is the opposite in Rep. of Korea and Japan where more than three quarters of the population live in the cities. The industries set up in the cities thus face difficulties

⁵ According to the Dept. of Census and Statistics of Sri Lanka (source: http://www.statistics.gov.lk/abstract/labour/tab_0402.pdf), the percentage of labor force in agriculture in the year 2000 was only 36 percent. However, in order to maintain the consistency of the data and the source the authors relied on the World Bank data.

Table 1: Comparison of Socio-economic Structure of the Three Nations

<i>Socio-economic Structure</i>	Sri Lanka	Rep. of Korea	Japan
Size of Agricultural Sector			
- Labor force in agriculture (% of total) 2000	45.5	10.0	4.1
Extent of Urbanization			
- Urban population (% of total) 2001	23.1	82.4	78.9
- Annual growth rate of urban population 1995-2000	2.3	2.0	-
Extent of Dualism			
- Extent of sectoral and geographic cleavage between traditional/subsistence and modern/commercial sectors ¹	2.5	3.5	4.0
- Extent of utilization of modern technology between traditional and modern sectors ²	2.5	3.5	4.0
Poverty and Income Disparity			
- Population below US\$ 2 a day (%) 1990-2001	45.4	<2.0	..
- Gini index	34.4 (1995)	31.6 (1993)	24.9 (1993)
- Distribution of income or consumption (% share)			
Lowest 20%	8.0	7.5	10.6
Highest 20%	42.8	39.3	35.7

Note:

¹ 1. No cleavage (limited development of modern sector) 2. A sharp and pervasive cleavage (overwhelming predominance of traditional sector) 3. A moderately definite cleavage (an important modern sector) 4. No clear-cut cleavage (high level of interaction between traditional and modern sectors)

² 1. No modern technology 2. Moderate technology in commercial sector 3. Moderate to advanced technology in commercial sector with a predominant traditional sector with moderate technology 4. Advanced technology in both sectors

Source: The World Bank, UNDP, FAO, ADB, country studies, and interviews.

in finding both skilled and unskilled labor. Having identified this limitation, a major move of industries to rural areas was observed in the late 1980s and the early 1990s. Nevertheless, some of those industries have already failed and others face immense problems due to poor infrastructure facilities in the rural areas. Not only labor, but urbanization also promotes values favorable to entrepreneurship and industrial growth. Daniel Lerner (1958) emphasized that some degree of urbanization is necessary for economic and political modernization, substantial extension of education, mass communication, etc., that determine industrialization.

Another striking characteristic of the socio-economic structure of Sri Lanka is the existence of a modern commercial sector and a traditional subsistence sector side by side without interaction. The extent of dualism or the sectoral, geographic, and technological cleavage and associated socio-cultural differences between these two sectors is very wide in Sri Lanka compared to the other two countries. Technology in the commercial sector tends to be modern and sophisticated where the limited expansion has been largely the result of foreign direct investment. In the subsistence sector, it tends to be traditional where expansion has taken place through increased population of the indigenous producers and has shifted into small-scale operations. Dualism is an essential stage of development as countries proceed from stagnant agrarian economies toward economic maturity (Lewis, 1954; Fei and Ranis, 1964). Nevertheless, the importance arises when the two sectors interact with each other and the benefits of a rapidly growing commercial sector are trickled down to the traditional subsistence sector. Unfortunately, this relationship has seldom

been seen in Sri Lanka, thus the development of domestic small scale industries has shown poor growth.

This side-by-side existence of the dominant subsistence sector with an insignificant but rapidly growing commercial sector has caused a great disparity in income distribution and consequently forced the majority of the population into extreme poverty. In Sri Lanka, nearly half of the population receives less than two dollars per day. Further, the highest 20 percent of population earns and/or consumes about 43 percent of the national income. The mass industrialization of a nation, which involves a considerable growth of small domestic industries, will never occur in such conditions of extreme poverty and income disparity.

ii) Social Organization:

The dominant Sri Lankan family structure is an extended system, which is organized in a hierarchical order. This forms a residential aggregate of a three-generation kin group of both sexes. These extended families form into a larger kin group known as '*pavula*', an endogamous and corporate bilateral kin group that represents a union of several families. On closer inspection, one may find various connections between extended family and industries. Although the business is supposedly organized on the rationale of profit maximization, various family ties could possibly lead industries into other objectives. Its employees are often drawn from a kinship circle, which is restricted to either one family or a kinship group. Ownership and management are transferred directly to family members, especially to sons, without any industrial training. Its capital is usually raised from family sources. Its purchases of inputs and sales of produce are apt to be dictated by the effort to give preference to family claims. Therefore, the formal rules and objectives of the industries are largely a facade; the actual operations are based on a blueprint of kinship ties. Thus, these kinship relationships have seriously affected the development of industries in Sri Lanka.

Another major feature of Sri Lankan society is the discrimination against women. This is apparent in the Gender-related Development Index (GDI), where Sri Lanka ranks 80 out of 144 countries (World Bank, 2002). Traditionally women are not permitted to engage in economic roles in Sri Lanka. Only a tiny minority receives an advanced education thus proceeding into higher occupations. This means Sri Lanka still has not received the full contribution of its women. Female subordination has been a nearly universal phenomenon in most Asian countries. Although Japan and Rep. of Korea now rank 13 and 30 respectively in the GDI ranking, they were essentially male dominant societies in the past. However, they have used this cultural factor to uplift the productivity of the industries. For example, an average Japanese or a Korean male employee would have a stronger bond to his workplace rather than to his family. There is a saying in East Asian cultures such as Japan, China, and S. Korea that 'people get married to their organization'. The husbands have been released from most of the family duties such as childcare and household work, and social obligations, thus they have more time to spend at their workplace. This is an example where a negative cultural factor has been effectively utilized to develop the industrial sector in these nations. Unfortunately, this pattern does not exist in Sri Lanka, thus gender discrimination has seriously affected its industrialization process.

From the feudal system (until 1505) and until the latter part of the British colonial period (1796 to 1948) Sri Lanka was (and occasionally the rural areas still are) characterized by a two-

Table 2: Comparison of Social Organization in the Three Nations

<i>Social Organization</i>	Sri Lanka	Rep. of Korea	Japan
Kinship Relationships ⁱ	2.5	3.0	4.0
Gender Inequality			
- Gender related development index ⁱⁱ [Rank] 2001	0.726 [80]	0.873 [30]	0.926 [13]
- Gender empowerment measure [Rank]2001	0.272 [67]	0.363 [63]	0.515 [44]
- Female legislators, senior officials, and managers (% of total)	4	5	9
- Female professional and technical workers (% of total)	49	34	45
- Female education			
*Adult female literacy rate (as % of male rate) 2001	94	97	..
*Average years of schooling - Female / Male	6.6/7.2	10.0/11.7	9.1/9.9
- Female in economic activity			
*Female economic activity rate - age 15 & above 2001	43.1	53.6	50.9
*Estimated earned income (US\$) 2001 Female / Male	2,095/ 4,189	9,529/ 20,578	15,617/ 35,061
*Female in labor force (%) 2000	36.6	41.4	41.4
*Female unemployment (% in female labor force) 1998-2000	11.0	5.1	4.5
Indigenous Middle Class			
- Presence of indigenous middle class ⁱⁱⁱ	3.0	3.5	4.0
- labor force engage in middle class occupations (%) ^{iv}	3.0	4.0	4.0
Extent of Social Mobility			
- Extent of opportunities to advance into middle class occupations ^v	3.0	4.0	4.0
- Presence of prohibitive cultural barriers to upward social mobility ^{vi}	2.0	4.0	4.0

Note:

ⁱ 1. Predominantly tribal groups 2. Predominantly extended families with important tribal groups 3. Predominantly nuclear families with important extended families 4. Predominantly nuclear families

ⁱⁱ Gender-related Development Index: A composite index measuring three basic dimensions - life expectancy, education, and income - adjusted to account for inequalities between men and women

ⁱⁱⁱ 1. Indigenous middle class is extremely small or negligible and there is no important expatriate middle class 2. Middle class is dominated by expatriate elements with small indigenous middle class 3. An important indigenous middle class 4. A predominant indigenous middle class

^{iv} Middle class occupations - All employment in commerce, banking, insurance, or in technical, professional, managerial, administrative, or clerical sectors. 1. <10% 2. 10-19% 3. 20-39% 4. >39%

^v 1. Very limited access 2. Limited opportunities 3. Fairly good opportunities 4. Good opportunities

^{vi} 1. Prohibitive cultural barriers affects majority of the population 2. Prohibitive cultural barriers affect significant segments of the population 3. Prohibitive cultural barriers affect small segments of the population 4. Absence of prohibitive cultural barriers

Source: The World Bank, UNDP, ADB, country studies, and interviews.

class structure of landlords and peasants. This structure transformed into a new form having a three-class structure comprising upper, middle, and lower classes. Unlike the other two countries with a prominent middle class, the majority of the population in Sri Lanka belongs to lower or poor class, the underprivileged society that has formed by the urban workers, the estate workers, and the peasants with more or less similar status. Upper class people, who are few in numbers, achieved their elite status through their involvement in economic activities and educational

achievements in the English language during British rule. Then the middle class was formed when the natives could earn wealth through trade and commerce activities during the later part of the colonial period, but they are still not prominent in number. Further, this middle class group, in most cases, have received their education abroad. It is assumed that these specialists who have studied abroad furnish corps of middlemen trained in both cultures who can act as a link between their countries and the industrialized nations. However, often such specialists are unable to make this type of adjustment and become museum like custodians of an exotic foreign culture rather than active catalysts in a developing society. In other cases, they feel completely unable to return to their homeland, and so become a part of the "brain drain" which siphons off the world's best-prepared talent to the countries where such talent is already in greatest supply. Their educational experience abroad has been a process of cultural change, which has destroyed their roots in their native country and made it difficult, if not impossible, for them to return to a constructive career. Therefore, in Sri Lanka the middle class has not been an effective force driving the country towards industrialization.

Another distinguishable variation in the three nations is the extent of social mobility. In contrast to other two countries, there are many prohibitive cultural barriers to upward social mobility in Sri Lanka including the values and norms attached to class, gender, caste, and religion (This will be analyzed in detail under cultural homogeneity and social tension). This is also affected by lack of opportunity to obtain advance skills and education. As in Table 3, in Sri Lanka, in contrast to the other two nations only 71 percent have enrolled in secondary education (This will be further discussed under education in the next section). Thus, this narrow educational base has also barricaded the individual scope of improvements in status.

iii) Education:

Sri Lanka is an exceptional country in the world, in that it provides free education until university graduation. Sri Lanka's primary enrollment rate and adult literacy rate is 100 percent and 92 percent respectively, comparing favorably with most Asian countries. Nevertheless, the expected relationship between education and industrialization has not been observed. Hilda Golden's (1955: 14) analysis reveals that the degree of literacy can be associated with retarded industrialization in some countries. Golden explained it as perhaps being a discrepancy between the census definition of literacy and the real meaning of literacy. In the formal definition, it is the mere ability to write one's name and read a simple article, but whether the peasant is really able to participate in a modern communication system is questionable.

Sri Lanka is desperately short of most of specialists, which require advanced educational preparation. Looking further, one finds even greater shortage of technicians or technically literate people who have received the type of training that can be given in vocational training centers. Without a sound educational system, which provides the essentials of scientific knowledge, skills, and attitudes, Sri Lanka is hopelessly handicapped in the assimilation of new technologies. One obvious reason for the limited supply of trained specialists is a shortage of secondary schools⁶, vocational training institutes, and universities with adequate facilities. A significant number of

⁶ In 2000, only 575 government schools out of total 9,976 schools (5.8 percent) had Advanced Level (High School) science classes (<http://www.statistics.gov.lk/abstract/education/tab 2108.pdf>)

Table 3: Comparison of Educational System in the Three Nations

<i>Educational System</i>	Sri Lanka	Rep. of Korea	Japan
Primary Education			
- Net primary enrollment ratio (%) 1998	100.0	..	100.0
- Proportion complete primary school (%) 1992-2000	100.0	96.0	..
Adult Literacy Rate (% age 15 and above) 2001	91.9	97.9	≈99.0
- Male / Female illiteracy rate 2000	6.0/11.0	1.0/4.0	.. /..
- Gross secondary enrollment ratio (% of relevant age group) 1998/1980	71.0/55.0	.. /78.0	102.0/93.0
- Gross tertiary enrollment ratio (% of relevant age group) 1980	3.0	15.0	44 (1998)
Science and Technology Education			
- Scientists and engineers in R&D (per million people) 1996-2000	191	2,319	5095
- Technician in R&D (per million people) 1990-2000	45.0	574.0	663.0
- Science, mathematics and engineering students (as % of all tertiary students) 1994-1997	29	34	23
- Science and technical journal articles (No.) 1997	61	4,619	43,891
Graduate Employment			
- Unemployment with tertiary education (% of total unemployment) 1997-1999	50.2	20.0	25.6

Source: The World Bank, UNDP, and ADB.

people discontinue their education at secondary school level or before (*i.e.* at the age of 10 years). The competition at secondary education is so vast that only 2 to 3 percent get a chance to enter the only 13 universities, that are all under government control. The technical colleges are also few in number (only 36 colleges in 2000) and training in these institutes is sometimes stigmatized by cultural ideologies (e.g. caste system, class and status, etc.). In the British period, the school curriculum was aimed at imparting a sound classical and liberal arts education. Since scientific and technical manpower is in short supply, one might expect that the major focus of higher education have been in this direction after independence. The tendency however, is to maintain a liberal arts curriculum, even though there is hardly any demand for such personnel.

The schools have failed to produce a 'functionally' educated population, a fairly adequate supply of technicians, and a considerable number of highly trained men who are active in research activities, prepared to take initiatives and risks that lead to industrialization. This has led Sri Lanka to be paradoxically characterized by a considerable number of unemployed university graduates coupled with a shortage of various types of skilled manpower. Graduates, instead of becoming a dynamic element in the country's progress, simply develop into "intellectual puppets" and complain that the society is unable to provide a function that grant them status and privilege. On the other hand industrialists claim that the 'educated people', especially university graduates, are incapable of doing any innovative work, and become nuisances in their organizations.

iv) Mass Communication:

As already discussed, mass media helps to educate and to modernize the thought patterns of

a society. In turn, it helps to increase the demand for commodities produced by industries, a necessary factor for industrial development. By eliminating traditional and often antagonistic ideologies, mass media can also help creating a modern society with better social and political integration. However, it has been observed that both the number and quality of mass media in Sri Lanka is very low compared to the other two countries. The country comparison in Table 4 shows a great variation in the use of all mass media techniques including newspapers, radio, and television.

Table 4: Comparison of Mass Communication in the Three Nations

<i>Mass Communication</i>	Sri Lanka	Rep. of Korea	Japan
- Daily Newspapers (per 1000 people) 1998	29	393	578
- Radio (per 1000 people) 2000	208	1,033	956
- Television sets (per 1000 people) 2000	111	364	725
- Television cable subscribers (per 1000 people) 2000	0.3	177.4	147.4

Source: The World Bank

One can argue that the use of mass media increases with the economic development of a nation. However, it is only one factor. There are other socio-cultural factors attached to the development of mass communication of a nation. On the first hand mass media should have a demand, which will be determined by, for instance, the newspapers, the reading behavior of the society from the demand side and the quality of information published in the newspapers from the supply side. With respect to the quality of information, some have noted that in Sri Lanka, especially government owned and controlled radio, television, and print media that have the broadest outreach in terms of distribution networks, are presenting bogus information that cannot be trusted⁷. For instance, as Deshapriya (2002) pointed out, since independence, successive governments in Sri Lanka have put into place a number of laws and regulations that empower state authorities to impose constraints on the freedom of expression and information. The government on the other hand blames the private media for presenting misleading information. This has led to social and political instability in Sri Lanka, which has negatively affected industrialization. Disanayaka (2002) pointed out that the Sri Lankan media at times has contributed to the escalation of ethnic tensions and political instability in the island.

v) *Fertility Rate:*

The importance of a low rate of fertility was already discussed in the foregoing analysis. Since independence, Sri Lanka has experienced significant changes in the level of fertility. The total fertility rate has declined from about five children per woman in the early 1960s to near the replacement level of 2.1 by the year 2000, in spite of the fact that the number of women in the reproductive age group has more than doubled during the same period (Dept. of Census and Statistics). Although Sri Lanka's fertility rate does not match Rep. of Korea and Japan, it is one of the best among other developing nations. The establishment of the Family Health Bureau in 1965 to implement a national family planning program, a network of family planning clinics through out

⁷ There are only seven large private establishments publishing daily newspapers, and few other private establishments publishing weekend newspapers. The number of privately owned establishments broadcasting on radio and television is only three.

the country, and a contraceptive service have been the major programmed factors behind this fertility decline. Among the non-programmed factors, the initial impetus for fertility decline has come about through socio-cultural factors. Although Sri Lankan standards, as discussed under 'social organization', are far below that of industrialized countries, they have shown some improvement in expansion of educational and occupational opportunities hence upward social mobility for women in the recent couple of decades. This has lifted the age at marriage of females and consequently reduced the rate of fertility in Sri Lanka.

Table 5: Comparison of Fertility Rate of the Three Nations

<i>Fertility Rate</i>	Sri Lanka	Rep. of Korea	Japan
- Total Fertility Rate (births per woman) 2000	2.1	1.4	1.4

Source: The World Bank

vi) Cultural Homogeneity and Social Tension:

Sri Lanka is characterized by many culturally diverse communities influenced by both eastern and western cultures. Even today, these different communities maintain a strong bond to their original cultures with traditional beliefs and customs. These traditional values, norms, and customs, which are antagonistic in nature, have resulted in prolonged conflicts among those communities. The ensuing socio-cultural aspects have inevitably contributed to Sri Lanka meeting with little success in its various attempts to develop the industrial sector.

Among the socio-cultural endowments, it may not be incorrect to state that the factor, which has most seriously affected Sri Lanka's industrialization is cultural heterogeneity and related violence. In Sri Lanka there are three main ethnic communities, namely Sinhala (74 percent), Tamil (18 percent), and Muslim (6.5 percent). The primordial attachments to their original ethnic beliefs and customs tend to be very strong among the three communities. Consequently, there are distinct cultural, religious, linguistic, and regional differences among them. The antagonistic perceptions created by these differences have resulted in racial conflicts in areas such as the relative socio-economic position in society, religious, language, and education rights, employment opportunities and the ownership of wealth interrupting the mutual harmony and complementary relationship among them (Nanayakkara, 1999). The marked ethnic violence and resultant risk has adversely affected investment activities of both local and international communities. In contrast, Korean and Japanese societies are relatively homogeneous. Although there are minority communities, namely ethnic Chinese in South Korea, and Ainu (<20,000 people) and *Okinawian (Ryukyuan)* in Japan, they are small in numbers and their cultural ideologies are not so different, preventing ethnicity related violence in those two countries.

Another area where conflicts have occurred is through religious differences. Religious division in Sri Lanka is linked to ethnic affiliation, thus making a double barrier, which is far from easy to bridge. In Sri Lanka there are four main religious groups, namely Buddhists (69.3 percent), Hindu (15.5 percent), Christians (7.6 percent), and Muslims (7.5 percent). Under colonialism, all indigenous religions (*i.e.* Buddhism, Hinduism, and Islam) found themselves placed in the classification of somewhat dubious religious institutions. On the contrary, varying degrees of preference were granted to Christianity as the religion embodying the value system of the con-

queror. The British also supported religious competition in Sri Lanka so long as it was not seen to result in an encouragement of nationalistic activities. Consequently, various religious disputes occurred in the island, for instance the late-nineteenth-century riot between Buddhists and Christians, and the clashes pitted between Sinhalese against Muslims in 1915 (Pfaffenberger, 1992). These religious conflicts continued and even today, Sri Lanka is characterized by religious violence that has adversely affected the industrialization process. Although Japan and Korea are also characterized with multi-religious communities⁸, the primordial attachments to different religious beliefs and customs are relatively less, thus the chances for violence are also less. Although individuals in these societies are attached to different religions by birth, in reality often they hold and practice rather a mixed version of different religions⁹.

Sri Lanka is also characterized by a three-class structure comprising upper, middle, and lower classes. The formation and other details of the class structure were already discussed under 'social organization'. Their income, property, type of clothing, level and kind of education, language of communication and patterns of social etiquette observed are markedly different from each other. Since classes represent conflicting interests, the relationships between them are fundamentally antagonistic in nature. The preconditions of industrialization such as challenging the status quo, seeking new routes for social mobility, taking risks, etc., occur in situations with such antagonistic perceptions. However, in Sri Lanka formulation of a new idea from a member belonging to lower and middle classes has been considered as a threat to society. Often such initiatives have resulted in severe corporal punishment¹⁰. Thus, the common practice of the lower classes is principally accepting the system of inequality, believing that they are not perpetual losers or that their position is improving. Members of the upper class are equally held back because their prerogatives are based upon the traditional prestige system and a challenge to any aspect of that system may call into question their very status, which gives them importance. Although, the presence of rich and poor is a universal phenomenon, in Korea and Japan the societies are not stratified into upper, middle, and lower classes and even within the rich and poor the economic, political, and social disparity is not so different.

Language differences have also caused another area of dispute among the Sri Lankan society. During the colonial era, both Sinhala and Tamil languages were spoken, but the main medium of education and government and therefore, the path to social mobility was English, the language of the European power. Recently all three languages were made official. However, Sri Lanka has found it difficult to displace English as the language of the universities and commerce. The language disparity has bottlenecked the communication processes. In a situation where Sinhalese speak Sinhala, the rest speak Tamil, while only a few can communicate in English¹¹, an effective

⁸ In Japan there are five religions namely Shinto (nearly 95 million -76%); Buddhism (24 million in Nichiren sect) (Out of the total population, 84% believe both Shinto and Buddhism); Confucianism; Daoism; Christianity (1 million people -0.7%). In Korea there are three religions namely Buddhism, Confucianism; and Christianity nearly one third of population attached to each of the religion.

⁹ For instance, an average Japanese will go to Shinto shrine for their day to day prayers, Church for his/her wedding ceremony, and Buddhist temple if someone passed away.

¹⁰ For example, the initiatives of the JVP - Janatha Vimukthi Peramuna - members were ruthlessly crushed taking thousands of lives, mostly belong to underprivileged middle and lower class society in Sri Lanka

¹¹ According to Halpe, a professor in English, in Sri Lanka only about three percent of the population is fluent in English language.

Table 6: Cultural Homogeneity and Social Tension^a in the Three Nations

<i>Cultural Homogeneity and Social Tension</i>	Sri Lanka	Rep. of Korea	Japan
Ethnic/Racial Relationship			
- Number of ethnic groups	3+1	1+1	1+2
- Population in the dominant ethnic group (%)	74	≈ 100	≈ 100
- Social instability arose from ethnic tension ⁱ	4.0	1.0	1.0
- Marketed ethnic violence ⁱ	4.0	1.0	1.0
Religious Relationship			
- Number of religious groups	4	3	4+1
- Population in the dominant religious group (%)	69.3	≈ 35.0	≈ 84.0
- Social instability arose from religious tension ⁱ	4.0	1.0	1.0
- Marketed religious violence ⁱ	3.0	1.0	1.0
Class and Status Relationship			
- Number of class and status groups	3	1	1
- Population in the dominant class (%)
- Social instability arose from class related tension ⁱ	4.0
- Marketed class related violence ⁱ	3.0
Language Relationship			
- Number of official languages in use	3	1	1
- Population speaking the dominant language (%)	≈ 80	100	100
- Social instability arose from language related tension ⁱ	4.0	2.0	2.0
- Marketed language related violence ⁱ	2.0	1.0	1.0
Caste Relationship			
- Number of castes	12+6	0	1+1
- Population in the dominant caste (%)	≈ 50	0	≈ 98
- Social instability arose from caste related tension ⁱ	3.0	1.0	1.0
- Marketed caste related violence ⁱ	1.0	1.0	1.0

Note:

^a - In the past 50 years

ⁱ 1. Never occurred (0) 2. Rarely occurred (1-3) 3. Somewhat occurred (4-10) 4. Frequently occurred (>10)

Source: Country studies and interviews

communication process cannot be expected. The language differences have also adversely contributed to worsening the conflict between Sinhala and Tamil communities. Sri Lanka was granted independence in 1948 and since then the country was governed for eight years by an ostensibly panethnic national party of unity, but in 1956 a Sinhalese populist politician won a landslide victory on a platform to make Sinhala the sole official language of government affairs. Tensions rose as Tamils resisted this move, and the first communal riots in the 20th century occurred in 1958 (Pfaffenberger, 1992).

In Sri Lanka, the Sinhala and Tamil communities are also stratified according to castes, which remains hereditary from generation to generation. They are associated with issues of social hierarchy and institutionalized inequality. A caste can be defined as "... a birth ascribed endogamous subdivision of an ethnic unit occupying a position of superior or inferior rank" (Nanayakkara, 1999). Membership of a particular caste is associated with a distinct cultural heritage, ideology, and set of ritual practices, which determine many behaviors, expectations, and ob-

ligations for individuals. According to Ryan (1993: 93), there are 25 castes with distinct occupations and 12 sub-castes within the Sinhala community. These castes and sub-castes are hierarchically arranged, *Goyigama* (farmers) at the top and *Rodi* (beggars) at the bottom¹². The restrictions on interaction among the members of different castes adversely affect the processes of effective communication, and complementary relationships among the members of society. In addition the skill based hierarchical stratification of the Sri Lankan caste system, has led to the stigmatizing of most industries and the individuals associated with them. Japan was also characterized with a four-caste structure¹³ in the Edo period (from 1603 to 1867), when there were about 2 to 3 percent of *hisabetsu buraku* people (discriminated communities - butchers, leatherworkers, and certain entertainers). With the Meiji restoration (from 1868-1912), steps were taken to discontinue this caste system and as a result, today this institution is an abandoned social phenomenon.

The Impact of Socio-culture Factors on Industrialization, Agricultural Development and Economic Growth

The inter-country comparison showed a significant variation in the socio-cultural endowments of the three nations. The impact of these socio-cultural variations is straightforward. There were marked differences in industrial and agricultural development, and consequently on the overall economic progress of the respective nations (Table 7). In the industrial and agricultural sectors, among other indicators, the most significant variation is seen in the level of productivity of the three nations (Figure 1). The level of industrial productivity in Rep. of Korea and Japan is respectively 12 times and 27 times higher compared to that of Sri Lanka. Similarly, level of agricultural productivity in Rep. of Korea and Japan is respectively 16 times and 40 times higher compared to that of Sri Lanka.

Consequently, there is a great variation in overall economic development of the three nations. At the time of independence in 1948, Sri Lanka enjoyed the third highest per capita income in Asia after Japan and Malaysia (Rajapatirana, 2000: 245). Even in 1960, Sri Lanka was a relatively rich Asian country with a per capita income of US\$ 152, twice that of India (US\$ 68), higher than Thailand (US\$ 97), and about equal to South Korea (US\$ 154) (Rajapatirana, 2002: 247). Nevertheless, at present the per capita income in South Korea and Japan is respectively 10 times and 42 times higher than that of Sri Lanka, indicating its mediocre development in recent years. Therefore, the socio-cultural factors, especially after independence, have created serious damage that has slowed down the industrialization, agricultural development and therefore the economic progress of Sri Lanka.

¹² According to Ryan (1993) the approximate order of major castes is Farmers; Fishermen; Cinnamon peelers; Toddy tappers; Artisans, including smiths of all types; Tailors; Lime burners; Washers; Jaggory makers; Pot-ter; Barbers; Tom-tom beaters; Dancers; Mat weavers; "Outcastes" - beggars

¹³ In the Edo period, the society was classified into worriers (Samurai), farmers, industrial craftsman, and merchant in a hierarchical order below, which the outcaste community (*hisabetsu buraku* people) ranked.

Table 7: Some Selected Indicators of Industrial, Agricultural and Economic Development

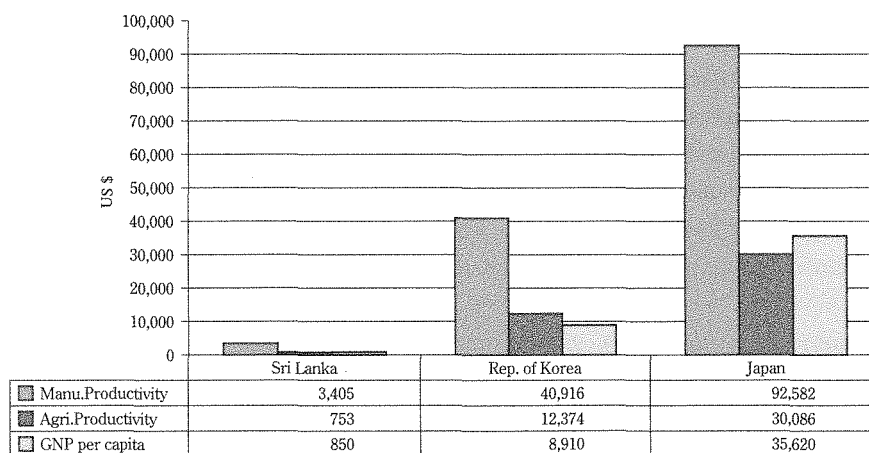
<i>Indicator</i>	Sri Lanka	Rep. of Korea	Japan
Manufacturing Industry			
Sectoral Share of GDP (%) 2000	16.8	43.0	22.0
Growth in Manufacturing Sector 1990-2000	8.1	7.5	0.5
Level of Modernization of Industry			
- The state of domestic manufacturing systems ¹	3.0	3.5	4.0
- Diversity and range of goods produced in modern industrial sector ²	2.5	4.0	4.0
Agriculture			
Sectoral Share of GDP (%) 2000	19.4	5.0	1.0
Growth in Agricultural Sector 1990-2000	1.9	2	-3.2
Crop productivity - Paddy (kg/ha) 2000	3,437	6,644	6,702
- Maize (kg/ha) 2000	1,084	4,062	2,466
Use of Agricultural Machinery			
- Tractors (per 1,000 agricultural workers) 1997-1999	2	60	690
- Tractors (per 100 sq.km. of arable land) 1997-1999	84	908	4,675
Use of Chemical Fertilizer (kg/ha of agric. land) 2000	105.1	397.0	277.4
Economic growth: GNP per capita (US\$) -1953			
	119	10	218
	-1970	172	261

Note:

¹ 1. Handicraft industry/Traditional production systems 2. Domestic small-scale power driven factory systems and a few modern factories, which are foreign financed and managed 3. Some large-scale domestic power-driven factory systems, but small-scale/traditional industry is more prominent 4. Several domestic factories in most industries in which most modern production methods are applied

² 1. Domestic consumer goods and a limited number of export goods 2. A fair variety of consumer and export goods and some intermediate goods 3. A variety of consumer, export and intermediate goods and some finished goods 4. A wide variety of consumer, export, intermediate and finished goods

Source: The World Bank, ADB, FAO, country studies, and expert interviews

Figure 1: Industrial, Agricultural, and Economic Development of the Three Nations (2000)

Note: Productivity in value added (US\$) per worker per year; Industry (1995-1999); Agriculture (1998-2000)

Source: The World Bank

Conclusion

The inter-country comparison showed a significant variation in the socio-cultural endowments of the nations. Among others, the size of the agricultural sector, extent of urbanization, gender inequality, educational orientation towards science and technology, mass communication, and on top of all, the cultural heterogeneity and related violence, which have both direct and indirect influences on the industrialization process, were significantly different among the three nations. The impact of these socio-cultural variations was also straightforward. There were marked differences in the industrial and agricultural productivity and development, consequently in the economic development of the respective nations. This explains why Sri Lanka lagged behind in the industrialization process compared to NIEs like Singapore, South Korea, and Taiwan that had less per capita income in the 1950s.

Therefore, there is an urgent need to re-construct the socio-cultural endowments of Sri Lanka, if it wishes to realize faster development of the industrial sector, and thereby the agricultural sector so that overall economic development could be achieved. Nevertheless, there are many, even among eminent scientists, who have difficulty in understanding the importance of socio-cultural endowments and their relationships with industrialization. One frequently asked question is; which comes first, the economic factors or the socio-cultural factors? Many believe it is economic progress that leads to change most of the socio-cultural variables of a nation. If that is so, how can one explain the economic development of most of the Asian NIEs today, which had worse economic standards than Sri Lanka until the 1960s.

With time, of course, some of these socio-cultural aspects will change naturally along with economic, political, and technological progress. Some of them are relatively stable and permanent in nature, thus they need years or generations to change. However, others can be changed favorably in a relatively shorter period of time with the proper guidance and socialization of the influential groups of society such as parents, religious groups, educationists, politicians, and managers. In order to become an industrial society and to foster industrialization, society itself should take the initiative and should change the attitudes and behavioral patterns of the people involved. They must adopt their practices to the changing expectations of society in which they operate. For instance, the four caste structure, which was there in Japan's Edo era had been discontinued during the Meiji restoration providing egalitarian treatment to all the individuals in the society. Using such experiences of the industrialized nations, Sri Lankan society has to adapt to the needs of the present world.

In sum, this study made it clear how socio-cultural variables act as dominant factors in development of domestic industries in Sri Lanka. This study also re-iterates the need for incorporating the non-economic aspects of a nation, which affect growth and development of industrial and agricultural sectors of the economy, rather than trying to use research paradigms from narrow academic discussion. The authors hope that this study provides useful references for interested parties and prompts further research in the understanding of domestic industries and agricultural development in less industrialized nations.

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スリランカにおける産業化と農業発展におよぼす社会文化的要因 ～アジア三国間の比較分析～

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摘 要

農業を基盤にした産業の発展は、一国の農業生産性の改善に緊急な課題である。しかしながら、農業を基盤にした産業の発展の場合、概して当該国の経済的、技術的、制度的および社会文化的な要因に依存していることが多い。産業化のための前三つの要因の重要性についてはこれまで広範囲にわたって調査されてきているが、最後のものについては実証研究は皆無に近い。

そこで本研究は、産業化が進んでいないスリランカ、近年の産業化が著しい韓国と、高度に産業化が進んだ日本を対象に三国間の産業化におよぼす要因について比較研究を試みたものである。産業発展におよぼす要因を明らかにするために、社会経済構造、社会組織、教育、マスコミュニケーション、出生率、文化的均一性、社会的緊張を含む六つの主要な要因を比較・分析した。研究は主にワールドバンク、UNDP、FAO、ADBが最近出版された二次的な資料に基づいている。必要に応じて、当該国の専門家とのインタビューによる資料も加えた。

三国間での比較分析の結果、各国の社会文化的な要因に有意な変異が見られた。産業化過程に直接、あるいは間接な影響を与える要因として農業セクターの規模、都市化の範囲、ジェンダーによる不平等性、科学と技術の指向性、マスコミコミュニケーション、とりわけ文化的な不均一性とそれに関わる暴力が三国間で有意に異なっていた。これらの社会文化的な変異の要因も簡潔明瞭である。産業と農業の発展と生産に、その結果として、三国間の経済発展に顕著な差があらわれた。従って、産業と農業のセクターのより早い発展を促進し、それ相応の経済発展を達成するためにはスリランカの社会文化的な要因を緊急に再構築する必要がある。

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