

## **SOCIAL AND CULTURAL DEVELOPMENT INDICATORS**

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### **Summary**

Economic development and social and cultural development are closely linked to each other. Whereas economic development is the means for societal change, social and cultural factors are prerequisite for successful and sustained growth. Some argue that

unless social and cultural conditions are ripe, people tend to lack a work ethic. Others contend that economic factors such as income and occupational profile exert a strong influence on the social and cultural spheres. This article first describes recent debates on the validity of indicators, and provides system-level comparison. In this discussion of social and cultural development indicators, we should keep in mind that the society we are trying to observe itself is undergoing a fundamental change. Therefore the indicators that have been widely accepted in the past may no longer be relevant. The indicators that are commonly used in a particular, well-defined discipline may have to be re-examined from emerging perspectives. With this caveat in mind, we discuss a variety of indicators and related issues, including the System of National Accounts, Basic Human Needs, the List of Social Indicators by the OECD, World Development Indicators, Agenda 21, Baseline Scenarios by the Intergovernmental Panel on Climate Change (IPCC), and others. Indicators on specific spheres such as demographic trends, urbanization, environmental indicators, services, unpaid work and time use are also described. This article also pays particular attention to the shift of social norms from industrialism to information orientation. Widening income gaps in the global community, financial mechanisms linking savings and investment worldwide, energy resource exhaustion, and the threat of global warming are also accompanied by local issues concerning quality-of-life orientation, mega-cities and urban congestion, environmental pollution and material flow, re-questioning of gender role, aging population, migration, and ethnic conflicts. Many societies encounter difficulty in handling global–local connections effectively with the existing decision-making mechanisms (market mechanism in economic spheres and democracy in political spheres) and policy instruments (in the hands of national government). Therefore, setting the issue in a proper context is an essential part of the social process.

		Sub-Saharan Africa		Asia		Europe & Central Asia		Middle East & North Africa		Americas
Income Group	Subgroup	East and Southern Africa	West Africa	East Asia and Pacific	South Asia	Eastern Europe and Central Asia	Rest of Europe	Middle East	North Africa	
Low-Income										
		Angola	Benin	Cambodia	Afghanistan	Albania		Yemen, Rep.		Haiti
		Burundi	Burkina Faso	Laos	Bangladesh	Armenia				Honduras
		Congo, Dem. Rep.	Cameroon	Mongolia	Bhutan	Azerbaijan				Nicaragua
		Ethiopia	Central African Republic	Myanmar	India	Kyrgyz Rep.				
		Kenya		Vietnam	Nepal	Moldova				
		Lesotho	Chad		Pakistan	Tajikistan				
		Madagascar	Congo, Rep.			Turkmenistan				
		Malawi	Cote d'Ivoire							
		Mozambique	Ghana							
		Rwanda	Guinea							
		Somalia	Guinea-Bissau							
		Sudan	Bissau							
		Tanzania	Mali							
		Uganda	Mauritania							
		Zambia	Niger							
		Zimbabwe	Nigeria							
			Senegal							
		Sierra Leone								
		Togo								
Middle	Lower	Namibia		China	Sri Lanka	Belarus		Iran	Algeria	Bolivia

Income				Indonesia		Bulgaria		Iraq	Egypt	Colombia	
				Korea, Dem. Rep.		Georgia		Jordan	Morocco	Costa Rica	
				Papua New Guinea		Kazakhstan		Syria	Tunisia	Cuba	
				Philippines		Latvia		West Bank and Gaza		Dominican Republic	
				Thailand		Lithuania				Ecuador	
						Macedonia				El Salvador	
						Romania				Guatemala	
						Russian Federation				Jamaica	
						Ukraine				Panama	
						Uzbekistan				Paraguay	
						Yugoslavia, Fed. Rep				Peru	
		Upper	Mauritius	Gabon	Malaysia		Croatia	Turkey	Lebanon	Libya	Argentina
			South Africa				Czech Rep.		Oman		Brazil
						Estonia		Saudi Arabia		Chile	
						Hungary				Mexico	
						Poland				Uruguay	
						Slovak Rep.				Venezuela	
	High-income	OECD countries			Australia			Austria		Canada	
					Japan			Belgium		USA	
				Korean Rep.			Denmark				
				New Zealand			Finland				
							France				
							Germany				
							Greece				

							Ireland			
							Italy			
							Netherlands			
							Norway			
							Portugal			
							Spain			
							Sweden			
							Switzerland			
							UK			
	Non-OECD countries			Brunei		Slovenia		Israel		
				Singapore				Kuwait		
				Taiwan				UAE		

Source: World Bank, World Development Report 1998/1999.

Table 1. Selected economies of the world by income group, 1998.

UNESCO EOLSS  
SAMPLE CHAPTER

## **1. Economic versus Social–Cultural Dimensions**

### **1.1. Global Community, or Is It?**

Most of us will agree that social and cultural development is closely related to economic development. However, if one looks at the causal relationship between the economy and the society, opinions may diverge. Some will argue that economic factors such as income and occupational profile exert a strong influence on the social and cultural spheres. Others will stress that unless social and cultural conditions are ripe, people tend to lack a working ethic and incentive for higher levels of living. Throughout most of human history, however, what was lacking was not human aspiration but productive capacity and job opportunities; hence successful economic performance was the prerequisite for social and cultural achievements. The United States, Canada, and Australia are probably the lucky exceptions because financial capital as well as human capital was channeled by the mother country, alleviating them of the need to come up with investment funds to start with.

Table 1 provides an overview of the world community by income class and region. In the Table, economies are categorized according to 1997 per capita gross national product (GNP) levels. Low-income refers to US\$785 or less; lower middle-income, US\$785 to US\$3125, upper middle-income, US\$3126 to US\$9655, and high-income, US\$9655 or more (World Bank, 1999). In 1997, the highest income country was Switzerland with per capita GNP of US\$44 320, followed by Japan with US\$37 850 and Norway with US\$36 090, according to the same source. In contrast, comparable figures stood at US\$119 in Ethiopia, US\$270 in Nepal, US\$260 in Nigeria, US\$270 in Bangladesh, and US\$390 in India.

Adjustment by the purchasing power parity (PPP) considerably narrows the gap by correcting undervaluation in developing economies and strong exchange rates in industrialized economies, but the general picture remains. Although most of us agree that economic factors are not the final end in themselves but only instrumental to human and social satisfaction, such sharp differentials in per capita income reveal a fundamental discrepancy in economic means. The purpose of this Topic is to examine such diverse subjects as education, equity, health, population, social cohesion, and poverty. The possibility of human and social development indicators will also be sought.

### **1.2. Two Hundred Years of Development**

Industrialization is what characterizes the last 200 years of human and social development. It is an exaggeration to say that development started with the Industrial Revolution, because even in the age of the machinery the world had seen considerable development of handicraft. What changed the world was the pace of development largely facilitated by the use of steam engines and, later, electric motors. The invention of steam engines by James Watt occurred in 1765, leading to the Industrial Revolution in the 1770s. Politically, the French Revolution occurred in 1789, while the first president of the United States, George Washington, took office in the same year. Nation-states as we know them today started to take the shape of the present day only

after that time. Even Europe looked very different then. China and Japan were being exposed to contacts from the West, but were undecided about their fate until they were forced open in the 1860s.

It is not an easy task to present the development of the world community over the past 200 years. According to Angus Maddison who, concentrating on the period 1820 to 1992, constructed statistical series on world population, per capita gross domestic product (GDP), and world GDP, world population increased fivefold, per capita GDP eightfold, world economic size fortyfold, and world trade 540-fold. His income series is adjusted by PPP (purchasing power parity), allowing for long-term as well as cross-section comparisons of the levels of output and income per capita without being distorted by the different price levels or exchange rate fluctuations. The prices of goods and particularly personal services vary radically between countries and between urban and rural areas. Over time, along with the economic development, wage rates tend to appreciate, and personal services, construction, and government services tend to be overstated compared to low-income societies. What used to be produced within a household starts to be traded in market, and this tends to exaggerate income levels. Exchange rates, which are often used for international comparisons of income and product, are mainly determined by tradable goods. In addition, they fluctuate widely, reflecting short-term capital flows. PPP converters are intended to overcome those shortcomings of straight comparisons, and have been developed in the International Comparisons Project (ICP) initiated by Kravis, Summers, and Heston (1982) and succeeded by the joint program by the UN, EUROSTAT, and the Organization for Economic Cooperation and Development (OECD) (UN, 1994).

Date	World population (millions)	World GDP (billion 1990 PPP US\$)	World per capita GDP (1990 PPP US\$)
1820	1068	695	651
1870	1260	1129	895
1900	1565	1977	1263
1913	1772	2726	1539
1929	2047	3696	1806
1950	2512	5372	2138
1960	3026	8449	2792
1970	3665	13811	3768
1980	4414	20006	4533
1990	5257	27359	5204
1992	5441	27995	5145

Source: Angus Maddison (1995), pp. 226–228.

Table 2. Indicators of world development.

The global picture hides regional differentials. Indeed, the gap seems to have widened during the 1820–1992 period, and also, in the latter half of the twentieth century starting in the year 1950. “Western offshoots” in Madison’s term refer to the US, Canada, Australia, and New Zealand.

Region	1820	1900	1950	1992
Western Europe	1292	3092	5126	17387
Western offshoots	1205	4022	9255	20850
Southern Europe	804	1572	2021	8287
Eastern Europe	772	1373	2631	4665
Latin America	679	1077	2487	4820
Asia and Oceania	550	681	765	3252
Africa	450	500	830	1284
Average	651	1263	2138	5145

Source: Angus Maddison (1995), p. 228.

Table 3. Differentials in per capita GDP.

Entering the new millennium, the world community is asking itself two fundamental questions. One is that of narrowing the gap in quality of life and the other is the sustainability question. The 200 years of industrialization in the advanced economies in Europe and North America, and also Japan, brought prosperity to these regions, but while some others are succeeding in catching up, some more are being left behind. And if the catching up actually happens, as it should from an egalitarian point of view, the global environment may not be able to support human aspirations at that level. This leads to further questions: are economic indicators such as GDP the most viable measure of human achievement? Is economic success only an instrument for attaining happiness? This section is aimed at providing a clue to this crucial agenda.

### 1.3. Development Scheme

Economic development and social and cultural development are closely linked to each other. Whereas economic development is the means for societal change, social and cultural factors are prerequisite for successful and sustained growth. Mainstream economics assumes economy-wide integration into a single competitive market, but the reality of developing economies often departs from this supposition. Fei and Ranis, theorizing on the dualistic development consisting of subsistent agriculture sector and emerging industrial sector, distinguished the following sectors and markets:

1. industrial production sector,
2. industrial household sector,
3. agricultural production sector,
4. agricultural household sector,
5. intersectoral commodity market,
6. intersectoral financial market, and
7. intersectoral labor market.

The agricultural sector is characterized by widespread disguised underemployment and high rates of population increase. The amount of land is the limiting factor for such an economy, where long years of population pressure have led to the cultivation of marginal land. Agricultural surplus emerges as a result of the relocation of the surplus labor force out of the agricultural sector. This surplus can be either consumed by its owner or delivered to the industrial sector through the intersectoral commodity market.

In the industrial production, factors of production are capital and labor. The agricultural sector is the main source of labor supply, and, while there is surplus labor in the agricultural sector, the wage level stays constant. In a subsistence economy, workers do not save, and industrial profits constitute the major source of investment funds originating in the industrial sector. Another important source of investment fund is the agricultural surplus discussed above. The intersectoral commodity market is expected to transform the subsistence consumption goods into a wages fund for the industrial workers. The intersectoral financial market establishes linkages between the owners of the agricultural savings and ownership of a portion of the industrial capital.

Fei and Ranis list the following as the roles of the government in the developing phase:

1. Breakdown of internal physical and legal barriers to trade.
2. Development of a transportation and communications network.
3. Establishment of unified national currency and postal systems.
4. Strengthening of the legal system and commercial codes to guarantee sanctity of contract.
5. Maintenance of a measure of political stability.
6. Provision of the rudiments of an educational system.

The economy will reach a turning point where surplus labor is absorbed in the industrial sector and labor becomes a scarce factor, and the economy is no longer dualistic. Competitive bidding for labor pushes real wages constantly upward. One consequence is a decline in fertility rate as a result of higher levels of income, education, and urbanization.

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Tinbergen J. (1964). *Central Planning*. New Haven and London: Yale University Press. [This book deals with the process and optimal extent of economic planning by governments.]

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United Nations (various years). *Statistical Yearbook*. New York. [An annual publication covering population, economic activities, international relations, energy, environment, and science and technology.]

United Nations (1975). *Towards a System of Social and Demographic Statistics. Studies in Methods*, Series F No. 18. New York: United Nations. [This publication provides a framework, commonly referred to as the SSDS, which is intended to systematically arrange statistical information in social and demographic spheres. Prepared by Richard Stone, the original author of the SNA and a proponent of the SAM.]

United Nations (1978). *Social Indicators: Preliminary Guidelines and Illustrative Series*. Statistical Papers Series M No. 63. New York: United Nations. [This publication contains examples of social indicators which can be derived from the SSDS. The work therefore can be viewed as a bridge between statistical accounts and indicators.]

United Nations (1979). *Studies in the Integration of Social Statistics: Technical Report*. Studies in Methods Series F No. 24. New York: United Nations. [This is a report containing four working papers aimed at conceptualization of a whole range of issues which fall within the purview of social statistics.]

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United Nations (1996). *World Population Prospects*. New York: United Nations. [This publication represent one of the most widely used population projections for the entire world. Updated periodically.]

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US Bureau of the Census (1996). *World Population Profile*. Washington, DC: US Government Printing Office. [One of the basic sources of global population projections.]

Van den Doel H. (1979). *Democracy and Welfare Economics*. Cambridge: Cambridge University Press. [This book discusses various modes of social decision-making and attempts to integrate economics and political science.]

World Bank (International Bank for Reconstruction and Development) (various issues). *World Development Report*. New York: Oxford University Press. [This series of annual publications analyzes current development issues. It also provides detailed indicators describing the economic, environmental, social, and cultural conditions in various parts of the world.]

World Bank (International Bank for Reconstruction and Development) (1998). *Global Development Finance 1998. Analysis and Summary Tables*. Washington, DC. [Together with Country Tables under the same title, this publication provides detailed analysis of financial flows to developing countries, for the whole world and for individual countries, in the form of official development finance and private flows. ]

World Resources Institute, United Nations Environment Program, United Nations Development Program, and World Bank (various years). *World Resources*. New York and Oxford: Oxford University Press. [The publication is aimed at providing accurate information on the environment and development. Includes both analysis and data tables.]

### **Biographical Sketch**

**Kimio Uno** is professor of Policy Management and Dean of the Faculty of Policy Management at Keio University, Shonan Fujisawa Campus, Japan. He is the co-editor (with Peter Bartelmus) of *Environmental Accounting in Theory and Practice* (Kluwer Academic Publishers 1998,) **which was** from a conference organized by the United Nations University Institute of Advanced Studies in 1995. Prof. Uno **has written extensively on** Policy Analysis, Environmental Science, International Relations, Models/Simulations, and environmental effects of trade liberalisation agreements. He has built econometric models and performing trade analysis, and is interested in databases and interactive WWW.