



## Traditional vs. Modern measures of Economic Development: a Theoretical Analysis

Dr. Abhimanyu Kumar<sup>1</sup>, Dr. Upasna Sharma<sup>2</sup>

<sup>1</sup>Department of Sociology, Government. P.G. College, Ranikhet, India

<sup>2</sup>Lecturer, Economics, Govt. P. G. College, Dwarahat, India

### Keywords:

Depression; Economic development; Economic growth; Industrialization.

### Correspondence:

Dr. Abhimanyu Kumar. Department of Sociology Government. P.G. College, Ranikhet, India.  
E-mail: kumar\_abhi004@yahoo.co.in

### Funding Information:

No funding information provided.

### Received:

19 January 2014; Accepted: 21 February 2014

International Journal of Scientific Footprints 2014; 2(1): 94–101

### Abstract

The great depression of thirties and the Second World War were the two major historic events, which brought radical change in the study of the principles, problems and policies of economic development. This was also necessitated perhaps due to the fact that most of the Asian and African countries got independence from the colonial rule immediately after Second World War.

At present economic development had its roots in Europe, which spread to USA, Australia and to several other parts of the world. During the last fifty years, these countries have witnessed highly accelerated rate of economic growth. But other large numbers of countries of Asia, Africa and Latin America have remained more or less stagnant or have progressed with extremely slow rate.

The concept of "Economic Development" is often referred to the characteristics that are either causes of or an effect of under development e.g. low capital formation, chronic unemployment, a large percentage of the population living on primary sector and negligible savings are said to be the general conditions that are found in the under developed countries. When a country is set on the course of industrialization and urbanization, then that country is said to be undergoing economic development.

The term economic development refers to the process through which an economy is transformed from a traditional one to a developed one. In the past, it has also been typically seen in terms of the planned alteration of the structure of production and employment so that agriculture's share of both declines and that of the manufacturing and service industries increases. Development strategies have therefore usually focused on rapid industrialization, often at the expense of agriculture and rural development. Finally, these principal economic measures of development have often been supplemented by casual reference to non-economic social indicators, e.g. gains in literacy, schooling, health conditions and services and provision of housing etc.

## Introduction

### The New Economic View of Development:

The experience of the 1950's and 1960's,

when many third world nations did realize their economic growth targets, but the level of living of the masses of people remained for the most part unchanged, signaled that

something was very wrong with this narrow definition of development. Therefore increasing number of economists and policy makers now clamored for the "dethronement of GNP" and the elevation of direct attack on aside spread absolute poverty, inequitable income distribution and rising unemployment. In short, during the 1970's economic development came to be redefined in terms of the reduction or elimination of poverty, inequality and unemployment within the context of a growing economy.

Development must therefore be conceived of as a multidimensional process involving major changes in social structures, popular attitudes and national institutions as well as the acceleration of economic growth, the reduction of inequality and the eradication of poverty. Development in its essence must represent the whole gamut of change by which an entire social system, turned to the diverse basic needs and desires of individuals and social groups within that system moves away from a condition of life widely perceived as unsatisfactory towards a situation or condition of life regarded as materially and spiritually better.

### **Measures of Economic Development:**

The major economic policy objective of developing countries in the post war years has

been to maximize their output of goods and services and despite some criticism the principal measure of development progress has been GNP per capita. In developing nations, it was assumed by and large, would replicate the historical experience of the industrial countries, embarking on a period of rapid and self-sustaining growth after achieving a critical threshold of economic maturity. Social and economic disparities would than decline, much as they did in the industrial nations.

The perception that economic development process was far from automatic and that in several countries with rapid economic growth, there was no desirable improvement in the living standards of the poor population. It led many to a broadening of development priorities with increased emphasis on meeting the basic human needs of the poor. As the definition of development and thus the route toward it changed, a search intensified for alternative measure of development process to supplement or replace GNP per capita. Three approaches to development measures now accepted are the Physical Quality of Life Index (PQLI), Social Accounting Matrix (SAM) and Human Development Index.

For making a systematic description, per capita GNP is being taken as traditional approach and PQLI, SAM and HDI are being

described in the title modern approach.

### **(A) Traditional Approach**

The Classical and Neo-Classical economists took national income as a criterion for measuring economic development. Later on some economists replaced it by per capita income. A brief account of these three criteria is being given below:

**(a) National Income as a measure of Economic Development** - Simon Kuznets, Meade, Meir and Baldwin took national income as a basis for measuring economic development. They believed that it is possible to rank the nations on the basis of their national income. It can, therefore, be said that a country is developing when its real national income increases over a long period of time and the rate of increase in National Income is treated as the rate of economic growth.

**(b) Per Capita Income as an Index of Economic Development** - Many economists choose to interpret development as meaning something more than a mere increase in aggregate output. They believed that it should also denote a rising standard of living of the people. Harvey Leibenstein, Rostow, Baran, and Buchanan favored the use of per capita output as the index of economic development. The UNO Experts in their report on 'Measures of Economic Development' of under

developed countries also accepted this measurement of development.

**(c) Economic Welfare Criteria** - From the welfare point of view, one must consider not only what is being produced but also how it is produced and distributed. Welfare criteria therefore include value judgment into consideration. The objective of development is to provide better life to its people through improvement or up liftment of the standard of living. In other words, it refers to increase in average consumption level of the individual.

### **(B) Modern Approach**

Economists relate the concept of development to personal and community welfare, which requires some kind of agreement on the various dimensions of welfare. These would obviously include basic necessities of life, education, health employment and equity in the distribution of income and wealth. There is a broad agreement on these indicators of development, but one can always think of some more indicators of welfare to make the list more lengthy and any attempt to combine them in a single index of the development will involve at least some degree of arbitrariness. However, economists now believe that in comparison to per capita national income the composite index of development despite all its limitations is far more useful to measure the

economic welfare of the people.

In the past a number of attempts have been made by economists to prepare comprehensive indices of development by assigning weights to various indicators. Everett E. Hagen has examined eleven indicators. These are quite good representative of social, nutrition, education, employment, use of basic industrial products, communication and other services, consumption of durable goods, urbanization and per capita gross national product. Donald H. Niewiaroski has considered fourteen indicators out of which only seven are common in his own and Hagen's indices.

UNRISD index includes sixteen indicators. This index assigns much less importance to consumer goods than the other two indices. However there is one thing that is common to all the three indices of development. They all assign great importance to health, nutrition and education as welfare indicators.

Most economists agree that an index of development based on a good number of socio-economic indicators provides a more relevant measure of social and personal welfare than per capita national income. Various concepts evolved by different economists for reaching to some form of concrete results may broadly be grouped into

three -

**(a) Physical Quality of Life Index (PQLI) -** Some economists have attempted to develop composite indicators that measure economic development in terms of quality of life or meeting the basic needs of the masses. Morris D. Morris identified three such indicators as life expectancy at age one, infant mortality and literacy, to construct a simple composite index called PQLI. It is an alternative measure of economic welfare, which is more sophisticated than GNP per capita. This index was pioneered by the Overseas Development Council of Washington. The three indices are calculated as under-

(i) Index number of life expectancy =

$$\frac{(\text{Life expectancy at age one} - \text{lowest value})}{(\text{Difference between Maxima and Minima} / 100)}$$

(ii) Index number of infant mortality rate =

$$\frac{(\text{Highest value} - \text{infant mortality rate})}{(\text{Difference between Maxima and Minima} / 100)}$$

(iii) Literacy is expressed in percentage

**Creating a Composite Index -** Life expectancy at age one, infant mortality and literacy be combined into single measure, this single measure that is called PQLI, is based

on a simple indexing system.

For constructing PQLI, the performance of each State/Country is put in a '0-100' scale where '0' is worst and '100' represents the best. Once all indicators are put in the '0-100' scale, then composite index is calculated by averaging the three indicators giving all of them equal weight.

### **Indexing the indicators -**

Infant mortality is expressed as the number of infant deaths per thousand live births. Worst situation is one when IMR is '1000' i.e. all children die within first year of their birth and the best is zero. This range of '0' to '100' would allow for easy conversion to a scale of '0' to '100' where '229' is taken as '0' and '7' as '100'. Suppose '229' is the highest for 'X' and '7' is the lowest for 'Y', the difference is '222' = i.e.  $2.22 = 1$ . Thus '2.22' change in IMR brings '1' point changes in infant mortality index.

For indexing life expectancy, the lowest reported life expectancy at age one is taken as '0' and highest as '100'. Let the lowest is '38' and highest as '77' which if placed in '0-100' scale then difference of  $39 = 100$ , then change in life expectancy by '139' is equal to '1' point change in index.

Literacy poses no problem; the percentage

figures correspond to the index numbers.

**(b) Social Accounting Matrices (SAM) -** Some work has been done on developing a system of social accounts to provide a kind of national accounting framework for social indicators. Stone (1975) and Seers (1977) have proposed the use of lifetime activity sequences calculated by dividing total life expectancy into segments. Such tables would show the average years (or fraction of his life) a person could expect to spend activity between school, leisure, retirement etc., while another might be built on a marital sequence (single, married, divorced, and widowed). Such tables would combine various important social statistics from different fields and would be used to indicate changes over time, either actual or planned.

Other ideas have been developed for a more limited social accounting approach. The Social Accounting Matrix (SAM) of Pyatt and Round (1977) expands the traditional input-output table into a matrix which detail payments made by productive sectors to different income recipients. Recipients can be disaggregated in various ways so as to indicate the distribution of income between various factors urban/rural households, or income classes. The power of the SAM approach is that it integrates production and income distribution data in a way that gives a

better view of the economy and of the flows between sectors. In this series Terleckyi (1975) has developed a matrix framework for analyzing the impact of government programs on various social goals, as indicated by the appropriate social indicators. Since programs affect more than one social goal, the approach develops a matrix of inputs and outputs, and suggests the possibility of defining the most efficient set of programs for achieving a particular set of goals.

**(c) Human Development Index (HDI) -** The search for a new composite index or socio-economic progress began in 1989 when Human Development Report was prepared by UNDP. While preparing the report the following concepts were taken into consideration.

(i) The new index must include the values involving human development e.g. the desire to live long, to acquire knowledge, to have a comparable standard of living, to breathe clean air, to be free to live in a community etc.

(ii) Since all these values are difficult to be mixed together three variables were chosen as representatives viz., life expectancy was chosen as an index of longevity, adult literacy as an index of knowledge, and GNP per capita adjusted for purchasing power parity as an index of access to a multiplicity of an

economic choices.

(iii) A composite index would be constructed rather than a number of separate indices.

The HDI would cover both social and economic choices. The merging of economic and social indicators is one of the distinctive feature and chief strength of the HDI. One of the most important decisions was to keep the coverage and methodology of HDI quite flexible.

It is accepted that the reliability of HDI depends upon the reliability of data fed into it. Therefore global community is impressed to improve the quality of underlying social and human statistics.

As mentioned earlier HDI has three key components; viz. longevity, knowledge and income. Longevity is measured by life expectancy at birth as the sole adjusted indicator; knowledge is measure to education variables, adult literacy and mean year of schooling with a weight of two-third to literacy and one-third to years of schooling. The third variable is real GDP per capita in Dollars. The HDI treats income up to the cut-off point as having full value but beyond the cut-off point income in sharply diminishing return. The idea behind is that an infinite amount of income is not an indicator of decent

life.

### **Superiority of Modern Approach over Traditional Approach:**

(i) Besides income the HDI measures, education and health; is thus multidimensional, rather than one-dimensional.

(ii) It focuses the attention of the policy makers on the objective development, not just the means.

(iii) It is more meaningful as a national average than the GNP because there are much greater extremes in income distribution than in the distribution of life expectancy and literacy.

(iv) It shows that the human development gaps between nations are more manageable than the ever-widening disparities in income.

The HDI can be disaggregated by gender, ethnic group and geographical regions and in many other ways.

Thus it may be safely concluded that the HDI reveals much more about the socio-economic progress of a country than GNP does, and there is a no reason not to use it increasingly in framing socio-economic policies of the nation.

### **References**

- [1] Adelman, I. and C. T. Morris. (1967). Society, Politics and Economic Development, Battimore: The John Hopkins Press.
- [2] Batten, A., P. (1980). New Measures of Development in Development Digest, Vol. XVIII, No.1.
- [3] Donal, N. N. (1965). The Level of Living of Nation's Meaning and Measurement, Esta distica: Journal of Inter America Statistical Institute.
- [4] Goel, R. L. (1980). Economics of Growth and Development, Meenakshi Prakashan, Meerut, India.
- [5] Haq, M. (1996). Reflections on Human Development, Oxford University Press, Bombay India.
- [6] Lekhi, R. K. (1995). Indian Economy since Independence, Economic Development and Planning of India, Kalyani Publishers, New Delhi.
- [7] Norman, H and S. Paul. (N.D). Indicators of development: The Search for a Basic Needs Yardstick, in Development Digest, Vol. XVIII, No. 1.
- [8] Sheklar, M. C. (1968). Social Change

in India (First Decade of Planning), A  
Theoretical Analysis, Deccan College,  
Post Graduate and Research Institute,  
Poona.

- [9] Todaro, M. P. (1998). Economic  
Development, Addison Wesley  
Longman Limited, England.