

## TOWARDS A SYSTEMS APPROACH TO SUSTAINABLE DEVELOPMENT

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*“Sustainable development” as a concept was popularised by a 1987 report of the United Nations World Commission on Environment and Development. The report defined sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. However, from this definition, we cannot ascertain the central intuition of the notion of sustainable development. Failure to do this makes it difficult to derive methods that can be used to formulate effective intervention policies that can enable nations to attain sustainable development. This paper briefly reviews various schools of thought in popular literature on the notion of sustainable development, exposes their weaknesses and develops a holistic notion of sustainable development based on the systems approach.*

### 1 INTRODUCTION

#### 1.1 Truman’s Development Legacy

The development era can be said to have started on 20 January 1949 when American President Harry Truman in his inaugural speech before Congress defined for the first time the conditions of the poor countries as ‘underdeveloped areas.’ This definition established a single category for the South, despite their immeasurable diversity: the underdeveloped countries. Truman’s coinage was, according to Wolfgang Sachs [1], a precise expression of a worldview. According to this worldview, all the people of the world were moving along the same track; some faster, some slower, but all in the same direction. The Northern countries were running ahead, whilst the countries in the South, with their low per capita income, were lagging behind. The premise of Truman’s worldview is that civilisation in a country is indicated by the level of production. To him the world is an economic arena where nations compete for position on the Gross National Product (GNP) scale. No matter what ideals inspired the diverse nations of the South, Truman recognised them only as stragglers whose historical task was to participate in the development race and catch up with the lead runners. It was, consequently, the objective of the development policy to bring all the nations into the arena and to enable them to run in the race.

The policy instruments employed to turn the southern societies into economic competitors were capital injection, technology transfer and cultural transformation. The latter was deemed necessary, for many traditional ways of living were considered to be ‘impediments of development.’ Productivism and the accumulation of wealth, the core traits of the economic society, were to be inculcated into the societies of the South. This was to be attained through the application of textbook microeconomic models, which required revamping all kinds of institutions – law, education, economy, governance, etc. – and hence, the degradation of the traditional style or ethos of doing things.

Science and Technology were viewed by Truman as pivotal to increased production and hence to greater prosperity, and were seen as the reason for the superiority of the North. The call for the transfer of technical assistance and technologies of all sorts from North to South was clear and loud. This process received another boost when John F. Kennedy challenged Congress on March 14, 1961, to finance the ‘Alliance for Progress’. Countless programmes of aid and assistance consisting of technical assistance, technology transfer, foreign aid, and the like, were launched in the decades following the speeches.

After 50 years of development, the state of affairs is dismal. The gap between the North and the South keeps on widening, and it is inconceivable that it can ever be closed. Although the developing nations account for 80 percent of the world population, they occupy only about 54 percent of the land area, and their world output has shrunk to about 15%. Large majorities of people in most developing countries live today in greater hardship and misery than at the time of decolonisation [1]. K. Saeed [2] identifies some of the intractable problems as skewed distribution of wealth in favour of a few elites whilst the majority live in abject poverty, population growing faster than GNP and hence perpetuating the problem of low income per capita, political instability due to civil strife, high illiteracy levels, and environmental degradation.

It has also become evident in recent years that Truman’s racetrack may lead to a collapse of the global system. Largely because of the tapping of fossil minerals, energy use has skyrocketed, the enormous increase in energy and material inputs into industrial production being accompanied by generation of waste. Threatened as a result are the earth’s limits to serve as ‘sources’ for the inputs and ‘sinks’ for the wastes of economic progress. Sachs [1] argues that five or six planets the size of the earth would be needed to serve the economic system if the developing countries were

