## Dr. Hilarian Codippily

Dr. Hilarian Codippily was a mathematician and an economist. He graduated with a B.Sc. degree in Mathematics from the University of Ceylon (1962) followed by a second B.Sc. degree from the University of London (1967). He joined the Ministry of Finance soon after graduation, pursuing a career in economic planning. While at the Ministry, he was awarded a scholarship for a Master's degree in Economics at the University of Warwick, England, obtaining the degree in 1975. On his return to the Ministry of Finance, he continued as Additional Director there, engaging in research in econometrics in his spare time while reading for his Ph.D. as an external student at the University of Warwick. He earned his Ph.D. in 1979.

Dr. Codippily joined the World Bank in 1981 and went on to become the World Bank's leading authority on 'Small Island Economics.' He retired in 2000 and returned to Sri Lanka, while remaining a consultant to the World Bank for several more years. Dr. Codippily passed away on 16th August, 2018.

---

***Public Lecture Delivered on 30th July, 2014***
***at the***
***Lakshman Kadirgamar Institute of International Relations***
***and Strategic Studies***
***Colombo, Sri Lanka***

---

GAMANI COREA FOUNDATION

# REFLECTIONS AND PERSPECTIVES ON ECONOMIC PLANNING

## 1. The Evolution of Mainstream Thinking on Development Planning and Gamani Corea's Contributions

Development planning in Sri Lanka has had a long and varied history since the colonial times. Recent literature on economic policy in Sri Lanka has provided valuable insights on development planning covering its changing role, concepts of planning, focus on critical development problems, and other related aspects. Building upon these contributions, this discussion paper attempts to present further perspectives on development planning in Sri Lanka, highlighting, in particular, Gamani Corea's contribution to the planning process; he was truly the Doyen of economists in Sri Lanka. The paper also draws from the author's experience in the respective ministries in charge of development planning and includes some international perspectives on development planning.

The evolution of development planning starting from the colonial times may be divided into four periods.

- The first takes us through the colonial period up to a few years after Independence in 1948.
- The second consists of the period relating to the Ten-Year Plan formulated under the direction of Gamani Corea at the Planning Secretariat.
- The third period relates to the Five-Year Plan formulated under the direction of H. A. de S. Gunasekera, Secretary, Ministry of Planning and Employment.
- The fourth consisted of a series of rolling Five-Year Investment Plans formulated initially under the direction of W. M. Tilakaratna, Secretary, Ministry of Finance and Planning.

### 1.1 Planning in the Colonial Period

The earliest initiatives at National Planning started during the colonial period (see Godfrey Gunatilleke, 2004). The first of these was entitled "A Policy and Programme for the Ceylon National Congress" produced in 1935. Following subsequent initiatives, the most significant document that had been produced was the Six-Year Plan 1947-56. This was essentially a combination of two budget speeches of the then Minister of Finance, J. R. Jayewardene, for the years 1947-48 and 1948-49. Nevertheless, it included priority areas for action such as the wet zone crops – tea, rubber and coconut, and import substitution in agriculture and industry. In agriculture, it underlined the need for the development of the dry zone for food production, including the goal of self-sufficiency in rice. Although the document included most of the elements of a national plan, each part was not analyzed in detail and was not integrated into an internally consistent whole (Gunatilleke, 2004).

The second significant economic document produced after Independence was the International Bank for Reconstruction and Development (IBRD) Report of 1951. It provided a detailed analysis of the economy, its current problems and future prospects, and an assessment of domestic and external resources needed for a comprehensive development plan. The IBRD Mission had, on the whole, endorsed the policies of the then United National Party (UNP) Government and the development programme that was being implemented. However, it strongly recommended a phased removal of the food subsidy, with appropriate adjustments in wages and taxes on exports.

Shortly after the Mission, although the Mission had not specifically recommended the setting up of a Secretariat, the Planning Secretariat was established in 1952, staffed with professional planners. In a sense, the IBRD Report can be regarded as a link between the Six-Year Plan and the Six-Year Programme of Investment, formulated by the Planning Secretariat. The stage had been set for the entry of Gamani Corea, the principal author of the latter document.

National planning in a formal sense began in 1952 with the establishment of the Planning Secretariat which functioned under the Cabinet. As described by Gunatilleke, it was formally headed by a senior civil servant, but the substantive professional work was directed by Corea, who was seconded for service from the Central Bank. The first product, i.e., the Six-Year Programme of Investment 1954/55 to 1959/60, presented by Prime Minister Sir John Kotelawala in July 1955 was essentially a framework of projects, by sector, proposed for implementation over its six-year timeframe; no significant changes in policy, nor directions for new investment were envisaged. The professionalism and thoroughness in preparing this document (510 pages) enhanced the discipline of preparing the capital budget. Gamani Corea's hand is seen in the high quality of the document; in particular, the first chapter outlines the problems of the economy in lucid language intelligible to administrators and politicians. In a sense, this document provided a foundation for the formulation of future plans.

## 2. The Ten-Year Plan

The Ten-Year Plan prepared under the leadership of Gamani Corea is by far the most comprehensive plan ever written in Sri Lanka. It envisaged a Gross Domestic Product (GDP) growth rate of 5.9%, which set against a population growth rate of 3.0%, implying a per capita income growth rate of 2.9%. Development planning had reached its highest point in Sri Lanka.

### 2.1 The Quality of Planning

The author's mind goes back to the words: "Planning should be sound, deliberate, and unhurried". Curiously enough, these profound words were written in a Ceylon Cement Corporation file during the 1960s, by L. J. D. Fernando, the Director of Geological

Surveys, who was also a Director of the Corporation. At the time he wrote these words, in the context of the development plan of the Ceylon Cement Corporation, he was the Acting Chairman in the absence of Chairman G. V. P. Samarasinghe. The words he wrote resonate so well with the Ten-Year Plan. It was sound, as it had a well-thought-out framework that benefitted from the work of several world-renowned economists, and dedicated work by the staff of the Planning Secretariat. It was deliberate as it had a clear road map and a high degree of commitment. It was also unhurried, as sufficient time, extending to three years was taken to discuss the key issues, assemble the needed data, carry out the analytical work, and write the text of the Plan.

The Plan responded to the aspirations of the masses. The Mahajana Eksath Peramuna (MEP) Coalition, led by S. W. R. D. Bandaranaike that came into power with a landslide victory in 1956 was based on support from the common masses, and the Government had a mandate to improve their quality of life over time. One of Bandaranaike's priority tasks was to revamp the Planning Secretariat, appoint Gamani Corea as its Head, and direct him to prepare a Ten-Year Plan.

Corea had the Midas touch, so to speak. Whatever he touched turned into gold. The Ten-Year Plan had many notable attributes, the main ones being:

- A clear statement of the initial conditions of Sri Lanka, or the starting point of the Plan showing clearly the economic status vis-à-vis comparator countries as well as a few developed countries;
- A vision for the future and long-term perspective, and a strategy for addressing the challenges of providing better living standards for an increasing population, and jobs for an increasing labour force;
- A discussion of alternatives for the transition from an agricultural economy to an industrial one;
- The overall magnitudes of the Plan, and an analysis which in today's parlance is called a macroeconomic framework and plan targets;
- Financing of the public sector components of the Plan and projected financing by the private sector;
- Detailed sectoral plans for tea, rubber, coconut, other crops, fisheries, industries, power supply, transport and communications, and social services.

To fully appreciate the Ten-Year Plan, one has to mentally transport oneself to an epoch over half a century ago into the 1950s – like in the movie "Back to the Future". In that day and age there were no highways, not much of modern industry, nor were commonplace things such as information technology, personal computers, the Internet, or Facebook even conceived. Sri Lanka was essentially a low-income agricultural country. It was in essence a classic dual economy, with a large traditional rural subsistence sector side by side with a small but powerful modern sector based on export crops – tea, rubber and coconut, supported by an infrastructure network and an institutional framework.

The benefits of this dual economy accrued to an English-speaking minority, popularly known as the "microscopic minority". The vast Buddhist Sinhala-speaking majority had taken a back seat. It was against this backdrop that the MEP Coalition which drew its political power from the Buddhist Sinhala-speaking masses of the rural sector and some socialist movements scored a landslide victory in 1956. Popular slogans called it the "Apé Aanduwa" or "Our Government". Thus, the main task of planners was to develop a vision and a plan to meet the aspirations of the masses. Also, the development philosophy at that time was that the state sector should have a lead role considering the small and limited capacity of the private sector. The Plan was presented by Prime Minister S. W. R. D. Bandaranaike in 1959.

## 2.2 Advice from Visiting Economists

The quality of the Plan was greatly enhanced by the work of a few eminent economists from abroad. For example, Joan Robinson focused on the need for investment, and worked on development scenarios for Ceylon, with broad magnitudes of projected output, employment, and estimated capital and foreign exchange requirements to support GDP growth. Commenting on excessive welfarism, she made the famous statement "Ceylon had tasted the fruit before she has planted the tree". John Hicks presented some reflections on the economic problems of Ceylon, focusing in particular on the need to increase productivity in agriculture and to expand industry to provide output and employment for a growing population. Ursula Hicks presented a thought-provoking paper on Local Government and Finance in Ceylon.

Nicholas Kaldor presented a paper on the problems of economic development in Ceylon, noting in particular, the excessive concentration on the plantation economy, and the need to develop hydroelectric power generation, and "power-intensive" industries such as fertilizer and cement manufacture. The paper by Oskar Lange focused on the task of economic planning in Ceylon. In general, these papers provided some interesting perspectives on the problem of economic development in Ceylon, highlighting a number of issues relating to needed financial resources, planning techniques, and the quality of nationalization.

Others including Kenneth Galbraith and Gunnar Myrdal provided valuable inputs. It is interesting to note a statement in Galbraith's paper that "In all countries not the least the United States, much of the initial thrust towards development has come from the state". This was very much in line with the climate of thought in Ceylon at that time. The contributions by these visiting economists were later published in a volume entitled *Papers by Visiting Economists*. A good review of these papers is provided in Sarath Rajapathirana's forthcoming paper entitled "Through Eminent Eyes: A Fifty-Year Retrospective on the 'Papers by Visiting Economists'".

Competent teams of local economists were also in place to develop draft sections of the Ten-Year Plan. A participatory approach was followed, involving line ministries and other specialists, in developing these draft sections of the Plan. However, it was Gamani Corea's genius that wove these into a coherent Plan.

# 3. The Organizational Framework for Planning

With the change of government in 1965, a separate Ministry of Planning and Economic Affairs was set up directly under Prime Minister Dudley Senanayake and Gamani Corea was appointed as its permanent secretary. Under the leadership of Corea, the focus shifted from plan formulation to operational aspects of planning, and economic management. The organizational structure consisted of separate divisions for Perspective Planning, Economic Affairs, Plan Implementation supported by the National Operations Room (NOR), and Foreign Aid.

## 3.1 Functions of Planning

The new Ministry assumed responsibility for some key functions of economic management:

- Formulation of a macroeconomic strategy and preparation of medium- and long-term forecasts.
- Management of the capital budget and allocations to ministries.
- Monitoring of progress on all major projects, using the NOR.
- Project evaluation and review of all important projects and proposals by sectoral ministries, prior to consideration by the Cabinet.
- Foreign exchange budgeting and allocations of foreign exchange and foreign aid to ministries.

A Cabinet Planning Committee was also established for discussion and decision-making on economic issues, at the highest institutional level.

Gamani Corea's main focus was on economic policy formulation and management through the Planning Ministry and other ministries. As described by Godfrey Gunatilleke "If the Ten-Year Plan was the high point of professional excellence, the period 1965-70 was a phase in which national planning was most effectively linked to the highest levels of decision making on the economy and development". Emphasis was shifted towards a market economy and allowing market forces to function, and the role of planning was to give strategic policy direction for increasing investment and GDP growth. The development of an Input-Output table during this period provided great insights into the economy. One noteworthy development was the introduction of the Foreign Exchange Entitlement Certificate or the FEEC scheme, to set some part of the country's foreign exchange resources at a premium rate, based on market forces, representing a partial shift towards a market economy.

## 3.2 Capacity Building for National Planning

Gamani Corea recognized the importance of capacity building and launched training courses, for example, a training course for development planning attended by the author in 1967 at the Training Institute at Glen Aber Place, Bambalapitiya. In his inaugural lecture, he highlighted one of the close linkages between agriculture and industry i.e., the need to develop agriculture, and thereby save foreign exchange, to import capital and intermediate goods to develop industries. This training course was conducted by the United Nations Asian Institute in Bangkok engaging prominent economists such as Professors Ramana and Bhatawdekar (1967). The participants included staff of the Planning Ministry, line ministries, and major corporations. In addition, the officials of the Ministry were sent abroad for postgraduate training in fields relevant to development planning. These training courses were financed under British Aid and were typically up to a master's degree level in British universities.

### 3.3 Some Gaps in the Ten-Year Plan

With hindsight, the Ten-Year Plan had a few gaps, as with any Plan. Spatial planning, especially in urban areas was not emphasized. As a result, some 40 years later, commercialization of residential areas is seen in and around Colombo due to lack of zoning. Also, policy planning did not receive much attention. Some indication of the kinds of policy planning to be done principally, by the Planning Ministry, the Finance Ministry, and the Central Bank – within a macroeconomic policy framework – would have been relevant. Furthermore, the importance of managerial, scientific, technical and other professional skills was not adequately emphasized, although investments in tertiary education were featured in the Plan.

It should be noted that planners cannot be blamed for these gaps, as the Plan's content reflected the political mindset and the role of the public sector, in the absence of a sizeable private sector at that time.

In sum, the lasting impact of Gamani Corea's work is seen in the quality of planning, the organizational framework for planning, the functions of planning, and capacity building and had indeed set the course for the discipline of National Planning for years to come.

### 3.4 The Five-Year Plan

Once again, national planning took a different turn when the United Front coalition led by Mrs. Bandaranaike and the Sri Lanka Freedom Party (SLFP) came into power in 1970. The country's worsening economic problems needed urgent attention. Unemployment had risen to nearly 15%, and the balance of payments was in trouble. To underline the importance of employment creation, the Planning Ministry was renamed as the Ministry of Planning and Employment, functioning directly under the Prime Minister Mrs. Bandaranaike. Gamani Corea was replaced by Professor H. A. de S. Gunasekera, who was the Professor of Economics at the University of Peradeniya at that time.

The discipline of national planning and the organization structure developed by Gamani Corea remained largely intact. The Plan Implementation Division was headed by Godfrey Gunatilleke, the Foreign Aid Division renamed the External Resources Division was headed by Nihal Kappagoda, the General Economic Affairs Division was headed by Leelananda de Silva and the National Planning Division, established later, was headed by Sarath Perera. One major change was the creation of a Regional Development Division to focus on employment creation which was headed by Harold Fernando. Most members of the United Nations (UN) Team led by Abdel Meguid functioned from the Perspective Planning Division, to assist in developing a macroeconomic framework for a development plan. It might be of interest to know that Manmohan Singh who was later Prime Minister of India functioned at Perspective Planning as a short-term consultant. The UN Team also included sector specialists who functioned from the respective line ministries.

The procedures adopted for the preparation of the Five-Year Plan were very similar to those of the Ten-Year Plan. There was one group of officials who, with the assistance of the UN Team prepared the macroeconomic framework. The real GDP growth rate envisaged was 6%, and the implicit Incremental Capital-Output Ratio (ICOR) was 3.25. The broad magnitudes of savings and investment as well as employment creation were worked out. Groups of officials were also appointed to develop sectoral plans, and in the case of agriculture, separate inter-ministerial groups were appointed to develop plans for each crop or group of crops. The author's role was to help prepare, in collaboration with his colleagues and line ministry officials, the draft sectoral plan for housing. The draft sections of the Plan were prepared under very difficult circumstances in the aftermath of the 1971 insurrection, when government offices closed at 3.00 p.m., leaving little time for meetings and plan writing. The country's situation had come back to almost normal by the time the Plan went to the Government Printer, and it was possible to do the proofreading at the Government Press till the early hours of the morning.

The draft Five-Year Plan was discussed with relevant groups and civil society and was adopted by the Government. The Five-Year Plan was presented by Prime Minister Sirimavo Bandaranaike in late 1971. However, the implementation of the Plan faced major setbacks. As noted by Gunatilleke (2004), the unsettled conditions in the world economy in the first half of the 1970s, world food shortages, the devaluation of the dollar, and the steep rise in energy prices rendered the macroeconomic framework totally irrelevant soon after the publication of the Plan. Nevertheless, some sectoral development plans such as the export development plan, or some housing construction projects were implemented with the resources available. Overall, the real GDP growth rate averaged only 2.5%, compared to a target of 6%, and unemployment continued to rise to a level of 24% by the mid-1970s.

## 4. Planning in a Liberalized Economy: The Rolling Five-Year Investment Plans

A major paradigm shift in economic policy and development planning took place in 1977, when the UNP, led by J. R. Jayawardene was swept into power. The new right-wing government moved the policy stance away from the controls of the previous regime to a market-oriented one – the first government in South Asia to do so. The economic reforms were far-reaching and included the unification of the regular exchange rate and the FEEC rate into one rate, the relaxation of exchange controls, the removal of import controls, the streamlining of government regulation, and the encouragement of foreign investment. The establishment of an export processing zone in Katunayake, called the Greater Colombo Economic Zone (GCEC) played a major role in attracting foreign investment. Conditions were thus created for people to save, invest, and grow their incomes, and the private sector was assigned a major role. To complement these initiatives, the public sector was assigned a supportive role to provide the needed economic and social infrastructure. A Committee of Development Secretaries, representing the ministries in charge of development, and a Committee of Cabinet Ministers became the principal organs to guide the development process, and to approve development programmes.

Within such a scenario, the central role of national planning was reduced, and the National Planning Division of the Ministry of Planning and Employment, renamed as a ‘Department’ was transferred to the Ministry of Finance to ensure consistency of development plans with the resources available. Since then, it has been called the Ministry of Finance and Planning. The amalgamation of the two ministries reflected in part the advice of the World Bank to do so, and the resentment of some ministries to the power exercised by the Planning Ministry which, inter alia had control over the capital budgets of line ministries and foreign exchange allocations. It also had a considerable impact on policy initiatives, through reviews of related cabinet papers.

The aversion to planning by the new government was so pronounced that when a draft plan was submitted to Prime Minister J. R. Jayawardene, directions were issued to drop the word “plan”. Accordingly, skills in plan writing had to be innovated to avoid using the word “plan”. This explains why the planning documents produced annually on a rolling five-year framework were entitled “Public Investment”. The focus of these documents was on public investment to support economic growth mainly through the private sector. Public investment was dominated by the three “Lead Projects” – the Accelerated Mahaweli Project, Housing and Urban Development, and the GCEC - and included several other projects proposed and implemented by the line ministries through their respective agencies. This radical change in economic policy produced spectacular results, as described below. On the policy front, the National Planning Department benefitted from a Harvard team of economists, led by Professor Joseph Stern, who provided policy advice for a short period.

The other notable features of these rolling five-year plans were its technical content. In designing the macroeconomic framework, much attention was focused on ensuring that its public investment component was fully consistent with the capital budget put together by the Treasury, based on line ministry submissions. With advice from the World Bank, a Flow of Funds, or a macroeconomic accounting framework exercise was introduced to demonstrate sources of funds and their utilization, both for the current account and the capital account for Sri Lanka, on a year-by-year basis. This was done in tabular form as well as in matrix form – very much like an input-output table. The sectors that featured in the Flow of Funds were: (i) the Government Budget; (ii) the other Public Sector; (iii) the Balance of Payments; (iv) the Private Sector; (v) the Monetary Sector; (vi) Other Financial Institutions; and (vii) the National Accounts. In its matrix form, the rows show the sources of funds, and the columns show the uses of funds. In a sense, the Flow of Funds represented a one-year slice, or a "cross-section" of the macroeconomic framework.

The initial version of this model was developed with advice from the World Bank. Also, at the initiative of the author, computerizing the macroeconomic model was done using the remote access terminal to the main computer at the National Institute of Business Management (NIBM) – long before the advent of personal computers. This land-based remote access terminal was the first of its kind installed in Sri Lanka, with the assistance of the Telecommunications Department and a private firm.

The response of the economy to the market forces operating in a liberalized economic environment was very significant. In 1978, the year after liberalization, real GDP growth surged to 8.2%. Thereafter, it stabilized to an average rate of about 5.6% from 1979 to 1983 – a level much higher than the average rate of 2.9% witnessed over the period 1971 to 1977. After 1983, the civil conflict had an adverse impact on economic development mainly through decreased levels of Foreign Direct Investment (FDI), tourism, and industrial development. Nevertheless, thanks to a liberalized economy, and the role of the private sector, Sri Lanka recorded an average growth rate of 4.7% during the civil conflict from 1983 up to the turn of the century. Even during the last five years up to 2009, real GDP growth had averaged 6% (ADB Key Indicators 2013).

## 4.1 Development Planning Guided by the Mahinda Chinthana

The most significant achievement in recent times has been the ending of the civil conflict in 2009. This singular event brought about not only the elimination of the "fear factor" and return to normalcy, but also a rebound in real GDP growth to 8%, largely reflecting the "peace dividend". The Government moved immediately in 2009 to: (a) resettle the Internally Displaced Persons (IDPs), on a scale perhaps unprecedented by international standards; (b) carry out extensive demining operations; and to (c) rebuild infrastructure in the North and the East.

With the return to peace and normalcy, the Government set about preparing plan documents largely guided by the Mahinda Chinthana enunciated by the former President Mahinda Rajapaksa. Several plan documents were prepared, the most recent one being "Mahinda Chinthana: Vision for the Future" – Public Investment Strategy 2014-2016, published in 2013 by the Department of National Planning, Ministry of Finance and Planning. This, like its predecessor document, is an elegant one, well presented with many tables, graphs, charts, and visual images to illustrate the initial conditions and the targets and goals along the current development path – reflecting greater clarity of presentation in this digital age. Unlike the older plans which present the macroeconomic framework, sectoral plans, and discussions on major projects, this plan has in addition, a number of targeted interventions for solving specific problems. These areas include, for example, inclusive development, empowering villages, knowledge and skills for excellence, and energy security. Addressing these problems has assumed special importance, considering the adverse impact caused by three decades of civil conflict.

Guided by the Mahinda Chinthana, the Government launched an extensive programme of economic infrastructure development, one of the largest since Independence. It consisted of two major highways, an outer circular highway, two harbours, a new airport, a modern concert hall, a large extent of road improvements, several lakes, walkways, parks, an improved physical environment, and cleaner and more attractive cities. Road improvements, in particular, play a complementary role to the output from investments in the directly productive sectors. This important role is essentially that of facilitating the movement of goods, from farms and factories to their respective markets. These investments in infrastructure, together with major investments in the health and education sectors, are contributing to economic growth and improved living standards. Poverty reduction programmes are also in progress to address the problems of lower income groups.

Sri Lanka recorded a real GDP growth rate of around 7% and an unemployment rate of a little over 4%, perhaps the lowest rate in Sri Lanka's history. The fiscal deficit is decreasing, and so is the external current account deficit. On the external front, overseas employment of close to two million Sri Lankans is contributing foreign exchange inflows equivalent to around 10% of GDP. Furthermore, the emphasis and development of information technology resulting in greater connectivity, and increased proficiency in English have enabled Sri Lanka in a more effective participation in the global economy. However, as in other developing countries, there are problems and challenges ahead, and these are being addressed. Having reached a lower-middle status, Sri Lanka is now on the threshold of joining the ranks of the upper-middle income countries.

## 5. UNCTAD

This section briefly reviews Gamani Corea's contributions at the international level. It was in 1963 that Raul Prebisch invited him to join a team to prepare for the first UNCTAD Conference in 1964, a decade prior to serving as Secretary General of UNCTAD from 1974 to 1984. He was also instrumental in establishing the Group of 77, and the South Centre. During this decade, developing countries had unified themselves into a single bloc and had made initiatives seeking a commitment from developed countries to provide preferential tariffs to developing countries on a universal basis. UNCTAD had also successfully completed negotiations for a Code of Conduct for Liner Conferences.

Gamani Corea assumed office as Secretary General of UNCTAD on the "ominous day" of April 1, 1974, as he calls it in his autobiography, but did not experience any popular drawbacks! At the time Corea assumed office, the oil-producing countries had formed the Organization of the Petroleum Exporting Countries (OPEC), and the fourfold oil price hike was in place. This influenced Gamani Corea's thinking towards forging unity amongst developing countries with the objective of avoiding commodity price fluctuations. He proposed a New International Economic Order, and by reviving an old idea of an integrated approach to commodities, he was instrumental in establishing an Integrated Programme for Commodities (IPC). This covered several commodities such as copper, rubber, jute, tea, tungsten, cotton, vegetable oil, and others. The objective was to stabilize prices, and to fix a floor for the price of each of these commodities.

The implementation of this approach required the combination of traditional export quotas with buffer stocks to keep prices stable. However, buffer stocks had to be funded, and a Common Fund for Commodities (CFC) was created for this purpose. The initial financing requirement was estimated at US$ 6 billion. However, the actual financing mobilized was only US$ 280 million, and the IPC ceased to operate by the mid-1980s.

Another major accomplishment to his credit was the creation of the Highly Indebted Poor Countries (HIPC) initiative, building upon his experience of chairing the Expert Group of the Non-Aligned Movement on Third World Debt which served as the basis for the HIPC initiative. His tenure at UNCTAD experienced one of the most active periods of its history.

## 6. International Perspectives on Economic Planning

The types of development plans cover a very wide spectrum. At one end of the spectrum are the comprehensive plans which are very quantitative in character, with emphasis on physical targets, and centralized direction control over the functioning of the economy, known as *dirigiste.* At the other end of the spectrum are the indicative plans which basically provide forecasts of the future state of the economy as a means of guiding investment choices of independent decision-makers through effective policies (Baum, Warren and Stokes Tolbert, 1985). Comprehensive plans were developed by the former Soviet Union, while the latter types, which may be described as 'comprehensive cooperative planning', were adopted by East Asian countries such as Korea and Singapore. In addition to these types of plans, those in sub-Saharan Africa and the Caribbean were largely inspired by colonial or former colonial governments and often managed by expatriates.

Development planning began in the Greek period where Aristotle had laid down the basic principles of planning. He had stated: "First, have a definite, clear, practical ideal – a goal, an objective. Second, have the necessary means to achieve your ends – wisdom, money, materials, and methods. Third, adjust your means to that end." (Bowles and Whynes, 1979). During the early part of the twentieth century, there was an increasing realization that market forces alone cannot restore equilibrium in an economy, and ensure stability needed for growth. This view was influenced inter alia, by the prevalence of imperfect competition, the business cycle, and the degree of income and wealth inequality. The climate of thought at that time was generally in line with the Keynesian philosophy that there are no automatic forces in the economy to restore it to a full employment equilibrium. Keynes proposed that some form of government investment i.e., public works was needed to pull the economy from an unemployment equilibrium. It was against this backdrop of the inadequacy of market forces to promote growth that several countries initiated systems of development planning.

## 6.1 The Soviet Planning Model

The first systematic plan was developed by the Soviet Union in the form of a Five-Year Plan in 1929. Since then, a series of development plans produced, were instrumental in helping the Soviet Union achieve a superpower status, both militarily and technologically, and to ensure a moderate level of living standards for its citizens. The main characteristics of these plans were that:

- All major industrial enterprises came under the direct control of centralized ministries, in a command economy.
- The national objective function was formulated as direct instructions to individual state-run firms and plants in the form of regulations as to the quantity and quality of output, quantity and sources of inputs, wages, prices, size and composition of the labour force, etc.
- Plans were developed between the Gosplan (the State Planning Committee) and individual state enterprises, in regard to feasibility and requirements.
- Plans took the form of 'material balances' in terms of actual quantities of commodities. Unlike in a capitalist economy, where there is a market mechanism based on prices, there was no such system to deal with imbalances in the economy.
- Under the Stalinist system, individual state firms were encouraged to make profits, although it was almost impossible to do so in a command economy, owing to the visible hand of central planners.
- The 'material balances' approach required an elaborate bureaucratic system for the collection of a vast number of data sets, which was very cumbersome to handle.

The structuralist approach in Soviet Planning led to a number of theoretical advances. One of them was the input-output model, developed by Wassily Leontief, based on the concept of the circular flow of economic life envisaged by the 18th century economist François Quesnay.

The inter-industry relationships inherent in the input-output table provided planners with deep insights into the structure of the economy, and how changes in one sector, or household consumption will affect the other sectors. While it provided a means of calculating outcomes by solving a set of linear equations, its use was limited by problems of data, and changes in coefficients due to technological advances or new production methods. Several countries such as France, Norway, Egypt, the United States, the United Kingdom, and Sri Lanka have computed input-output tables (Samuelson, 1980). Leontief was awarded the Nobel Prize in Economics in 1973.

Another contribution was the development of linear programming, first formulated by Leonid Vitalyevich Kantorovich, a Soviet mathematician and economist, when he was given the task of optimizing production in a plywood industry. He developed this technique for the optimal allocation of resources in the economy – in addition to a large number of contributions he had made in the field of mathematics. He was awarded the Nobel Prize in Economics in 1975. Yet another contribution was by Lev

Pontryagin, in the field of optimal control theory – where there is a large volume of literature, ever since the seminal paper by Ramsey (1928) on “A Mathematical Theory of Savings”. Despite his blindness Pontryagin became one of the greatest mathematicians of the 20$^{th}$ century, contributing to several key areas of mathematics. He, along with three of his colleagues formulated the so called Pontryagin’s principle. It is essentially a system of finding the best possible solution for taking a dynamic system from one state to another, especially when state or input controls are present. The application of this principle to a wide variety of problems is typically formulated in mathematical terms using Hamiltonians, and equations representing constraints. The optimization problem is then solved using differential equations.

The Soviet model produced tangible improvements to the living standards of the people of the Soviet Union up to a point but fell far short of those prevailing in the Western capitalist economies. This ultimately led to the fall of the Berlin Wall and the dismantling of the Soviet Union.

## 6.2 The Indian Planning Model

Development planning in India was greatly influenced by the Soviet planning model. The era of economic planning in India began as early as 1933. However, a very rigorous approach to planning began at the time of Independence and took the form of an unbroken series of Five-Year Plans. These plans were developed and monitored by the Planning Commission of India, functioning directly under the Prime Minister. The first Five-Year Plan was presented to Parliament by India’s first Prime Minister, Jawaharlal Nehru in 1951. The macroeconomic framework was based on the well-known Harrod-Domar model, and the content of the plan was focused on the agricultural sector.

India’s second Five-Year Plan (1956-61) was based on the Mahalanobis model, named after the Indian Statistician Prasanta Chandra Mahalanobis. This Plan focused on the optimal allocation of resources amongst the productive sectors of the economy, with the objective of maximizing long-run growth. It used state-of-the-art techniques of operations research, optimization, and novel statistical methods prevailing at that time. Much emphasis was placed on the development of the capital goods sector – which led to the establishment of five steel plants, and two supportive hydro-electric power projects. A basic assumption of the Plan was that of a closed economy, and that trading activity will be based on the import of capital goods.

By the time India reached the Fourth Plan (1969-1974), under the direction of Prime Minister Indira Gandhi, Development Planning in Sri Lanka had gathered much momentum. Thanks to the initiatives of Lal Jayawardena, Sri Lanka had established contact with the Planning Commission of India at the official level and a few of their officials served as Advisors at the Perspective Planning Division of Sri Lanka’s Planning Ministry. We had the good fortune of visiting the Indian Planning Commission at that time and meeting with the Head of Planning, Dr. Haksar, the Deputy Chairman of Cabinet rank who reported directly to Mrs. Gandhi.

The Fourth Plan was a well-written document, and inter alia focused on the Green Revolution. At that time, the government had nationalized 14 major Indian banks, and was following a socialist approach to economic development. However, state funds had to be diverted to the Indo-Pakistan war of 1971, adversely affecting plan implementation. As a result, the actual growth rate achieved was only 3.3%, as against a target growth rate of 5.6%.

One special feature of the Fourth Plan exercise was the formulation of the Gadgil formula for the distribution of plan transfers amongst the states based on a set of objective criteria. It was named after the then deputy chairman of the Planning Commission, D. R. Gadgil. The central assistance provided for in the first three plans and annual plans lacked such objectivity.

In more recent times the Twelfth Five Year Plan (2012-2017), was prepared by the Indian Planning Commission, headed by Montek Ahluwalia. Overall, the approach followed in recent times is a liberalized one, with a greater role for the private sector. The Plan envisages a growth rate of 8 % and a 10% reduction of the level of poverty.

## 6.3 Planning in the Maldives

The Maldives is a country that has risen from one of the poorest in the world to one having the highest per capita income in South Asia, close to US$ 6,000. This has been achieved through a few strategic actions initially, followed by a systematic approach to development planning.

The identification of binding constraints to development in Maldives is of fairly recent origin, in the early 1970s. The key constraints related to the absence of hotels, poor transportation, and the lack of essential infrastructure, and on a larger scale, the constraints in developing tourism. Once the tourist potential was realised, the government moved decisively to remove these constraints and to develop the tourist sector. These actions, in summary form consisted of

- The leasing out of uninhabited islands to private entrepreneurs (mostly local) for the development of resorts, subject to their paying a lease rent, based on bed capacity, and a bed tax.
- Building a new airport with the assistance of a World Bank loan.
- Securing the services of foreign airlines (mostly charter flights at the initial stage) to bring in tourists; and
- Attracting foreign professionals and labour to work in Maldives.

Since these initial actions, development in the Maldives has been guided by a series of development plans, under the leadership of President Maumoon Gayoom over a 30-year period, after assuming office in 1978. The most recent plan completed was the Seventh National Plan 2006-2010.

The guiding principles of the Seventh National Plan were: (i) national ownership; (ii) enhancing trust and change; (iii) providing economic opportunities for all; (iv) promoting gender equality; (v) ensuring environmental sustainability; (vi) respecting and promoting human rights; (vii) enabling private and civil society participation; and (viii) achieving results. The Plan set out 12 important goals and 88 targets across four areas: economic growth, social equity, environment protection, and good governance. Detailed sets of policies and strategies are spelled out to achieve the goals and objectives. The Plan placed a strong emphasis on achieving the Millenium Development Goals (MDGs).

## 6.4 The East Asian Planning Model

In the East Asia region, Japan, Korea, Taiwan, and Singapore developed a different approach to planning, best described as comprehensive cooperative planning (Baum and Tolbert, 1985, p. 19.) The focus was on comprehensive planning, particularly on managing national resources. Building upon the traditions of these countries, the governments developed a unique partnership with the private sector in formulating long-term strategies and short-term action programs. In a sense, the plans developed were indicative plans, and did not have technical sophistication nor the requirement of strict adherence to targets. The hallmarks of these plans were, effective policies, consultation (with the private sector), and flexibility in dealing with emerging situations (Baum and Tolbert, 1985, pp. 19, 20.)

In Korea, the highest institution in charge of economic planning was the Economic Planning Board (EPB). The main focus of the EPB was on the economic policy framework, and the only major state enterprise which was regulated was that relating to the ginseng trade, considering its importance as a natural resource and its perceived health benefits. Any major economic issue that required deep study was outsourced by the EPB to the Korea Development Institute (KDI), which had a contingent of professionally qualified staff. The Korean International Economic Institute (KIEI), on the other hand, was the “business arm” of the planning apparatus and was staffed among others by desk economists who were tasked to follow up developments in other countries and explore the market potential for Korean trade. The KIEI was in close touch with the private sector providing them feedback as needed to promote trade and investment abroad. Later in 1994, the EPB and the Ministry of Finance were merged to form the Ministry of Strategy and Finance (MOSF). This Ministry has enforcement functions as well. It oversees the National Tax Tribunal and the Financial Intelligence Unit.

As noted in the World Bank study on the East Asian Miracle, the high growth performance in the East Asian economies could be attributed to getting the basics right. Private domestic investment in physical capital and investment in human capital were the principal engines of growth. These investments were sustained by high levels of domestic savings.

The World Bank study also notes that sound development policy was a major ingredient in achieving rapid growth. Macroeconomic policy was unusually good and macroeconomic performance was unusually stable for stimulating private investment that was supported by policies to increase the integrity of the banking system. On the sectoral front, education policies were implemented through multiple channels to foster development (see the World Bank study on the East Asian Miracle for a full report).

## 7. Concluding Remarks

Let us now transcend the foregoing discussion on development planning and pose the question as to what we have learnt in the end. The main conclusion is that, in the broadest sense, the most important factors for successful growth and development are: policies, institutions, and human resource capacity. In Sri Lanka, all these factors benefitted from Gamani Corea's work albeit for a limited period. These may be called essential components, or legs of the tripod of development. In its simplest terms, a consistent macroeconomic policy framework, supported by a suitable regulatory environment is essential for people to save, invest, and grow the economy. Appropriate institutions are required to implement policies and programs and trained professionals are needed to run these institutions. These mutually reinforcing factors of policies, institutions, and human resource capacity are required simultaneously as parts of a composite whole for growth and development. For example, two legs of this tripod, say policies and institutions, without the human resource capacity would fail to provide growth and development due to lack of implementation. Institutions and human resource capacity without effective policies will also end in failure due to lack of direction and incentives. Thus, the key to economic success would depend on this tripod of development policies, institutions, and human resource capacity. These are simple in conceptual terms, but very difficult to implement in the real world, as witnessed during the past 40 years. However, addressing these challenges is well worth the effort to ensure that a country moves on a steady path of growth and development.

## References

Asian Development Bank, (2013), *Key Indicators* for Asia and Pacific, Manila.

Baum, Warren and Stokes Tolbert. (1985), *Investing in Development: Lessons of World Bank Experience,* Oxford University Press, New York, London.

Bowles, Roger A. and David K. Whynes, (1979), *Macroeconomic Planning.* George Allen & Unwin, London.

Gamani Corea, (1980), *Need for Change: Towards the New International Economic Order,* Pergamon Press, United Kingdom.

Gamani Corea, (2008), *My Memoirs,* Gamani Corea Foundation, Colombo.

Government of Ceylon, The Planning Secretariat, (1955), *The Six-Year Investment Programme, 1954-55* to 1959-60, Colombo.

Government of Ceylon, The Planning Secretariat, (1959), *The Ten-Year Plan,* Government Publications Bureau, Colombo.

Government of Ceylon, The Planning Secretariat, (1959), *Papers by Visiting Economists,* Colombo.

Government of Ceylon, *The Ministry of Planning and Employment,* (1971), The Five-Year Plan, Colombo.

Government of Sri Lanka, National Planning Division, Ministry of Finance and Planning, (1978), et seq. *Public Investment.* Annual Issues, Colombo.

Government of Sri Lanka, Central Bank, Website on Economic and Social Statistics, Colombo.

Kelegama, Saman, (2009) Review Essay on Gamani Corea, My Memoirs, in Sri Lanka Economic Journal Vol. 10, No. 1.

Pontryagin, L. B., V. G. Boltyanakii, R. V. Gamkrelidze and E. F. Mishchenko, (1962), “The Mathematical Theory of Optimal Processes”, Interscience, New York and London.

Ramana, D. V. and M. V. Bhatawdekar, (1967), *Problems of Economic Development, and Planning Techniques.* Lectures delivered as part of a course in development planning conducted in Colombo by the U.N. Asian Institute in Bangkok.

Ramsey, F. P. (1928), *A Mathematical Theory of Savings.* Economic Journal, Vol. 38. pp. 543- 59.

World Bank, (1993), *The East Asian Miracle,* Washington, D.C.