

**RETHINKING MODELS OF ECONOMIC DEVELOPMENT FOR NEPAL*****Udaya Raj Adhikari**

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Received 12th July 2020; Accepted 19th August 2020; Published online 18th September 2020**Abstract**

This paper introduces the various economic development models like the *Gujarat Model*, *Bihar Model*, *Nordic Model* and *China Model* to meet the objectives outlined in the introduction section of this paper. These models cannot be quantified since they merely propose some philosophical paradigms on how *development should or would take place*. The *New Economic Development Model (NEDM)* also called the "Development zone" model helps to identify Nepal's placement to reduce poverty rapidly and create enough employment opportunities in the country to achieve faster economic growth. The paper also predicts the *three 'i' framework as a rethinking approach of economic development for Nepal i.e. identification of zone, infrastructure in development and investment policy so that the overall economic development objective can be achieved*.

Keywords: Policy Development Plan, Growth-Inequalities Matrix, Development Zone.**INTRODUCTION****Development Performance of the Economy**

Nepal's growth performance has been sluggish, much lower than that of peer economies in the region since 2001, attributed to various factors including turbulent and unstable politics, prolonged political transition affecting development administration, and natural disasters, making the country an economic laggard in the region. The overall size of the investment is low, largely from the private sector that is channeled mainly to the services sector. The public investment that stands around 5 percent point of GDP is not only low but also insufficient as reflected in the high incremental capital-output ratio (ICOR) of 4.9, the highest in the region. Inefficiency is also manifested in the under spending of capital budget due to prolonged delays in the completion of projects (World Bank, 2009). Exports have slowed down to historically low levels accompanied by ballooning imports, resulting in an unprecedentedly high trade deficit. The overall growth performance was mediocre particularly in fiscal years 2014/15 and 2015/16, in the aftermath of the 2015 earthquakes, civil conflict and border blockade. Against this backdrop of low base years, the growth rate of subsequent years has been positive, contributed mainly by normalization of economic life after the end of trade blockade, favorable monsoons, improved power supply, a steady inflow of remittances and the massive launch of post-earthquake reconstruction programs. The *positive growth rate* is expected to be sustained in the near-term. Meanwhile, the IMF has cautioned that the pursuit of higher growth with the expansionary policy could lead to fiscal and external imbalances. To ensure sustainable growth in the medium-term, the need is to raise productivity capacity through higher investment and greater competition. Even in the face of the slowdown of economic growth in the 2000s, except the year 2005/6 amid an intensification of violent conflict and turbulent politics prior to 2014/15, the economy witnessed positive development in the number of areas. As presented above (Table 1), the growth rate in internal revenue has been impressive reaching 24 percent of GDP, the highest in South Asia, which has contributed to increasing economic self-reliance

for public expenditure. The ratio of public expenditure to GDP has been rising largely financed by internal resources. But the disturbing part is the increasing ratio of recurrent expenditure at the expense of capital expenditure; the trend is likely to continue further in the context of expanded administrative superstructure under the new constitution. The most positive development in the recent past particularly after 1990 is the substantial progress in *poverty reduction and social indicators* as reflected in the human development index, hunger reduction, the fulfillment of MDG targets and other aspects as reported in different international reports. The decline in Nepal's poverty is reflected both in terms of income poverty and multidimensional poverty. Nepal has been ranked 22nd among seventy-seven developing countries in the Inclusive Development Index of the World Economic Forum Report (2018), up from the 27th position in 2017, well ahead of several BRICS countries such as Brazil, India and South Africa (World Bank Group, 2017). The Nepal country Economic Memorandum of 2017 by the World Bank also highlights other aspects including the significant decline in income inequality in recent decades, low unemployment rate and strong female labor force participation in the country. Contrary to the experience of most other economies characterized by *high economic growth* with a limited impact on poverty alleviation, Nepal represents a unique case of modest economic growth with remarkable performance in poverty reduction. The improved social indicators and the remarkable progress in the reduction of multi-dimensional poverty are contributed mainly by the increased investment in the social sector and infrastructure building following the restructuring of public expenditure stated since the early nineties as part of the reform process. This resulted in increased access of households to basic social and economic services like education and health services, drinking water, transport, communications, irrigation, electricity and banking facilities. One of the most important factors behind poverty amelioration resulting from increased household income has been the growth of remittance inflow to the country. This phenomenon has, however, led to the loss of productivity at home affecting growth. There is growing feminization as well as shortage of labor for farming, public works and industrial activities. Over the past decade, there has been a sharp deterioration in export competitiveness, while

Table 1. Expenditure Revenue Indicators (1989/90-2017/18)
Rs in 10 Million

S.No	Heading	1991-92	1995-96	2005-06	2010-11	2015-16	2016-17	2017-18
1	GDP(Current Price)	144931	24891.3	65408.4	136695.4	225316.3	264259.5	300724.6
2	Total Expenditure	2641.8	465.4	11088.9	29536.3	60101.6	83724.8	106617.5
3	2 as percent of GDP	18.2	18.7	17.0	21.6	26.7	31.7	35.5
4	Recurrent Expenditure	9905.4	2156.2	6701.8	21016.8	37129.7	51861.6	69345.7
5	4 As percent of GDP	6.8	8.7	10.3	15.4	16.5	19.6	23.1
6	Capital Expenditure	16512.8	2498.1	2960.7	4732.8	12325.1	20874.8	26354.7
7	6 as percent of GDP	11.4	10.0	4.5	3.5	5.5	7.9	8.8
8	Total Revenue	13512.7	2789.3	7228.2	19981.9	48196.2	60918	72672.5
9	8 as percent of GDP	9.4	11.2	11.1	14.6	21.4	23.3	24.2

Source: Economic Survey Reports of the Ministry of Finance. 2017/18 data sourced from NRB report of February 2019.

imports have surged on the back of the rising inflow of remittances. The massive transfers have likely induced a Dutch Disease with the expansion of the non-tradable sector and its spending effect, leading to contraction of the manufacturing sector and the rise in real exchange rates. As Nepali Rupee is pegged to Indian Rupee, the pressure on the Nepali rupee to appreciate against foreign currencies other than India's has aggravated the problem of competitiveness.¹

Policy Development Plan of Nepal

Nepal began its move toward an open, market-oriented economy in the mid-1980s with the adoption of policies involving greater liberalization of the domestic economy and trade. Interest rates were partially deregulated and barriers to entry for joint-venture banks were lowered. Relations with the People's Republic of China were also strengthened during these years. A trail of reforms followed in the 1990s and early 2000s, particularly to improve the financial sector, improve access to microcredit, and strengthen government institutions. These reforms included the Co-operative Act of 1991, the Development Bank Act of 1995, the Financial Intermediary Societies Act of 1998, the establishment of the Rural Self-Reliance Fund in 1990, the establishment of Grameen-like regional rural development banks in 1992, and the establishment of the Rural Microfinance Development Center in 1998. Besides, several laws were passed in the early 1990s to improve the capabilities of institutions in the power sector, such as the Hydropower Development Policy and Electricity Act of 1992. In the mid-1990s, Nepal was hit by political instability, double-digit inflation and ballooning external debt, and a current account deficit. To address the fiscal deficit, several tax reforms were passed, including introducing a value-added tax in 1997 to cover a wide range of businesses. This was followed by the new income tax and new excise tax laws, and establishment of the Large Taxpayer Office in the early to mid-2000s. Revenue generation generally shifted from customs duties to the value-added tax and other sources. Several laws were also passed to improve the banking sector, particularly the credit culture. Some of the salient laws include the Nepal Rastra Bank Act, the new Directive on Credit Information and Blacklisting in 2002, and the new Bank and Financial Institutions Ordinance in 2004 (ADB, 2009). Other key reforms accomplished include privatization of state enterprises, greater flexibility of the currency, and a trade policy that has increasingly abandoned import substitution in favor of export promotion (ADB 2002). These reforms helped pave the way toward Nepal's membership to the World Trade Organization in 2004. Another major institutional reform has been adopting a planning approach to development. This began in Nepal in 1956 with the formulation of the First Five Year Plan (FYP), 1957–1961.

Nepal's FYPs generally set the government's overall goal and specific targets for the medium term. While the plans have different priorities, they usually have common objectives to increase output and employment; develop infrastructure; attain economic stability; promote the industry, commerce, and international trade; establish administrative and public service institutions to support economic development, and introduce labor-intensive production techniques to alleviate underemployment. The social goals of the plans were to improve health and education as well as to encourage equitable income distribution. Ten FYPs have been implemented and the Three Year Interim Plan (2007/08–2009/10) is currently being carried out (NPC various years). The first four FYPs emphasized the development of infrastructure, especially roads and electricity. Under the Fifth and Sixth FYPs, emphasis shifted toward agriculture and industry. Poverty reduction has been explicitly stated as a development objective since the Sixth FYP (1980–1985). Poverty alleviation was a major objective of the Eighth FYP (1993–1997), the first national plan formulated after the restoration of multiparty democracy in 1991. The Ninth FYP (1998–2002) adopted poverty alleviation as its sole objective. And the Tenth FYP was generally based on the Poverty Reduction Strategy Paper (NPC various years). Table 2 summarizes the thrusts in the FYPs since 1986. While poverty reduction has always been an overriding concern in development planning in Nepal, only since the Sixth FYP (1981–1985) has it been explicitly stated it as a development objective. The Ninth FYP (1998–2002) adopted poverty alleviation as its sole objective and intended to reduce poverty through (1) sustained and broad-based growth, (2) development of rural infrastructure and high priority social sectors, and (3) specific programs targeting the poor. The FYPs recognize accountability, democratic systems, and market-oriented economic structures that avow social and ecological responsibility as key factors in sustaining growth. A comprehensive poverty reduction strategy was developed and fully integrated into the Tenth FYP (2003–2007).

Statement of Purpose

Many countries aspire to formulate economic development model strategies to improve their citizens' quality of life. However, development economics has a lack of consensus about viable economic development models, and thus the rationale for this paper. This paper describes five economic zones of economic development to meet the needs of economists, developmental planners, and policymakers.

- To describe the application of four economic models that were previously used in different countries.
- To study impact assessment framework of previously used economic model on the entire economy, whether such development model were suitable or not.

Table 2. Nepal's Development Plan and Policy Highlights

Nepal's Development Plan	Policy Highlights
<i>Seventh Five Year Plan (1986-1990)</i>	<ul style="list-style-type: none"> During the Seventh Five Year Plan (FYP) period (1986-1990), the Government formulated its Program for the Fulfillment of Basic Needs, the first separate plan for reducing poverty. This ambitious long-term program envisaged eliminating poverty in Nepal for 15 years. It targeted increasing productivity of all sectors, expanding opportunities for productive employment, and fulfilling the minimum basic needs of the people. However, the FYP was later abandoned during the period of political upheaval. The Seventh FYP proposed expenditures of NRs29 billion. It encouraged private sector participation in the economy (less than NRs22 billion) and local government participation (NRs2 billion) Because of the political upheavals in mid-1990, the new government postponed formulating the next plan. The July 1990 budget speech of the minister of finance, however, implied that, for the interim, the goals of the seventh FYP were to be continued. During this period, foreign aid was expected to play a major role in development; thus, approximately NRs11.8 billion, or 44.4 percent of the total budget of NRs26.6 billion, was expected to be derived from foreign loans or grants.
<i>Eighth Five Year Plan (1993-1997)</i>	<ul style="list-style-type: none"> Poverty alleviation was a major objective of the Eighth FYP, the first national plan formulated after the restoration of multiparty democracy in 1991.
<i>Ninth Five Year Plan (1998-2002)</i>	<ul style="list-style-type: none"> The Ninth FYP adopted poverty alleviation as its sole objective and, unlike previous plans, established long-term goals for improving development indicators in all sectors based on the potential of each for reducing poverty. One of the goals of the Ninth FYP was to lower the poverty incidence from 42 percent to 32 percent by the end of the plan period in 2002, with a long-term goal of reducing this to 10percent within the coming 2 decades. In addition to these targets, the FYP identified several other variables relating to "human poverty" (literacy, infant mortality, maternal mortality, and average life expectancy at birth) as opposed to "income poverty," and set target levels for each of them. The Ninth FYP intended to reduce poverty through (1) sustained and broad-based growth, (2) development of rural infrastructure and social priority sectors, and (3) specific programs targeting the poor. In addition to integrating the "moderately poor" into the mainstream and providing targeted assistance to extremely poor households, the Ninth FYP included components to benefit the poor, the two most important being maintaining macroeconomic stability and restructuring government finances to increase the flow of resources to the social sectors
<i>Tenth Five Year Plan (2002-2007)</i>	<ul style="list-style-type: none"> The Tenth FYP set a target to reduce the poverty level to 30percent. A 10percent improvement in Nepal's human development index ranking is expected due to the improved social indicators. In the context of development goals, 6.2percent economic growth was targeted. The strategy of the Tenth FYP was to implement self-employment creating, income-earning, and social protection programs that directly benefit economically, geographically, and socially disadvantaged groups and castes, disabled and helpless people, and people living below the poverty line. The Ninth FYP focused on (1) high, sustainable, and broad-based economic growth; (2) social sector and infrastructure development; (3) targeted programs; and (4) good governance.
<i>Three Year Interim Plan, (2007/08-2009/10)</i>	<ul style="list-style-type: none"> The Interim Plan's main goal is to lay the foundation for economic and social transformation to build a prosperous, modern, and just Nepal by supporting the establishment of peace and reducing unemployment, poverty, and inequality in the country. The plan's strategy includes (1) giving special emphasis to relief, reconstruction, and reintegration; (2) achieving employment-oriented, pro-poor, and broad-based economic growth; (3) promoting good governance and effective service delivery; (4) increasing investment in physical infrastructure; (5) emphasizing social development; and (6) adopting an inclusive development process and carrying out targeted programs.

Source: National Planning Commission (Various Year)

- To predicts the three 'i' framework as a new approach of economic development for Nepal i.e. identification of zone, infrastructure in development, and investment policy so that the overall economic development objective can be achieved.
- This paper examines the above objectives through four models and five economic zones that seem to have structural similarities but exhibit unique different performance characteristics and output.

Identification of the Economic Development Model

Overview of the Economic Development Models

This paper introduces four development models to meet the objectives outlined in the introduction section of this paper. These are discussed below.

The Gujarat Development Model: Gujarat's development journey (of Gujarat state in India) has received tremendous praise both across India and the world. Under Narendra Modi's leadership, Gujarat was known for its development-oriented governance where the people were made active partners and stakeholders in the development journey. When Narendra Modi took over as the Chief Minister Gujarat (7 October 2001-22 May 2014) was reeling under the effects of a devastating earthquake. The drought, cyclone and floods on the preceding years too slowed the development journey. This is a model that depended upon the collective efforts of the people of the Gujarat state of India.

Gujarat's development journey is characterized as development-oriented, inclusive and participative. Policy decisions were not taken behind closed doors by select few individuals but were taken after consulting with all the stakeholders. An optimum use of technology was made to minimize corruption which helped the pace of development. Another special facet of the development of Gujarat was that it was not centered on any one sector. All three sectors namely agriculture, industries and services made an equal and active contribution towards the economic growth and development of Gujarat.²

The Bihar Development Model: This model has now become almost conventional wisdom that Bihar under the National Democratic Alliance government has moved onto a new and higher growth path. An examination of the Central Statistical Organization data for the decade since 1999-2000, however, reveals a cyclical move towards a higher growth continuum rather than any structural break under the NDA government. The recent growth path represents the resumption of a long, fluctuating and volatile movement towards a trade-led higher growth continuum that had started in 1994-95 but was interrupted by the impact of bifurcation of Bihar in 2001. A preliminary proposition is that the process of moving to a higher growth continuum since 1994-95 in Bihar follows from the diversified patterns of accumulation through the agency of new entrants to accumulation as an outcome of the social justice movement in Bihar. The evidence indicates a politically fractious movement of Bihar's economy since bifurcation to a volatile higher growth continuum that is lopsided in three dimensions regional, sectoral and social (Gupta, 2010).

The China Development Model: Economically, China has shocked the world. The Chinese economy has done remarkably well over the last three decades, consistently ranking among the fastest-growing in the world. It has attracted significant amount of foreign direct investment, and has become the largest trading country. Such remarkable successes were attributable to the model of the developmental state (Zhang, 2011). The Chinese reform since 1978 ranks as one of the most extraordinary episodes of social and economic transformation in history: industrialization, marketization, urbanization, and globalization all occurring at the same time. The changes are so comprehensive and profound that they represent a new model of Chinese economic growth. This model describes the requirements for building the new institutions including its public finances for future growth, adjustments in its savings, industry, and agriculture, changes in its demographic structure, business environment, and pattern of rural-urban migration, prospects for 'green growth', its energy policy trilemma and the climate change mitigation strategy, and changes for China's interaction with the international economy through its overseas investment and trade in high tech products. China's adoption of a new model of economic growth is of immense importance to people in China and everywhere.³ The Chinese model requires large fiscal resources, technological sophistication, a well-trained and loyal security apparatus, and sufficient political discipline within the regime not to take power struggles public. Nonetheless, as the prestige of the Chinese model grows, even without Chinese efforts to propagate it, other authoritarian governments are encouraged by the idea that authoritarianism is compatible with modernization, and they try to adapt, to varying degrees, Chinese methods of control (Nathan, 2015).

The Nordic Development Model: The Nordic model is a developmental model incorporating a competitive capitalism and a smooth provision for the wellbeing of the general public. In other words, it is an amalgamation of a free-market economy with a welfare state. The Nordic model insists on the need for political stability for economic growth, and it believes that political stability can be achieved through different social pacts and agreements but not through any sort of tyrannical or authoritative imposition of power. In Nepal too owing to the lack of political stability the pace of developmental activities has been slow. Hence political stability in the nation and different pacts and agreements in the society are necessary to increase the pace of development in every nook and corner of the country. According to the Nordic model the state shoulders not only regulatory responsibilities but also assumes developmental and entrepreneurial roles. Conventionally Nepal has been carrying out regulatory activities and has been formulating and implementing periodic and annual developmental plans and policies. However, as the majority of the projects are donor-driven and have been running under project-based approaches Nepal has failed to achieve desired outcomes. Similarly, despite having a lot more to do to keep pace with the socio-economic and technological advancements in the world there is a very limited entrepreneurial intervention of the government that is necessary for strong productivity and higher wellbeing of the people. The Nordic countries are today among the richest countries in the world measured by GDP per capita. These countries also come top in more or less every international comparison of competitiveness. This was not the case 150 years ago. In the mid-nineteenth century, the Nordic economies lagged behind those of the leading industrialized nations. The economic development in these countries has

therefore been swift. At the same time, these countries do not resemble the 'textbook model' of efficiency: the Nordic economies have been marked by large public sectors, extensive and generous welfare systems, a high level of taxation and considerable state involvement. As a result, the 'Nordic model' has received considerable international attention (Fellman, 2019).

Assessment of the Four Economic Development Models

Three 'I' Approach of the Development Model

The New Economic Development Model (NEDM) builds an analysis that how Nepal would be a prosperous country and what model does best suit for Nepal has been a hot topic for every policy maker in Nepal. At the same time, "the pan was not heated enough for banking cake ". Therefore agenda for economic development could not gain adequate attention. Nepal has successfully moved along the social and political transformation process to achieve the visionary goal "Prosperous Nepal, Happy Nepali". This paper aims to adopt the High growth and low inequalities zone' for economic development which will faster, inclusive growth with more and better jobs by making low disparities between rich and poor people.

Identification of the Development Zone

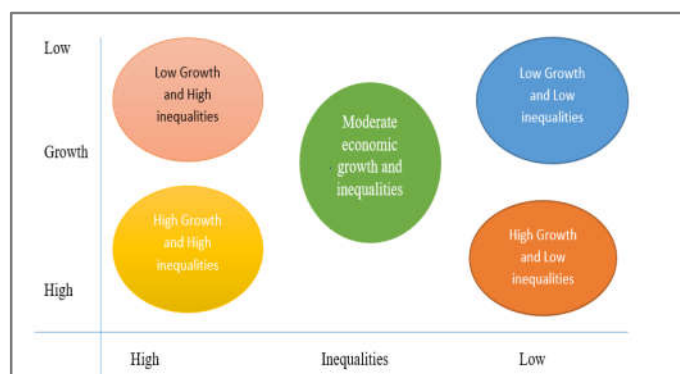


Fig. 1. Growth-Inequalities Matrix

The first 'I' of the new economic development model is called 'Identification of Zone'. The Growth-Inequalities matrix is a chart that was created to identify five-zone of economic model by using two macro-economic variables as 'growth' and 'inequalities'. The above figure 1 states that of choosing one best zone out of five which the country wants to maximize their output by achieving economic development objectives. The five zones of the economic model are discussed below.

High Growth with Low inequalities: Every country wants this model but only a few got success in the course of implementation. For example, the Bihar Model can be described as a good reference point. Bihar has been able to reduce proportion of people below the poverty line a full 20 percentage points within only five years (54 percent in 2005 to 33 percent in 2011). There is a risk of a downturn of economic growth if we add a big social welfare component. It creates an imbalance between the production and distribution. In a high growth scenario more benefits are reaped by large farmers, industrialists and investors therefore inequalities of income furthers increase. High economic growth with low inequalities has greater risk, therefore it is an upheaval journey to "Prosperous Nepal".

Table 3. Assessment of the Four Economic Development Models

Model	Zone Identification	Explanation
Gujarat Model	<ul style="list-style-type: none"> High Growth and High inequalities 	<ul style="list-style-type: none"> Development oriented governance. Characterized as development-oriented, inclusive and participatory. It is not centered on any one sector. All three sectors namely agriculture, industries and services made an equal and active contribution towards the growth of Gujarat. Gujarat's growth rate of 9.6 percent. <i>Bhattacharya (2013)</i> Gujarat was 20th based on urban inequality.⁴
Bihar Model	<ul style="list-style-type: none"> High Growth with Low inequalities 	<ul style="list-style-type: none"> An equal economic participation for all. Market-friendly growth and governance model. Bihar has a reduced proportion of people below the poverty line 20 percent within 5 years (54 percent in 2005 to 33 percent in 2011). (<i>World Bank Group ,2016</i>) Based on increasing social sector expenditures on health, education and welfare of scheduled castes and tribes. Bihar epitomizes the role of the state in delivering basic services, especially to the extremely poor. Bihar's economy limped along at an average annual growth rate of 2.7 percent, 3.4 percentage points lower than the national average, in 1991-2001. Over the next decade though, Bihar's growth rate trebled to 8.2 percent, beating the national average for the first time in independent India's history. <i>Bhattacharya (2013)</i> The poverty estimates indicate that the highest poverty headcount ratio (HCR) exists in Bihar at 53.5 percent as against the national average of 29.8 percent. (<i>World Bank Group ,2016</i>)
China Model	<ul style="list-style-type: none"> High Growth with Low inequalities 	<ul style="list-style-type: none"> Model follows the Beijing Consensus Idea. Economic Freedom exist but without political Freedom, strategic Investment abroad and emphasis on technology transfer Describes the replacement of an old uninhibited investment expansion model of growth, by a transition to modern economic growth model and provides insights into recent changes and where they are likely to lead. These include requirements for building the new institutions including its public finances for future growth, adjustments in its savings, industry and agriculture, changes in its demographic structure, business environment, and pattern of rural-urban migration, prospects for 'green growth', its energy policy trilemma and the climate change mitigation strategy, and changes for China's interaction with the international economy through its overseas investment and trade in high tech products China growth rate 9.5 percent and Gini coefficient 47.7. (<i>World Bank ,2011</i>)
Nordic Model	<ul style="list-style-type: none"> Low economic growth with Low inequalities 	<ul style="list-style-type: none"> Inclusive development A dynamic process of creative destruction and innovation A high level of public welfare spending and a high level of taxation. It incorporates a competitive capitalism and a smooth provision for the wellbeing of the general public, particularly the less well-off population. It insists on the need for political stability for economic growth. It believes that political stability can be achieved through different social pacts and agreements but not through any sort of tyrannical or authoritative imposition of power Average growth of Nordic countries is about 2.09 percent. (<i>World Bank ,2011</i>)

High Growth and High inequalities: It can adopt the Gujarat Model. The government can suspend the agenda for inequalities for a few years as the then Chief Minister of Gujarat Mr. Narendra Modi did. There should be consensus among the political parties on reducing the inequalities in the distribution of benefits after the achievement of high economic growth. If Nepal offers an attractive incentive to the investors as Modi did to big international investors receive benefits disproportionately, ultimately it will increase the Gini coefficient and ultimately will result in social tensions. The government may withdraw the incentives offered to the big investors as compared to small entrepreneurs.

Low economic growth with low inequalities: This zone is also called an inclusive growth Model which includes heavy social welfare. Achieving higher growth would be difficult through this model. E.g. If we have an inclusive road, where bullock, carts, the man pulling carts, Thela, bicycles, and buses/cars are allowed to move at high speed in that situation. Nothing different will happen under the inclusive growth model.

Low economic growth but high inequalities: This zone is the worst option. No country wants this model but poor countries are forced to adopt this model due to the lack of capital, lack of technology, creates a dichotomy between rural and urban area, stagnation in the rate of domestic saving, slow overall growth in agriculture production, slow overall growth in agricultural

production, slow growth in employment. Nepal had used this model in the past and paid a high price. Maoist, ethnic and geographical conflicts may have surfaced because of low economic growth and high inequalities.

Moderate economic growth and inequalities: If Nepal likes to add bigger social welfare components to the neoclassical Model. The economic growth rate would be moderate but it corrects the income and consumption inequalities. It would be an inclusive growth model that incorporates the small farmers, small industries and cooperatives and resources are allocated judiciously between small and mega projects.

Infrastructure in Economic Development

Infrastructure development is a precondition for growth. It plays an important role in promoting inclusive development with shared prosperity through its impact on the lives of the poor and marginalized populace, particularly in a situation like Nepal's where large part of the population lives in remote regions with poor access to economic services. Efficient infrastructure also helps raise labor productivity, economies of scale and human capital through contribution to education and health. It is this sector that raises agriculture income by connecting farm produces with the market, enables better delivery of services, and lowers production cost of firms to improve competitiveness and maximize the output.

Infrastructure and growth

That infrastructure accumulation may promote growth is hardly news for developing-country policymakers. In the macroeconomic literature, a number of studies have found empirical support for a positive impact of infrastructure on aggregate output. *Loayza, Fajnzylber and Calderón (2003)* find that the same telecommunications indicator is robustly related to growth in a large panel data set including both industrial and developing countries. To our knowledge, *López (2004)* is the only paper assessing the contribution of infrastructure to both growth and income distribution, again using telephone density as the infrastructure indicator. In a panel framework and controlling for possible reverse causation, he finds that infrastructure both raises growth and reduces income inequality. A few papers go beyond measures of infrastructure spending and infrastructure stocks and consider the issue of infrastructure efficiency. *Hulten (1996)* finds that differences in the effective use of infrastructure resources explain one-quarter of the growth differential between Africa and East Asia, and more than 40 percent of the growth differential between low- and high-growth countries. *Esfahani and Ramirez (2002)* report significant growth effects of infrastructure in a large panel data set in which the contribution of infrastructure is affected by institutional factors.

Infrastructure and inequality

Aside from the effects of infrastructure development on aggregate income growth, another strand of recent literature has examined its effects on income inequality. The underlying idea is that, under appropriate conditions, infrastructure development can have a positive impact on the income and welfare of the poor over and above its impact on average income. There are good reasons why infrastructure development may have a disproportionate positive impact on the income and welfare of the poor. From an aggregate perspective, *Ferreira (1995)* presents a model of public-private capital complementarity in which expanding public investment reduces inequality. Conceptually, infrastructure helps poorer individuals and underdeveloped areas to get connected to core economic activities, thus allowing them to access additional productive opportunities (*Estache, 2003*). Likewise, infrastructure development in poorer regions reduces production and transaction costs (*Gannon and Liu, 1997*). In this vein, *Estache and Fay (1995)* find that enhanced access to roads and sanitation has been a key determinant of income convergence for the poorest regions in Argentina and Brazil. Along the same lines, infrastructure access can raise the value of the assets of the poor. For example, recent research links the asset value of poor farm areas -- as proxied by the net present value of the profits generated by their crops to the distance to agricultural markets. Improvements in communication and road services imply capital gains for these poor farmers (*Jacoby, 2000*). Infrastructure development can also have a disproportionate impact on the human capital of the poor, and hence on their job opportunities and income prospects. This refers not only to education, but most importantly to health. A number of recent papers has focused specifically on the impact of expanding infrastructure services on child (and maternal) mortality, and educational attainment. This literature shows that policy changes that enhance the availability and quality of infrastructure services for the poor in developing countries have a significant positive impact on their health and/or education and, hence, on their income and welfare as well.

From the micro perspective, infrastructure reform whether through private participation or without it may involve price or supply strategies that hamper the access and affordability of infrastructure services for the poor. For example, withdrawal of subsidies may lead to higher prices post-reform; new private providers of infrastructure may charge higher connection fees than under public provision, or may be reluctant to serve poorer areas (*Estache, Foster and Wodon, 2002*). As a result, infrastructure services may become unaffordable to lower-income groups. Whether this happens in practice, however, depends on the overall design of the reforms, and there are numerous episodes in which the poor have benefited from reforms involving private participation. (ADBI, 2015).

Investment Policy: Growth and Investment

The country successfully attained the almost all MDGs and targets between 2000 and 2015. Building on this foundation, the country should expedite the process of achieving the SDGs which are much more ambitious and comprehensive. Even during slow economic growth over the past few decades, the country made remarkable progress in poverty reduction and human development. The main challenge at present is to accelerate economic growth by raising investment. Together with Afghanistan, Nepal remains the poorest country in the region. Only with increasing productivity and growth can the country uplift the living conditions of the people and meet rising aspirations. To quote the famous economist, Jagadish Bhagwati and Arvind Panagariya, growth is necessary for alleviating poverty in a country that starts from a low-income base, since it reduces poverty directly by pulling the poor into gainful employment, and facilitates additional poverty reduction by generating revenues that enable the financing of redistributive programs principally aimed at the poor. To achieve this double-barreled outcome, they suggest a two-track strategy: one, reforms to accelerate and sustain growth while making it more inclusive, and two: reforms to make redistributive programs more effective as their scope widens. The country's endowment of water, land and forest resources, agro-ecological diversity and natural beauty represent one potent source of growth if optimally utilized. Prof. Lester Thurow of MIT has observed that natural resources have ceased to be a major source of competitive advantage, as new technologies and institutions alter the traditional sources of competitive advantage. Having them is not a way to become rich and not having them is not a barrier to becoming rich; Argentina has them and is not rich, to put simply. Nepal's experience until today substantiates this theory. Despite the potential of Nepal's water resources, the country depends on external sources for almost half of its power need. Similarly, there is an increasing import bill of agro and forestry products even to meet the basic requirements because of the failure to make optimal use of one-third of the country's territory under agriculture, and 40 percent under forest cover. The following table explains the element of investment policy strategy and best practices in the investment area for development.

New strategies for achieving development zone

The departure from the 'business-as-usual' approach that will less address inequalities, reduce poverty rapidly and create enough employment opportunities in the country to achieve faster economic growth. The following are the post covid strategies to achieve high growth and low inequalities zone (Figure 1) for future growth direction.

Table 4. Investment Policy Framework for Sustainable Development

Investment Policy Elements	Policy Guidelines
<i>Strategic Investment Policy</i>	<ul style="list-style-type: none"> Investment Policy should be geared towards the realization of national sustainable development goals (which may be linked to globally defined sustainable development goals, or SDGs) and grounded in a country's overall development strategy. It should set out strategic priorities e.g. , investment in specific economic activities ,area of public-private partnerships, creating decent work opportunities, enhancing sustainability, qualitatively improving productive capacity and international competitiveness.
Investment Policy Coherence for productivity capacity building : <i>Human Resource Development</i>	<ul style="list-style-type: none"> The potential for employment creation and skills transfer should be one of the criteria for determining investment priorities. Taking into account the mutually reinforcing link between human resource development (HRD) and investment, investment policy should inform HRD policy to prioritize skill building in areas crucial for development priorities, whether technical, vocational, and managerial or entrepreneur skills.
Investment Policy Coherence for productivity capacity building : <i>Technology and know-how</i>	<ul style="list-style-type: none"> The potential for the transfer, dissemination and adaptation of appropriate technologies and the dissemination of know-how should be one of the criteria for determining investment priorities, and should be promoted through adequate investment related policies. Where investment priorities are driven by the objective to increase participation in and benefits from global value chain (GVCs), technology and skill requirements along GVC development paths, as well as upgrading opportunities, should inform policy.
<i>Infrastructure</i>	<ul style="list-style-type: none"> The potential for infrastructure development through FDI, in particular under PPPs or other risk- sharing arrangements, should be an integral part of investment policy. Infrastructure development policies should give due consideration to basic infrastructure areas crucial for the building of productive capacities, including utilities, (rail)-roads, sea and airports or industrial parks, as well as other sustainable- development sectors, in line with investment priorities. Strong governance and oversight should be exercised in essential infrastructure industries and sectors of a public service nature.
<i>Enterprise Development</i>	<ul style="list-style-type: none"> The potential for FDI to generate business linkages and to stimulate local enterprise development should be a key criterion in defining investment policy and priorities for FDI attraction. Enterprise development and business facilitation policies (including access to finance) should promote entrepreneurial activity where such activity yields particularly significant benefits through linkages and acts as a crucial locational determinant for targeted foreign investments. These policies are especially important where investment take place in the context of GVCs, as increasing domestic value added in trade and associated upgrading opportunities rely on the development of a local supplier base.

Source: UNCTAD Report (2015)

- The global COVID-19 pandemic has altered economic behavior that will affect growth going forward.** With over 10 million infections, 400,000 deaths, and a global GDP contraction of 5.2 percent, the global impact of COVID-19 is unprecedented. The impact of the crisis is not temporary but is likely to induce lasting changes in the way that economies operate. The following four trends are indicative of how economies' modus operandi will change as they emerge from the crisis:
 - Inward Orientation:** Increased barriers to the movement of goods and people is likely to alter trade and tourism, and limit outmigration opportunities.
 - Increased Vulnerability and Inequality:** The economic crisis has resulted in job losses across the board and particularly affected workers in the informal and gig economy who have little or no access to safety nets, accelerating inequality and poverty.
 - Digitization:** Lockdowns have accelerated a push towards digitization, moving trade in goods and services, social interactions and the provision of public services, online.
 - Green Growth:** Climate change presents an equal if not larger economic risk than the pandemic, which has led to a global impetus towards an environmentally sustainable economic recovery post COVID-19.
 - Debt:** Given the large economic shock, leverage of governments, firms and individuals is likely to rise in the aftermath of the crisis, with the potential for systemic risks.
- For Nepal to emerge stronger from the crisis, it will be necessary to adapt quickly to this new reality.**
 - Nepal is still at an early stage of the crisis, with a domestic outbreak having commenced only in May 2020 and infection rates continuing to rise. The crisis has forced the Government of Nepal (GoN) to make tough choices.
 - The national lockdown that has been in place since March 2020 has been effective in curbing the rapid spread of the virus.
 - However, it has adversely affected the livelihoods of workers in the informal sector. This has generated adverse knock-on-effects, for instance, leading households to neglect health care or education and contributing to a reported increase in gender-based violence. The GoN has initiated select policy measures to buffer the economic impact of the crisis and has started to gradually ease the lockdowns, but a comprehensive roadmap for the response and recovery will be necessary. By drawing on global experiences, this roadmap can allow Nepal to adjust to the new modus operandi induced by the crisis.
 - An economic framework to chart Nepal's emergence from the crisis can be structured in three stages: relief, restructuring and a resilient recovery.** During the relief stage, the priority is on addressing the immediate health impacts of the pandemic and providing support to livelihoods and firms to reduce vulnerability. As the country brings the pandemic under control and infection rates level-off, the economy can re-open gradually, leading to the restructuring stage. The focus in this stage is on strengthening health systems and adjusting to a new normal that prioritizes domestic employment generation in a greener and more digital economy. The resilient recovery stage focuses on new opportunities to invest and reforms to promote more sustainable, inclusive and resilient growth in a post-COVID world.
 - Each of the stages has been structured around four pillars.** These pillars include measures related to health, social protection, economic measures and cross-cutting priorities:
 - Health interventions are critical to save lives and ensure sustainable human capital growth going forward.** In the

relief stage, the focus of health measures is to contain the spread of the virus and to preserve health services for non-COVID-related infections. Priorities thus involve testing, treating and isolating the infected, which includes the build-up of testing capacity, quarantine centers and specialized health facilities. Information flow among different levels of government will be critical at this stage. In the restructuring stage, efforts can focus on increasing the capacity of the health system, for instance through private sector participation and a strengthening of federalism and restarting crucial vaccination programs. Developing guidelines to manage the gradual easing of the lockdown will also be important. In the resilient recovery stage, building systems for future disease prevention, outbreak response and health surveillance will be critical. This would include developing standard operating procedures to address future pandemics and maintain health service delivery during crises.

- Social support is needed to protect the livelihoods of the poor and vulnerable from current and future shocks and build human capital.** In the relief stage, a quick disbursement of cash or in-kind transfers to the most affected and vulnerable households will be critical. An expansion of the Prime Minister's Employment Program to cover newly unemployed workers and returning migrants will be key to protect livelihoods. Alternative approaches to distance learning could be adopted including radio, TV, and SMS to ensure broader coverage of students. In the restructuring stage, providing employment through public employment programs and supporting entrepreneurship would help along with continued provision of cash or in-kind transfers. The country will also benefit from support to mobile banking and digital financial services, and through the establishment of a digitized social registry. Efforts will also need to be made at getting children back to full-time schooling accompanied with enhanced school sanitation and health protocols. In the resilient recovery stage, the focus needs to be on a strengthened social protection system which can effectively address future shocks, employment support measures through reskilling and revised migration policies, and an education system which is more inclusive and digitally oriented.
- Economic support to firms will be important to generate employment and pivot them towards a greener economy, while managing debt overhang.** In the relief stage, liquidity support (time-bound) needs to be provided at the most affected firms with the objective of main employment. The agriculture and tourism sectors could be prioritized, given their criticality for food security and employment. In the restructuring stage, continued support to firms, including through recapitalization, will be needed. Private sector recovery can be supported through targeted investments in digitization and by providing fiscal incentives for green investments. In the resilient recovery stage, efforts need to be aimed at strengthening physical, digital and financial infrastructure to develop e-commerce platforms, enhance access to finance and promote green growth.
- Cross-cutting priorities would need to focus on fiscal sustainability, financial sector stability, a more digitally oriented and green economy and resilient public services.** In the relief stage, the focus needs to be on

accommodative monetary and expansionary fiscal policy to support banking sector liquidity and provide relief to households and firms. Essential services also need to be maintained together with removing barriers to internet access. In the restructuring phase, expansionary fiscal and monetary policy will likely continue but with increased emphasis on raising revenues and maintaining debt sustainability. It will also be important to assess the impact of the crisis on the financial sector and the health of utility companies so as to plan for a sustainable recovery. Increased emphasis on broadening internet access will support service delivery, with some non-essential services also resuming during this stage. In the resilient recovery stage, it will be important to undertake efforts to rebuild fiscal buffers and strengthen financial sector stability. Pandemic preparedness, financial sustainability of utilities and a strengthened federalism architecture will enable smooth and resilient public service delivery. In addition, enhanced digital systems and connectivity will support service delivery and private sector growth and business continuity. Finally, key elements of green growth would include sustainable and resilient infrastructure, strengthened solid waste management and air and water pollution control. (*World Bank, 2020*)

Summary and Conclusion

Since, the country has entered a new political set-up under the new constitution bringing the government closer to the people with promises for a just, egalitarian and prosperous society. To achieve these goals, Nepal will need first and foremost to make functional the new federal governance structure which it has adopted. The country's Achilles heel is the all-encompassing capacity deficit it has in implementing the written laws and executing policies, rooted in deteriorating political culture. The immediate need is to build and strengthen institutions at subnational levels to enable them to perform their constitutional duties. There are serious problems and challenges in governance, development planning, and financial management that require new economic development approach for good governance with emphasis and capable institutions which merit-based bureaucracy, rational planning and decision making based on proper appraisal of implementation capacity, rather than populist swaying. To sustain the new political structure, meet the fundamental rights to ensure freedom from poverty and deprivation, and provide opportunities for economic wellbeing and upliftment to attain its socialist aspirations, it is necessary to raise factor productivity, reorient social protection program making it more poverty focused and accelerate economic growth with increased volumes of quality investment. Public investment needs to be scaled up and made more efficient, particularly to close the infrastructure gaps, while restraining the growth of recurrent public expenditure. At the same time, domestic and foreign private capital is essential to rekindle and reinvigorate growth and to transform the economy. Only an investment -friendly climate with liberal policies, strong rule of law ensuring the security of property rights, improved infrastructure and business friendly regulations can lead to a higher flow of FDI in a sustained manner to expand Nepal's industrial base. FDI also brings in new technology, know-how and captive foreign markets. For the country to graduate to higher-levels of development and be on a course of equitable prosperity under the new political dispensation, it is necessary to reorient our work ethic, value system and public policy.

The excessive preoccupation with politics and factional interests must give way to a shared economic vision with an emphasis on productivity, formalization, social mobility, quality governance, meritocracy and social justice. A state can emerge to become self-legitimizing only when freed from partisan interests and parochial affiliations. This is the least that a country as proud as Nepal, South Asia's oldest nation-state, can hope to aspire in a new century that has brought unprecedented opportunities for rapid catch up with peers, while also confronting the existence peril posed by climate change. To sum up, economic growth is the most powerful force for reducing income poverty. Linkages between growth and poverty reduction, and the role of the government in promoting growth, are complex depend on a range of institutional, cultural, historical and physical parameters. Nepal has, in general, growth slower than the rest of other south Asian countries, with less robust links between growth and poverty reduction. Accelerating growth and strengthening these linkages will be critical for improving Nepal's capability to reduce poverty and attaining the national goals and SDG targets, in particular the goals of having the proportion of those living on incomes of less than one dollar a day and the proportion of people suffering from hunger. The growth was driven mainly by the realization of the failure of the past inward-looking policy in promoting growth and reducing poverty. The stranglehold of government regulations over social and economic lives giving limited space to private capital and market forces resulted in low productivity, sluggish economic growth and poor revenue generation. Prodded by the lessons learned from the international experience, South Asian countries including Nepal started using different development zone as explained above. So by adopting a *development zone* as "*High growth and Low inequalities Zone*", we can achieve social welfare by low disparities with employment opportunities in the current business environment. This was coupled with the restructuring of public investment in favor of the social sector, infrastructure creation, development of backward areas, target-oriented poverty alleviation and social justice measures for the marginalized and underprivileged towards achieving the socialist goal of economic and social justice. A new approach for the development of Nepal will require the *three "I" strategy* as discussed above in the paper. It will require developing a vision and strategy for reforming the administrative system to remove antiquated rules, strengthen capacity and eliminate the paralysis in decision making. And will also require improved fiscal performance to manage the mounting debt and carefully shepherd the country's scarce resources in the right direction.

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Notes

1. Nepal has achieved strong growth in revenue in recent years. That was facilitated by growth of the tax base with rising remittances propelling consumption of imports-alongside sustained efforts to strengthen tax administration including at customs. There is considerable scope to raise the revenue further. This would be important to finance the current and capital spending needed to achieve the sustainable development goals (SDGs) and address infrastructure bottlenecks to boost the medium term growth and raise living standards throughout Nepal. Mahat, R. S. (2020). *Trials, tremors and hope: Political economy of contemporary Nepal*. New Delhi: Adroit.

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4. On an All-India basis, Gujarat ranked 15th based on urban inequality, where 1 represents the highest inequality in the 2009-2010 fiscal year, the latest available. On the basis of rural inequality, Gujarat was 20th. Complete GINI coefficient data for all Indian states is not available for the 1999-2000 period so comparing Gujarat's inequality versus other states during that time period to the present is not meaningful. Retrieved From <https://qz.com/171409/gujarat-by-the-numbers/>

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