The Myths of Economic Growth (GNP): Implications for Human Development

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*In Gedeon Mudacumura and M. Shamsul Haque (eds.) *Handbook of Development Policy Studies*. New York: Marcel Dekker, 2004. pp.1-24.

Introduction

In the development field, most mainstream development theories, irrespective of their differences in philosophical and ideological underpinnings, tend to focus largely on the economic sphere while overlooking the non-economic domains (politics, culture, religion) or them secondary. This inclination towards economic reductionism could be observed in major conservative theoretical traditions such as non-interventionist classical and neoclassical economic theories and interventionist Keynesian and post-Keynesian perspectives, which focus mostly on economic realities in advanced capitalist nations. Similar emphasis on the narrow economic dimension could be found in reformist theories and approaches that emerged between the 1950s and 1970s, including unbalanced growth theory, vicious-circle theory, stages of growth theory, agriculture-first approach, and basic-needs approach, which attempt to address economic backwardness in developing countries (Haque, 1999). During this period, although certain modernization theories stressed the political, cultural, and psychological factors (Appelbaum, 1973; Kim, 1984), in the ultimate analysis, such factors were treated as causal variables related eventually to the realization of economic growth in these countries. Thus, what central concern inspires all these theories was often the issue of economic growth—the sources, causes, processes, obstacles, possibilities, and ends of such growth. Although the radical theoretical tradition of development theories, covering various dependency and neo-Marxist analyses, tried to explain issues such as dependency and underdevelopment, dependent development, class and the state, articulation of the modes of production, and so son (Randall and Theobald, 1985; Simon and Ruccio, 1986), their primary emphasis remained on the economic sphere.

Even if one gives more credit to some of the above theories for their scope to address certain non-economic factors, the fact remains that in real-life development practices and experiences—including most development policies, programs, projects, and agencies—have been shaped

by mainstream economic growth theories and guided by a narrow concern for growth indicated predominantly by measure such as gross national product (GNP). Under the challenges posed by the Great Depression and the Second World War, the practical historical circumstances reinforced this particular economic measure (Cobb, Halstead, and Rowe, 1995). In the developing world, since the worldwide decolonization and emergence of newly independent nations, the measure of GNP has remained the most dominant concern in adopting national development plans, rationalizing development programs, evaluating the success of development projects, and providing development assistance by international agencies. As Robinson (1979) observes, GNP per capita has been treated as the primary measure of development objectives, economic success, and people's national welfare. According to Streeten (1979:21-22), due to the "result of the propaganda of politicians and economists, aided by the transistor radio, television, and jet planes, economic growth came to be regarded as a human right."

In addition, it is largely the measure of GNP per capita that has been used to determine a country's economic status and rank in the overall global hierarchy of levels of national development (Hoogvelt, 1982:15). Although historically, the biased ranking or profiling of various societies into categories, such as civilized vs. barbarian, traditional vs. modern, and backward vs. advanced, were guided by cultural and religious prejudices, in the current age, it is the GNP measure that has dominated such ranking of nations into categories such as "least developed", "developing", "developed", and so on. No matter how parochial, superficial, and misleading the GNP measure may be, it has been effectively used by development experts and agencies in stereotyping postcolonial societies, certifying their ranks in global economic order, imposing on them the inappropriate development policies and strategies, and encouraging them to follow the economic leadership of international institutions dominated by capitalist states. This reductionist framework often precludes the use of various non-economic measures to determine the levels of development. In this regard, Merriam (1988:16) states the following about the importance of non-economic factors:

"In some ways the 'poor' cultures of the Third World are rich psychologically and spiritually, enjoying a contentment and sense of tradition sorely lacking in hectic, ulcer-ridden, depersonalised industrial societies. To many Buddhists, for example, inner peace is more valuable than a high Gross National Product. The highest divorce and suicide rates occur in the First and Second Worlds. If personal happiness were our criterion, the Third World might rank first."

However, the fact remains that the measure of GNP not only continues to dominate development studies and policies, it has gained new significance in recent decades due to the global rise or revival of market-biased neoliberal ideology and new economic policy, which tend to prescribe the realization of economic growth and efficiency while ignoring the non-economic spheres that are equally critical for authentic human development (Haque, 2002). In has been observed that today the measure of GNP is globally accepted as the indicator of human progress, level of civilization, sign of well-being, yardstick of economic success, and basis of policy debate (Bjonnes, 2002; Cobb, Halstead, and Rowe, 1995; Cobb, Goodman, and Wackernagel, 1999). However, the unilateral focus on economic growth by national governments, regional economic associations, and international institutions, has adverse developmental implications in terms of the biased and reductionist profiling of nations based on GNP, rationalization of the dominance of advanced industrial states (with higher GNP) in world order, imposition of policies by these dominant states on countries with lower GNP, rapid depletion of resources and degradation of environment in the process of accelerating GNP, and so on. This article attempts to explore major paradoxes and limitations of the measure of GNP as the most widely used indicator of development, and to evaluate the implications of this use of GNP for formulating development theories and policies. In pursuing these objectives, the next section presents a brief discussion on the connotation and existing critique of GNP.

Existing Critique of GNP: Some Examples

In general, Gross National Product (GNP) of a country represents the total money value of all goods and services produced by its residents in one year. More specifically, GNP includes the money value of total annual domestic product of a country, plus incomes (e.g. investment earnings and remittances) earned abroad by its residents, minus payments made to non-residents and foreign institutions (e.g. interest on foreign loans and repatriated profits made by foreign investors) (World Bank, 1985; David, 1986). On the other hand, Gross Domestic Product (GDP) is the total money value of annual goods and services produced by both residents and nonresidents (including profits made by foreign investors) in a country, minus incomes earned abroad by its residents. For developing countries, the GNP measure seems to be more realistic, because in these countries, profits or incomes made by foreign investors are much more common and significant than profits made by their residents in foreign countries (Cobb, Halstead, and Rowe, 1995). In any case, the GNP measure has come to represent the "principal measure of economic progress" and the "criterion of success" (Brown, 1990; Robinson, 1979). As mentioned above, the measure is used to categorize nations along the continuum between most developed and least developed nations, with other categories (such as high-income, middle-income, lower middle-income, and upper middle-income countries) between the two (Gonzalez, 1988). Although the use of GNP to assess the level of development has been expanded and globalized, there are some criticisms of this development measure.

More specifically, *first*, it has been pointed out that the valuation of goods and services in terms of GNP requires the existence of perfect market competition, and since such a condition hardly exists, there is certain skepticism about the use of this measure as an indicator of economic welfare (Bannock, 1975). The problem becomes more serious in many developing nations where market institutions are underdeveloped, and valuation of goods and services through free market is often ineffective. Second, there are certain inherent limits of GNP pointed out by various authors. For David (1986), the cross-national comparison of GNP in terms of a common currency like the US dollar, is problematic because the official exchange rates do not always reflect income and price differences among countries, and because of the existence of underground economy and non-priced economic activities in many countries. Another limitation of the GNP measure, according to Estes (1988:24-25), is that it is incapable of measuring non-economic (social) dimension of human welfare, which constitutes an essential part of overall development. In addition, this measure assumes all outputs as beneficial, without making any distinction between "productive and destructive activities" (Cobb, Halstead, and Rowe, 1995).

Third, in opposition to parochial economistic view of development held by mainstream economists, it is emphasized by some scholars that there is no direct compatibility between GNP growth rate and actual human development. As Daly (1989:75) points out, "Limits to growth do not imply limits to development." Similarly, for Trainer (1989:2), "Identifying development with sheer economic growth certainly does wonders for GNP, but it does very little for the poor majority." Fourth, going one step further and in line with dependency theorists, Alschuler (1988:6) mentions that sometimes economic growth may lead to national disintegration, internal colonialism, state repression, and thus, maldevelopment. Shiva (1989) also points out how the GNP measure may eventually imply maldevelopment. There are indeed certain developing nations with high GNP growth rates (especially the Newly Industrialized Countries), which have achieved such high growth rates often at the expense of internal state control and external dependence.

Finally, in order to overcome some of the major limits or shortcomings of GNP, there have emerged some alternative measures for assessing development. For example, there is so-called Physical

Quality-of-Life Index (PQLI) developed by Morris D. Morris and his associates, which covers issues like life expectancy, infant mortality, and adult literacy (Barnett, 1988). On the other hand, the UN Expert Groups covered a broader range of items in defining the "level of living", including health, education, nutrition, housing, employment, transportation, security, freedom, recreation, etc. (Estes, 1988). Very similar list of items was considered by the OECD in its concept of "social well-being" which, according to Estes (1988), reflects the living status in developed nations rather than developing countries. Based on such a critique of existing measures of socio-economic development, Estes (1988) himself presents a separate index called "Index of Social Progress" (ISP) in order to assess human welfare—it consists of 44 social indicators that are classified into eleven sub-indexes, including health, education, defense, demography, geography, economics, political stability, and so on. Some other authors present indicators such as Happy Life Expectancy, Genuine Progress Indicator, International Human Suffering Index, and so on (Yeh et al., 2001). On the other hand, Gonzalez (1988) offers the so-called "socioeconomic development index" (SEDI) that consists of four factors, including income, diet, health, and education. He compares the above four measures or indexes (GNP, POLI, ISP, SEDI), and explains how socioeconomic ranks of different countries vary when these diverse measures are used.

Although some of these measures to assess development are more comprehensive than GNP, they are still biased and reductionist in nature in terms of taking the indicators of affluent Western nations as the benchmarks of development, excluding structural factors of inter-class variations in living conditions, and presenting all developmental issues in statistical figures. The former UN Secretary General Javier Perez de Cuellar pointed out that the outcomes of economic development hardly benefited the poorest strata in society, and development concerns like human dignity and well-being should not be treated as "a collection of numbers in a list of statistical tables" (De Cuellar, 1983:190). More importantly, the past and present assessments of development have largely been based on the GNP measure: most national development plans, regional development initiatives, development reports have been dominated by the GNP figures. Even in the academic shere, although some scholars may pay attention to certain non-economic factors, eventually they also begin to "rank the less developed countries in groups based on GNP or per capita GNP" (Thanawala, 1990:15). Thus, there is a need for more comprehensive critical studies of GNP as a measure of development. Thus, the next section of the article attempts to present a more comprehensive critique of GNP.

Deconstructing the Myths and Realities of GNP

GNP as Process of Commoditizing Life

It has been pointed out that most measures of "economic growth", especially GNP, tend to put emphasis mainly on the market value of production, and thus on "the rate at which resources are converted to commodities", without taking into account all the goods and services that are not exchanged in the market (Mander and Barker, 2001). In other words, GNP largely involves the process of commoditizing material goods and human labor by selling them in the marketplace at certain prices or wages.

First, with regard to material goods, an increase in GNP may occur simply because of the commoditization of these goods—i.e. the process of measuring the monetary value of those goods based on their market values. In other words, when goods are produced and consumed by the same individuals without going through the process of market valuation and exchange, they are unlikely to be taken into account in the GNP calculation. The rate of the GNP increase, thus, often reflects the pace of converting resources into commodities. In subsistence economies, although people's basic needs are usually satisfied through "self-provisioning mechanisms" (goods produced and consumed without involving market-based exchange), such mechanisms remain outside the GNP measure (Shiva, 1989). One main reason, of course, is the fact that the valuation and information of these self-provisioning products (outside the market) simply do not exist, and thus do not appear in the GNP tables, in many developing countries (Robinson, 1979). While in developed capitalist economies, almost every product has a market value, in many developing countries, significant portions of material goods are usually produced in the household economy, and thus remain in the "non-market sphere" beyond the scope of GNP (Barnett, 1988; Cobb, Halstead, and Rowe, 1995).

As Shiva (1989) mentions, when people eat self-produced foods, live in self-built housing, and wear handmade garments, they are considered poor since these products have not been assigned with monetary values, but when they eat processed food, live in rented house, and wear machine-made garments available in the market, they are considered rich. Historically, before the intervention of the world capitalist system in traditional developing societies, most indigenous people used to produce goods and services for their immediate consumption rather than for accumulation and sale, and in the absence of a money economy, they depended on barter as a means of exchange. Such a self-reliant lifestyle could hardly be measured in terms of GNP. In the case of India, according to Chopra (1983:217), "the unorganized barter economy" of rural India was largely excluded from the

national income account. However, with the deeper incorporation of many developing societies into the world market, and the proliferation of the money economy into every sphere of life (Bjonnes, 2002), the GNP figures may show considerable progress, but often without much improvement made in actual quality of life. In some cases, a considerable portion of increased GNP may have nothing to do with real increases in goods and services, except the process of their marketization and valuation in monetary terms.

Second, in terms of human labor, the GNP figure increases with the commoditization of services involving paid labor. But the GNP measure fails to include unpaid labor involved in household activities such as caring for children and elderly parents at home, growing and preparing foods for family consumption, providing volunteer services to the community, and so on (Cobb, Goodman, and Wackernagel, 1999; Mander and Barker, 2001). With regard to the prevalence of such unpaid labour in most developing countries, Redclift (1987:15) observes that "informal activities are particularly important when we consider the environment in the South: collecting firewood, cooking food, feeding, clothing and housing people. None of these activities are adequately represented in GNP statistics." In traditional developing societies, the main reason for not including unpaid household labor (involved in parenting, caring, cooking, cleaning, repairing, etc.) in the GNP calculation, is the fact that in these activities "no money changes hands" (Cobb, Halstead, and Rowe, 1995).

In contrast, in advanced capitalist nations, due to the social realities of broken families, high divorce rate, single parenthood, end of inter-generational bonds, and the dominance of individualistic choice and careerism, the abovementioned household activities are performed by paid or waged labor counted in GNP. As a result, parenting is replaced by paid child care, home-cooking is replaced by dining in restaurants, neighborhood watch is replaced by salaried security guards, and so on (Cobb, Halstead, and Rowe, 1995). Thus, in these societies, as the families and communities declined, the GNP figures went up and economic experts became unnecessarily impressed (ibid.). With regard to the female workforce in these countries, Mishan (1986:114-115) observes that "the services that women now provide for industry and commerce continue to add to the value of GNP, the concomitant reduction of services they would otherwise provide in their homes . . . is ignored in the GNP computation."

While in developing countries, the unpaid labor of housewives used in washing, cooking, cleaning, and caring is not counted in GNP, in developed nations, most women add to GNP by earning wages as paid employees, and by purchasing home appliances (e.g. washing machines, coffee-makers, etc.), using expensive child-care services, or hiring domestic helpers to replace their traditional household duties. In addition, in order to

maintain their career image, these women spend a huge amount of money on expensive cosmetics, jewelry, dress, diet pills, fitness program, and so on—all of these also increase the GNP figure. On the other hand, the grandparents (senior citizens) in developed nations cost billions of dollars in state-funded old age security and care (as a part of GNP), in most developing countries, they stay with the family, take care of grandchildren, and contribute to the family stability through valuable advices based on their wisdom and experience. Even most children in developing countries often participate in household activities without being counted in GNP, their education is relatively inexpensive, and their sources of recreation is local games and sports and hand-made toys (also outside the GNP loop), whereas children in developed nations inflate the GNP figure by billions of dollars due to most expensive education, child care, high-tech toys, cartoon shows, computer games, and so on.

It is clear from the above discussion that the commoditization of material goods, human labor, and lifestyle in terms of determining their market values based on their supply and demand is crucial to include them in the calculation of GNP. In the capitalist nations, due to the existence of advanced markets and an intensive process of commoditization, most products and work hours are counted in their GNP figures. But in developing societies characterized by self-serving rural economies and underdeveloped market systems (especially countries with minimal exposure to the world capitalist system), many people themselves grow their foods, build their houses, perform their household activities, and perform care services for their family members, although these outputs and services outside the market do not appear in the GNP figures. Thus, one may conclude that the measure of GNP is quite misleading to compare the standards of living between the developed and the developing countries.

GNP without People's Well-being

In modern market economies, a considerable portion of economic growth (in terms of GNP) are based on activities and goods and services that hardly contribute to human well-being in any form. As pointed out by Cobb, Goodman, and Wackernagel (1999), the GNP or GDP is simply the total amount of money spent on goods and services irrespective whether they increase or diminish actual well-being. *First*, the money spent on and the revenue generated from the whole advertisement industry has become colossal—although it publicizes various consumption items to attract customers, by itself, it does not produce any goods for human consumption. In modern societies, the sale of most products involves massive advertisements, and the customers are often attracted to such products not

because of their actual needs, but because of continuous manipulation of customers through such advertisements in various media. In fact, there are hardly any advertisements for products related to primary human needs such as basic food items, medicines, education, and so on.

But there are massive advertisements for relatively unnecessary goods, ranging from cosmetics to private cars, alcoholic beverages to diet pills, airlines to hotels, children's toys to adult entertainments. It is estimated that an average American observes 150,000 advertisements on television in lifetime (UNDP, 1998). In the process of shaping the desires of consumers for various products, the global spending on advertisements amounts to at least \$435 billion, and the recent growth has been fastest in developing countries like South Korea, the Philippines, Colombia, and so on (ibid.). Although this huge spending on advertisement constitutes a part of GNP, it does not offer any tangible consumption goods, it basically produce sensational images and symbols for various products and services to attract customers and manipulate their consumption patterns. Even some of the hazardous or harmful products can be made attractive through their repetitive advertisement. However, the capitalist market economy has to continue advertising in order to manufacture customers' needs and expectations, so that they never feel self-sufficient. As Weaver (1973:104) mentions, "The industrial economy is based on people wanting more and more material goods... advertising plays some part in this process."

Second, due to the abovementioned proliferation of advertisement industry, many goods are produced and purchased by customers, and thus counted in GNP, but they often do not enhance human well-being. Today there are dozens of over-publicized but ineffective products in the market that claim and fail to address human disorders associated with modern lifestyle, including alcoholism, sexual dysfunction, job stress, loneliness, and so on. It is the excessive publicity of products through advertisement that leads to "addictive consumption", and without such publicity many customers would not spend money on these products (Cobb, Halstead, and Rowe, 1995). Although such addictive consumption may not improve well-being, but it increases GNP. In addition, since intensive advertisements distort human wants and manipulate them to possess more and more, many goods are purchased but only partially consumed or not consumed at all. In this regard, Mishan (1986:183) mentions some of such unused or under-used products covered in GNP, including unread books and magazines, hardly used electronic goods, discarded sports equipments, unused postcards and sales catalogues, and so on. In other words, although many products are sold through intensive publicity (often based on fabrication or misinformation), which boost the nation's economic growth figure, they fail to enhance people's well-being to the extent that they are usually underutilized, not to

mention their adverse outcomes in terms of worsening the problem of garbage disposal.

Third, another item that adds to GNP but cannot be consumed or do not improve human well-being, includes the production of military hardware and lethal weapons (Mander and Barker, 2001), which represents one of the biggest sources of government expenditure in the world. In the US, by the mid-1980s, the national economy became heavily dependent on arms production, and it increasingly accounted for a major part of the nation's economic growth (Redclift, 1987; Mishan, 1986). In 2001, the world military expenditure was \$839 billion, and only five rich industrialized countries accounted for more than 50 percent of this expenditure (SIPRI, 2002). Although the global military expenditure declined during 1987-1998, perhaps due to the end of the Cold War, it increased by 7 percent during 1998-2001 (ibid.). By 2003, while the estimated military budget rose to \$379 billion in the US, it also increased in China, India, and Russia (CDI, 2002; Walker, 2002). Although the colossal business of arms production boost the GNP figures, especially in advanced industrial countries, products—including conventional arms, ballistic missiles, nuclear arms, biological and chemical weapons—cannot contribute to human well-being in terms of people's living standards.

On the other hand, the opportunity costs of expansive military budget in developing countries are significant, because the huge defense budget reduces the funds available for the education, health, transport, and housing sectors that are so critical for the well-being of poor population. Of course, one may argue that the strong defense sector contribute to human well-being in terms of greater national security, which is largely a self-serving argument, because inter-state conflict and arms race are not ordained by any supernatural power—they are human creations and often involve the vested interests underlying the whole political economy of defense industry. If various nations would decide to have collective peace and security without military expansion and arms proliferation, a more genuine and long-lasting security could be achieved, the resources available of basic human needs would increase, and the human and environmental costs (e.g. deaths caused by wars and environmental disorders caused by nuclear arms) could also be avoided. Under such an ideal global situation, although the GNP figure might plummet, the extent of actual human well-being would certainly improve.

Finally, in advanced market economies, for most products, there are many intermediaries involved between the production and consumption processes, many of which may be counted in GNP but do not enhance human well-being. For instance, before reaching the consumers, many food items have to pass through various stages such as storage, packaging and repackaging, using preservatives, transporting to various destinations, and so

on. It has been mentioned that in the US, the food supply system involves intensive use of energy at its various stages such as processing, transportation, and preparation (Brookfield, 1979). However, in the final analysis, an apple pie remains an apple pie irrespective of how many times it is packaged, how much distance it travels, how long it is kept in cold-storage, and how much it is treated by preservatives. However, each of these stages between production and consumption involves other final products (such as packaging, transport, storage facilities, preservatives, and distribution outlets), which cannot be consumed but are taken into account in the GNP calculation. On the other hand, in the localized rural economies in developing countries, as people usually produce their own consumption goods or purchase them fresh from small local markets, the long chain of intermediaries between production and consumption, which boost the GNP figure without enhancing actual well-being, hardly exists in this context.

GNP Concealing the Hidden Costs

There are many hidden costs that are not taken into account in the calculation of GNP: while GNP includes the benefits of industrial and technological production in market economies such as abundant food, comfortable shelter, increased mobility, and improved communication, it hardly takes into account the costs involved in such production process, including the depletion of natural resources, air and water pollution, soil erosion, risk of radiation, destruction of species, economic disruption, urban congestion, low-quality processed foods, family breakdown, destruction of community, increase in crime, and so on (Bannock, 1975; Cobb, Halstead, and Rowe, 1995). This serious shortcomings of the GNP measure require further clarifications.

First, the GNP figure is flawed because while it takes into account the depreciation of industrial plant, its fails to consider the depletion of "natural capital" like fossil fuels and forest resources (Brown, 1990:7-8). As various nations, especially the advanced industrial nations, extract more oil and gas from the ground, the growth rate of GNP increases, but this measure overlooks the fact that the more these non-renewable natural resources are exploited, the less quantity of such resources will be available for future use (Cobb, Goodman, and Wackernagel, 1999). As Mishan (1986:117) mentions, the rate of using resources like fossil fuels, mineral reserves, and water reserves increased to such an extent that it might pose a threat to the use of such resources by the future generations. Although the depletion of these natural resources may add to GNP in the current year, it makes such resources less available in the future years: therefore it is a violation of "basic accounting principles" if such depletion is not considered "a cost on the

national accounts" in terms of the unavailability of such resources in the future (Cobb, Goodman, and Wackernagel, 1999; Cobb, Halstead, and Rowe, 1995). Beyond resource depletion, the massive use of fossil fuels by growth-inducing industries and cars is responsible for the emission of greenhouse gases (especially carbon dioxide), which may eventually lead to global warming, the sea-level rise, disastrous floods, and so on. Unfortunately, these catastrophic costs of growth-related products and activities are always overlooked in the GNP assessment.

This interpretation is also applicable to the case of renewable natural sources such as forests and fisheries, because continuous over-exploitation of these resources exhaust them so much that the rate of depletion often exceeds the regeneration capacity, and thus, they eventually become nonrenewable resources (Shiva, 1989). With regard to the eventual destruction of forest due to its rapid depletion, Brown (1990:7-8) mentions that in the calculation of GNP "the trees cut down are counted as income but no subtraction is made to account for depletion of the forest, a natural asset." During the recent two decades, the amount of tropical forest lost was 7 million hectares in Latin America and the Caribbean, 4 million hectares in Asia, and another 4 million hectares in Sub-Saharan Africa (UNDP, 1998). Similar observation is made about the depletion of the fisheries that it may improve the national account of economic growth only until the whole sector collapses (Cobb, Halstead, and Rowe, 1995). The global fish stocks have already been depleted or are in danger of being depleted by 25 percent (UNDP, 1998). Once again, the point here is that the measure of economic growth only shows the rate of exploiting natural resources, while ignoring its cost in terms of the unavailability of such depleted resources in the future. This form of economic growth based on the mindless depletion and waste of natural resources that endangers the future generations, has been interpreted by the UNDP (1996:4) as "futureless growth". In this regard, Brown (1990:9) mentions that if the environmental outcomes of economic growth, including resource depletion, are considered, "real economic progress would be much less than conventional economic measures indicate."

Second, another cost not counted in GNP is the process of land degradation—e.g. soil erosion, salinization, groundwater depletion, and desertification—caused by intensive cultivation, irrigation, fertilizer use, and so on. While such modern cultivation, often pursued for cash crops by commercial agriculture, brings immediate economic gains and boosts GNP, it leads to land degradation to such an extent that the rate of land productivity eventually declines, which is not taken into account in assessing economic growth. It has been observed that modern cultivation based on irrigation, fertilizer, and pesticides accounts for the salinization and desertification of land—thus one-sixth of the world's land area (about 2 billion hectares) has

already been degraded, and almost 70 percent of dry land is at risk worldwide (UNDP, 1998; Redclift, 1987; Bjonnes, 2002). In both developed and developing countries, the expansion of agricultural modernization and the adoption of high-yielding varieties have usually caused the depletion of groundwater and the loss of soil quality (Brookfield, 1979; Redclift, 1987). Regarding the exclusion from economic assessment of this worsening problem of land degradation, it is mentioned that "with the existing economic accounting system, those who overplow and overpump appear to be doing well in the short run, even while facing a disastrous collapse over the long run" (Brown, 1990:9). In addition, in the process of economic development, the construction and expansion of highways, airports, pipelines, seaports, buildings, rail-lines, industrial plants, and so on, in most countries, huge areas of cultivable land have been destroyed or degraded, and these are hardly taken into account in the GNP account (Mander and Barker, 2001; Cobb, Goodman, and Wackernagel, 1999).

Third, the measure of GNP fails to include its indirect cost to human health and lifestyle, especially in terms of serious health hazards resulting from the GNP-inducing commercial foods and industrial products and the loss of leisure and family time caused by the GNP-friendly waged labour. It has been reported by experts that in this industrial age, people are absorbing and inhaling toxic chemicals, synthetic materials, and harmful gases through commercial food chain and intensive industrial atmosphere, which have damaging effect on their livers, kidneys, lungs, and other organs (Caldwell, 1977). In the process of boosting economic growth, the replacement of home-cooked foods (overlooked in GNP) with manufactured foods (counted in GNP) has caused new diseases or the "diseases of civilization" in high-income nations, including diabetes, cancer, blood pressure, and so on, which are relatively absent in traditional low-income countries (Caldwell, 1977). Ironically, the money spent on research, medicines, and hospital services for these modern diseases also increases the GNP figures of affluent nations, whereas the absence of these diseases and medical services implies less GNP for traditional societies.

On the other hand, in the process of generating incomes, most citizens in advanced market economies have no choice but to be engaged in waged labor in various organizations to earn their livelihood, which implies that they have to compromise their leisure time spent with family and friends. Even from a utilitarian perspective, since the eventual objective of any meaningful economic growth and income is supposed to be individual satisfaction, this loss of leisure time is an opportunity cost of waged labor. However, the measures of economic growth such as GNP or GDP ignore the value of such leisure and recreation (Cobb, Goodman, and Wackernagel, 1999). As a result, in some of the traditional societies, although people may

lead a happy and relaxed life based on the satisfaction of basic material needs, leisure and recreation with family, and pursuit of spiritual belief, they show poorly in the GNP figures since these mode of life does not add to the market-based indicator of economic growth (see Bjonnes, 2002).

GNP Pathologies Leading to More GNP

The abovementioned useless components and unaccounted hidden costs of GNP—such as advertisement and overconsumption, industrialization and environmental hazards, waged labor and alienation, and so on—create a series of adverse or pathological outcomes (e.g., obesity, pollution, crimes) that require additional products and services (e.g. weight-loss programs, environmental regulation, crime control) which also add further to the GNP figure. In other words, the pathological consequences of GNP themselves lead to more GNP. In this regard Paul Streeten mentions that if "it were to be found that what we had been measuring was not goods, but anti-bads, produced in order to combat the bads produced by the process of growth, we might all agree that economic growth was not all that wonderful" (Streeten, 1988:7). However, this dimension of the GNP myth requires more specific explanations.

First, as mentioned earlier, due to continuous media manipulation of consumer's behavior through massive advertisement industry, there is a tendency of overconsumption of manufactured or processed foods (usually with high sugar and fat content) contributing to the national account of GNP. This pathological consumption has led the problem of obesity, and thus to the proliferation of numerous diet pills, weight-loss programs, exercise machines, low-fat products, and fitness clubs, which contribute to a further boost in the GNP figure of affluent nations. In the US, for example, more than 50 percent adults are overweight or obese, the number of obese children increased by 50 percent in recent two decades, more than two-thirds of the population are trying to lose weight, and thus, the annual spending on various weight-loss products and programs has reached about \$33 billion (Redefining Progress, 1999; Cobb, Halstead, and Rowe, 1995). In addition, about 300,000 people die every year from unhealthy diet and inactivity, and the medical spending on various obesity-related diseases (e.g. breast and colon cancer, heart disease, and stroke) amounts to over \$51 billion per year in the US (Redefining Progress, 1999), and all these constitute a part of this country's GNP. In contrast, in many developing countries where the modern food industry, especially the fast-food chain, has not yet entered in any significant way, the problem of obesity hardly exists, and thus, the pathological GNP cannot add to their economic development indicators.

Second, in the process of generating GNP, the massive expansion of

industries usually involves the burning of fossil fuels, use of hazardous chemicals, and pollution of air and water. As Weaver (1973:109) suggests, "Once growth is introduced as the primary goal, environmental pollution is inevitable. Each firm must pollute in order to compete with other firms . . . " This situation creates the need for various environmental programs and agencies to regulate and monitor these industries and their products and to carry out clean-up operations. The management of human waste and garbage has become a great challenge in cities worldwide. It is estimated that in the past 50 years, the rate of global carbon dioxide emissions from fossil fuels increased fourfold, and in past 20 year, the amount of per capita waste in industrial nations increased three-fold (UNDP, 1998). As Mishan (1986:118-119) points out, the environmental pollution caused by private industries, usually become the responsibility of the government to spend public money to clean up such pollution, and this expenditure appears in the national accounts as a component of GNP. Today in almost all nations, there are environmental ministries, agencies, and departments spending a considerable part of the national budget to regulate environmental hazards, monitor environment-related industrial activities, clean up garbage, create conducive infrastructure, and maintain environmental health. There are also examples of environmental disasters such as the Exxon Valdez oil spill which required the government to spend money on the clean-up of toxic waste, and it added to the GNP figure (Cobb, Goodman, and Wackernagel, 1999). Similarly, the medical bills paid for health problems caused by hazardous environment become a part of GNP. In this regard, it is pointed out that it is a violation of accounting principles to incorporate such public and private expenditures on managing environmental degradation and its health effects into the calculation of GNP (Cobb, Halstead, and Rowe, 1995).

Third, in most capitalist nations, the pursuit of economic growth and accumulation based on market competition, utilitarian self-interest, and waged labor, has reinforced individualistic motivation, disintegration of family, destruction of community, erosion of family and community support, feeling of loneliness and alienation, and so on. These socio-psychological patterns arising from capitalist economic growth, on the other hand, have led to pathological behavior such as mental disorder, sense of insecurity, alcoholism, and criminal acts (Weaver, 1973). Since the family and community support systems have virtually disappeared in modern industrial societies, numerous public and private sector organizations have emerged and considerable amount of money is spent to address these pathologies, which become a part of GNP (Cobb, Goodman, and Wackernagel, 1999, Weaver, 1973). For instance, the erosion of family institution in industrial nations is evident in alarmingly high divorce rate, which has generated various services, including marriage counseling, sex-advice clinic, divorce

settlement, single-parenthood consultation, child care, and so on. Although these services were relatively unknown in the low-income societies (Mishan, 1986), they now constitute a part of GNP in affluent nations.

Related to the fragmentation of family and community and impersonal atmosphere at the workplace, is the feeling of alienation, loneliness, and stress that often leads to artificial coping mechanisms such as alcoholism, drug abuse, anti-depression pills, psychotherapy, and varieties of recreational (often perverted) items such as gambling, night club, video, adult movies, massage centers, computer games, hot-line facilities, commercial sports, and so on. All these services arising from the pathological outcomes of industrial societies add tremendously to the calculation of GNP. In European countries, for instance, the average cost of alcoholism represents 2 to 6 percent of GNP (Alcoweb, 1996). Social breakdown in these societies is also related to various forms of crimes. In the US, the expansive crime-prevention system and security industry (e.g. locks and electronic devices) generate \$65 billion a year, and it is included in its GNP (Cobb, Halstead, and Rowe, 1995). In addition, due to the erosion of family and neighborhood support systems, most individuals feel vulnerable or insecure, and in order to overcome such a perceived or real sense of insecurity, there have emerged various insurance policies for virtually all aspects of life—health insurance, car insurance, property insurance, travel insurance, unemployment insurance, life insurance, and so on—which are also a plus for GNP (Cobb, Goodman, and Wackernagel, 1999). In traditional developing countries, the guarantee of individual security is not based on such organized policies offered by the profit-making insurance companies, it is often ensured by family and community protection that does not appear in GNP. In short, in advanced industrial nations, the pathological outcomes of economic growth or GNP require the adoption of redress mechanisms and remedial services that boost the GNP figures of these countries further.

Critical Implications of the GNP Myths

It has been discussed above that the development policies and programs pursued by countries all over the world have dominated by the GNP indicator despite the availability of some alternative measures. However, the idea of economic growth in general and GNP in particular, has serious limitations. As discussed in great details in this article, the GNP figure may continue to increase by simply putting market prices without adding actual goods and services and without enhancing people's well-being. In addition, GNP fails to include the unaccounted costs of economic growth, but it incorporates expenditures made on activities related to pathological outcomes of economic growth itself. Beyond these shortcomings or drawback of GNP,

this section briefly explains some of the major critical implications of using GNP as the primary development agenda for various countries.

Economic Impacts

First, in general, economic growth (especially the GNP indicator) has not only been used by international agencies such as the World Bank, International Monetary Fund (IMF), and World Trade Organization (WTO) to impose economic policies and conditionalities on developing countries, it has also been used by governments in these countries to justify policy reforms, invite foreign investments, and ask for foreign loans (Bjonnes, 2002; Streeten, 1979). As early as 1969, the report of the Commission on International Development submitted to the World Bank emphasized an increase in foreign aid to enhance the rates of economic growth in developing countries (Minhas, 1979). Earlier scholars such as Rostow interpreted development as "economic growth", and suggested that the objective of growth could have provided the rationale for international aid, technical assistance, and foreign investment (Streeten, 1979). Thus, in the name of GNP, the extent of external debt and dependence of these countries has considerably increased. Between 1970 and 1990, the combined total external debt of all developing nations increased from only \$100 million to \$1.3 trillion (O'Cleireacain, 1990). In the name of economic growth, developing countries borrowed heavily from external sources that worsened their conditions of dependence and diminished their economic self-reliance.

Second, whatever increase in GNP has been achieved through economic growth policies, the situation of poverty has not improved in many developing nations. The UNDP (1996:2) calls it "ruthless growth", which "benefit the rich, leaving millions of people struggling in ever-deepening poverty. During 1970-85 global GNP increased by 40%, yet the number of poor increased by 17%." In many instances, while the overall level of GNP has increased, the growth-led policies have often diminished the living standards of common people (Bjonnes, 2002). In Africa, the average household consumes 20 percent less today than 25 years ago (UNDP, 1998). Globally, about 20 percent of the world population has not benefited from the explosion of consumption growth, and in the developing world, 33 percent peoplre are without safe drinking water, 20 percent without adequate food, and 25 percent without adequate housing (UNDP, 1998; Brandon, 2000; Karliner, 1997). Ironically, although the world's food supply is adequate, each year 30 million people still die of hunger, 800 million experience malnutrition, and millions more cannot afford to purchase enough food (Bjonnes, 2002).

Even in countries where the GNP level has improved due to rapid

industrialization, agricultural modernization, urban development, and foreign investment, it is usually the affluent elite (industrialists, bureaucrats and politicians) who gained from such ventures, while impoverishing the majority of the population, including the rural and urban poor. In Africa, for example, large industrial projects and irrigation systems have benefited the rich minority, but they have destroyed the local production systems and the indigenous farming and fisheries on which the poorer sections always depended (Postel, 1990:47). Similarly, in many developing countries, the environmental degradation and resource depletion caused by growth-led activities have devastated the livelihood of the poor (Mander and Barker, 2001). The measure of GNP has no scope for considering the worsening situation of poverty as long as the overall national economic figures keep increasing even though such GNP figures are often deceptive in many ways discussed in this article. In addition, the GNP indicators often perpetuate a form of psychological poverty among people in traditional societies by ranking their non-market but self-reliant lifestyle at a much lower level in comparison with the market-driven lives of people in advanced market economies.

Third, an overemphasis on the realization of national economic growth understood in terms of GNP often conceals, justifies, and even worsens inequality between income groups and between nations. It has been pointed out that since the GNP or GDP measure overlooks the issue of income distribution, any economic gains made by few high-income households may be understood as benefits to all—it does not make a distinction between the gainers and losers of higher economic growth (Cobb, Halstead, and Rowe, 1995). Thus, at the international level, although the total global income reached \$23 trillion by 1993, about 20 percent of the world population living in industrial nations accounted for \$18 trillion, while 80 percent of this population living in developing countries claimed only \$5 trillion (UNDP, 1996). According to UNDP (1997), in fact, the share of the global income for the poorest 20 percent of the world population declined from 2.3 percent in 1960 to 1.4 percent in 1991 to 1.1 percent in 1997. Despite the continuous increase in the global GNP, the economic gap between the richest and poorest countries increased from a ratio of 3:1 in 1820 to 35:1 in 1950 to 72:1 in 1992 to 84:1 in 1998 (Bjonnes, 2002). Similarly, in terms of consumption, in 1998, while only 20 percent of the world population in the richest countries accounted for 86 percent of the world's private consumption expenditures, the poorest 20 percent accounted for as little as 1.3 percent of such expenditures (UNDP, 1998). At both the global and national levels, the rapid economic growth facilitated by globalization has benefited the rich, it has hardly trickled down to the poor (Mander and Barker, 2001).

Political Implications

Beyond economics, the dominance of GNP as the primary national goal and development agenda has considerable political implications, because it tends to ignore, even legitimize, political repression, authoritarian rule, external interference, and international hegemony as long as the economic growth figures continue to increase. Such a scenario of economic growth is interpreted by the UNDP (1996:2-4) as "voiceless growth" under which economic growth does not expand democracy or empower people, it instead perpetuates authoritarian political controls. However, there are both the global and national dimensions of this scenario.

Internationally, it is widely recognized that the realization of economic growth and accumulation at the early stage of capitalism was inseparable from the worldwide colonial intervention involving political repression, forced labor, and drainage of resources from South and Southeast Asia, Africa, and Latin America (Chopra, 1983; Furtado, 1983). It is pointed out that the early growth and prosperity of England and other Western countries cannot be understood without some reference to the exploitation of material and human resources in South Asian and African countries (Blacking, 1987). This repressive colonial means used for economic growth still continues in indirect form. After decolonization, the Western powers created and used international institutions like the World Bank and the IMF to exercise economic dominance over developing nations (Robinson, 1979). Today, the global economic powers, especially the US, exercise politico-economic domination over the people and governments in the developing world through such international agencies and multinational corporations (Chossudovsky, 1994). In other words, the past economic achievements and the current higher GNP figures in developed nations have often been realized through repressive means and external pressures used in former colonies that are now "dependent" independent nation-states.

Internally, the achievement of economic growth and accumulation has involved domestic repression in both developed and developing countries. It is observed that instead of expanding people's democratic rights, economic growth has usually been accompanied by internal repression and control (Seers, 1979). For instance, in South Africa, the previous high rate of economic growth or GNP under the apartheid regime usually involved severe political and economic repression (Lipton, 1985). Regarding East Asian countries, which have been known for high growth rates of GNP, it was mentioned by Worsely (1986) that the regimes in these countries (especially in Taiwan and South Korea) practiced continuous political repression against popular organizations. About these East Asian cases, similar point is made by

Chakravarty (1987:83) that their high growth rates were pursued through economic nationalism based on an authoritarian framework. In fact, in almost all cases, the realization of higher growth rate requires that "all work is done in anonymous, undemocratic, faceless, impersonal, smoothly functioning institutions" (Weaver, 1973:105).

Recently, in most Latin American countries, the realization of rapid economic growth through the market-driven neoliberal approach has been carried out by a centralized mode of governance. In order to enhance the GNP figures, promarket policies such as privatization, deregulation, and liberalization were introduced by states through executive power without popular mandate. In cases like Argentina, Brazil, and Peru, the neoliberal policy approach has usually been based on presidential decrees without any public support, legislative debate, and discussion with opposition parties (Pereira, Maravall, and Przeworski, 1993:208). Similarly, based on the rationale of enhancing economic growth and efficiency, most countries in Southeast Asia, sub-Saharan Africa, and the Middle East have embraced these neoliberal policies largely prescribed by the World Bank and the IMF under the so-called structural-adjustment programs (Schmidt, 1998; Corkery, 1997; Jiyad, 1995). It has been pointed out by Hildyard (1997) that in Africa, these growth-led and market-centered policies, in fact, required repressive governments and authoritarian rules that did not allow any public opposition or resistance to such policies.

Cultural Consequences

The realization of higher economic growth or GNP requires the reorganization of society and culture. For developing societies, it largely implies the replacement of indigenous cultural beliefs (which usually discourage competition, greed, and accumulation) by the commoditized cultural products that generate incomes and boost economic growth by reinforcing selfish possession, hedonistic consumerism, and individualistic competition. According to UNDP (1996:4), in the process of achieving this "rootless growth", people's cultural identities are being eroded, many of the world's 10,000 distinct cultures have been endangered, and certain minority cultures have been marginalized by the dominant culture of economic growth. Even in capitalist nations, the costs of growth-driven industrial goods and cultural commodities have been the loss of individuality and uniqueness, and the destruction of local subsistence cultures (Mishan, 1986; Bjonnes, 2002). In recent years, due to the worldwide craze for enhancing economic growth through the deregulation of media networks, liberalization of information and communication technologies, and globalization cultural products, the

indigenous cultures of most developing countries have come under more serious threats.

In the pursuit of economic growth, the recent expansion of free trade and foreign investment brought more foreign goods, consumerism, and bourgeois outlook in developing countries, especially through massive publicity or advertisement (UNDP, 1998). On the other hand, the global media, including cable television, film industry, and computer network have entered the remotest parts of developing countries with devastating impacts on their local cultures. Although these have enhanced enormous potential for economic growth by accelerating the speed and volume of information exchange and economic transaction, they have serious repercussions for indigenous cultural traditions. Similarly, many countries in the developing world introduced expansive tourism industry in order to increase GNP, especially by attracting affluent visitors from Western nations, which had serious cultural impacts on these countries (Thanh-Dam, 1983). Although tourism has expanded worldwide, and become a multi-billion dollar industry, it seriously threatens indigenous cultures.

One good example of the cultural cost of economic growth is Southeast Asia. After decades of export-led policy, foreign investment, and tourism in most countries in the region—which are globally known for spectacular GNP growth rates—today a major part of their urban population speak English, practice Western lifestyles, endorse Western mass culture, and eagerly follow Anglo-Saxon ideals and world-views (Schmidt, 1998). In these countries, the policy makers guided by "growth fetishism" have apparently paid inadequate attention to the long-run consequences of rapid economic growth (Chakravarty, 1987:92-93). The adverse cultural consequences of high growth rates in these newly industrialized countries—such as the replacement of local language, destruction of indigenous lifestyle, loss of self-reliance, expansion of forced labor, proliferation of sex tourism, and erosion of identity and self-respect—should be a source of valuable lesson for other developing countries which take the cultural dimension of human development seriously.

Concluding Observations

In this article, it has been argued that the contemporary development debates and policies are dominated by economic measures or indicators such as GNP. However, there are major limits or drawbacks of GNP to assess the status of development in various countries. It has also been explained that there are considerable economic, political, and cultural implications of using GNP as an indicator of development or enhancing GNP as the primary national goal. Despite such conceptual shortcomings and practical demerits, most

governments and international institutions continue to use GNP as the dominant indicator of progress. The critical reasons for preferring this economic measure by national and international policy makers is not just their ignorance of its limitations and implications, but also their vested interests served by the use of such a reductionist, unreliable, and harmful measures to assess human progress or development.

At the international level, the use of GNP to rank various countries creates images of superior and inferior nation-states, encourages developing countries to ask for foreign assistance, justifies the expansion of foreign investment, and thus perpetuates the external dependence of poor countries on rich nations based on an exploitative relationship. In the process, many developing countries in Asia, Africa, and Latin America have become the victims of huge external debt, which diminished their economic autonomy to the extent that their major national policies are now dictated by the donor countries and agencies. Similarly, based on the perceived need for a higher GNP rate (reinforced by international development agencies and experts), most developing countries are now encouraged to provide maximum incentives to attract foreign investment. As a result, all major transnational corporations have penetrated into developing countries, made huge economic gains, and established corporate ownership and control in these countries (Alschuler, 1988; Karliner, 1997). In addition, the policy experts (mostly economists) associated with international agencies often prefer to use the GNP figures—because of their previous training in reductionist economics; their incapacity to deal with crucial non-economic issues (family, community, environment, leisure) that may not be quantifiable in monetary terms; their jobs in these organizations that function as the "foreign aid industry" based on the GNP myth; and their interest in exercising expert power reinforced by the calculus of economic figures (Bjonnes, 2002; Helleiner, 1990).

At the national level, the use of GNP in articulating national policies often serves the interests of the ruling parties or the regimes in various ways. For instance, many regimes in the developing world use the GNP figures to sell economic policies (e.g. privatization of basic services and liberalization of trade and investment) which are otherwise harmful to citizens in terms of their adverse implications for employment, basic services, and economic self-reliance. By continuously advocating the positive figures of GNP, even the dictatorial regimes—such as those in South Korea, Taiwan, and the Philippines in the 1980s—may try to justify their repressive modes of governance. In addition, by focusing on the "overall" national economic condition or the "average" economic situation of individuals, the GNP figures overlook serious inequalities among classes or income groups, and thus, may help legitimize the growing affluence of local elites and the worsening poverty of low-income citizens. Thus, it is not surprising that in

the case of the US, while the political leaders may boast about improvement in the GNP or GDP figures, the average citizens feel unsure or left out (Cobb, Goodman, and Wackernagel, 1999).

In the above context, there is a serious need for re-examining, rejecting, and replacing GNP as the dominant goal or indicator of human development, especially in developing countries that have been the worst victims of the GNP myths in recent years. It is possible to decipher "what" major initiatives need to be taken in this regard, although it is difficult to identify "who" can adopt and implement such initiatives. First, perhaps in line with the main arguments in this article, it is necessary to undertake serious critical studies on the limits and dangers of such a reductionist and futile measure like GNP, and to disseminate these critical studies widely since this measure has been perpetuated for many years among academics, experts, policy makers, and institutions. These further studies on this measure of economic growth are essential to demonstrate its misleading nature, to show how it may have presented the wrong impressions of national affluence and poverty, and to emphasize the significance of a more "humanistic assessment" of social progress (Chakravarty, 1987; Mishan, 1986; Soedjatmoko, 1983).

Second, a more comprehensive measure of development has to be articulated to replace the GNP framework. In this regard, it is wise to consider some of the alternative measures that are already available, including the so-called Genuine Progress Indicator (GPI), which addresses some unconventional but important factors like non-monetary benefits (e.g. household work, parenting, volunteer work), expenses without well-being (e.g. defense expenditure), depletion of natural resources, harms caused by environmental pollution and economic inequality, and so on (Cobb, Goodman, and Wackernagel, 1999). The point here is that any comprehensive measure for assessing development must overcome the drawbacks of economic growth, consider the multiple dimensions (economy, politics, culture, ecology), accommodate diverse societies and traditions, and involve various actors or stakeholders (Bjonnes, 2002; Pearce, Barbier, and Markandya, 1990). It may require a multi-disciplinary approach and cross-cultural outlook to articulate such a comprehensive measure of development.

Finally, with regard to practical priorities, specially in developing countries, it is imperative to move away from the GNP mania and undertake policies in favor of people's basic needs such as food, housing, sanitation, medicine, and education (Chakravarty, 1987; Cole, 1987). These countries also need to overcome the GNP-driven external debt and dependence and build economic self-reliance or self-determination, so that they can adopt appropriate policies and programs based on local context, people's needs,

social justice, and cultural beliefs (Bjonnes, 2002). These policies may include substantive land reforms, agricultural subsidies, small-scale industries, need-based education, grassroots development, people's empowerment, bottom-up planning, environmental protection, cultural enrichment, and so on (ibid.). It does not really matter whether national policies and activities enhances economic growth and improves the GNP figures, the ultimate consideration should be whether such policies and activities lead to greater happiness, well-being, and freedom for the current and future generations. It is time to overcome the fetish of economic growth and get out of the GNP trap, which according to Mishan (1986:114), represents a form of "statistical hallucination."

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