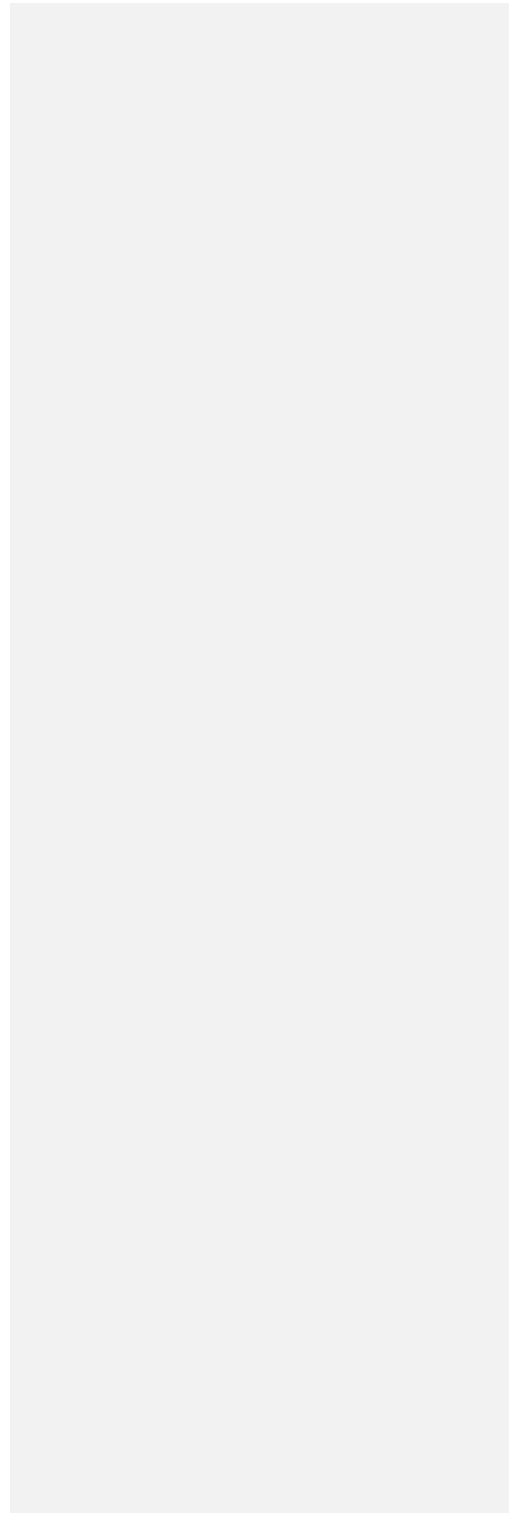


Operationalizing Gross National Happiness

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Nestled deep within the Himalayan Mountains lies Bhutan, a tiny mountain kingdom whose unique paradigm for economic development has been heralded as the future of development strategy. Called Gross National Happiness (GNH), it challenges many of the assumptions inherent in traditional Western development literature by arguing that the purpose of development should be to deliver happiness and well-being to people, and not just to raise the material standard of living¹. By *distinguishing* the health of the economy from the wellbeing of the individual, GNH seeks “a more meaningful purpose for development than just the mere fulfillment of material satisfaction”².

Since Bhutan’s fourth king introduced the concept of Gross National Happiness in 1978, it has steadily gained credence and momentum in both the academic and policy spheres. Buckets of ink *have been spilled in media* as diverse as academic journals³ to *popular trade* books^{4 5} to magazine articles^{6 7 8} trumpeting the benefits of GNH as a metric of human progress. As its prominence grows, GNH has become more than an intellectual exercise – in 2012, Bhutan and the United Nations convened the *High-Level Meeting: Well-being and Happiness* to encourage GNH’s adoption around the world and published the first World Happiness Report⁹. Later enshrined in the United Nations’ Sustainable Development Goals¹⁰, GNH is being presented as a revolutionary development paradigm that can and should displace development economics’ focus on the maximization of the living standard, defined as the level of per capita Gross Domestic Product (GDP).

Lost in the GDP-GNH debate is a discussion of the tangible differences between policy outcomes dedicated to maximizing GNH as opposed to those that seek to maximize GDP. This is because very little prior work has analyzed how GNH impacts the policymaking process in Bhutan. Most academic work on GNH focuses on its theoretical application to different fields. From exploring GNH as a model for environmentally friendly development¹¹ to the positive impact it might have on human well-being¹² to its effects on the law¹³ to comparisons with other quality of life indicators¹⁴, there has been no lack of academic work that thinks about how GNH might function outside Bhutan. However, very little analysis has been dedicated to how

¹ <http://www.gnhcentrebhutan.org/what-is-gnh/>

² https://ophi.org.uk/wp-content/uploads/GNH_and_GNH_index_2012.pdf

³ <https://www.nature.com/news/development-time-to-leave-gdp-behind-1.14499> <- excerpt from an article in Nature

⁴ *Gross National Happiness*, Arthur Brooks

⁵ *Happiness: Lessons from a New Science* Richard Laynard

⁶ http://content.time.com/time/business/article/0,8599,1957746,00.html?utm_source=reddit.com

⁷ <https://www.forbes.com/sites/simonconstable/2016/06/01/is-gdp-outdated-maybe-maybe-not/#2e57ad383057>

⁸ <https://www.theguardian.com/world/2012/dec/01/bhutan-wealth-happiness-counts>

⁹ <https://doc-research.org/wp-content/uploads/2018/03/GDP-obsoleteMay-2018.pdf> (find a more credible cite here)

¹⁰ https://sustainabledevelopment.un.org/content/documents/23588Bhutan_Presentation_EGM_MGOS_MARCH_2017.pdf

¹¹ *Avoiding the limits to growth: Gross National Happiness in Bhutan as a Model for Sustainable Development* Jeremy S. Brooks

¹² <https://journals.sagepub-com.go.libproxy.wakehealth.edu/doi/pdf/10.1177/2322093717731634>

¹³ <https://www.tandfonline.com/doi/abs/10.1080/08039410.2017.1393459>

¹⁴ <https://journals.sagepub.com/doi/abs/10.1177/0276146718787600?journalCode=jmka>

GNH is understood and implemented in Bhutan itself, and whether Bhutan's outcomes are meaningfully different than those a GDP-maximizing state might pursue.

Such analysis is a crucial prerequisite to bringing the benefits of GNH outside Bhutan; after all, if scholars and policymakers do not have a clear understanding of the kinds of policy GNH has invited in Bhutan, then they cannot hope to properly adapt the GNH model to their own fields and nations. By extensively reading Bhutanese economic planning documents, interviewing Bhutanese scholars and economic planners, and informed by five weeks of living and working alongside ordinary Bhutanese, the author of this paper seeks to provide a starting point for future scholarship on GNH by examining how it has been operationalized in the Bhutanese economy.

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Broadly, Bhutan's economic planning body designs policy around the achievement of orthodox economic targets in line with the logic of GDP and retroactively justifies that they were designed with the intention of maximizing GNH. As discussed below, this is a consequence of numerous disconnects between different bureaucracies charged with creating and implementing GNH.

The paper is structured as follows. Section Two delves into the history and praxis of GDP, reviewing a number of criticisms of it that motivate why GNH's popularity is surging around the world. Section Three introduces the GNH Index and unpacks what exactly it seeks to measure. Section Four examines the role GNH plays in Bhutanese policymaking, and Section Five examines two crucial sectors of the Bhutanese economy to provide specific examples for the points raised in Section Four. Section Six concludes by noting that the disconnect between the rhetoric and reality of GNH is the result of a lack of a common definition of GNH across different bureaucratic organizations in Bhutan.

Section Two: Gross Domestic Product

Definition and History

GDP is a statistical construct defined by accepted economic theory. While there are many ways of measuring GDP (all of which, in principle, produce the same final value), the most common is the expenditures approach, which measures the total amount of spending in the economy for a given period of time. It is given by the following equation:

$$Y = C + I + G + CA$$

Where

C stands for consumption, which represents household private consumption expenditure.

I stands for investment, which represents capital expenditures by private firms on assets with more than one year of life, such as real estate, equipment, and production facilities. Note that private financial investment does not fall under I in the GDP identity

– that is instead considered as savings activity which is not calculated in the GDP identity.

G stands for government spending, which represents all spending by government authorities on both defense and non-defense goods and services.

CA represents the current account, which is the amount of goods and services exported by a country less its imports.

Under the expenditures approach, statisticians sum the amount of money spent in each of the aforementioned categories and add all four categories together to obtain the total value of goods and services produced over a certain period of time¹⁵.

GDP is a wartime invention. The idea that a measure of the total value of all goods and services produced is useful was pioneered by the British in the 17th century, who sought accurate estimates of the national tax base in order to finance wars against the Dutch and French¹⁶. GDP developed haphazardly until 1934, when Simon Kuznets delivered a report to the US Congress that articulated a comprehensive methodology for calculating GDP using the national income accounting method – figures he used to produce an accurate picture of a US economy mired in the Great Depression¹⁷. Notably, Kuznets’s methodology included a sum total of all subjective feelings, labeled “income enjoyed”, and accounted for military spending as a decline in national income¹⁸. With the dawn of World War Two, however, Kuznets’s GDP calculation faced a political challenge from economists like Milton Gilbert who argued that military spending should be added, and not deducted, from national income. Gilbert’s methodology necessitated a focus on expenditure, not income, and ignored capital depreciation. Finally, it disregarded Kuznets’s “income enjoyed” category to produce today’s familiar GDP identity¹⁹. Gilbert’s methodology supplanted Kuznets’ because it was based on the prevailing economic intuition of Keynes’ General Theory and allowed military planners to justify higher defense expenditures in World War Two on account of the fact that they raised GDP.

The shift from Kuznets’ methodology to that of Gilbert’s illustrates a crucial fact about GDP: as an identity, it is true by definition, and thus the economic activity measured is determined by the social consensus of what economic activity is. Were the social consensus of what represents economic activity to change, so would the meaning of the GDP value. As an example, in Kuznets’ mind, “income enjoyed” was economic activity, while in the minds of the Keynesians it was not. The different GDP methodologies also demonstrate that statistics are not value-neutral, and that changing political priorities can lead to a completely different set of metrics to describe the exact same economic situation – an implication that will become important for the comparison of GDP and GNH discussed later in this paper. As an example, Kuznets’s method

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¹⁵ This value gives nominal GDP. To compare GDP in one time period to other time periods, it must be adjusted for inflation to get real GDP.

¹⁶ GDP: A brief but affectionate history

¹⁷ *ibid*

¹⁸ *ibid*

¹⁹ Note: Gilbert’s methodology actually calculated Gross National Product (GNP), a metric that is slightly different from GDP but still captures the same spirit, namely, the total value of all goods and services produced.

sought to record the drop in economic prosperity of individuals during the Depression, and thus used a personal income approach that accounted for military spending as a trade off with individual incomes. In contrast, Gilbert's method sought to justify heightened wartime spending and an interventionist Keynesian economic regime and thus re-categorized the State as a consumer of defense products.

After World War Two, Gilbert argued that his GDP identity, originally designed to measure wartime production capability, still offered important information for peacetime policymakers and thus should continue to be used. A British variation of Gilbert's calculation won the day and was enshrined as the formal definition of GDP by the UN in 1946 with the creation of the System of National Accounts.²⁰

GDP in Development Economics:

Perhaps no statement better illustrates why a wartime measure of production capability is relevant for peacetime economic development than that of the founding document of the Organization for Economic Cooperation and Development, which states that its task is to *"achieve the highest sustainable economic growth and employment and a rising standard of living"*. The success of Keynes' General Theory ensured that the linkages between economic growth, the unemployment rate, and standards of living were enshrined in economic theory, and that increasing the economic growth rate as measured through GDP provided a means to improve the other two. As the field of development economics matured throughout the 1950's, economists increasingly began to equate economic growth (the rate of change of real per capita GDP) with economic development – measured through the unemployment rate and the living standard – itself defined as an increase in real per capita GDP²¹. Orthodox development policy adheres to this principle to this very day; among countless other examples, Chapter 9 of the UN Charter stipulates that full employment and a higher standard of living (measured by the level of per-capita GDP) should be pursued as common goals of all nations²².

Here, three assumptions are worth discussing. First, recall that economic growth is defined as the change in the real per capita GDP. Thus, it tracks a specific set of indicators that represent the socially agreed upon definition of economic activity and thus may not capture the true state of the economy. Second, while the relationship Keynes' theory suggested between the economic growth rate and the unemployment rate has generally held²³, it is less clear why economic development is equated to an improving unemployment rate and an increase in per capita GDP -- especially in the presence of confounding variables that suggest that increases in per-capita GDP may not accurately reflect the true standard of living that individuals experience on a day-to-day basis. Third, orthodox development economists have equated economic growth and economic development by tautology: economic development is defined as the

²⁰ gdp brief but affectionate history

²¹ Theory of Economic Growth, Arthur Lewis, 1955, this guy is a Nobel Prizewinner

²² <https://www.un.org/en/sections/un-charter/chapter-ix/index.html>

²³ Okun's Law

increase in living standards, which in turn is defined as the increase in real per capita GDP – the very definition of economic growth. As the discussion of assumption two suggests, however, increases in per capita GDP may or may not necessarily lead to a higher standard of living for ordinary citizens²⁴. It was this realization that motivated the creation of Bhutan's Gross National Happiness philosophy.

Section Three: Gross National Happiness

Gross National Happiness is an alternative development philosophy that has arisen out of Bhutan's unique religious and cultural context. In the early 1970's, Bhutan's fourth king Jigme Singye Wangchuck declared that a strategy of maximizing per capita GDP would be insufficient to guide Bhutan's development, arguing that raising income alone could not deliver happiness and well-being for Bhutan's citizens²⁹. Out of these observations arose Gross National Happiness: a philosophy that seeks to raise the well-being of Bhutan's citizens³⁰.

The idea that the state should seek to promote subjective well-being, (ie. happiness) first and foremost is a concept that is deeply rooted in Bhutan's religious history. Bhutan is a Buddhist society whose cultural, social, and political ethos stem from Buddhist thought -- Buddhism and Bhutanese culture are largely indistinguishable from one another³¹. Since Buddhism holds that happiness is a universal value that all sentient beings should strive for, the Bhutanese state has thus sought to promote happiness in its citizens. This guiding principle dates back to Bhutan's inception as an organized political entity. Bhutan's legal code of 1729, for example, stated that "if the government cannot promote happiness for its people, then there is no purpose for government to exist"³². At present, the Constitution of Bhutan, ratified in 2008, enshrined happiness as a key goal of the state – the first Section of Article 9, which concerns State Policies, affirms that "The State shall strive to promote those conditions that will enable the pursuit of Gross National Happiness"³³. To operationalize and quantify GNH, the Bhutanese government in 1998 formed the Centre for Bhutan and GNH Studies (CBS) to research happiness and well-being in the Bhutanese context and form a 'GNH Index' that the government could use to track development progress and make public policy decisions. The methodology for forming the GNH Index was first published in 2006. Since then, two GNH surveys of the Bhutanese people in 2010 and 2015 have been completed.

Contrary to what the name suggests, the GNH Index is not a pure measure of subjective well-being. Subjective well-being surveys generally seek to measure an individual's short or long-term emotional experience and is measured by rating one's happiness on a scale that generally varies from 0-10. As, Karma Ura, president of the CBS notes, subjective well-being measurements are summations of life in totality, and not mathematical aggregations of daily,

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²⁴ Bergh 2009

²⁹ <http://www.gnhcentrebbhutan.org/what-is-gnh/history-of-gnh/>

³⁰ Interview, Karma Wangdi, Centre for Bhutan Studies

³¹ <http://www.bhutanstudies.org.bt/publicationFiles/ConferenceProceedings/GNHAndDevelopment/2.GNH&development.pdf>

³² <http://www.gnhcentrebbhutan.org/what-is-gnh/history-of-gnh/>

³³ <http://www.gnhcentrebbhutan.org/what-is-gnh/history-of-gnh/>

weekly, and monthly evaluations. This mathematical imprecision has been a source of heavy criticism for subjective well-being surveys and one that GNH seeks to address as Bhutan receives increased international attention³⁴. The GNH Index possesses four qualities that make it distinct from many other subjective well-being surveys. First, it includes hard quantitative data such as standards of living (see the following sub-section). Second, the GNH Index utilizes a definition of happiness which is explicitly rooted in Buddhist philosophy and thus also measures the status of conditions³⁵ that Buddhism would define as negatives that inhibit an individual's progress towards enlightenment, where true happiness can be found. Third, the GNH Index makes normative judgements, manifested through its weighting system, about which variables of interest are more or less important for well-being. Fourth, the GNH Index is not just a development metric but also a personal ethos where the State encourages individuals to increase their own performance on GNH indicators such as proficiency in the *Driglam Namzha*^{36 37}.

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Before commenting on the GNH Index, it is important to draw the distinction between GNH as a development strategy and the GNH Index (the metric of interest for this paper). As a development strategy, GNH is an aspirational set of principles that seek to shape tiny Bhutan's economic development in a way that harnesses the inevitable forces of globalization while still keeping Bhutan's unique Buddhist cultural heritage intact³⁸. In contrast, the GNH Index is Bhutan's way of operationalizing the GNH development framework by providing a new metric that tracks economic development, the state of Bhutan's cultural heritage, and the reported subjective happiness of the Bhutanese population. Thus, the GNH philosophy, the implementation of which is measured through the GNH Index, reflects a wider set of development priorities than simply maximizing per-capita GDP. Section Four will elaborate upon this distinction.

The GNH Index Calculation

The GNH Index consists of 9 domains, which are measured by 33 indicators that consist of 124 variables³⁹. This extensive list that is intended to capture all possible determinants of what might promote Bhutanese well-being under the GNH framework. Of the 33 indicators, 9 are quantitative and 24 are qualitative.

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The GNH Index measures nine domains:

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(1) psychological wellbeing,

³⁴ Find a footnote of people criticizing SWB for mathematical imprecision

³⁵ Those three conditions, called 'negativities', are anger, resentment, and social distraction.

³⁶ This is the Bhutanese code of etiquette, much of which is codified into law, which governs dress and behavior in formal settings as well as arts, architecture, and other cultural assets.

³⁷ <http://www.bhutanstudies.org.bt/wp-content/uploads/2017/05/2015-Survey-Results.pdf>

³⁸ <http://www.bhutanstudies.org.bt/publicationFiles/ConferenceProceedings/GNHandDevelopment/2.GNH&development.pdf>

³⁹ The number of variables and indicators is not fixed; it has changed with each new iteration of the GNH index. However, they broadly capture the same ideas.

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- (2) health,
- (3) education,
- (4) time use,
- (5) cultural diversity and resilience,
- (6) good governance,
- (7) community vitality,
- (8) ecological diversity and resilience, and
- (9) living standards.

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The progress Bhutanese society makes on the domains is measured through the 33 indicators, which in turn are measured by the 124 variables⁴⁰. Once all relevant data necessary to tabulate performance on the GNH indicators are collected, they are plugged into a formula to determine whether an individual has achieved sufficiency in the corresponding domain. If an individual achieves sufficiency in six of the nine domains, they are considered 'happy'. Note that the GNH formula assigns heavier weighting to quantitative indicators than qualitative ones when determining whether an individual has achieved sufficiency in a GNH domain. The formal GNH formula is as follows:

$$\text{GNH} = H^H + (H * A^{\text{Suf}}), \text{ where}$$

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H^H is the percentage of happy people. Recall that an individual is defined as happy if they have achieved a sufficient score in six of the nine GNH domains.

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$(H * A^{\text{Suf}})$ is the percentage of people who are not happy multiplied by the number of domains in which those not yet happy people lack sufficiency.

This gives a headline index value for all of Bhutan which ranges from zero to one, where 0 indicates that the population is experiencing 0% Gross National Happiness and 1 indicates that the population is experiencing 100% Gross National Happiness. Each GNH survey is accompanied by a report that discusses the headline index value along with extensive analysis of how Bhutan performed on the GNH domains and indicators relative to the previous report to give policymakers the information necessary to guide development. This report is published by the CBS.

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Bhutan has conducted two GNH surveys thus far. The 2010 GNH score was .743, and the 2015 GNH score was .756. The increase in GNH across the time periods was driven by a significant increase in material well-being (measured by income growth, housing quality, and assets), a 20% increase in access to services (electricity, clean water, and healthcare), and increased participation in cultural festivals. However, every psychological well-being indicator dropped

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⁴⁰ indicators are diverse and range from listing five life satisfactions to listing which of the 13 Bhutanese artisan skills an individual possesses to reporting household income. The full list of indicators can be found within the appendix.

sharply in the same period, as well as sense of belonging and the Bhutanese etiquette of courtesy called the *Driglam Namzha*⁴¹.

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Yet what do those GNH Index scores really mean? In the case of GDP, for example, the final number outputted represents a tangible dollar quantity of assets that are produced by the economy. Granted, the GDP number might be imperfectly capturing the economic activity that is occurring, but the outputted GDP value clearly measures what its identity has defined as economic activity. What the GNH Index value represents is much fuzzier. It is not purely a measure of subjective well-being, because the life satisfaction rating (GNH's measure of subjective well-being) is only 3% of the total GNH formula. Neither is it purely a measure of objective economic conditions, because living standards is only 1/9 of the total GNH formula. Nor is it purely a measure of the strength of Bhutan's rich history and culture in the present era simply by virtue of the fact that the index includes multiple domains that are unrelated to it, such as health, education, living standards, and ecological diversity and resilience. As a result, GNH is neither a measure of subjective happiness nor a measure of the conditions for happiness. In fact, the headline GNH Index value is largely meaningless – in trying to aggregate nine distinct domains of measurement into one, the overall GNH value does not present a consistent measure of 'development' because different domains can simultaneously trend in opposite directions. The results of the 2015 GNH Index are a good example of this; decreases in the life satisfaction indicator and the psychological well-being domain in general were outweighed by relatively greater increases in the living standards and health domains. However, this does not imply that GNH is a useless indicator for guiding development.

The author proposes that instead of focusing on the headline GNH value we reinterpret the GNH Index as a dashboard; a set of nine unique domains each with a performance value that represents a weighted sum of the indicators selected to measure it⁴². In this sense, the GNH Index is the Bhutanese government's effort to collect data on an incredibly diverse set of measures of Bhutanese life and examine how they have changed over time in order to make policy decisions that are based on more information than just per-capita GDP⁴³. The accompanying report with each GNH Index is designed with this in mind. It breaks down the overall GNH value both by domain, dzongkhag⁴⁴, and demographic group, and drills down to each of the 33 indicators and most of the 124 variables. The statistics themselves are surrounded by a bevy of rich discussion and analysis that highlight trends and statistically significant interactions between different variables⁴⁵. Both GNH Index reports have also included a policy recommendations section that summarizes hundreds of pages of analysis into a succinct set of suggestions for Bhutanese policymakers to digest.

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⁴¹ <http://www.bhutanstudies.org.bt/wp-content/uploads/2017/05/2015-Survey-Results.pdf>

⁴² Indicator breakdowns are in the appendix

⁴³ Interview with Karma Wangdi, Center for Bhutan Studies

⁴⁴ A geographic unit in Bhutan with a corresponding regional administration

⁴⁵ 2010 GNH report, 2015 GNH report

Now that both GDP and GNH have been discussed, the following two sections will analyze whether predicating development policy off each of those distinct metrics has led to meaningfully different policy outcomes.

Section Four: How GNH Influences Policy

It is clear that GDP and the GNH Index measure distinct things. Designing development strategy around raising per-capita GDP implies a strong commitment to enhancing what the GDP identity defines as economic activity -- generally through raising the productive capacity of the economy through investment in human⁴⁶ and physical capital⁴⁷, the exploitation of natural resources⁴⁸, and the encouragement of technological innovation⁴⁹. For Bhutan specifically, development organizations like the World Bank have also noted the importance of expanding the role the private sector plays in the economy⁵⁰.

What a development strategy predicated off the GNH Index looks like is less clear. One of the GNH Index domains is economic standards of living, so a development strategy that focuses on raising GNH is not necessarily exclusive with one that seeks to raise per-capita GDP. However, the GNH Index also gathers extensive data on the psychological, cultural, and environmental setting the Bhutanese people live in -- information that does not factor into GDP calculations. Whether the gathering of all that additional data leads to a policy outcome that is distinct from GDP remains to be answered.

The following two sections will seek to provide an answer to that question. This section will analyze how GNH influences Bhutan's policymaking process at both the national and local levels. The next section will zoom in to the granular details of the economy by taking a sectoral specific approach; comparing and contrasting policy prescriptions for Bhutan in the tourism, agricultural, and hydropower sectors from GDP-focused international development organizations and Bhutan's own GNH-based policy prescriptions.

Background: Economic Planning in Bhutan

Bhutan is small, mountainous, and landlocked; its primary natural resources are its immense forests and powerful Himalayan rivers that offer about 30,000 MW of potential hydroelectric power⁵¹. Bhutan has guided economic development since 1961 by Five Year Plans (FYP) -- economic development programs first implemented by Bhutan's absolute monarchy and continued today by Bhutan's democratic legislature. Before the first five-year plan was implemented in 1961, Bhutan's economy was almost entirely based on subsistence agriculture

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⁴⁶ [Endogenous Technological Change](#), Paul M. Romer

⁴⁷ "The Solow Growth Model" Acemoglu, Daron (2009)

⁴⁸ <https://www.oecd.org/environment/environment-development/42440224.pdf>

⁴⁹ Schumpeterian growth model, P. Aghion

⁵⁰ Interview with Dr. David Mason, Urban Development Expert, World Bank

⁵¹ <https://www.hydropower.org/country-profiles/bhutan>

and animal husbandry⁵². Bhutanese society was rural, insular and severely underdeveloped; there were no roads, manufacturing, electricity, or banking, and very few schools or hospitals⁵³.

Each of Bhutan’s FYPs focuses on a specific aspect of the economy and/or society that is in need of improvement. Early Five-Year Plans focused on infrastructure: roadbuilding, electricity provision, hospitals, and schooling, and have grown in scope over time⁵⁴. Plans are funded through foreign development aid -- primarily from India and the United Nations -- and domestic tax revenue. This concentrated economic development has borne fruit; Bhutan has experienced a tenfold increase in per-capita GDP since 1980 and today enjoys one of the world’s highest economic growth rates⁵⁵.

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FYP’s are harmonized across government by the Planning Commission, formed in 1971. The Planning Commission was renamed the Gross National Happiness Commission (GNHC) in 2007 to emphasize the role GNH is accorded in Bhutan’s development⁵⁶. Tasked with “guiding and steering the integration of GNH principles in all policies and plans”, the GNHC is the clearing house for all Bhutanese economic activity; it sets the objectives of FYPs, allocates resources, and monitors other government entities to ensure that plans are properly carried out⁵⁷. The following subsection will examine the process the GNHC uses to allocate resources and plan economic development, paying close attention to the role of GNH in policymaking.

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How GNH is the GNHC?

From a careful evaluation of policy planning documents both publicly available and privately obtained as well as a series of interviews with employees of the Gross National Happiness Commission, the author has reconstructed the policymaking process that goes into the drafting and implementation of FYPs in Bhutan, with a particular focus on the 11th (2013-2018) and the 12th (2018-2023) Plans.

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When it drafts a new Five-Year Plan, the Gross National Happiness Commission seeks to maximize GNH, not the GNH Index^{58 59}. This distinction matters for policymaking – while the GNH Index accords equal weight to each of the nine domains of Gross National Happiness, the GNHC is unconstrained by that formulaic construction, and can select certain domains to emphasize development in, which may come at the cost of others. The result of this is

⁵² <https://www.gnhc.gov.bt/en/wp-content/uploads/2017/05/06fyp.pdf>

⁵³ Ibid.

⁵⁴ https://www.gnhc.gov.bt/en/?page_id=15

⁵⁵ The World Bank

⁵⁶ https://www.gnhc.gov.bt/en/?page_id=1065

⁵⁷ https://www.gnhc.gov.bt/en/?page_id=1065

⁵⁸ 11th Five Year Plan (public link) 12th five year plan (book)

⁵⁹ Recall from Section Five that a crucial distinction exists between the two: the GNH philosophy is Bhutan’s effort to harness and regulate economic growth in a way that preserves and advances the four pillars of sustainable socio-economic development, cultural preservation, environmental preservation, and good governance, while the GNH Index is a dashboard of indicators that provide the government with feedback on how it is performing.

maximization of GNH as defined by the GNHC, not maximization of GNH as quantified by the GNH Index. The Twelfth Five Year Plan is an excellent example of this.

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Despite the 2015 GNH Index survey reporting that material well-being had risen drastically but psychological well-being and cultural diversity and resilience had fallen, the primary goal of the 12th FYP is economic growth, with an emphasis on macroeconomic stability and economic diversification⁶⁰. Policy planning further diverts from the GNH Index when the Key Performance Indicators (KPIs) are constructed. KPIs are metrics the GNHC sets goals in that the Five-Year Plan should obtain. However, the KPIs do not overlap with the GNH Index particularly well; in the 11th FYP, for example, of the 61 KPI's, only 9⁶¹ were measured by the GNH Index (implying only 14% overlap between the FYP and the GNH Index). This suggests that there exists a disconnect between the maximization of GNH as defined by the GNHC and the definition of GNH as created by the CBS's GNH Index.

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Once the focus of the Five-Year Plan is set and the corresponding KPI targets are established, the GNHC then allocates resources across the Dzongkhags, Gewogs, and Thromdes of Bhutan. In every Five-Year Plan before the current one, resource allocation was the result of bureaucratic bargaining, where charismatic leaders of different interest groups would often receive a greater share of the resources⁶². In the current twelfth Five Year Plan, resource allocation is instead assigned through a formula that scores administrative units on a variety of factors and distributes resources accordingly. Notably, a small chunk of this formula (varies between 10-15%) consists of a given region's GNH score, with a lower GNH score resulting in a greater resource allocation⁶³. Two points here are worth commenting on. First, the GNH Index score is misused in the formula. It is intended as a direct measure for a region's subjective well-being⁶⁴, even though the overall GNH Index score does not serve as such (see Section Four). This suggests that there is a lack of harmonization between the CBS (the designers of the GNH Index) and the GNHC (the body in charge of implementing GNH) about what exactly the GNH Index measures and thus how it should be used when designing policy. Second, the formula structure represents all nine domains of the GNH Index in some way, which suggests that the commitment to GNH is deeply enshrined in Bhutanese policymaking. However, this comes with a caveat: economic indicators are over-weighted relative to all other categories – a region's economic performance as measured through traditional, GDP based development metrics determines 40% of the total resource allocation for the region, which is much larger than any other single category. This suggests that Bhutanese policymakers are still highly responsive to traditional development metrics when designing policy, implying perhaps that the difference between GNH and per capita GDP when it comes to resource allocation may be overstated. The following subsection will take a closer examination at the current Five-Year Plan to elaborate upon that point.

⁶⁰ 12th FYP paper

⁶¹ List those nine out

⁶² Interview with GNHC researchers

⁶³ The full resource allocation formula is in the appendix.

⁶⁴ Interview with GNHC researchers

Convergence between GNH and GDP in the Twelfth Five Year Plan:

The official goal of the Twelfth Five Year Plan is to create a “Just, Harmonious and Sustainable Society through enhanced Decentralization”⁶⁵. At the heart of the Twelfth Five Year Plan is the belief that economic growth is the foundation for achieving Gross National Happiness⁶⁶. This is evident not only from conversations the author has had with planners at the GNHC, but also in how the GNHC has selected the metrics it has to measure progress towards the nine domains of Gross National Happiness. Essentially, the GNHC has used traditional economic measures of progress to justify making improvements on domains where the GNH Index does not use economic measures. This suggests that there may be few practical differences between GDP and GNH focused strategies when it comes to resource allocation at the national level. While the full matrix that shows which metrics (National Key Result Areas, or NKRA’s for short) align with which GNH domain is in the appendix, the body of this paper will focus on the psychological well-being domain as an example of this phenomenon.

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The psychological well-being domain of the GNH Index concentrates on four indicators:

1. Life satisfaction
2. Social support
3. Emotional experience
4. Spirituality

According to the Twelfth Five Year Plan, the path to improving the psychological wellbeing domain of GNH is to improve four corresponding areas:

1. Create productive and gainful employment
2. Eradicate poverty and reduce inequality
3. Enhance a healthy and caring society
4. Strengthen justice services and institutions

Progress in the GNH Index is measured by improvements in the variables selected to measure the indicators. Progress in the 12th FYP is measured by progress in the key performance indicators that align with the areas. However, there is a notable disconnect between the GNH Index variables and the key performance indicators of the 12th FYP – the Index variables and 12th FYP KPI’s do not measure the same things. In fact, there is very little overlap between them. This could easily create a scenario where progress on the 12th FYP’s goals for improving psychological wellbeing would not translate into an improved GNH Index score in that domain. As an example, of the 15 variables measured in the GNH Index on this domain, only three have a target KPI that corresponds to them. Furthermore, the GNHC has used progress in conventional economic metrics (such as the unemployment rate) to justify progress in GNH Index indicators such as life satisfaction. This logic is in line with orthodox, GDP-based development strategies that emphasize economic growth and full employment as the means to achieve social wellbeing. Broadly, all four of the targeted areas in the 12th FYP are related to

⁶⁵ GNH book

⁶⁶ Interview with GNHC researchers

traditional development strategies; areas (1) and (2) flow directly from established economic theory, and areas (3) and (4) would also be targeted by a GDP-focused development strategy as well.⁶⁷ Notably, the emphasis on economic development as the means to achieve psychological health is in tension not only with the inspiration for GNH (which arose out of criticisms of per-capita GDP's inability to deliver human wellbeing), but also with the results of the 2015 GNH survey, which showed that upward trends in material prosperity were accompanied by lower psychological well-being scores.

Closing thoughts for Section Four:

Resource allocation across the Bhutanese economy is still largely governed by conventional economic dictates, with less economically developed areas receiving a greater share of resources. This is largely due to the divergence between the CBS' GNH Index and the policy targets set by the GNHC that equate progress in traditional economic domains with progress towards maximizing GNH. While the GNHC holds that its development policy targets are in line with the CBS' GNH Index, this is more a retroactive justification for the economic development policies the GNHC considers appropriate for Bhutan's future. The following section will examine three key industries in Bhutan to provide specific examples that confirm the analysis conducted in Section Four.

Section Five: Industry Level Analysis

This section will compare and contrast GNH and GDP-based policy prescriptions in the tourism and agricultural sectors in order to further elucidate whether designing economic policy around GNH has led to a meaningfully different development outcome. The author would have analyzed the hydroelectric sector as well, however, little to no data is available for it.

Tourism:

Perhaps the best illustration of the contrast between GNH and GDP-centric development strategies comes from Bhutan's tourism industry. As a remote Himalayan country with jaw-dropping mountain hikes and intricate Buddhist temples, Bhutan has all the hallmarks of an elite destination for international tourism. However, Bhutan allowed no tourists into its borders until 1974, when it opened its doors to the outside world to raise revenue and promote its culture abroad⁶⁸. Tourism in Bhutan has increased rapidly since then; 1974 saw 287 tourists visit – a number that has increased to 274,097 by 2018⁶⁹. In 2016, tourism contributed about 9% to Bhutan's total economic output and is an important source of hard currency reserves – access to which is a priority given Bhutan's outsized trade deficit⁷⁰.

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For a country with little productive capacity and few natural resources available for exploitation, significant investment in the tourism sector would seem to be a useful way for tiny

⁶⁷ Find articles on how health and institutions are parts of TFP.

⁶⁸ <https://www.tourism.gov.bt/>

⁶⁹ https://www.tourism.gov.bt/uploads/attachment_data/attachment_data/tcb_xx8r_BTMTM%202018%20_final.pdf

⁷⁰ <https://www.nationalcouncil.bt/assets/uploads/files/FINAL%20Tourism%20Policy%20EAC%2016th%20Session.pdf>

Bhutan to generate a new and substantial income stream. Tourism is already the top generator of foreign direct investment in Bhutan, with capital from abroad financing hotels and related infrastructure which in turn substantially strengthens the domestic hospitality industry⁷¹. The tourism industry has also encouraged entrepreneurship in Bhutan – no easy feat for a country whose culture is steeped in subsistence agriculture and which possesses a significantly underdeveloped private sector⁷². Perhaps more importantly than anything else, tourism is Bhutan's top source of foreign hard currency⁷³. Access to this is crucial given that Bhutan imports about 90% of its consumer goods, creating a large balance of payments deficit that in 2012-13 caused a foreign currency crunch -- jeopardizing Bhutan's future access to the imported goods upon which its population has come to rely⁷⁴.

Despite the clear economic benefits it could bring, early tourism policy in Bhutan was not designed to maximize revenue.

Seeking to avoid the experience of its Himalayan neighbor Nepal⁷⁵, Bhutan's tourism sector was initially governed by the phrase "High Value, Low Volume". This strategy imposed a substantial minimum tariff of US \$250 per day on all foreign tourists in order to restrict the quantity of tourists and ensure that those tourists that did visit were bringing in a steady stream of spending that would benefit government coffers and the local economy. 'Low volume' was Bhutan's way ensuring that its cultural and environmental heritage – two of the four pillars of GNH -- would be preserved in the face of an anticipated swell of foreign visitors for a country whose borders had been largely closed to the outside world⁷⁶, both physically by way of the Himalayan Mountains and politically by government policy. Furthermore, all tourists were to be escorted by a specially trained Bhutanese guide who would minimize the social and environmental consequences of foreign visitors.

Deleted: Initially, tourism in Bhutan defied expectations.

In 2008, the Bhutanese government hired the US management consultancy McKinsey & Co to help monitor, implement, and streamline development policy. One of the issues at stake was tourism. As Bhutan gained greater international exposure in the mid 2000's, the flow of tourists began to swell – driven largely by increased regional tourism from SAARC states that were not subject to the tourist tariff. Bhutan thus found itself at a crossroads and turned to McKinsey & Co. to provide advice.

Recognizing the economic benefits that Bhutan's tourism sector brings, McKinsey's report to the Bhutanese government (referred to as the "McKinsey Report") called for a significant expansion in Bhutan's tourism industry. McKinsey advocated for a massive increase in tourist arrivals, calling for 250,000 tourists by 2012 (for reference, Bhutan experienced only <X> tourists in 2008 when McKinsey was brought in). This policy would dump Bhutan's "high value, low volume" tourism strategy in favor of one that would liberalize the tourism tariff, giving

⁷¹ <https://www.adb.org/sites/default/files/publication/177790/gnh-development-framework.pdf>

⁷² Cite one of dave mason's WB articles

⁷³ <https://www.nationalcouncil.bt/assets/uploads/files/FINAL%20Tourism%20Policy%20EAC%2016th%20Session.pdf>

⁷⁴ <https://www.adb.org/sites/default/files/publication/174841/south-asia-wp-040.pdf>

⁷⁵ Interview with Karma Wangdi, CBS

⁷⁶ History of Bhutan, Karma Phuentsho

tourism a 15% contribution to total GDP and create over 25,000 new jobs⁷⁷. The McKinsey Report sought to use tourism to deliver substantial economic growth in Bhutan.

While rejecting some of the specific policy recommendations, Bhutan has broadly adopted McKinsey's view that increased tourism volume can and should generate economic prosperity. Bhutan has changed its tourism philosophy to "high value, low **impact**" rather than "high value, low **volume**", and targeted a substantial increase of tourists to 100,000 by 2012. Furthermore, growth of tourism as a percentage of GDP is now enshrined as a national economic target in the current 12th FYP – it is a KPI under the "Economic Diversity and Productive Capacity Enhanced" National Key Result Area. These changes were made despite criticisms from stakeholders in the public and tourism industry, who feared that Bhutan would experience too many new tourists too quickly -- rapidly overwhelming the infrastructure, culture, and environment that make Bhutan unique. McKinsey's recommendations also faced opposition from government; one civil servant argued that *"the government's decision to hire a global consultancy firm McKinsey and Company was wrong.... One, we do not need to pace up growth any faster than we already are doing it. Such wanton development as envisioned by the government predominantly could cost us dearly"*⁷⁸. In the case of tourism, it would appear that Bhutan has bowed to economic dictates despite public opposition and GNH philosophy.

Agriculture:

As a society that is historically geared around subsistence farming and pastoralism, agriculture occupies a vital role in Bhutan's rich culture, history, and lifestyle. Unfortunately, its economic impact is underwhelming. Despite employing over 50% of the workforce, agriculture only contributed about 16% to Bhutan's economic output in 2016. Bhutan's 11th Five Year Plan (2013-2018) recognized these shortcomings and called for substantial growth in the sector to achieve the plan's objectives of diversifying the economy, reducing poverty, and creating more inclusive growth⁷⁹.

To help fulfill these goals, the World Bank in 2017 prepared a policy brief that identified challenges and recommendations for agribusinesses in Bhutan. Titled "Increasing Agribusiness Growth in Bhutan", the World Bank report had four broad pieces of advice: first, recalibrate public sector policy to promote, rather than subtly replace, private sector agricultural activity, second, grow Bhutan's agricultural export markets, and third, promote FDI and the domestic banking sector to enable investments that raise Total Factor Productivity (TFP).

Across the agricultural sector there appears to be broad consensus between the GNH Index, GNHC, and World Bank about the necessity for and steps to improve agriculture in Bhutan,

⁷⁷ https://books.google.bt/books?id=RKjwCQAAQBAJ&pg=PA121&lpg=PA121&dq=mckinsey+bhutan+tourism&source=bl&ots=jqHJskinpO&sig=ACfU3U3GIC-j_RDV2t_tgL_Olhypd7v43Q&hl=en&sa=X&ved=2ahUKEwjS8ODC897iAhXjheYKHc07D0QQ6AEwEXoECGMQAQ#v=onepage&q=dorji&f=false

⁷⁸ <https://pdfs.semanticscholar.org/bd89/b8744b7cc97080c507a95bbec3e0e501b35.pdf>

⁷⁹ [file:///Users/andrewlogan/Downloads/Increasing%20Agribusiness%20Growth%20in%20Bhutan-final%20\(1\).pdf](file:///Users/andrewlogan/Downloads/Increasing%20Agribusiness%20Growth%20in%20Bhutan-final%20(1).pdf)

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although for different reasons. For the GNH Index, calls for improvements in agriculture are largely motivated by the fact that farmers have the lowest GNH score of any occupational group in Bhutan, a result that is primarily the product of a low score on the living standards domain⁸⁰. For the GNHC, increasing agriculture's share of GDP and the percentage of cultivated agricultural land are KPI's necessary to achieve the economic diversity and nutrition security KPI's, which in turn improve the health, ecological diversity, and living standards domains of GNH⁸¹. For the World Bank, agricultural reform is motivated by the need to increase Bhutan's economic growth rate, labor efficiency, and TFP⁸². Policy implementation by the GNHC also matches well with the World Bank's recommendations; two key focuses of the 12th FYP are increasing private sector economic activity and Bhutan's export portfolio⁸³ – both of which are functionally identical to the World Bank's suggestions. The overlap between GNH and GDP in both measured outcomes and policy recommendations in this sector suggests broadly that GDP and GNH oriented development policy are not always in tension with one another, and specifically that a low GNH score, particularly in the living standards domain, harmonizes well with orthodox economic recommendations.

Section Six: Conclusion

If nothing else, Gross National Happiness represents a significant paradigmatic step that emphasizes crafting policy around human well-being and happiness rather than economic prosperity⁸⁴. Despite this, any discussion of GNH must be tempered by an understanding of what it truly measures and the role it plays in Bhutanese policymaking. As Section Three notes, the GNH Index value is not a measure of happiness in the strictest sense; rather, it is an amalgamation of selected metrics in nine distinct domains that often trend orthogonally. As a result, the headline GNH Index value is largely meaningless and is instead intended to provide a dashboard of indicators for the Gross National Happiness Commission to use when crafting development policy. Whether intentionally or not, the Gross National Happiness Commission largely ignores the metrics chosen by the GNH Index and instead develops Five Year Plans with an eye towards its own set of metrics that it considers to be important for improving the nine domains of GNH. Coincidentally (or perhaps intentionally), the metrics chosen by the GNHC are often intertwined with suggestions of orthodox economic theory, suggesting that there may be little practical difference between GDP and GNH-centric development strategies. However, these differences are more the result of a lack of harmonization between the metrics targeted by the GNH Index and the policy goals set by the GNHC. Perhaps if Bhutanese economic planners in the GNHC were to pay closer attention to the specific areas prompted by the GNH Index, they would experience a radically different development outcome than GDP-centric policies. For now, however, it appears that GDP is here to stay.

⁸⁰ <http://www.bhutanstudies.org.bt/wp-content/uploads/2017/05/2015-Survey-Results.pdf>

⁸¹ 12th FYP document

⁸² [file:///Users/andrewlogan/Downloads/Increasing%20Agribusiness%20Growth%20in%20Bhutan-final%20\(1\).pdf](file:///Users/andrewlogan/Downloads/Increasing%20Agribusiness%20Growth%20in%20Bhutan-final%20(1).pdf)

⁸³ GNHC interview

⁸⁴ Interview with [John Helliwell](#)

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The following subsection will outline several arguments previously iterated in the literature for why this may not be the case.

GDP criticisms: why economic growth does not mean economic development:^[MP1]

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There are many arguments presented in the literature that criticize the use and interpretation of per capita GDP growth as a proxy of social welfare and human progress¹. Many are summarized in Bergh 2009². For the benefit of the reader, this author will review several of them here.

Income distribution: Per capita GDP does not capture changes in income distribution, and thus presents an unequal picture of personal well-being and access to opportunities for development.

Use and destruction of natural environment: Per capita GDP does not capture environmental externalities that can have adverse real effects on quality of life.

Basic needs: an increase in per-capita material wealth does not imply that individuals receive basic needs like clean air and access to nature.

Informal economic activity: GDP does not recognize the economic value of informal economic activity, like childcare, voluntary work, and subsistence agriculture. When GDP is recalculated to include informal economic activity, it overstates the real gains to welfare.³

This author is not the first to realize the shortcomings of GDP as a measure of human welfare. Several alternative development indices have been created to address the perceived shortcoming between real per capita GDP and human well-being⁴. One of these indices, Gross National Happiness (GNH), is native to Bhutan.

¹ Get the huge list of articles from footnote 8, on page 118

² [url](#)

³ Greece example

⁴ These include: The World Happiness Report, the Human Development Index, the Social Progress Index, the Happy Planet Index, and the Ranking of Happiness.