2.1 Introduction

Standard of living refers to the material basis of well-being, which is reflected in a person’s consumption level. Because of this, academics and policy analysts often use real income as a proxy to measure living standard. But this focuses on cash-income alone and leaves out the possible effects of non-cash income on the well-being of individuals. Non-cash incomes such as use of stock of consumer durables, goods and services received as gifts, assistance, health, recreation, etc. affect the people’s standard of living. Thus, standard of living of an individual or group of individuals is determined by their access to resources, which comprise of both cash and non-cash income.

Standard of living, in turn, is one of the important determinants of well-being or happiness. Obviously, improvement of living standard constitutes the most important objective of plans and programs of both developed and developing countries. Given this important role in actualizing the overall well-being of their citizens, it has been (and continues to be) a subject widely studied by various disciplines and agencies- governmental, non-governmental, multilateral, academic, etc. These studies also have a variety of themes, with poverty being the most common one. Studies on poverty have looked at its “causes, effects, and prevalence” and the extent to which it improved or worsened following change in government policies and programs. Inequality is another popular theme. These studies looked at the disparity in standards of living between rich and poor, sub-populations, ethnic groups, etc. Studies have also focused on how standards of living have changed over time.
Studies pertaining to the relationship between well-being and happiness emerged largely during the early 1970s. This upsurge in studies of well-being, or happiness, and living standard was provoked by the failure to notice commensurate improvement in well-being along with increased income. In his seminal article, Easterlin (1974) saw that while industrialized countries had experienced phenomenal economic growth over the past 50 years, there had been no corresponding rise in the happiness of their citizens. He observed that within a country, satisfaction of individuals with their lives varied with their level of income; i.e. richer people on the whole were more satisfied than their poorer fellow citizens. But he saw that average satisfaction levels within a country remained stable over time even in the face of rapid economic growth. He also saw that average level of satisfaction is not strongly correlated with income. In his updated study, he explicated that “happiness or subjective well-being, varies directly with one’s own income and inversely with incomes of others” (Easterlin 1995). In his most recent study, Easterlin (2001) argued that impacts of income on happiness or subjective well-being depend upon standards which change over time according to the individual’s expectations and social comparisons.

Several studies have then been carried out following Easterlin’s seminal work of 1974. Veenhoven (1988 and 1991) found that people with higher income levels had higher levels of happiness or subjective well-being. He also found that after a certain threshold level of income, it did not impact subjective well-being so much. Clark and Oswald (1994) studied the relationship between unemployment and happiness and concluded that unemployed people had much lower levels of mental well-being than those with work. Oswald (1997) saw that in a developed nation “economic progress buys only a small amount of extra happiness”. Di Tella et al. (2001) found that people were happier when inflation and unemployment were low, and that unemployment affected happiness more than inflation. There are several other studies along the same vein. This paper does not intend to review the whole gamut of studies on happiness and income. What might, however, be appropriate is to sum up some common findings of these studies. Most of these studies come to the following conclusions: i) in several industrialized countries where income has drastically increased, subjective well-being or happiness has not increased or in some cases it has fallen; ii) relative income affects happiness more than absolute income; happiness or subjective well-being depends on expectations and social comparisons, iii) income affects well-
being of people but beyond a threshold level, it ceases to influence well-being; and iv) people adapt to circumstances and those with higher adaptation capabilities tend to be happier even when their incomes are very low.

Following the framework of past studies, this paper will study the relationship between the economic living standards of people and their reported level of happiness. This study goes a step further than past studies in that it also looks at how non-cash income affects the well-being of people. The remaining part of the paper describes the survey; presents the empirical results of the survey, which are analysed in terms of districts; studies the relationship between various aspects of living standard that people experience and their reported level of happiness; and summarizes the findings of the study.

2.2 The Survey

The questionnaire comprised of six sub-sections. i) Household income: This sub-section collected information on the total income of the respondent’s household as a whole. Household income also included the type and estimated value of non-cash income received from their relatives, family and friends during the previous year. ii) Perceptions of inequality or relative income: This sub-section asked respondents how they consider themselves in comparison with others in the community: wealthier than most families, about the same as most families, or poorer than most families. iii) Financial Security: This sub-section asked respondents if their income was enough for their everyday needs and if they confronted any financial problems during the previous year. iv) Food security: This sub-section asked respondents if they faced problems with food supply to their family resulting in either skipping or reducing of meals for the family. v) Housing: This sub-section asked respondents about the nature of tenure of their housing, conditions/quality of their houses (whether in need of repair), and number of rooms their apartment or house had (room ratio). vi) Asset ownership: This section collected information on the ownership of land and cattle.

2.3 Empirical Results

2.3.1 Household income

Household income refers to the aggregate cash and in-kind income earned by all members who live in the same household as the respondent. Generally, in communitarian families like ours, household
income is a common resource from which every member of the household benefits equally. So, the household’s current level of income becomes an important determinant of standard of living that a family can afford. The mean household income was Nu. 69,877. In terms of per capita monthly income, it amounts to Nu. 1164 (i.e. Nu. 69,877/5). This per capita income is higher than poverty line of monthly income of Nu. 1096 per person.

57% of the respondents have an annual household income of less than Nu. 25,000 and 15% of them have more than Nu. 100,000 (see figure 2.1).

**Figure 2.1 Distribution of respondents by levels of their household income**

In terms of spatial distribution of household income, respondents in Thimphu have highest household income and those in Wangduephodrang have the lowest (see figure 2.2). The stark difference in levels of household income between respondents in Thimphu and in other districts is largely due to the fact that most of the respondents from Thimphu were businessmen, civil servants, and corporate employees whose annual incomes were high.

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1 Average household or family size in the survey is 5.
Variation in household income still prevails when we rank it by dzongkhag for rural respondents only. This time, the highest annual mean household income is observed in Tsirang while the lowest annual income is still observed for the respondents of Wangduephodrang (see figure 2.3).

A sheer comparison of household income between the respondents of various dzongkhags would not make any sense unless the size of families is brought into the picture. When family size is included in the analysis
(i.e. when the mean household income is divided by mean family size: 5), we observe that respondents in Zhemgang have the lowest per capita annual income (see figure 2.4).

**Figure 2.4 Per capita annual income by dzongkhags**

2.3.2 Relative income

In the preceding section, actual cash and non-cash income received by the respondents during the previous year was analysed. This was done on the grounds that the level of current income that respondents earn determines the level of material well-being that respondents enjoy. However, the level of current income is rarely a sole determinant of the level of material well-being enjoyed by an individual. How one perceives one’s economic status relative to others does play a significant role. In order to capture this determinant of living standard, respondents were asked whether they considered themselves wealthier than other families, about the same as most families, or poorer than most families. The survey yielded the following results:
As we observe above, a bulk of the respondents considered themselves about the same as others. 22% of the respondents considered themselves as poorer than others; this corresponds roughly to 23% of our population who lives below poverty. When this relative income is ordered in terms of dzongkhags, Tashigang reports the highest proportion of respondents who considered themselves poorer than others while Thimphu has the lowest proportion of respondents who considered themselves poorer than others in their community. See figure 2.6 for details.

2.3.3 Financial security

A family’s financial security is an important determinant of the level of material well-being it can enjoy. Families without financial security could be deprived of the basic necessities during times of economic shock.
Gross National Happiness Survey Findings

Given this, respondents were asked for their views on the adequacy of their income. 72% of respondents said that their income was just enough for their everyday needs, 16% said that their current income was not enough for everyday needs and 12% said that their current income was more than enough to meet their current needs.

**Figure 2.7 Distribution of respondents by financial security**

From the policy point of view, 16% of the respondents who said that their income was not adequate deserve special attention. In order to facilitate focused policy intervention, the ordering of dzongkhags by problems of financial security is presented below.

**Figure 2.8 Respondents facing financial insecurity by dzongkhags**

2 Respondents with financial insecurity can be broken down further by various demographic and social backgrounds of the respondents.
2.3.4 Food security

Food security and freedom from hunger are most common measures of material and psychological well-being. Food insecurity affects one’s well-being largely through the health of individuals. For instance, an individual who do not have a good diet can suffer from malnutrition, which impairs one’s resistance to diseases. Studies have found a strong relationship between poverty and stunting, inadequate cognitive stimulation, anemia, diabetes, etc.

Only 3% of the respondents reported that they faced problems of food insecurity during the previous year. When we extrapolate the 3% of respondents to our national population, it amounts to about 12,646 individuals.

*Figure 2.9 Percent distribution of respondents by problems of food security*

Most of the respondents who reported that they experienced food insecurity during the previous year were from Samtse, Dagana, Zhemgang, Gasa and Tashigang. This finding is similar to that of the Poverty Analysis Report, 2007.
2.3.5 Housing

Shelter constitutes one of the basic needs of human beings. Past research has found that individuals who are deprived of, or lack access to, good quality housing suffer from several problems. The channel through which such problems affect the happiness or well-being of individuals is the multiple health problems from which these individuals suffer, caused by poor quality of housing. Homeownership contributes to better health by fostering greater self-esteem and increased sense of security. For those living in rented housing, it is important for them to have access to affordable housing. High housing costs, i.e. expenses incurred in the form of rental payments relative to one’s total income could cause financial stress, especially to low income families. High housing costs could leave families/individuals with insufficient money to spend on other basic necessities such as food and clothing. Just being able to own or rent a house is not enough. Questions were asked on ownership of houses (nature of housing tenure), rent and mortgage payments (affordability), the number of rooms in the house (suitability) and whether the houses were in need of repairs (adequacy).

Responses on ownership and affordability have been left out from this analysis since most of the respondents owned their own houses. So this report presents the findings on suitability or room ratio and adequacy or quality of housing. 28% of respondents have housing that have a room
ratio of 1, i.e. 1 person per room and 15% reported a room ratio of 3, i.e. 3 persons per room. The later indicates a situation of overcrowded housing.

**Figure 2.11 Room ratio (> 3 persons per room) by dzongkhags**

In terms of spatial distribution of respondents living in overcrowded housing, most of them were from Samdrupjongkhar, Dagana, Pemagatshel, Zhemgang, Tashigang, Samtse, and Tsirang while Gasa, Haa, and Thimphu had a small proportion of respondents living in overcrowded housing. This finding is similar to that of Population and Housing Census, 2005, which showed that bigger and spacious houses were located in western Bhutan.

**Figure 2.12 Overcrowded housing (> 3 persons per room) by dzongkhags**
In terms of adequacy or quality of housing, 58% of the respondents expressed need for repairs (32% for minor and 26% for major repairs). Thus, quite a large section of the respondents were living in inadequate housing during the time of the survey.

**Figure 2.13 Distribution of respondents by quality of housing**

![Pie chart showing distribution of respondents by quality of housing](image)

In terms of variations in quality of housing between dzongkhags, we observe that a high proportion of respondents in Gasa lived in poor quality housing while only small proportion of respondents in Thimphu lived in poor quality housing. See figure 2.14 for details.

**Figure 2.14 Distribution of respondents living in poor quality of housing by dzongkhags**

![Bar chart showing distribution of respondents living in poor quality of housing by dzongkhags](image)
2.3.6 Ownership of assets

Ownership of assets such as land and livestock are a very important determinant of well-being in an agrarian country such as Bhutan. An individual’s command over these assets plays an important role in establishing his/her economic capabilities, which further determine their livelihood strategies and potentials. Studies have found a high positive correlation between ownership of land and livestock by an individual and the overall economic well-being that he/she enjoys.

21% of the respondents reported that they did not own any land and these were largely respondents from urban areas who were businessmen and public sector employees. Of those who owned land, 37% owned less than 3 acres, 27% owned between 3-6 acres, 9% owned between 6-9 acres and only 6% owned more than 9 acres.

Figure 2.15 Distribution of respondents by acreage of land owned

The lowest mean landholding is observed for the respondents of Thimphu while the highest is observed for Samtse. As stated earlier, respondents in Thimphu were mostly civil servants, corporate sector employees and businessmen who didn’t depend on land for their livelihood, and so the lowest mean landholding is observed for them. It is interesting to note that poorer districts of Samste, Dagana and Zhemgang have higher mean landholdings than others. Given the statistics on poverty in these districts, it could be assumed that the land that they own is either of poor quality or has not been effectively utilised.
As for the ownership of livestock\(^3\), most of the respondents owned a decent number of livestock. This is due to the fact that most of the respondents were farmers.

In terms of variation in ownership of livestock, respondents in Tsirang, Haa, Dagana, Samtse and Gasa owned relatively more livestock as compared to respondents from other districts.

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\(^3\) Livestock includes chicken, horses, donkeys, mules, goats, bulls, and cows.
2.4 Relationship between Indicators of Living Standard and Happiness

The analysis to this point has been on the status of various living standard indicators and how they correlate with various social and demographic characteristics of respondents. This section will analyse the relationship between these indicators and the level of happiness of the respondents.

2.4.1 Household income vs. happiness

Household income has been chosen over personal income in the analysis of the relationship between levels of income and the reported happiness of respondents. Generally, in almost all parts of Bhutan, families function as communitarian groups. All resources such as time and income are pooled together. The intra-family allocation of resources is not dominated by the self-interest of the members, and all members of the family benefit from them equally. In such a setting, household income is a better candidate for explaining the standard of living and, therefore, well-being or happiness of the members.

We observe a positive relationship between the mean happiness of respondents and their income levels. Except for the income range of 75,001-100,000 where mean happiness slumps a bit, the level of happiness rises with the rise in household income. This confirms the importance of household income as a determinant of living standard and well-being.
Similarly, we observe a positive relationship between quality of life and levels of income.

**Figure 2.20 Relationship between mean household income and quality of life**

2.4.2 Relative income and reported level of happiness

Social comparisons, or how one assesses one’s current income in comparison to one’s neighbours and peers, is also an important determinant of happiness. The worse one’s economic situation or level of income is in relation to others, the less happier one tends to be. Thus, self-assessment of relative income shares an inverse relation with level of well-being or happiness. The data reveal relations between self-
assessment of income and reported level of happiness that supports the findings of previous research. Respondents who considered themselves to be richer than have a mean happiness level of 7.02 on a 1 to 10 scale; those who assessed their income to be about the same as others 6.15; and those who considered themselves to poorer than others 5.93.

**Figure 2.21** Mean happiness of respondents according to self assessment of their income

<table>
<thead>
<tr>
<th>Perception of one's income</th>
<th>Mean happiness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wealthier than most families</td>
<td>7.02</td>
</tr>
<tr>
<td>About the same as most families</td>
<td>6.15</td>
</tr>
<tr>
<td>Poorer than most families</td>
<td>5.93</td>
</tr>
</tbody>
</table>

2.4.3 **Financial security and happiness**

Past epidemiological research found that individuals subjected to economic insecurity suffer anxiety and stress, which eventually lead to other health problems. Therefore economic security is an important determinant of well-being. As mentioned earlier, individuals without financial security can be deprived of basic necessities which could lower their overall well-being.

The data show results that are consistent with the findings of earlier research. We observe that respondents who reported that their income was more than enough for their current needs scored a mean happiness of 6.88 and those who reported that their income was not enough for their needs scored a mean happiness of 5.54.
2.4.4 Food security and happiness

Food security and freedom from hunger are the most common measures of material and psychological well-being. Food insecurity affects one’s well-being largely through health of the individual. For instance, an individual who does not have a good mix of diet can suffer from malnutrition, which impairs one’s resistance to diseases. Studies have found a strong relationship between poverty and stunting, inadequate cognitive stimulation, anemia, diabetes, etc. The data reveal findings that support the claims of past studies; i.e. people who do not enjoy food security have lower well-being or mean happiness than others.

Figure 2.22 Relationship between financial security and happiness

Figure 2.23 Relationship between food security and happiness
2.4.5 **Housing and happiness**

2.4.5.1 *Suitability of housing or room ratio and happiness*

When families cannot afford decent housing, they may be forced to live in homes that are too small and overcrowded. Past studies have found that individuals who live in crowded houses suffer from psychological distress, helplessness and high blood pressure. Studies have also found that individuals living in a crowded setting are more exposed to infectious diseases and suffer physical problems. All these problems lower the overall well-being of individuals subjected to such settings. The survey results support these findings. We observe an inverse correlation between room ratio and the levels of happiness of the respondents. A lower mean happiness is observed for respondents living in overcrowded housing.

*Figure 2.24 Relationship between room-ratio and happiness*

Confirming the findings of past studies, the survey results show that people living in overcrowded housing are severely distressed. The same respondents are also not satisfied with the condition of their health.
2.4.5.2 Quality of housing and happiness

When families cannot afford good housing, they may be forced to live in sub-standard or poorly maintained housing. Such houses may be overrun by dust mites, cockroaches, rodents and other pests, which serve as sources of allergens which, in turn, cause asthma and other diseases. Individuals living in poorly maintained houses may also be subjected to risks of accidental burns and injuries. The data show that those respondents who said that their houses were in need of major repairs scored lower on mean happiness than both those who said that their
housing needed no repairs and those who said that their housing needed only minor repairs.

**Figure 2.27** Relationship between quality of housing and happiness

The data also confirms that respondents living in poor quality housing are not satisfied with their health.

**Figure 2.28** Relationship between quality of housing and health satisfaction

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### 2.4.6 Asset ownership and happiness

#### 2.4.6.1 Land ownership and happiness

In an agricultural economy such as Bhutan’s, land constitutes the most important form of capital. Ownership of land is a critical part of rural
livelihood, and access to it determines rural wealth and rural poverty. Land also plays an important role in defining social, cultural, and political relations between people in these countries. Issues related to land, therefore, play an important role in the economic, socio-cultural and political well-being of people. Economically, those without land could experience perpetual poverty; socio-culturally, one could be in a situation that has negative impacts on one’s self-esteem; and, politically, one may never be able to raise one’s voice.

In the present study, we didn’t dissect impact of landownership on each of the above issues; we confined ourselves to the broad relationship between landownership and happiness. The data reveal a positive relationship between ownership of land and happiness, with the respondents without land experiencing the lowest level of mean happiness. See figure 2.29.

**Figure 2.29 Relationship between land ownership and happiness**

The data reveal findings which show that the channel through which ownership of land affects well-being is its role in the provision of food security. Respondents who reported that they were food secure on an average owned one acre more land than those who were food insecure. 

4 Note that earlier we have seen that respondents who were food insecure had lower mean happiness than those who were food secure.
Figure 2.30 Relationship between mean landholding and food security

2.4.6.2 Livestock ownership and happiness

Like land, livestock plays a very important role in an agricultural economy. Livestock acts as a store of wealth; it contributes to food and nutritional security; and it provides draught power, transport and manure. Through these functions, livestock plays a significant role in promoting the economic well-being of its owners. In this study, it is observed that respondents who did not own any livestock are the least happy as compared to those who own livestock. Another interesting finding of the study is that the mean happiness of the respondents is positively correlated with the number of livestock they own; even among those who own livestock, those that own a bigger number of livestock are happier than their counterparts who own a smaller number of livestock.

Figure 2.31 Relationship between number of livestock and happiness
The study also shows that respondents who have a bigger number of livestock are food secure and enjoy good health, indicating the role of livestock in ensuring food and nutritional security and, therefore, higher economic well-being.

**Figure 2.32 Relationship between no. of livestock vs. food security**

![Graph showing food security and livestock relationship](image1)

**Figure 2.33 Relationship between no. of livestock vs. health status**

![Graph showing health status and livestock relationship](image2)

### 2.4.7 Spatial variations in happiness

In the preceding discussion, we have observed a convincing relationship between happiness and indicators of living standard. Earlier on, we saw that indicators of living standard varied between dzongkhags. Because of the strong influence of variables of living standard on happiness and
their variation between dzongkhags, we observe variations in reported level of happiness between various dzongkhags. The highest mean happiness is observed for respondents of Thimphu and the lowest for respondents of Pemagatshel. See table 1.16.

2.5 Summary and conclusion

This paper has attempted to look at the relationship between various components of individual and household standards of living with reported levels of their happiness. The main findings of this paper are that respondents with access to a better economic standards of living are happier than those that are economically deprived. Using household income as a unit of analysis, it is observed that respondents with higher household income are happier than those with lower household income. This confirms previous research findings that richer individuals are happier than deprived or poor individuals at any point of time, and that income is an important determinant of well-being to individuals in developing countries such as Bhutan. Household income in our case was highly correlated with the reported level of happiness. This points to the need for policies and programs that enable individuals and families to enhance their household income.

This paper also confirms the importance of relative income. We observed that people who assess their income positively in comparison to others reported higher levels of happiness than those who considered their income situation to be worse than others. This highlights the importance of the need for policies and programs that would curtail inequality in the community. Related to this we observed that there are some regional inequalities; respondents in the eastern parts of the country are poorer (in terms of household income) and report lower levels of happiness. While this could be due to sheer insufficient family incomes to meet their basic needs, it could also be because of their relative position in comparison to people from other parts of the country. This highlights the need for a policy that seriously addresses issues of regional imbalance.

Continuing with inequality, we observed a disparity between dzongkhags in all the variables, with some dzongkhags like Wangduephodrang, Zhemgang, Gasa, Pemagatshel on the lower end of scale. These disparities bring about disparities in levels of happiness as well. One important lesson that these findings give is that the current approach to address regional imbalance through establishment of
schools, BHUs, hospitals and RNR extension centres in various parts of the country has failed. In order to address imbalance in terms of income and other livelihood issues, there is a need to devise a resource allocation method that goes beyond sheer absence of a school or a hospital.

Another important finding is the important role of financial security as a determinant of well-being or happiness. We observed that respondents who had funds more than required for current needs were happier than those who either had just enough or did not have enough to meet their current needs. This suggests the need for putting in place plans and programs that increase the financial security of Bhutanese citizens.

The paper highlights the importance of proper and affordable housing as one of the important determinants of health and happiness. It shows that most of the respondents expressed the need for house repair. We also observed that some families live in houses unsuitable to them; the mean size of some 49 families was higher than the number of rooms in their houses, indicating overcrowding. Renters spent a substantial part of their income on housing. We observed that respondents who had suitable and adequate housing were happier than others that reported some housing problems. These findings highlight the importance of housing policy within the overall framework of social policies; a set of policies that enable citizens of the country to readily own or live in houses that are affordable, suitable and adequate to their families would go a long way in promoting their well-being or happiness.

Ownership of land and livestock has been demonstrated to be one of the important determinants of well-being or happiness. To that extent it is worthwhile mentioning that any well-being related policies that do not take land and livestock into account may be ineffective. Fearing destructions of environment, particularly forest resources, the Royal Government had followed a policy whereby farmers have been asked to reduce the number of their livestock, particularly cattle. It is highly recommended that the government review its policy of reducing the number of livestock.

In conclusion, this paper shows relations between various components of material well-being and level of happiness that are in congruence with similar studies of the past. In that sense, this validates the inclusion of economic well-being as one of the indicators of Gross National Happiness.
References


