

## Food Security and Gross National Happiness

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### Abstract

*This paper reconsiders the concept of food security to reflect Bhutan's Gross National Happiness framework. Through various case studies relating to people's food security, including production, circulation and consumption, it analyses factors that would affect GNH indicators. By comparing the conventional concept of food security with the GNH framework, the paper suggests that while the conventional concept focuses on "what" and "how much", namely what is produced, traded and eaten and quantities, it lacks a perspective on the "how" questions, namely how food is produced, how food is traded and distributed, and how food is consumed.*

### Introduction

This paper reconsiders the concept of food security to reflect the idea of Gross National Happiness (GNH). It represents preliminary thoughts on how much the conventional concept of food security can be expanded, and how food security relates to Gross National Happiness. The paper uses data, apart from secondary sources, from fieldwork that was carried out in Bhutan between 2004 and 2007 in several phases.<sup>1</sup> Geographical areas it covers were Paro, Wangdue Phodrang, Punakha, Trongsa, Bumthang, Mongar, Trashigang and Trashy Yangtse. The fieldwork originally aimed mainly at tracing trading routes and trading practices of chillies – both in the past and in the present but the data have implications that are more widely applicable. Besides information on trading practices of chillies, the

data include aspects of people's lives such as food production patterns and eating habits and customs.

This experimental paper starts by looking at the conventional understanding of food security. It then moves on to outline aspects of the idea of Gross National Happiness and its indicators, the Bhutan Development Index. Based on these, the main part of the paper explores various facets relating to people's food security, namely production, circulation and consumption, and will examine factors that would affect GNH indicators. This will indicate aspects of the food security concept that might affect the GNH framework, and the paper also attempts to refine the concept of food security to take account of the GNH framework.

### **The concept of food security**

The concept of food security has experienced several transformations. In 1974, when the concept was launched at the first World Food Conference, food security was understood as an issue relating to food supply. It was defined as "availability at all times of adequate world food supplies of basic foodstuffs" (United Nations, 1975). In order to achieve food security, each government was "to remove the obstacles to food production and to provide proper incentives to the agricultural sector", and the highly industrialised countries "should promote the advancement of food production technology, and should make all efforts to promote transfer, adaptation and dissemination of appropriate food production technology for the benefit of the developing countries" (United Nations, 1975). A new perspective emerged in the early 1980s, with Amartya Sen's work on hunger and markets (Sen, 1981). Sen emphasises "access to food" rather than simply production, and thereby turns attention from supply to demand. The World Bank report, *Poverty and Hunger*, maintains this perspective, defining food security as "access by all people at all times to enough food for an active, healthy life" (World Bank, 1986: 1). Since then, new elements have been added such as safe and nutritious food and food

preferences. For instance, in 1996, at the World Food Summit in Rome, the definition was refined as follows:

Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. (FAO, 1996)

Pottier points out that this Rome Declaration goes for the widest possible approach and reflects postmodern uncertainties.<sup>2</sup> The mention of “food preference” is seen as an attempt to address context specificity of the issue (Pottier, 1999: 13-14).<sup>3</sup>

We have so far understood that there are a few turning points in the definition of food security. Although various documents emphasise the complexity of the issue, at the level of definition it should be safe to understand food security as a matter of availability of and access to food with considerations of nutrition, safety and preferences of people.

## **GNH**

The concept of Gross National Happiness was coined by the fourth king of Bhutan, Jigme Singye Wangchuck in the 1970s, and proposes a holistic approach to development.<sup>4</sup> It is a broader approach compared to the conventional approach to development, which mainly focuses on material progress. The contribution of the idea of GNH to development thinking cannot be exaggerated. The framework encompasses not only material aspects of life, but also culture, tradition and natural environment. It also integrates objective realities with subjective elements, namely what people feel about their own lives. In order to capture overall progress in GNH, the Bhutanese government is formulating comprehensive set of indicators of GNH, the Bhutan Development Index (BDI). The indicators are divided into nine domains. These are: Psychological Well-being; Good Governance; Education; Health; Community

Vitality; Time Use and Balance; Culture; Ecological Diversity and Resilience; and Living Standard.

Dasho Karma Ura, the Director of the Centre for Bhutan Studies, which takes a lead in formulating the BDI, points out in his recent TV interview some of the very important features of the idea of GNH (Ura, 2008). Firstly, he says that under the GNH concept we need to look at reality as a whole, taking a multi-sectoral integrated approach. He points out that the concept of GNH calls for a perspective which goes beyond one sector, and states that we have to be mindful about consequences which policies/programmes of one sector would have on another. If a solution within a certain sector becomes a cause of a problem in another, it is actually not a solution. Secondly, the concept encompasses both subjectivity and objectivity and hence its indicators integrate both aspects. This is to say that progress in, for instance, the health sector should be measured both using conventional health indicators (such as infant mortality rates and population count per doctor), as well as people's feelings about their own health. Thirdly, Dasho Karma Ura emphasises "relationships" as being fundamental to happiness. According to him, "relationships, or shared situations, are where happiness spontaneously arises: you are not looking for happiness, but it comes out when relationships improve". He continues that "in some sense, happiness is really a by-product of improving relationships".

In the next section, I will examine the concept of food security from the perspective of the GNH framework.

#### **Food security and GNH**

Here I do not address the issue of whether the Bhutanese people have sufficient food *per se*.<sup>5</sup> Rather, I look at some of the stages of food production, circulation and consumption, and try to analyse how these would relate to the GNH way of thinking shown above, and how this could affect GNH indicators. I shall do so through

citing some experiences from my previous fieldwork, and also using secondary sources.

Needless to say, food security is fundamental to sustain life. Food security however relates to many more aspects of people's lives than merely meeting biological requirements. How food is produced, circulated and consumed; all of these have implications for GNH and its indicators.

#### **On producing food**

When I visited villages in the western part of Bhutan in 2004 in order to research the production and trading of chillies, I met a woman who grew cabbages. She usually took these cabbages to markets to sell – both local and export. She told me that by selling cabbages she could earn cash, which was important in many ways including sending her children to school, but, she continued, while growing cabbages she had to use lots of pesticides to kill insects and worms which would harm the harvest. In her mind, this was not a Buddhist act and certainly led to losing religious merit, therefore she said that she did not want to grow cabbages so much.

In this short sketch of food production, we can see many elements relating to GNH. Cash income from selling cabbages improves the elements of material accumulation (“Living Standard”) and “Education”, however the use of pesticides might adversely affect “Ecological Diversity and Resilience”. The religious aspect she pointed out would affect the “Culture” element of the GNH indicators. Moreover, as she feels uneasy about using pesticides, it would affect “Psychological Well-being”. When we look at this example from the view-point of the conventional food security concept, the focus is on availability of food items, which she grows and also buys with money she earns by selling cabbages, their nutritional value, and personal preferences. These are mainly material aspects of the food i.e. which food, what nutrition and its amount. When we examine the case in the light of GNH, it becomes

more obvious that how those food items were grown also means a lot to people, namely the process. It is a matter of the “relationship” people have with food, in other words, how people are engaged in the foods they produce.

#### **On trading food**

Chilli is a very important food item in Bhutan. It is used more as a vegetable rather than a spice. Some people even say that it is a “staple food” in Bhutan, along with rice. While rice can be substituted with other grains, such as maize, buckwheat and millets, chilli cannot be replaced by anything. Those who live in areas where chilli does not grow also eat chillies, so they have to obtain it somehow from other sources. Trading occurs not only between chilli-producing and non-chilli-producing places, but also amongst chilli-producing places. This is mainly because of differences in the timing of harvests due to altitude and climate. In some areas, the chilli harvest is in the middle of the monsoon season, so that they cannot dry chillies for future use. Hence they depend on harvests in higher altitude areas where the harvest is after the monsoon, so that chillies can be dried and people can get seeds for the next year.

Trading of chillies can be largely classified into two categories, one is cash medium transactions at the markets, and the other is barter both between and within villages. There can be barter in markets and also cash medium exchanges in villages and houses but these are relatively smaller in scale, and this article therefore focuses on the first two transaction modes, namely cash medium transactions at the markets and barter between and within villages. The features of these two modes are applicable to trading of other food items such as grains, fruits, dairy products and vegetables, therefore the discussion has wider implications than the case of chillies.

The market-based cash medium transactions include exports, local markets, and shops. They are mainly for those who have relatively easy access to markets and shops. Prices fluctuate to varying

degrees in markets and in the case of chilli, the highest price is ten times greater (or even more) than the lowest price in the season. In barter, communities or households generally have their own regular trading partners. This partnership is usually stable and in some cases it is a relationship of several generations. If Community A and Community B exchange chillies and rice, the terms and rates of exchange are usually fixed within the area. Many people engaging in barter have their own individual counter parties, who act as "hosts" when they visit, arranging the distribution and the collection of items within their community.

While cash earned at markets can be exchanged with any items and services available, in barter the items farmers bring are directly exchanged with items that are available in the partner village. Usually this is something that the farmers would like to obtain (since they know what is available where), but to be fair the range of items available is limited. On the other hand, one farmer in eastern Bhutan told me that, while in the vegetable market he had to wait for a whole day for customers to come, in barter he can rely on his partner for distribution; all he has to do is to deliver items for barter together with some gifts for his host. He later receives the exchanged items from the host. For him, transactions through barter are less tedious. The same farmer, however, pointed out other aspects of these two modes of transaction. According to him, when he buys in markets and shops, he can choose the quality of the items, but in barter he cannot be too choosy about the quality of the items that people in the partner community bring for exchange, partly because he has a long-term relationship with them. In barter, however, he would be sure, from the beginning, about the physical amount he would receive for the items he takes for exchange. In the market, since the price fluctuates, and also since he would not be sure how much he will be able to sell, he cannot predict how much he will earn.

From these comments, we can see that trading itself is about managing "relationships". It represents a relationship with the

market in terms of physical accessibility, fluctuations in price, quality and quantity of items, and human interactions with shop-owners and customers. As for the barter, trading encompasses relationships with partner communities and hosts, their socio-economic circumstances, and the quality and quantity of items they exchange.

Among the GNH indicators, market transactions are most obviously directly related to "Living Standard", and, using the cash obtained, indirectly related to many of the other indicators, particularly "Education" and "Health". Barter transactions most obviously affect indicators in the area of "Living Standard" and "Community Vitality".

The conventional food security framework does not readily accommodate issues such as whether community spirit and partnerships are strengthened during food transactions. It is not within the scope of the framework to assess how food items are transferred from producers to consumers. The most important aspect of transactions from the perspective of the conventional food security framework is perhaps the price of and accessibility to food items. Taking an extreme example, the conventional food security framework does not differentiate between rice obtained from long-term partner communities and that acquired illegally. The concept of GNH very much differentiates how rice is obtained.

Pottier aptly observes this point with a different example. He looks at food distribution to poorer sections of society through the "self-targeting" mechanism, and poses an important question: "Does self-targeting enable the poor ... to access what they really want or is the strategy perceived as a social control mechanism which stigmatises and reinforces social hierarchy?" (Pottier, 1999: 15). Food items provided through such a mechanism and those bought in ordinary shops must have different meanings. In other words, how food items are obtained makes a significant difference in the light of GNH thinking.



**On consuming food**

Food is consumed primarily to sustain life biologically. At the same time, since humans are social beings, there are also socio-cultural elements to consumption of food. Kunzang Choden in her recent book titled, *Chilli and Cheese: Food and Society in Bhutan*, illustrates this point in detail. She describes vividly the role food plays in Bhutanese society. While she introduces on a number of different occasions the social and cultural importance of food, one chapter is devoted entirely to “Food for Hungry Spirits”. She says, “Food is a means for maintaining a reciprocal link between the humans and the spirits; the malevolent spirits that harm humans must be propitiated and appeased by gift of food” (Choden, 2008: 53-54).

What to eat is defined not only by availability of food, but also by individual preferences and food’s appropriateness to certain occasions and circumstances. Food items and preparation methods for everyday meals are differentiated from those for festivals and special occasions. Some food items and cooking methods signify regional identity, such as *puta* for Bumthang, *branja* for Mongar and *hyuentey* for Haa.

How to eat is also an important and complex issue. There is a large difference between eating alone and sitting for a family meal in the light of GNH. There are special occasions when people get together and share foods. What to eat and how to eat have to match. In other words, there are food items and cooking methods that are considered appropriate for certain occasions. Some items are even indispensable for some events, such as *desi* in celebrations and rituals. One farmer told me that he always makes sure that his family has enough red rice for rituals and festivals.

There are certain cooking skills and recipes that have been passed down through generations. At the same time, however, there are nearly forgotten food items and menus. Kunzang Choden (2008: 139-140) points out that we are inclined to forget our traditional and

indigenous foods, and that this trend is accelerated by urbanisation and the growing cash economy. She argues that many people associate eating wild plants and herbs with backwardness and poverty, and that consequently, we have forgotten many of the plants eaten by our parents and ancestors. She takes an example of one herbal plant, marjoram, which urban dwellers may import in bottles with fancy labels as an “exotic” herb, not knowing that there is plenty of marjoram free for the picking in their own backyards. Like wild marjoram, she points out, other cultivated and wild plant species used in the past are no longer used or, worse still, their use in Bhutanese cookery is forgotten (Choden, 2008: 140).

There are many implications from her observations. A loss of menu is a loss of a society’s cultural asset. One might argue that, while we lose certain menus as socio-economic conditions change, new menus are introduced from abroad. In terms of the number of “recipe cards”, one can hardly say if there is an increase or decrease. But the issue is not only the number of recipes but also their components. For instance, we might introduce hamburgers to our menu, but at the same time lose a recipe that was once used in certain rituals or celebrations. The number of recipe cards remains the same, but new food items may not be able to substitute for all aspects of the item that used to be served in a ritual. This is because food and cooking methods carry cultural and social meanings and replacing certain dishes, whose recipe has been passed down for generations, signifies a change of meanings that circulate in society.

During my fieldwork in eastern Bhutan, an informant showed me a soupy, thin porridge-like dish made of maize flour. When I come back to Thimphu, I talked about the dish with a friend from the same area. The friend said to me that he remembers that his grandparents used to eat the dish, especially on cold winter mornings, in his village when he was small, but he does not eat it these days. The talk of the dish actually stirred his memory of his childhood.

In consuming food, it is obviously not only nutritional factors that are important, but also the cultural and social elements which foods carry. Consequently, the GNH indicators that are directly affected by food consumption are not only "Health" and "Living Standard", but also "Psychological Well-being", "Community Vitality" and "Culture". "Ecological Diversity and Resilience" might be also affected by the kind and amount of fuel that is used to prepare food. The "Time Use and Balance" spent to prepare and consume food is another consideration. As modernisation progresses, new convenient equipment is introduced and people may not have to stand in front of fire for a long time, but, at the same time, as life becomes busier, people might also spend less time for meals.

In the conventional concept of food security, what people eat is important since it is a matter of nutrition and sustaining life. The framework takes very little account of how people eat. Even when menus are the same, eating alone, family eating and communal eating are significantly different in terms of their socio-cultural implications and certainly in terms of GNH. It is a matter of relationships among people sharing food. As Sutton (2001) illustrates, memories of sharing food stay for a long time, and work to strengthen human relationships.

#### **Conclusion**

The conventional concept of food security is actually not very much concerned with "how" questions; namely, how foods are produced, how they are traded, and how they are consumed. The concept identifies that food security is a matter of access. Such access can mean to production: farmers in Bhutan produce food for their own consumption. Access can mean to trading: food items that are not available from a farmer's field have to be obtained through some sort of transaction. Access can mean to consumption: food has to be finally consumed and fuels and cooking utensils are required. However, the conventional understanding of food security does not

differentiate among different methods, modes and styles of production, transaction and consumption of food.

A further consideration is that these “how” questions, apart from implications for the GNH framework, may have a strong relation to the sustainability of food security. An example may be how vegetables and grains are grown. An excessive use of chemical fertilisers and pesticides might decrease long-term productivity of the land. Another example could be how food items are traded. An excessive dependence on the market might make farmers more vulnerable to price fluctuations and other factors which are outside their control.

This paper has examined the concept of food security divided into different stages from production to consumption, and considered how GNH indicators are affected. It is clear that food is not only required to meet our biological requirement for survival. It has far wider implications when we consider food security using a GNH framework. The conventional concept of food security requires refining in the light of GNH, primarily based on “how” questions.

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#### **Notes**

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<sup>2</sup> Maxwell (1996) also suggests that a post-modern perspective is reflected in this concept of food security.

<sup>3</sup> There are critiques on the definition of food security provided by the Rome Declaration. For example, Pottier (1999) says that the Declaration's consciousness to cultural specificity may be only a token gesture as the declaration concerns only on food preferences, and not on social and cultural "perspectives".

<sup>4</sup> A detailed analysis on the concept of GNH in Bhutan's development policies is found in Ueda (2003).

<sup>5</sup> There are recent studies on the food security situation in Bhutan, for instance, *Poverty Analysis Report 2007* (National Statistics Bureau, 2007) and *Rapid Impact Assessment of Rural Development* (Planning Commission, 2007).

