Subjective Well-Being and Its Changes: Case Study of Highland Communities in Northern Thailand

Pimpimon Kaewmanee[1], Benchaphan Ekasingh[2], Prathanthip Kramol[3] and Nuttamon Teerakul[4]

Faculty of Economics, Mae Jo University, Thailand
Department of Agricultural Economy and Development and Center for Agricultural
Resource Systems Research, Faculty of Agriculture, Chiang Mai University, Thailand
Faculty of Economics, Chiang Mai University, Thailand
Email: pimkaewmanee@gmail.com

Abstract

Well-being for all has been set as the goal of the nation in Thailand after the economic crisis in 1999 along with the King Bhumiphol's Sufficiency Economy Philosophy. Since then, there have been studying on quality of life and well-being in Thailand. However, the majority of studies on subjective well-being focus only on lowland people and rarely found the highland one, who are hilltribes and live in remote area. This paper will present a study on changes in subjective well-being (SWB) of participants of the Highland Research and Development Institute's project in ten years. In this research, SWB was depicted into three parts of its structure such as satisfaction in life as-a-whole, happiness and eudaimonia. Also, it was composed by seven components including health status; work-life balance; education and skills; social connections; civic engagement and governance; environmental quality; personal security income and food security.

A total of 908 households of eight communities were interviewed using questionnaires in 2015. The participants were asked to self-rate themselves on their subjective well-being level comparatively between the year 2005 and 2015, and other related information.

Ordered logit model is employed to explain the extent to which variations in dependent variables of well-being. The results indicate that changes in work-life balance, social connection, civic engagement and governance, environmental quality, personal security and income are significantly related to subjective well-being. These finding may help to inform the policy-makers debate the promotion of well-being in Thailand.

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[1] Lecturer; Faculty of Economics, Mae Jo University, 63 Sansai-Phrao Road, Nongharn, Sansai District, Chiang Mai, 50290 Thailand Corresponding author: pimkaewmanee@gmail.com
[2] Associate Professor; Department of Agricultural Economy and Development and Center for Agricultural Resource Systems Research, Faculty of Agriculture, Chiang Mai University, 239 Huay Kaew Road, Muang District, Chiang Mai, 50200 Thailand
[3] Assistant Professor; Department of Agricultural Economy and Development and Center for Agricultural Resource Systems Research, Faculty of Agriculture, Chiang Mai University, 239 Huay Kaew Road, Muang District, Chiang Mai, 50200 Thailand
[4] Lecturer; Faculty of Economics, Chiang Mai University, 239 Huay Kaew Road, Muang District, Chiang Mai, 50200 Thailand

Introduction

There are many key performance indicators have been used to measure progress on social and economic development such as income per capita, unemployment rate, and so on. These indicators mainly measure only in monetary perspective but cannot capture everything that is important to people (Layard, 2005). Recently, the new paradigm of measuring development progress, non-monetary aspect has been concerned more in various ways such as people well-being or happiness and its determinants. There are evidences reported that the results of happiness study could be valued and useful particularly for policy makers (Frey and Slutzer, 2002; Stiglitz, Sen and Fitoussi, 2010; Graham, 2011; Dolan, Layard and Metcalfe, 2011).

In Thailand, the interest in happiness and quality of life has been on the rise over the past decade since sufficiency economy philosophy was applied to the national's plan. Data on happiness are primarily based on how people self-rate their well-being have been collected (for instance, Thamrongvarangoon et al., 2000; Kojondham, et al., 2004). Recently, the happiness level of Thailand, called Thai mental health indicator, has been collected every three years by the National Statistic office according to a tripartite cooperation across the Department of Mental Health, Institute for Population and Social Research and the National Statistical office of Thailand since 2008.

The data sources from some research projects and national survey that were mentioned above were employed for further works, but same as other developing countries there are neither many nor vary. Mainly, the results of the happiness studies in Thailand are presented in term of the level of happiness or quality of life at national level and majority of them observed only lowland people (e.g. Gray, et al., 2010; Sukkumnoed, 2013) and rarely found the highland one, who are hilltribes and live in remote area.

To observe the social progress, changes do matters. But, there are rarely to find the studies on changes in well-being in Thailand. Moreover, there is no evidence shows any studies which prevail the results of development toward sufficiency economy philosophy concept by reporting how people well-being changes.

Using the Highland Research and Development Institute (Public Organization) (HRDI) as a representative of development project and/or organization. Since October 2005, this public-funded organization is committed to promote food security, poverty alleviation and ecosystem health in highland Thailand. HRDI's working area are covered highland communities in 12 provinces which are 4,148 natural villages (HRDI, 2017) whereas above 500 meters in elevation. These highland areas are a mix of hills, mountains and flat land, or what are called mountain plateau.

This paper aims to explore changes in happiness or subjective well-being of participants of HRDI's project in ten years. Also, it will be discovered what the potential factors affecting participants' happiness. These finding will be led the way to enhance well-being or quality of life policy both organization level and national level. Finally, the results of this study will be used as an evidence to support how to enhance people in the rural area, particularly in highland community.

What SWB is.

The genesis of the term "subjective well-being" (SWB) originates from efforts by researchers who sought to explain what the good life is and how people perceive themselves experiencing a good life. This leads to the term "subjective well-being" as reflecting happiness or the "good life" (Diener, 2000; Brülde, 2007). Diener (2006) also suggested the summary of subjective well-being definition as "SWB is an umbrella term for the different valuations people make regarding their lives, the events happening to them, their bodies and minds, and the circumstances in which they live." It is worth noting that happiness however is
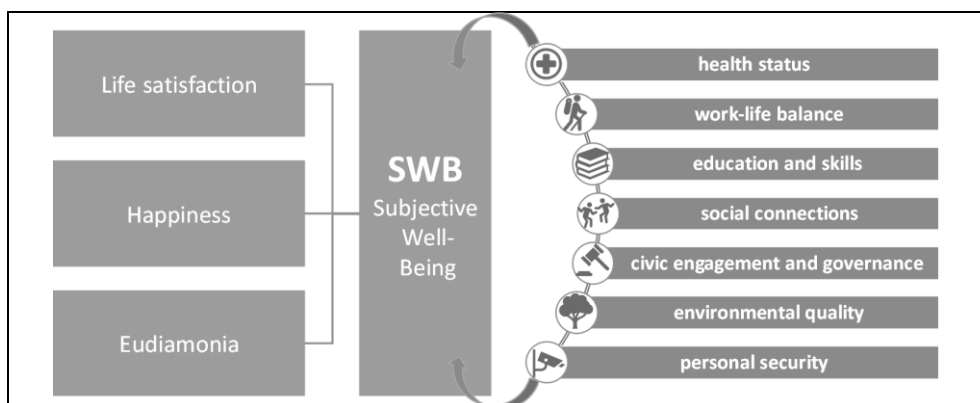
not actually a synonym of subjective well-being but rather it reflects one of the elements of subjective well-being (Helliwell & Barrington- Leigh, 2010; Conceição & Bandura, 2008).

In most of previous studies, SWB refers to people's evaluation of both the affective and cognitive aspects of their lives (e. g. Dolan, et al. , 2008; Powdthavee, 2008; Helliwell & Barrington- Leigh, 2010; Kahneman & Krueger, 2006; Gamble & Gärling, 2011). The cognitive element is referred to individual's evaluation of their life satisfaction while the affective element is referred to the evaluation of emotions and moods (McGillvary & Clarke, 2006) . Typically, the structure of affect was separated into two dimensions; positive and negative (e.g. Chmiel, et al., 2012; Lehman, et al. , 1993) whereas happiness arises from the balance between positive and negative affect. Some called the affect as hedonic approach of SWB.

The hedonic approach of well-being in this circumstance was referred to both life satisfaction and happiness (for more details see Ryan & Huta, 2009; Ryan & Deci, 2001; Hahn, et al, 2012). While, the eudaimonic (i. e. eudaimonia or human flourishing) approach seems to be the latest concept which has been interested especially among philosophy and psychological researchers (Waterman, 1993; Gamble & Gärling, 2011; Crespo & Mesurado, 2014). However, in this study taken from OECD framework on measuring subjective well- being (2013) which the structure of subjective well- being could be composed by three concepts of well- being: life evaluation; affect; and eudaimonia. Life evaluation has been conceptualized as people's evaluations of their overall life satisfaction. Affect is people's feeling which can be measured emotional state of their experiences in other word happiness. While eudaimonia goes beyond people's life evaluation and emotional states to focus on people's functioning and realizing people's potentials. Measures of SWB provide better understanding of individual's well- being and useful information on the relative factors of people well- being (Boarini et al., 2012; Helliwell and Wang, 2011).

This research modified SWB concept of OECD (2013) as the conceptual framework guiding data collection and analysis. From this guideline, SWB was depicted into three parts of its structure such as life evaluation or satisfaction in life as- a- whole, emotional affect or happiness and eudaimonia. Also, it was composed by seven components including (1) health status, (2) work- life balance, (3) education and skills, (4) social connections, (5) civic engagement and governance, (6) environmental quality, (7) personal security, income and food security. (Figure 1)

Figure 1 SWB aspects and its determinants
Source: adapted from OECD (2013)

Research Methodology

Study Area

Household survey was conducted in 2015 in eight highland development sites of HRDI. The sites were in four Northern provinces, namely Chiang Mai, Nan, Chiang Rai and Tak and covered as follows: 1) Pang Dang Nai; 2) Loung Kod; 3) Huay Pao; 4) Pa Kuay; 5) Pang Hin Fon in Chiang Mai province; 6) Mae Salong in Chiang Rai province; 7) Khun Satan in Nan province and 8) Mae Song in Tak province.

Data Collection

The survey design based upon theory of stratified sampling. The sample size with an error 5% were calculated by using Yamane's formula. A total of 908 households of eight communities were interviewed using questionnaires along with focus group and in-depth interviews under local hilltribe interpreters. Participants were asked to self-rate themselves on their subjective well-being level and other related information. SWB was measured by asking participants to self-rate level of their feeling or opinion comparatively between the year 2005 and 2015.

SWB and its change measurement

In this study, SWB was measured by applying SWB of OECD's approach which have been accepted and been used across EU countries and members of OECD in other regions (OECD, 2013). Participants were asking to self-rate themselves by three main questions in order to capture three aspects of SWB as follows;

1) Life Satisfaction: How satisfied are you with your life as a whole?

2) Happiness: How happy do you feel nowadays?

3) Eudaimonia: How do you agree with the following sentence: "In general, I feel what I do in my life is worthwhile"?

The questions are on the degree from 0 to 5. Zero means "not at all", while 5 means "extremely satisfied" or "completely happy" or "completely agree". The roundup average of those three results was used as dependent variable of SWB.

From table 1, changes in SWB questions, the participants were asked to self-rate of their feeling to what extent the changes compare between year 2015 and 2005. The study reports participants in every study sites rated themselves higher in life satisfaction. While 2 of 8 sites, Longklod and Paklouy, which are rated themselves lower in happiness. Participants in Huaypao area rated themselves lower in Eudaimonia and no changes in happiness. In 2015, participants in Longklod rated themselves the highest in SWB, while Maesong rated themselves the lowest one.

Table 1 Three aspects of SWB and average of SWB in 2005 and 2015 categorized by study sites

	Life Satisfaction		Happiness		Eudaimonia		SWB	
Study Sites	**2005**	**2015**	**2005**	**2015**	**2005**	**2015**	**2005**	**2015**
1 Pangdang	3.79	⇧ 3.98	3.88	⇧ 3.95	3.76	⇧ 3.95	3.82	⇧ 3.96
2 Longklod	4.25	⇧ 4.27	4.36	⇩ 4.30	4.19	⇧ 4.20	4.27	⇩ 4.26
3 Huaypao	4.06	⇧ 4.11	4.05	▫ 4.05	4.11	⇩ 4.09	4.07	⇧ 4.08
4 Paklouy	3.86	⇧ 3.87	3.96	⇩ 3.86	3.81	⇧ 3.84	3.87	⇧ 3.86
5 Panghinfon	3.56	⇧ 3.73	3.74	⇧ 3.81	3.74	⇧ 3.76	3.68	⇧ 3.77
6 Khunsatan	3.84	⇧ 3.92	4.04	⇧ 4.08	3.83	⇧ 3.96	3.90	⇧ 3.99
7 Maesalong	3.83	⇧ 4.06	3.98	⇧ 4.13	3.84	⇧ 4.03	3.88	⇧ 4.07
8 Maesong	2.99	⇧ 3.72	3.41	⇧ 3.87	3.16	⇧ 3.64	3.16	⇧ 3.71
Grand Total	**3.80**	⇧ **3.97**	**3.93**	⇧ **4.01**	**3.84**	⇧ **3.95**	**3.85**	⇧ **3.97**

Source: Calculated in this study (2015)

Empirical Model of Changes in SWB

The empirical model on determinants of changes in SWB of individual *i* could be constructed as the following.

$$CSWB = x'\beta + \varepsilon \qquad (1)$$

where x represents the vectors of explanatory variables; $CSWB_i$ represents observed changes in subjective well-being level. The β represents the coefficient

Changes in SWB,

vectors that we would like to estimate, whereas ε_j is an error term.

Further suppose that while we cannot observe *changes in SWB*, we instead can only observe the categories of response:

$$CSWB = \begin{cases} 1 \; if \; 0 < CSWB \le \mu_1, \\ 2 \; if \mu_1 < CSWB \le \mu_2, \\ \quad \vdots \\ N if \mu_{N-1} < CSWB \end{cases} \qquad (2)$$

Then the ordered logit technique was used the observations on y, which are a form of censored data on changes in SWB, to fit the parameter vector β.

General form of changes in SWB Model

CSWB = f(health status, work-life balance, education and skills, social connections, civic engagement and governance, environmental quality, personal security, income security)   (3)

Where CSWB represents Change in SWB,

0 is denoted as in 2005, it was much less than in 2015;

1 is denoted as in 2005, it was a little less than in 2015;

2 is denoted as 2005 and 2015 it was about the same;

3 is denoted as in 2005 it was a little better than in 2015 and

4 is denoted as in 2005 it was much better than in 2015.

Health represents Satisfaction with health (a scale of 0 to 5)

WLBalance represents satisfaction with work-life balance (a scale of 0 to 5)

Edu represents satisfaction with education and lifelong learning (a scale of 0 to 5)

Social represents satisfaction with social connection

Civic represents satisfaction with civic engagement and governance

Env represents satisfaction with environmental quality

Ppsafety represents satisfaction in personal security

Income represents total income per capita of household

Results

These eight study sites have mostly sloping land areas, no irrigation and some areas lack important infrastructures like electricity (esp. Maesong) and telephone (Maesong, Longklod) or access to market (Longklod, Paklouy, Khunsatan, Maesong). There are nevertheless good road conditions in these areas although some areas are quite remote. Average household members are 4.2 people. The households have low education (the average is 3.6 years in schooling) and had low access to government extension services. These communities are mainly agriculturalists and are responsive to new agricultural
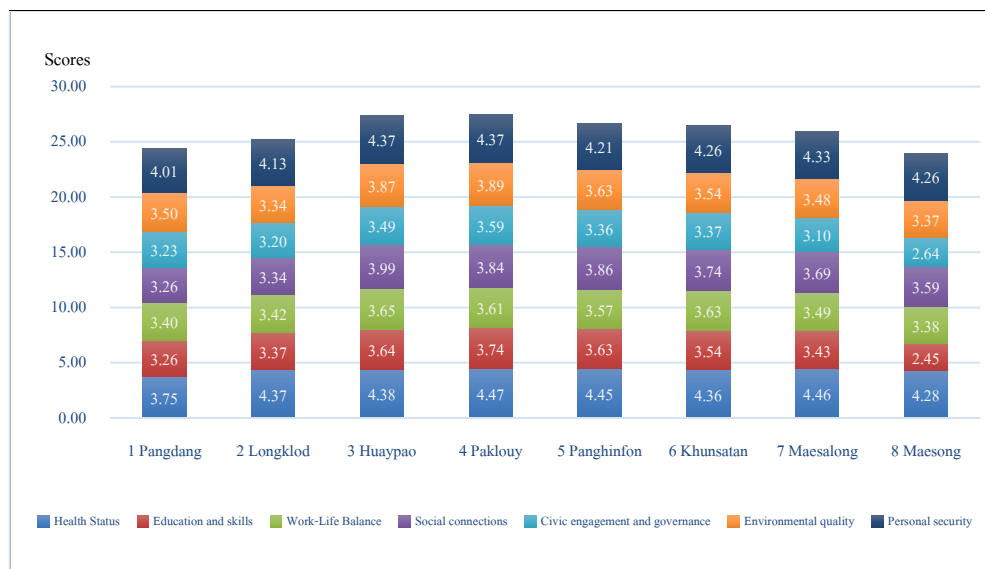
technologies and environmental conservation. They readily adopt tree-based crops and integrated farming.

Agriculture is the main occupation of most households in the areas. Secondary occupation is trading. The crops which are important in the areas are different in each location. In terms of social capital in all study areas, it was found that most households were very satisfied with their own communities. Almost all study households had the opinion that their own communities have good to very good biodiversity in plant and animal varieties and that forests in their communities were abundant to very abundant.

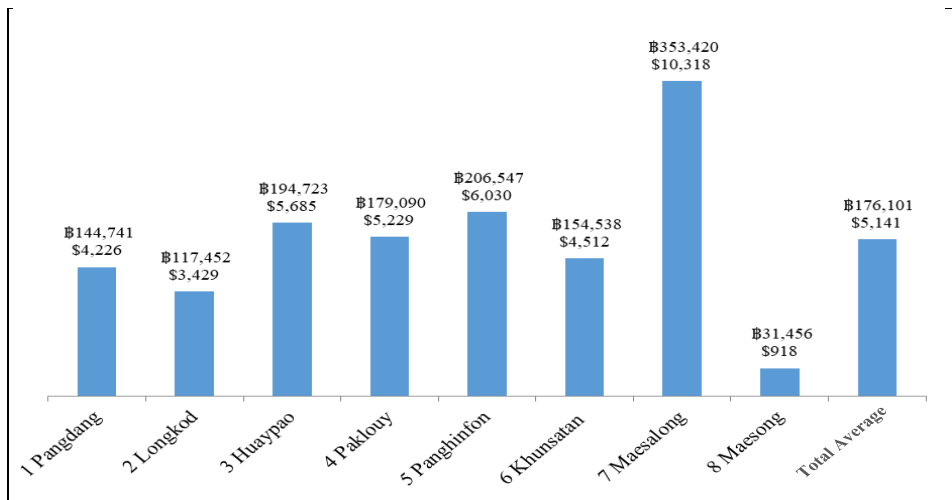Observing level of satisfaction by accumulating scores of seven SWB indicators together in Figure 2, the results shows participants in Paklouy, where is in Chiang Mai province, rated themselves the highest scores of happiness, while participants in Maesong, where is in Tak province and is the hardest place to reach, rated themselves the lowest one.

In overall, average annual household income in the study sites is 176,101 baht (approximately 5,141USD[5]) or 46,428 baht per person per year (approximately 1,355USD). Whereas Khunsatan is the highest household income as about 353,420 baht (10,318USD) compared to other sites, while Maesong had the lowest household income as 31,456 baht (918USD) (Figure 3)

Figure 2 Accumulated wellbeing scores by study sites
Source: Calculated in this study (2015)

[5] Reference rate in the year 2015 = 34.2524 baht/USD
(Source: Bank of Thailand)

Figure 3 Average household annual income by study sites
Note: Reference rate in the year 2015 is 34.2524 baht/USD (Source: Bank of Thailand)
Source: Calculated in this study (2015)

According to data analysis using ordered logit model, the results explained that changes in work- life balance, social connection, civic engagement and governance, environmental quality, personal security and income are significantly related to subjective well- being (Table 2). But, health status has not played an important role in happiness. Also, education was omitted from the model. Balance between work and another activity in life was found statistically significant in SWB. This result supports previous studies such as Diener (2000), Lyubomirsky (2001), Greenhaus, et al. (2003), Dolan (2008), Helliwell & Wang (2011), OECD (2013). The decades of political conflicts in Thailand may be the reason why a changes in civic engagement and governance being important to SWB. Personal security, including quality of living area and sense of safety in neighborhood will bring the higher well-being.

Also, there were evidences reported that being social and spending more time with friends and family increases positive affect on SWB. Moreover, it was found that income is a significant determinant to happiness, supporting an against Easterlin paradox idea that for a middle- income country like Thailand, particularly in the highland communities, "the richer you are, the happier" exists.

Table 2 Factor affecting changes in SWB

	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
Health	0.144515	0.166597	0.87	0.386	-0.18201	0.471038
Wlbalance	0.292877***	0.102882	2.85	0.004	0.091232	0.494521
Social	0.449956***	0.155285	2.90	0.004	0.145603	0.754308
civic	1.156629***	0.207754	5.57	0.000	0.749438	1.56382

Table 2 Factor affecting changes in SWB (Continued)

	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
Env	0.709773***	0.130233	5.45	0.000	0.454521	0.965024
Ppsafety	1.243644***	0.182459	6.82	0.000	0.886031	1.601257
Income	2.97E-06**	1.29E-06	2.30	0.021	4.44E-07	5.51E-06
Marginal effect						
Pr(CSW B = 1)	3.384115	0.678219			2.054829	4.7134
Pr(CSW B = 2)	6.091584	0.687604			4.743906	7.439263
Pr(CSW B = 3)	9.980192	0.740714			8.528419	11.43196
Pr(CSW B = 4)	14.97373	1.250741			12.52233	17.42514
Number of obs	907					
LR chi2(7)	178.7					
Prob > chi2	0					
Pseudo R2	0.108					

Note: *** is significant at level 0.01; ** is significant at level 0.05
Source: Analyzed in this study (2015)

Conclusion

This paper has presented an empirical investigation of the relationship between changes in SWB and its determinants in highland Thailand. The primary data collected in 2015 were employed to examine the determinants of subjective well-being by using ordered logit analysis. It was found that HRDI's participants were happier. It may imply that the achievement of development projects toward sufficiency economy philosophy. The determinants of changes in SWB in highland Thailand include work-life balance, social connection, civic engagement and governance, environmental quality, personal security and income.

These finding may help to inform the policy-maker debate the promotion of well-being in Thailand. There are main findings should be remarked specifically for policy implementation. According to the highland community circumstances, activity which helps to bond community relationships is necessary in order to strengthen community especially in remote area. Also, eight of study sites are surrounding by and/or situated in the forest. Moreover, majority of them are hilltribes whose custom and culture mainly related with nature. These maybe reasons how changes in quality of environmental will affect changes in their wellbeing. The fact from this study shows that Thai's SWB is related to the effect of politic on their life. According to politic situation in Thailand nowadays, the results of the study can be referred to an awareness of political problem solving in Thailand. Finally, the success of HRDI's development works can be used as the role model of rural or/and highland development toward SEP's concept and SEP concept itself should be

applied as the principle of development strategies.

Acknowledgement

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