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HARVESTING HAPPINESS

Is agriculture extension contributing to well-being and happiness of poor people in communities of Houn district, Oudomxay province, Laos?



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Abbreviations

ADB: Asian Development Bank

DAFO: District Agriculture and Forestry Office

GDP: Gross Domestic Products

GNH: Gross National Happiness

GNI: Gross National Income

HDI: Human Development Index

HDR: Human Development Report

IFAD: International Fund for Agriculture Development

IMAS: International Master of Advanced Studies in Development Studies

IHEID: Graduate Institute of International and Development Studies

LEA: Lao Extension Approach

LEAP: Laos Extension for Agriculture Project

NAFES: National Agriculture and Forestry Extension Service

PAFEC: Provincial Agriculture and Forestry Extension Center

PAFO: Provincial Agriculture and Forestry Office

DAFO: District Agriculture and Forestry Office

PPA: Participatory Poverty Assessment

T/ha: Ton per hectare

WB: World Bank

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Abstract

"Harvesting happiness" is a research that aims to understand definitions regarding happiness and well-being from the farmers themselves, especially the poor. This is to make sure that agricultural extension contribute in improving well-being as well as will not degrade their happiness.

The research took place in four villages of Houn district, Oudomxay province, Laos during December, 2007. The four villages represent two main social groups (Khmou and Lue) and two locations (nearby town and isolated). In each village, village authority, one man/one woman groups and four poor individual households were interviewed. Totally, interviewed persons include four village authorities, eight groups of farmers and 16 poor households.

Findings show that the main problems of agriculture productions of the poor households are land issues, followed by lack of knowledge and lack of capital.

Regarding well-being and happiness, farmers themselves have defined 10 perceptions as follows: rice, money, health, household assets, family relations, social infrastructures, social relations, education, natural environment and culture. Rice is the "happy crop" for all farmers both rich and poor. Rice determines living condition of individual, the more rice, the happier the person is; if there is lack of rice it is the sign of poverty and rice makes people happy because they like to eat rice. For the poor, they perceive rice as the first priority, followed by money, family relations and health. It is not hesitating in this research to say that rice is the "happy food" for Lao people.

Agricultural extension has not been well known by farmers. Most interviewed farmers have no idea about such services. Some farmers understand that agricultural extension is the agents that provide seeds and capitals. Most of extension workers understand their roles as introducing new seeds/breeds and production techniques to the farmers. Thus, there is a big gap between perceptions between farmers and extension workers. Mainstreaming the Laos Extension Approach will be difficult because "knowledge" is not perceived by the farmers as priority (especially among the poor) and the extension workers still have lack of understanding about their roles as learning facilitators and they have lack of capacity to analyze local values.

Agricultural extension has not improved well-being and happiness of the poor farmers. This is basically because public agricultural extension services have not reached the farmers while at the same time, the private sectors do not target the poor. It is true that a lot of farmers in Boam Lao and Nam Yone village have improved their living standard a lot through selling maize, but this is not sustainable. Moreover, the poor have not benefited so much from growing maize.

In order to sustain well-being as well as to promote happiness among the poor farmers, agricultural extension agents must understand that improving well-being and happiness is the ultimate goal of development. Extension workers should pay more attention listening to the farmers, and they should understand that the farmers are heterogeneous. For example, not all farmers could be better off and happier through a common approach (maize production for instance). Moreover, it is necessary for the agricultural extension workers to spend more time with the farmers in order to identify interventions that complementing local values.

The Lao Extension Approach would lay the good path for agricultural extension agent to better contribute to improving well-being and happiness of the poor farmers because this approach takes into account the needs of the farmers as well as considering local values, constraints and potentials. Mainstreaming the LEA is the initial step and integrating perceptions of well-being and happiness of the poor within the frame work of the LEA is another important step in order to design pro-poor extension activities.

Introduction

Today, the richest person of the world has more than 62 billion US\$, while the GNI of Laos in 2007 amounted to 6.2 billion US\$. This enormous gap of income between one person and one nation amounted to 10 times. I am asking myself how is it possible such a big gap in income disparity?

Over 50 years of development that has been focusing on economic growth, results are not so impressive. There are not only problems of social inequality, but one of the clear evidence that no one could argue against is the degradation of the natural environment-the products of development: the climate change, pollutions, water scarcity and the oil crisis. Thus, it is important that more people should discuss about these problems and seek for alternatives. That is why, the human development approach, the well-being approach and the happiness approach have been brought into international discourse in the past decades as complementary to growth-oriented approach.

This research does not try to cover all the issues relating alternative development approaches. In fact, it tries to bring more attention a concept of well-being and happiness approach. The research has been narrowed down to more practical level through analyzing a case in the field of agricultural extension and perceptions of well-being and happiness from farmers point of views in some communities of Laos. The general objective is to investigate whether agricultural extension is contributing to improve well-being and happiness of the poor farmers? This research topic was chosen because agricultural extension is one of the most influent sectors in the area of rural development. Thus in order to improve well-being of rural people as well as to ensure that rural people are happier, agricultural extension should contribute to improve well-being and happiness of all farmers especially the poor.

It is very important that we should think more about using happiness approach as a cross cutting issue like human rights, gender and environment in the field of rural development because happiness approach provides a framework that takes appreciations of farmers into account in all development planning and policy formulation. Agricultural extension services that fit to appreciations of farmers will enable them to full participation, motivation and ensure sustainability of the interventions.

This study is divided into two parts. Part I persuade scope of the research and includes problem statement, concepts/definition, and research methodology. This part provides the logic of the research and gives some information on human development, well-being and happiness approaches. Part II is a case a study in Houn district, Oudomxay province, Laos. It provides information on different perspectives regarding well-being and happiness from a farmers point of view, the context of agricultural extension in Houn district and links between agricultural extension and perceptions of well-being and happiness.

Part I: Scope of the research

1. Problematic

Laos is a small mountainous country with a rather low population density comparing to other countries in the region (24 people/km2). Most of labor force are farmers (76% in 2005) who cultivate different kind of crops. There are 68 ethnic groups which are categorized into three main groups: Lao Loom (12 groups), Lao Theung (36 groups) and Lao Soong (20 groups)¹. The Lao Loom lives in lowland; they settle houses along rivers; lowland rice and fishing is their main living activities. Lao Theung and Lao Soong live in upper area mountainous area); they settle houses along creeks and springs; they grow rice and harvest non timber forestry products to make a living. In conclusion, most Lao people has a simple lifestyle: they produce rice for their own consumption and natural resources such as river fish, bamboo, rattan, tree barks, wild roots, grass, wildlife, etc play very important roles as sources for food and income for the rural people.

In order to ensure that all Lao people have a better living standard and to achieve international development agenda, the Government of Laos has adopted economic growth strategy as the central goal in socio-economic development as stated in the 6th national socio-economic development plan 2006-2010². Particularly agriculture which is the main economic sector, the Government of Laos aims to (i) ensure food security, (ii) increase commodities and cash crops for local and international markets, (iii) eradicate slash and burn cultivation and (iv) reach sustainable management of forest.

Even though, the Government of Laos has various policies in the area of agriculture and forestry development as mentioned above. The reality is more complex. Extension workers have a lack of means and ability to implement all policies in an effective manner. Often, at the local level, income generation seems to be a magic recipe for agriculture development. Extension workers understand that their main task is to introduce farmers to new technologies that can raise the income in order to integrate farmers in the market economy and to ensure economic growth. In consequence subsistence economy is understood as backward, and farmers must change their subsistence farming systems toward commodity productions. For example shifting cultivation (upland rice) is defined as environmental harmful practices, and this practice must be replaced with other higher value cash crop production such as maize.

The belief that 'growth is all' has been playing a dominant role in directing socio-economic development in many countries since 1940s (after the World War II). This development approach has proved the impressive in leading Japan, South Korea, Hong kong, Taiwan,

Lao National Front for Construction, <u>The Ethnic Groups in Lao PDR</u>, Department of Ethnic, Manthatulath print house, Vientiane, 2005, pp. 7-8.

² National Committee for Planning and Investment of Laos, <u>National Socio-Economic Development Plan (2006-2010)</u>, Vientiane, 2006, page. 60.

Singapore, Malaysia and Thailand to achieve a rapid economic progress and overcome poverty for majority of the people. So, it is clear that, there is a strong relation between growth and income, including income of the poor- "the greater economic integration benefits the poorest in society as everyone else" ³

On the contrary, there are also other schools of thought that believe 'growth is not all' and focusing only on economic growth is not enough. Critiques argued that there have been many problems in growth-orientated approach such as wealth distribution, inequality and environmental problems. In Laos, even though during 2001-2005, the country could achieve growth 6.3% annum, but the income from growth is distributed unevenly within and between each social group. It usually results in a greater disparity between the richest and poorest sections of the population. In Laos, income inequality has increased. For example, income of the richest quintile has increased from 38.4% (1992-93) to 44.4% (1997-98) but income of the poorest quintile has decreased from 9.3% (1992-93) to 7.8% (1997-98).⁵ Poverty gap ratio has increased from 3.0 (in 1992) to 6.1 (2002), Gini index has increased from 0.304 (in 1992) to 0.346 (in 2002)⁶. In more contrast, many farmers (Lao Loom) can achieve higher income through commodity productions, but Lao Theung and Lao Soong who live in mountainous area, lack of production means and have limited access to market/ credits are not really improving their situations-they cannot achieve better well-being. On the contrary, there is a sign that their well-being has worsened and that they have less food due to lower yields of upland cultivation and degradation of natural resources ⁷. In additions, a result of economic growth in Laos, forest coverage has declined from 70% (in 1970s) to around 40% today.⁸

To complement the theory of growth, Amartya Sen has developed a theory of human development. The human development approach addresses "human capability" which is incompletely addressed in economic growth. Later, the Human Development Index was developed in 1990 to address some element of human well-being. The index indicates that human should have the ability to live long (life expectancy at birth), have knowledge (adult

³ Dollar, David, Kraay, Aart, <u>Growth is Good for the Poor</u>, the World Bank, 2000, page. 3.

A National Committee for Planning and Investment of Laos, <u>National Socio-Economic Development Plan (2006-2010)</u>, Vientiane, 2006, page 5

⁵ National Committee for Planning and Investment, <u>National Growth and Poverty Alleviation Strategy</u>, Laos, 2004, page. 28.

⁶ UNESCAP, <u>Statistical Yearbook for the Asia and Pacific 2007</u>, United Nation, New York, 2007, page. 107

⁷ Cornford, Jonathan, <u>Globalization and Change in South of Laos</u>, Focus on Global South, 2006, page 46.

⁸ Environmental Investigation Agency, Telapak, <u>Borderlines</u>, the Vietnam's Booming Furniture Industry and Timber Smuggling in the Mekong Region, Emerson Press, London, 2008, page. 4

literacy rate and combined primary, secondary, and tertiary gross enrolment ratio) and have a good living standard (GDP per Capita at PPP). In Laos the country has achieved a certain improvement of well-being: Human Development Index has increased from 0.503 in 2000 to 0.601 in 2005, per capital income has reached USD 490 in 2005 (increased 1.3 times comparing to 1995), primary enrolment rate has increased from 77.3% (2001) to 84.3% (2005), infant mortality rate has reduced from 145 per 1000 live births in 1970 to 62 per 1000 live births in 2005, life expectancy has increased from 46.5 years (1970-1975) to 61.9 years (2000-2005)⁹. This improvement shows that there is a link between economic growth and improvement of well-being of Lao people.

However, it is still not enough. Other new schools of thought have invented a new development philosophy which is complementing the HDI. For example: in 1976 the king of Bhutan Jigme Singye Wangchuck developed the term Gross National Happiness. Later in 1980s, the concept of "human happiness" has been put at the center for human development rather than economic growth, and this concept provides a framework for development planning in Bhutan.

The concept is becoming a new global debate as an alternative for sustainable human development. Several events that marked the arrival of this concept in global discourse were: the first international conference on GNH held in Thimphu, Bhutan in 2004 on the theme of "Gross National Happiness and Development". It was followed by the 2nd international conference on GNH in Canada in 2005 on the theme "Rethinking Development-Local Pathway to Global Well-being" and recently in November 2007 in Thailand, the 3rd International Conference on GNH was conducted on the theme of "Toward Global Transformation-World Views makes a difference". In general all discourse aim to claims that Happiness is more important than Gross National Income, and happiness should be placed in the center for development; How to integrate the concept in reality?

The happiness approach is very interesting in the context of Laos. Bhutan and Laos have some similarity: landlocked countries, subsistence economy, ethnic diversity, small population and people with the same religious background (Buddhism). It is possible that Laos could integrate this concept in development strategy which might help to solve problems of social inequality, environmental problems and to ensure the well-being of the people.

Nevertheless, there is lack of knowledge on happiness concept in Laos. Moreover, since agriculture and forestry play the most important roles in the area of rural development and poverty reduction is the first priority of the country, it is important to understand whether agriculture extension is contributing to improving happiness and well-being of poor farmers. This is why I have thought about carrying a research with the following objectives:

A. to understand definitions of Happiness and Well-being from farmers' points of view,

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⁹ UNDP, <u>Human Development Report 2007/2008</u>, St. Martin's Press, LLC and of Palgrave Macmillan Ltd, New York, 2007, pp. 236-271

B. to understand the context of agriculture extension and

C. to explore opportunities for agriculture extension to contribute to improving Happiness and Well-being of poor farmers

Outcome from this research will provide ideas for new approach in the area of rural development. Understanding what make poor farmers happy will help in effective planning in rural development and poverty reduction programs.

2. Concepts/Definitions

2.1 Growth and Poverty

For the growth is all school of theory, led by the international financial institutions such as the WB and the IMF. Dollar said that growth is good for the poor because growth contributes to raise overall income which helps to increase income of the poor. Core set of institutions and policies supporting growth such as macroeconomic stability, fiscal discipline, openness to trade, financial development and rule of law are good for the poor as well as other people in the society. Openness to international trade, improved rule of law and financial development is great for the poor because it raises overall income, and it helps to distribute wealth equally; Reduction government consumption and stabilizing inflation are called: 'super-pro-poor' while there is no evidence that formal institutions or large degree of government spending on social services generally affect income of the poor ¹⁰.

According to growth and income inequality, Dollar believes that there is no tendency for growth to be biased against low income household at early stages of development, but a decline of growth is usually hard on the poor. Moreover, there is no evidence that growth has become less pro-poor that it was in the past-in fact, growth has become slightly more pro-poor in recent decades. The banks understand that inequality tends to increase in the early stage of development, but it will diminish later (Kuznet hypothesis). Moreover, there is also no evidence that growth has caused income inequality. In the contrary, there is proven that income of the poor people has increased during significant growth. Growth has been always contributing to raise income for everyone in the society. Even though, the rich people are getting richer first, they will eventually give benefits to the poor later (trickle- down process). For example, private property rights, stability and openness directly create a good environment for poor households to increase production and income. ¹¹

On the contrary, in the other schools of thought, critiques argue against this dominant approach. Critiques said that there have been enormous increases of income disparity between and within each social group. For example, the ADB has reported that income

¹⁰ Dollar, David, Kraay, Aart, <u>Growth is Good for the Poor</u>, the World Bank, 2000, pp. 5-10

¹¹ Ibid

inequality within some developing countries in Asia has been increased from 5-10% in the last 10 year; ¹²income of the world richest person alone worth over 62 billion \$US (2008) ¹³ while the total Gross National Income of Laos at the same year amounts to only 6.2 billion \$US. ¹⁴ Moreover, Revero raised that economic development has had a huge impact to the environment and threatens food, water and energy security ¹⁵. Climate change and diminishing of non-renewable resources (fossil fuel) for instance is the best example of the impact from growth in the last decades. On the same side, Hodge argued against the free trade. She believed that free trade is an evil that are widening distance between producers and consumers and threatening local food sovereignty (communities have lost their self-sufficiency), while free trade is benefiting large scale companies which are subsidized by the government (in the form of direct subsidies and infrastructure development), it harms the environment (through promotion of monoculture, use of GMOs, longer mileages of goods travels) and destroys a local small and medium enterprises ¹⁶. In addition, critiques also believe that the State has very important roles to play in order to ensure wealth redistribution, social welfares and security.

2.2 Well-being

Since the past decades, people have been looking for alternative approach in enhancing/ measuring human progress to complement the conventional approach. Income and wealth are remaining very important, but it is not all about good life. The important thought is that income is of course very important as a mean to achieve well-being, but it is not an end in itself. Therefore it is important to understand what well-being actually means.

In commonly, people point out that "Well-being is a concept or abstraction used to refer to whatever is assessed in an evaluation of a person's life situation or 'being'. In short, it is a description of the state of individual's life situation" Des said that well-being can be measured objectively and subjectively-objective well-being is measured based on values that

¹² Asian Development Bank, <u>Inequality in Asia</u>, Manila, 2007, page. 6

¹³ http://www.forbes.com/2008/03/05/richest-people-billionaires-billionaires08-cx_lk_0305billie_land.html (dated: March, 2008)

¹⁴ The Work Bank, <u>Lao PDR Economic Monitor</u>, The World Bank Vientiane Office, 2007, page. 2.

¹⁵ Oswaldo de Rivero, <u>The Myth of the Development</u>, Zed Books, London, and New York, 2001, pp. 163-175.

¹⁶ Hodge, Helena. N, Gorelick, Steven, "Toward an Economics of Happiness" in Ura, Krama, Galay, Krama (Editors) <u>Gross National Happiness</u>, Centre for Bhutan Studies, 2004, pp. 77-104

¹⁷ McGillivray, Mark, "Human Well-being: Issues, Concepts and Measures" in McGillivray, Mark (Ed), <u>Human</u> Well-being: Concept and Measurement, UNU-WIDER, PALGRAVE MACMILLAN, New York, 2007, page. 3

people believe as good for them such as assessing life based on long life, good health and self-autonomy. For example: I can live healthy for 80 years. Subjective well-being is measured based on assessing a feeling of individual, or in other word to assess pleasure and pain of the person's life. For example: I am very happy that I can live for 80 years. ¹⁸ There are many efforts to define well-being approach. Mark referred that the most influential one is the capability approach of Sen ¹⁹

Sen terms human wellbeing as 'capability' of a person²⁰. Sen's human development approach focus directly on enhancing freedom of individuals in leading their lives they value and have reason to value-what people succeed in being and doing, or in the other word, people should have capability to remove all forms that preventing them from freedom. Sen said that forms of unfreedom starts from the basic ones that block the freedom to survive such as undernutrition, little access to health care and clean water, premature mortality, and to other forms that limits freedom of individual such as lack opportunity to gainful employment, education and social/economic insecurity, inequality and forms that prevent political liberty and basic civil rights²¹.

In this freedom-centered approach, Sen believed that development must play a role in enhancing basic freedom of the person to be able to survive, or it is called 'Constitutive role' of freedom. This includes avoiding famine and undernourishment, have ability to live long and healthy, and to have knowledge. There is also another group of freedoms that contribute to the general capability of a person to live more freely and to expand the freedoms, this is called 'Instrumental freedoms' it includes: political freedoms, economic facilities, social opportunities, transparency guarantees and protective security ²².

Nevertheless, to have a broader understanding about the concept, it is important to have a look in another concept. Veenhoven said that "The term 'well-being' denotes that something is in a good state [...]. The term is used for social systems and for individual beings suggesting that what is good for society is also good for citizens. In that sense the term 'well-being' is synonymous with 'quality-of-life'." ²³

¹⁸ Gasper, Des, "Human Well-being: Concepts and Conceptualizations" in McGillivray, Mark (Ed), <u>Human Well-</u>being: Concept and Measurement, UNU-WIDER, PALGRAVE MACMILLAN, New York, 2007, page. 35

¹⁹ McGillivray, Mark, "Human Well-being: Issues, Concepts and Measures" in McGillivray, Mark (Ed), <u>Human Well-being</u>: Concept and Measurement, UNU-WIDER, PALGRAVE MACMILLAN, New York, 2007, page. 4

Veenhoven, Ruut, "The Four Quality of Life", <u>Journal of Happiness Studies</u>, 2000, vol1, page. 5

²¹ Sen, Amartya, <u>Development as Freedom</u>, ALFRED A.KNOPF, INC, New York, 1999, page. 15

²² Sen, Amartya, <u>Development as Freedom</u>, ALFRED A.KNOPF, INC, New York, 1999. P. 36

Veenhoven, Ruut, "Subjective Measures of Well-being", Discussion Paper No. 2004/07, UNU-WIDER, 2004, page.4

In the concept of 'quality-of-life' Veenhoven classifies it into four criteria: livability of environment (living in a good environment), life-ability of the person (being to cope with life), utility of life (being worth for the world) and appreciation of life (enjoying life). This classification is based on two bi-partitions: a. life 'chance' and life 'results', and b. 'outer' and 'inner' qualities.

Figure 1: The four "quality-of-life"

	Outer qualities (the environment)	Inner qualities (the individual)
Life chances	Livability of environment	Life-ability of the person
(Opportunity	* Ecological dimension.	* Physical health
for a good life)	* Social dimension.	* Mental health
	* Cultural dimension.	* Knowledge
		* Skill
		* Art of living such as varied lifestyle, differentiated taste
Life results	Utility of life	Appreciation of life
(the good life	* External utility	* Appraisal of life-aspects
in itself)	* Moral perfection	* Prevailing moods
		* Overall appraisal

Source: Veenhoven, Ruut, "The Four Quality of Life", Journal of Happiness Studies, 2000, vol1

Veenhoven described the four quality of life as this follows:

The first criteria of well-being are livability which is considered as objective well-being which measured clearly by objective measures. Livability is used by ecologist and biologists to describe living environment which exists independent. It is also called 'good living conditions' by ecologists, 'welfare' by economists and good living environment by politicians and social reformers. Livability can be measured using indicators in specific aspect such as assessing physical, economic and social dimensions of a living environment (inequality for an example) and in overall aspect such as combining many indicators to produce an index (index of social progress for instance).

The second criteria of well-being are life-ability which is considered as objective well-being, but it can be measured by both objective and subjective measures. Psychologist used this variant to describe how well one is equipped to cope with problems of life and Sen calls this variant 'capability'. Life-ability can be measured in specific aspect because being 'well'

Veenhoven, Ruut, "The Four Quality of Life", <u>Journal of Happiness Studies</u>, 2000, vol1, page 11.

involves many capabilities (intelligence for instant), and it can be measured in overall aspects (but very difficult).

The third criteria of well-being are utility of life. The utility of life is considered as subjective well-being that can be measured clearly by both objective and subjective measures. It is basically stress the consequence of life. This variant is also called 'meaning of life' by moral advisors. Measures regarding this variant are not clear in social indicator research.

The forth criteria of well-being are appreciation of life. The appreciation of life is considered as subjective well-being that can be measured clearly by subjective measures. This variant is also called 'satisfaction', 'happiness' and 'enjoying'. Appreciation of life can be measured in specific aspects such as asking how one feel about work or family, and it can be measured in overall aspects such as asking how much one happy with one life as a whole.

Livability, life-ability, utility of life and appreciation of life have differences among them, and it must be clearly distinguished to avoid confusion as well as to have broader views of well-being. For example: a person lives in clean environment (livability) does not necessary have a good knowledge (life-ability) and the president who is being worth for the company (utility of life) does not necessary satisfied with his job (appreciation of life). Sum scores of the four criteria inclusively to measure well-being do not make sense-but we should use each criterion separately. Livability, life-ability and utility of life cannot be completely measured, while only appreciation of life can be measured completely

"well-being should be defined in multidimensional aspect as an umbrella notion" ²⁶. In this research, well-being is defined in multidimensional aspect that includes objective and subjective dimensions. The objective well-being has been described in the Sen's capability approach and in The UNDP HDI. "Subjective dimension of well-being is also called happiness" ²⁷ which has been described in Veenhoven's concept and will be described more in the section 'happiness'.

Well-being is the form that allows the person to be free from unfreedom forms as expressed by Sen, or in the other word, it is defined in both outer and inner dimension which is defined by Veenhoven (livability of the environment, life-ability, life utility and appreciation of life). Practically, this research investigated conditions that poor farmers understand as well-being. The proposed investigation conditions of good life includes basic needs (food, water, house, cloth, medicine), income, health, education, social and economic infrastructure (road, electricity, irrigation, drinking water, school, hospital), environment, culture and social relation.

Veenhoven, Ruut, "The Four Quality of Life", <u>Journal of Happiness Studies</u>, 2000, vol1, pp 20-25.

²⁶ McGillivray, Mark (Ed), <u>Human Well-being</u>: Concept and Measurement, UNU-WIDER, PALGRAVE MACMILLAN, New York, 2007, page. 29.

²⁷ McGillivray, Mark (Ed), <u>Human Well-being</u>: Concept and Measurement, UNU-WIDER, PALGRAVE MACMILLAN, New York, 2007, page. 10.

2.3 Human Development Index

As Mark said that since 1940s, there are many efforts in measuring well-being using different indicators such as: GDP per capital, GNI per capital, GNI per capital at PPP, poverty head count, Gini coefficient, life expectancy, child mortality, access to health service, access to water, access to sanitation, infant mortality, maternal mortality rate, calorie intake, literacy, year of schooling, school enrolment ratios, variables that address political participation, civil liberties and human and labour rights, physical quality of life index, human development index, gender empowerment measures, gender development index, genuine development index and recently happiness. ²⁸ However, the most wide-used and accepted measurement tool of well-being among national governments, international organizations, researchers and civil organizations is the "Human Development Index".

The Human Development Index (HDI) is built based on the human development approach of Sen (more detailed is in the concept of well-being). The index represents a well-known international measurement tools for human well-being. It is first appeared in the first Human Development Report (HDR) of the UNDP in 1990. However, the Sen's human development approach has been adapted by the UNDP in narrower scope of measuring well-being "the UNDP has made it clear that its inclusion in the HDI is intended to capture a material dimension to well-being." This is also clearly stated in the first UNDP HDR: "Human Development is a process of enlarging people' choices. The most critical ones are to lead a long and healthy life, to be educated and to enjoy a decent standard of living."

The index includes three main quantitative indicators: health (life expectancy at birth), knowledge (adult literacy rate and combined primary, secondary, and tertiary gross enrolment ratio) and living standard (GDP per capital at PPP). The index presents human development in each country across the world on a scale from zero to one (one is the perfect human development) which shows the overall progress of human development in respective country. For example, the recent HDR 2007/2008 showed that, there were 70 countries that categorized as countries with high human development (Iceland and Norway range as the top with 0.968 point), 85 countries with medium human development and 22 countries with low human development (Sierra Leone as the bottom of the table with 0.336 point). The UNDP has realized that Even though the HDI address two more dimensions of human well-being beside income such as health and knowledge, it still does not address

McGillivray, Mark (Ed), <u>Human Well-being</u>: Concept and Measurement, UNU-WIDER, PALGRAVE MACMILLAN, New York, 2007, pp. 5-13.

²⁹ McGillivray, Mark (Ed), <u>Human Well-being</u>: Concept and Measurement, UNU-WIDER, PALGRAVE MACMILLAN, New York, 2007, page. 8.

³⁰ UNDP, <u>Human Development Report 1990</u>, Oxford University Press, New York, 1990, page. 10.

³¹ UNDP, <u>Human Development Report 2007/2008</u>, St. Martin's Press, LLC and of Palgrave Macmillan Ltd, New York, 2007, pp. 230-233

human development completely. There are still many dimensions that are left behind such as political freedom, civil rights, interpersonal relations, physical environment ³².

Critiques say that the HDI has shortage of qualitative indicators. Even that the UNDP has been addressing other issues such as participation (HDR, 1993), gender issues (HDR, 1995), poverty (HDR, 1997), human rights (HDR, 2000), resources (HDR, 2006), climate change (HDR, 2007), etc, but they never put those indicators in the HDI. Moreover, there are many limits in measuring methodology. For example, Anand and Sen said that measuring group performance such as the gross national product, net income and life expectancy at birth that are based on averaging individual involve loss of some valuable information ³³; Jorg said moving minimum and maximum values for each three human development dimensions (25-85 years for life expectancy, 0-100% for school enrolment and 100 to 40,000 US\$ for GDP per capital) will affect the overall HDI values.

However, in this research the HDI is very important. It provides a basic conceptual framework of measuring well-being-This research will investigate whether the poor people in Laos consider income, health and knowledge as the well-being.

2.4 Happiness

In oriental point of view, in particular Buddhism, "the ultimate goals of Buddhism is 'nirvana' and 'Buddahood'" ³⁵ In Sanskhrit, "'nirvana' means 'to be blown out', 'to be extinguished' and 'to be calmed'" ³⁶ The Tharavada sees nirvana as a transcendent state of mind that one can no longer affected by attachment, hatred and delusions-one, or in other word, one has unshakable calm. Charles S said that in Mahayana, the Buddhahood (Bodhisattava) is a designation for anyone aspiring to complete, perfect enlightenment. The Buddhahood provides the middle path for one to achieve 'nirvana' in the guiding principle that nothing can exist forever and nothing exist after physical death of organism. The Buddahood is described in the noble eight-fold path (right views, right aims, right speech, right action, right livelihood, right effort, right meaningful and right concentration).

^{32 &}lt;u>UNDP, Human Development Report 1990</u>, Oxford University Press, New York, 1990, page. 13.

Anand, Sudhir, Sen, Amartya, <u>Human Development Index</u>: Methodology and Measurement, Human Development Office, New York, 1994, page. 2.

Schimmel, Jorg, <u>Development as Happiness</u>, Graduate Institute of Development Studies, Geneva, 2006, page. 10.

³⁵ Harvey, Peter, <u>Buddhism</u>, Continuum, New York, 2001, page. 86

³⁶ Prebish, Charles S, <u>Historical Dictionary of Buddhism</u>, Scarecrow Press, Inc, N.J. & London, 1993, page 203

Prebish, Charles S, <u>Historical Dictionary of Buddhism</u>, Scarecrow Press, Inc, N.J. & London, 1993, pp. 74-75

In the field of human development, John C said that Buddhism refers that human development has a meaning as elimination of rebirth and its suffering. When the rebirth cut off, the person has reach nirvana-the final goal of life. Birth is considered painful, and life is considered suffering. We suffer from wanting things and not obtaining them, joy is caused for sorrow because we know the moment is fleeting and will soon be over ³⁸ In this concept, if 'happiness' is the ultimate goal of life, happiness should also be called 'nirvana'. Moreover, Buddhist thoughts do not deny economic progress as mentioned by Schumacher "Spiritual health and material well-being are not enemies: they are natural allies" ³⁹. So one would say in Buddhism, happiness is the states of clam mind that one live in material world with a clear understanding about the values of materials and does not allow materials to control over one's life. Material well-being is considered very important but spiritual health is also very important.

In common language when they talk about 'happiness' people refer to the positive feeling (inner values) of the person. Here are some common understanding about happiness concepts: "Happiness is mostly the by-product of doing what makes us fell fulfilled (Benjamine Spock); happiness does not depend on outward things, but on the way we see them" (Leon Tolstoy); It is not easy to find happiness in ourselves, and it is impossible to find it elsewhere" (Agnes Repplier). Happiness doesn't depend upon who you are or what you have, it depends solely what you think (Dale Carnegie)."

In modern social science, 'happiness' "is the degree to which a person evaluates the overall quality of his present life-as-a-whole positively. In other words, how much the person likes the life he/she leads." Jorg summarized in his report that happiness is a global term which contains people's different evaluation concerning their lives, the event affect them, their bodies and brains, and their living conditions. Veenhoven said that there are two criteria of definitions regarding happiness in social science: 'object' definitions and 'subject' definitions. The objective happiness refers to fixed and general applicable standard of good life. For example, a happy person is someone who is sufficiently integrated (passions, conscience, ego-functions) and who has realized his potentialities reasonably well (NSS,

³⁸ Marerk, John C, <u>A Buddhism Theory of Human Development</u>, Oriental Theories of Human Development, Perter Lang, Inc, New York, 1998, page. 98

Schumacher, E.F, <u>Small is Beautiful</u>: a study of economics as if people mattered, Blond & Briggs Ltd, London, 1973, page. 48

⁴⁰ Siengkoun, Vitaya, <u>Quotations on Happiness</u>, Saitharn publication house, Bangkok, 2006, pp. 43-66

Veenhoven, Ruut, "Advances in Understanding Happiness", Revue Québécoise de Psychologie, France, 1997, vol 18, pp. 29-74

Schimmel, Jorg, <u>Development as Happiness</u>, Graduate Institute of Development Studies, Geneva, 2006, page. 29

1970:200) and the subjective happiness stress a subject-bound appreciation which may be draw on given standards of good life, but they not necessarily do so. For example: 'happiness is a lasting, complete and justified satisfaction with life (Tatarkiewicz, 1975:16). 43

Happiness can be also called 'life-satisfaction' or 'subjective well-being'. The term life-satisfaction has the same meaning as happiness, but it has advantage in expressing subjective dimension of happiness concept (subjective happiness) while happiness is also used to refer objective good (objective happiness). For the term subjective well-being, Veenhoven referred to two criteria of well-being: the utility of life and the appreciation of life (see more in the section "well-being") while Diener referred subjective well-being to all various types of evaluation, both positive and negative, that people make of their live. It includes reflective cognitive evaluations, such as life satisfaction and work satisfaction, interest and engagement, and affective reactions to life events, such as joy and sadness.

Veenhoven's concept provided a framework that living conditions and individual characteristics generally believed to determine happiness to a large extent. There are indeed considered differences in happiness between people living in different conditions. Differences are from characteristics of society (economy, politic, peace (war), and environment) and also differences in one's place in society (age, minority status, income, education, occupational prestige, global social rank, work and intimate ties such as spouse, children, friends and relatives). There are also considered differences in characteristics of individual such as personal resources (physical health, general mental effectiveness, specific abilities, activity level, and richness of mental life), personality traits (perceived face control, defensive strategies, tendencies to like things, time orientation), lifestyle, longings, convictions and appreciations.

In conclusion, one should define happiness as 'self evaluation of one's life concluded positively' and it should be measured subjectively for example: asking directly how happy one is in overall? Conditions to be happy can be varied from one to another depending on where one lives and characteristics of the one. This research does not focus on whether the poor are happy (satisfy) with their current life or not, but focus on what make the poor happy or in the other word, how do the poor people think about a happy life? In our stand point, we investigated living conditions and individual characteristics to determine happiness.

⁴³ Veenhoven, Ruut, <u>Conditions of Happiness</u>, D.Reidel Publishing Company, Holland, 1984, pp. 16-18.

Diener, Ed, "Guidelines for National Indicators of Subjective Well-being and Ill-being", University of Illinois, 2005, pp. 2-3

⁴⁵ Veenhoven, Ruut, <u>Conditions of Happiness</u>, D.Reidel Publishing Company, Holland, 1984, pp. 141-352

2.5 Gross National Happiness

Happiness approach is used in various ways. Veenhoven said that one uses this approach to monitor social progress (if happiness of the people declined, it means that there is something wrong), evaluate effect of policies, identify conditions of good life, ⁴⁶ and Diener said that happiness approach should be seen as democratic process that citizens provides information for policy debates. ⁴⁷

Bhutan, a small country (700,000 people) in between China and India is the only one country in the world that has been applying the happiness approach in development of the country. Thus it is worth to describe this effort as an example.

Gross National Happiness is a uniquely Bhutanese development approach that is built with a long historical process of the country. Bhutan is a Buddhist country which Buddhism traditionally is the foundation of its public policies, so changes in the order word is based on Buddhism values- the GNH provides an umbrella in designing practical policies that contribute to achieve the Buddhism values. In the contrary, "GNH can be understood as a basis for policy formation rather than expression of high moral Buddhism dimension-The operation of the GNH appear as reasonable development in the history if Bhutanese state"

Since the late 1980s, the kingdom of Bhutan Jigme Singye Wangchuck has been promoting GNH as the direction for the country development. Thinley said that the GNH offers values for human development. First, it stands for holistic needs both physically and mental well-being. Second, it seeks to promote inner search of happiness that harmonize with outer circumstances. Third, it recognizes that good society offers the best possibilities to sustain individual happiness-the state has the role to maintain conditions for individual in the society to pursuit happiness. In the other word, happiness is addressed through public policies in which happiness become criterion of development programs and projects. Forth, it addresses that public policies in which based on GNH makes more sense than based on economic tools ⁴⁹. Thinley added that the GNH policies are addressed under four pillars in this following:

Veenhoven, Ruut, "Advances in Understanding Happiness", Revue Québécoise de Psychologie, France, 1997, vol 18, page. 3

Diener, Ed, "Guidelines for National Indicators of Subjective Well-being and III-being, University of Illinois", 2005, page. 2

⁴⁸ Ura, Krama, Galay, Krama (Eds), <u>Gross National Happiness and Development</u>, Centre for Bhutan Studies, Thimphu, 2004, page. 32-38

Thinley, Jigmi. Y, "What does Gross National Happiness mean?" 2nd International Conference on GNH, Canada, 2005, pp. 1-13.

- 1. Sustainable and equitable Socio-economic development. In GNH, economic growth is absolute necessity to eradicate poverty. However, the way to measure growth must be distinguish from the conventional approach (such as measuring of conventional GDP) - the GNH includes values of social and economic contributions of households and families, free time and leisure given the roles of these factors in happiness. The indicators must not be biased towards consumption. I takes into account conservation of social, environmental and human capitals. In GNH, it focuses on income redistribution and fulfilling the absolute needs to achieve happiness.
- 2. Conservation of the Environment. In Bhutan, most of people live within the nature. Environment is extremely important for Bhutanese livelihood as sources of food, food productions, medicines, materials and pleasure. Moreover, conserving the environment is very important because the country has very high environmental risk (global warming trends to disappear the Himalayas). Bhutan has been launching greening and biodiversity preservation policies. The country today has 26% of it dedicated as wild life sanctuaries and 72% forest coverage.
- 3. Preservation and Promotion of Culture. In this globalized world, local cultures are tend to diminished. Western cultures are spreading all over the world through powerful mass media and telecommunications. In GNH, cultural values is highly recognized, it addresses that preserving culture means to promote local choices and well-being of the people. It is the belief that individual happiness is largely come from the society. So, preserving local culture is a process to enable true needs of the people in the society.
- 4. Good Governance. Basically, in Bhutan the government's mandate is to achieve national vision of Gross National Happiness; that is to ensure the well being and happiness of the people at individual, community, organizational, sectoral and national level. However, there are differences in theory and practices. In government of Bhutan still in the stage of developing as 'GNH state' However, in GNH, happiness is depending on quality of relationship among stakeholders, the goal of governance is to ensure more peaceful, harmonious, equitable and truly sustainable and civilized human society 50.

In order to measure progresses of the GNH policies, Galay mentioned that the government of Bhutan has recently developed nine indicators: (i) psychological well-being, (ii) health of the population, (iii) education, (iv) time use and balance, (v) community vitality, (vi) cultural diversity and resilience, (vii) ecological diversity and resilience, (viii) living standard, and (ix) good governance 51. The indicators are used in national research carried by the government institute (the Centre for Bhutan Studies).

Lead by the above policies, Bhutan have been achieved in some extents of human development as reported in Bhutan HDR 2005 that the country had sustainable economic

⁵⁰ Ibid

⁵¹ Galay, Karma, "Pattern of Time use and Happiness in Bhutan", 3rd International Conference on GNH, Thailand, 2007, page. 2.

growth (7-8% annum from 1990-2003), primary enrolment rate has increased from 72% in 1998 to 81% in 2003, per capital income has reached US\$834 in 2003 (US\$ 116 in 1980), people living below national poverty line has reduced from 36% in 2000 to 31.7 in 2003, primary healthcare coverage has reached 90% in 2002 (65% in 1990), life expectancy raised from 45.6 in 1984 to 66.1 in 1994, the infant, under-five and maternal mortality rates have been declining rapidly at 60.5, 84 and 2.6 per 1000 live births in 2000 (down from 142, 123 and 7.7 per 1000 live births in 1984), rural sanitation and safe drinking water coverage has increased from 60% and 45% in 1990 to 88% and 78% in 2005 and forest coverage amounts to 72.5% (2005). ⁵²

2.6 Agricultural Extension

As stated in the NAFES extension strategy "the term 'extension' was first used to describe adult education programs in England in the second half of the 19th Century; these programs helped to expand – or extend - the work of Universities beyond the campus and into the neighboring community. The term was later adopted in the United States of America, while in Britain it was replaced with 'advisory service' in the 20th Century. In Lao, Thai: Song-Suem which means 'to promote' There is no widely accepted definition of extension. The definition that is more likely fit to the current extension approach in Laos is: Agriculture extension as Assistance to farmers to help them identify and analyze their production problems and become aware of the opportunities for improvement." ⁵³

In Laos, policies on agriculture extension are 'demand driven extension based approach'. This is clearly stated in the 'Strategic Vision for the Agriculture Sector' in 1999 that the demand for service is demand-driven. This approach emphasizes: (i) encouraging farming communities to express their problem, (ii) helping the communities to participate in finding solutions to their problems; and (iii) giving communities the opportunity to gain access to the resources to solve their problems.

To respond to the above policy, the Government of Laos has adopted a new extension approach called: Laos Extension Approach (LEA) in 2005 as the main extension strategy. Again, NAFES recognized that the Lao Extension Approach is built on a set of ideas about how farmers learn to solve their problems and what is the most effective way of supporting them in this process. The LEA principles are: decentralization, pluralistic, participatory, needs-based, integration, gender-sensitive, group-based, self-motivated, sustainability. 55

⁵² Royal Government of Bhutan, <u>Bhutan Human Development Report 2005</u>, Thimphu, 2005, pp. 23-48.

National Agriculture and Forestry Extension Service, <u>Consolidating Extension in Laos</u>, Vientiane, 2005, page.3

⁵⁴ Ministry of Agriculture and Forestry, <u>Strategic Vision for the Agricultural Sector</u>, Vientiane, 1999, page. 49

National Agriculture and Forestry Extension Service, <u>Consolidating Extension in Laos</u>, Vientiane, 2005, pp. 52-54

This research tries to understand how local extension workers understand about meaning in agriculture extension as well as the farmers. The research also tries to understand how extension activities are implemented in the reality comparing to the above extension policies and principles, and the last point, the research try to understand whether agriculture extension contribute to improve well-being and happiness of poor farmers.

3. Research Methodology

This research uses qualitative approach. Using qualitative approach are more appropriate than quantitative approach because the qualitative approach helps to better understanding about the context of my research through interacting with people and observation local livelihoods. This research used the following techniques:

A. <u>Interviews</u>. The research used interview as a tool because most of the poor cannot read, and they have difficulties in understanding question. Face-to-face interview allows me to ask people in different ways in order to get the best information. Interview provides more accurate information for example: a person does not know how many hectares of land he has, he does not know yield of his rice cultivation... interview allows me to help interviewee in calculating the figures. Interview also provides interesting information because it allows interviewee to talk in his own way in a long sentence. Village authorities, individual households and extension workers were included in the interviews.

- B. <u>Group discussions</u> (4 villages=8groups). There are two target groups: men and women. At the beginning of the research, the research carried group interview instead of group discussion. During the interview women were dominating by a few men. Because of this problem, The research used group discussion. Basically, each group men group and women was given same questions. After that each group discussed for 30 minutes, then each group presented their results. After each presentation, farmers could ask for clarification. This method helps to overcome problems of men's interference in women's interview. It also provides opportunity for women to discuss and present their results to men.
- C. <u>Participant Observation</u>. Participant Observation is a qualitative approach that allows interviewer to participate in daily activities at the local level, and data collection is done through observation only. With this theory, we spent some days with villagers in each village; we ate with them and slept with them; we helped them to carry water, to cook and to transport their harvest to the storage; we participated community work (such as building a school); we joined their festival and parties (such as celebration of new house). This technique helped a lot in building trust and understanding between researchers and villagers. It also helped to understand the reality of rural livelihood.
- D. <u>Transect Walk</u>. This technique is to create understanding about agro-ecological condition of the village. The technique is applied as this following: after identification of village map, village authority and I identify walking direction. The identification is designed at aiming to see all type of land use activities such as village area, lowland rice field, upland field, forest...

This activity helped to construct clearer idea on production activities, quality of natural resources, land use characteristics, etc.

Typology of interviewees

Oudomxay is one of the 17 provinces in Laos. It is located in the Northern part nearby China. One of the characteristic of the province is that it has many ethnic minorities. I selected Houn district in Oudomxay province because the district has a remarkable change in agriculture production. Agriculture production has shifted from subsistence production (shifting cultivation) to commodity production (maize). Four villages in Houn district are selected for this research. The selected villages are based on 2 factors: a. access to market and b. ethnicity. The reason behind is that the research tries to make a comparison between the two ethnic groups that live in two different accessibility conditions. Selection process of villages was done in collaboration with the head of the district agriculture and forestry office. The village categories are described as below table:

Figure 2: Criteria of selected villages

Criteria	Villages with strong link to market	Villages with weak link to market
Khmou village	Nam Yone	Mok Khouan
Lue village	Boam Lao	Houy Hok

- Nam Yone is a Khmou village which is located along the main road of the district. It is located nearby a town (10 minutes by car). Farmers in this village grow maize as the main crop.
- <u>Boam Lao is a Lue village</u> which is located along the main road of the district (next to Namyone village). It is located nearby a town (10 minutes by car). Farmers in this village grow maize as the main crop.
- Mok khouan is a Khmou village which is located in mountainous area. It is isolated from the town due to bad road. It is located only about 15 Km from district town but it take about 2 hours for travelling by motorbike. The village is not accessible during rainy season. Farmers in this village still live on shifting cultivation.
- Houy Hok is a Lue village which is located in mountainous area. It is isolated from the town due to bad road. It is located only about 20 Km from district town but it take more than 2 hours for travelling by motorbike. The road condition is a little better than Mok khouan village. The farmers still carry on subsistence production (lowland rice) combing with Soya bean production in dry season.

In each village, four poor households were interviewed, one group of village authority; group discussions were facilitated (man and woman group/10 people per group). All together in the four villages, I interviewed four village authorities, four man groups, four woman groups and 16 poor households. The interviewees are not selected based on age, education level and economic classes. However, the key criteria for interviewed households was poverty. The household must be defined by the community as poor household (rice sufficiency is the key criteria). In more detail, the interviewees are selected as described in the table below:

Figure 3: Criteria of selected villagers

Criteria	Target	How to select
Village Authority	The village authority includes a village head, 2-3 deputy, 2-3 representatives of elderly, representatives of youth, woman and trade union.	The village head gathers his committee for a meeting. Make sure that at least the village head/or the deputy and elderly group are present.
Woman and Man group	Any local resident that is not part of the village authority	The interviewees are selected randomly
Households	Poor household	The poor households were identified by the village authority. Normally, the poor households are the household that have rice shortage.

Figure 4: Criteria of selected extension workers

Criteria	Target	How to select
Provincial Extension Workers	The head of Provincial Agriculture and Forestry Office/or his deputy, some extension workers that have involved in demand-driven agriculture extension approach.	Selectively interview by the interviewer: one head, three extension workers in provincial level.
District Extension Workers	The head of District Agriculture and Forestry Office and some district extension staffs.	The interviewees are selected by head of the District Agriculture and Forestry Office.

All together 10 extension workers were interviewed (six district extension workers and four provincial extension workers). There were three provincial extension workers interviewed because there are only three extension staffs that have been trained on the new agriculture approach (demand-driven) that has been promoted by the government in this area since 2007. This is to understand constraints of implementing the new policies in the local context. Head of provincial agriculture and forestry office and head of district agriculture and forestry office were also interviewed because it is necessary to find out about agriculture extension policies and programs. And lastly, some district agriculture extension workers were randomly interviewed because it is interesting to see how local extension workers perceived about extension work.

<u>Limitation</u>

There are some limitations in this research as this following:

- First of all, farmers themselves have difficulty to make definition about happiness. Moreover, farmers do not see differences between well-being and happiness. This shows that there is a strong relation between happiness and well-being. So, in farmer point of views, happiness and well-being are the same.
- Most of farmers do not remember about their ages and ages of their family members. Moreover, people are not sure how big their area is and yield of their crops. So, the ages are estimated by farmers themselves and the figures of yields and areas were estimated by interviewers. For example estimating area of upland rice field was done by calculating seeds used in the field. Normally it takes 60 Kg of rice seeds per hectare. Estimating yield was done by calculating how many bags are there for rice harvest this year (but we must know how many Kg in one bag).
- Interviewing women seem very difficult because they were not so open. The reason behind is that they are culturally excluded. They do not have opportunity to talk with visitors; they have a very low level of education, so most of them could not speak Lao language. Moreover, interviewing women often interrupted by men who observed nearby. So that, most information gathered from household level were from men except some households where the husband was not present.
- Farmers were busy because it was the start of the dry season crop. Farmers in the first village were busy in planting soya bean which is the most labor consuming step of this production system. The third village was also difficult because there were also another group of official staffs working on land and forest reallocation (land titling). Moreover, for the poor time is very limited. However, I managed to interview people in the early morning and in the evening. In summing up, time pressure limited in depth interview.
- There is no electricity available at all in the second village, while the first, third and forth village has electricity sometimes (from generators and micro-hydro power motors). In fact the whole district is not connected to national grid. I had difficulty on using electronic tools such as tape recorder, camera and computer.
- Language limited interactions due to the fact that some villagers do not speak Lao language.
- Economic calculation is done based on the main income activities only especially crop production-not livestock production. So agricultural income in this research is not completely cover the whole production system. This is because there is not enough time to gather information on livestock production. Moreover it is very difficult to calculate economy of livestock production because information was not available.

Part II: Case Study

1. Presentation of findings

1.1. Perceptions of Well-being and Happiness

People from different backgrounds have different standards of evaluating and comparing their happiness. In this study, where all the interviewed persons have a very low education, it is difficult for them to understand the differences between well-being and happiness. In conclusion, the following perceptions are the combination of both well-being and happiness. The findings are categorized into 10 perceptions: rice, money, household assets, social infrastructures, natural environment, health, education, social relations, family relations and culture. Among the 10 perceptions, rice is the most important.

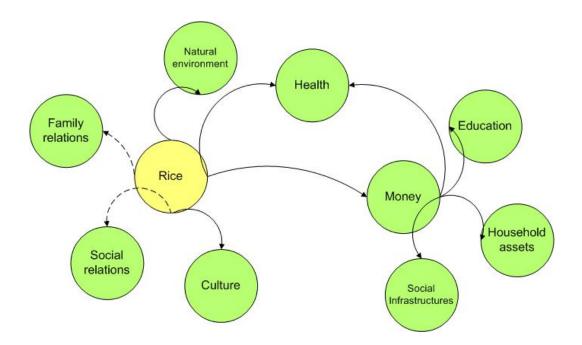


Figure 5: Links between rice and other factors of well-being and happiness

Figure 5 shows that rice plays the central roles for well-being and happiness. Rice contributes directly to health of the people because people eat rice as the main food. Without rice people have malnutrition; Rice production integrates in the lifestyle of Lao people (more detail in interpretation part)-promoting rice is promotion of Lao culture; Traditional rice cultivation is an environmental friendly activity that harmonizes with the natural environment; Rice is a source of cash income-the money is very necessary for health, education, social infrastructure and household assets. There are not clear links between rice and family/social relations.

The perceptions between social groups and sex have some differences. Thus, it is important to present the findings in each target village.

1.1.1 Perceptions of well-being and happiness in Houy Hok village

Figure 6: Conditions for Well-being and Happiness in Houy Hok village

Conditions for well-being and happiness	Male group	Female group	Poor households
Rice	*	*	*
Money	*	*	*
Household assets (land, house, hand tractor)	*	*	*
Social infrastructures (road and electricity)	*		
Natural environment			
Health (healthy and long life)	*	*	*
Education			
Social relations			
Family relations			*
Cultures			

Key: * = priority

The above figure shows that villagers considered rice, health, money, assets (house, vehicles) as first priority to obtain well-being and happiness. They considered social infrastructures (road) and family relations (love in the family) as the second priority. Villagers considered natural environment, education, social relation and culture less important.

Rice sufficiency (to have enough rice to eat) is considered very important. Farmers said that to be happy is "to live well and eat well" it basically means that having enough rice to eat is happiness.

Money is perceived by farmers as magic means to obtain happiness-they believe that money can buy any things that are available in the market including rice and medicines. Farmers thought that if one household that have 500-1,000 \$US per year, that household is very happy (this standard is based on the rich households in the village).

Regarding health, all farmers believed that to be happy the person must have good health-villager thought that they want to live as long as the oldest person in the village. However, they thought that to live over 80 years is not good because he/she could not move easier and create workload for the family to look after.

To have a good house, a vehicle (tractor) and good road are also considered to make people happy. The men reported that the women now can travel easier to do trading in town than before. In the past women had to walk and carried stuffs on their back to the town. They also had to carry water and unhusked the rice manually. Since the villager have had access to

the road, women no longer walk to town, they could trade their rice and soya bean using the hand tractors. There are also many small rice husking machines that help to save women's labors.

Education, family relation, social relation, culture and environment are second priority. Regarding education, villagers think that education is good for them because it creates knowledge. They wish that their children should have education as high as possible, but it is not possible because they do not have money to afford education. Moreover, it is perceived by farmers that "high education is not necessary in rural area" (mentioned by a farmer in group discussion).

Regarding to the environment, villagers think that the forest is very important because it provides food, wood and shelter for the people. Villagers said that "no forest, no water". However, villagers said that too much forest is not good either because there will be no land for agriculture productions.

Nevertheless there are links between family relation, social relation and culture and happiness. The women group mentioned that they feel bad if there are many poor people in the community especially if the poor are their relatives. However, these factors are considered as secondary importance in contributing to individual happiness and well-being.

1.1.2 Perceptions of well-being and happiness in Boam Lao village

Figure 7: Conditions for Well-being and Happiness in Boam Lao village

Conditions for well-being and happiness	Male group	Female group	Poor households
Rice	*	*	*
Money	*	*	*
Household assets (land, house, hand tractor)	*		*
Social infrastructures (road and electricity)	*		
Natural environment			
Health (healthy and long life)	*	*	*
Education			
Social relations	*		
Family relations		*	*
Cultures			

Key: * = priority

In Boam Lao village, all villagers reported that rice, money and health are the key for well-being and happiness. Family and social relations are very important for women and poor households. Social infrastructures are also important especially among men. Natural environment, education and cultures are considered not so important for well-being and happiness.

Even though most of the villagers grow maize as the main crop, they still eat rice as their main diet. Many farmers including the village authority reported that they want to grow rice as before because at the present time they have to buy rice in higher price. It is true that maize price is very good, but the price of rice is higher. Growing rice is good because they do not have to worry about marketing-if the price of rice goes down they do not have to worry about it because they eat the rice anyway.

One of interesting findings in this village is that family relation is considered very important in the household level. Mrs. Yai (26), a poor household who has been married for three years and has two children said that "Happiness for me means the husband and the wife love and care each other. I am very happy because my husband and I go along together very well, even though we are poor, but we still love each other. However, I am not happy because the parent of my husband do not like me because I have been married once before" Mrs. Phout (24) a poor household who has been married for 5 years and has no children also said that "happiness means sex" (she was laughing when she answered).

The villagers reported that safe and united community is the key condition for well-being and happiness of individual. "We gathered together today to clean up the bush and to rebuild the school for our children. The school is very important because it helps to create knowledge for the new generation" said by one villager at the community work day. "Good community where everyone cares for each other and helps each other, where there are no crimes and evils is very important" said by an elder of the village.

Rice, money and good house are the key conditions for well-being and happiness as mentioned by Mrs. Joy, (27) a poor household who has one child "Happiness means to be rich. To be rich you need to have enough rice to eat, have money and a good house. I am not happy at all about my life because I do not have a good living standard-I have a lack good living conditions that other people have." Poor households wanted to have the same living conditions as other people in the same neighborhood. Mr. Phone (28), who has been married for seven years and has 3 children, said that "Happiness is to have rice to eat, to have a house to live and to have money to spend. I really want to have some money to buy a tractor because my life will be a lot easier if I have a tractor like other people. At the present time I am not happy at all because I have a lack of basic needs."

Money is very important. Mr. Phone showed a good example why the money is so important: "at the present time when we are sick, we do not have money to go to the hospital. I had to borrow money from other people with a very high interest (ranging from 50-70% per year). Most of maize harvested this year was spent to pay back the old depts." He wishes to have income for about 2,000 \$US per year. This amount of money could pay back the debt, buy the rice and send his children to go to school.

1.1.3 Perceptions of well-being and happiness in Mok Khuan village

Figure 8: Conditions for Well-being and Happiness in Mok Khuan village

Conditions for well-being and happiness	Male group	Female group	Poor households
Rice	*	*	*
Money	*	*	*
Household assets (land, house, hand tractor)	*	*	*
Social infrastructures (road and electricity)	*		
Natural environment			
Health (healthy and long life)	*	*	*
Education			
Social relations			
Family relations			*
Cultures			

Key: * = priority

In common with the previous village, Boam Lao, villagers considered rice, money and health as the most important factors to achieve well-being and happiness. A social infrastructure, especially the road is reported by men as the priority while women reported that a family relation is also the priority. However, other factors such as social relations, education, culture and the environment are not mentioned as priorities.

Mr. Phonexay (43) reported that: "Last year, we had 8 month rice shortage due to drought. We had to work for other people in order to get the rice. Moreover, we borrowed rice from other people as well." Mr. Luer (24) also showed how important the rice is: "Happiness means to have rice to eat, water to drink and a house to live. If we need meat I go for hunt and if need vegetables, there are plenty of vegetables in the forest, but there is no rice in the forest"

Land is considered as an important factor for well-being and happiness. "Happiness to me means to have land for growing rice" said by Mr. Doung (30). The villagers reported that land issues will be a major problem in the future because the villagers have been asked by the district authority to move to new location nearby road. "We really do not want to move because we are not sure that we will get any money for the moving as well as compensation for our land and houses. Moreover, there is limited land in the new location. All land are owned by other people already, if we want the land we have to buy from them" said by villagers during group interviews.

Money is an important factor mentioned by the interviewees as the means to buy food, goods and medicines. The desire for money is smaller than other target villages. The amount of money that people wish to have in one year per household varies between 200 to 1,000 \$US only.

Health is considered very important for well-being and happiness. "Good health allows us to move freely, so we can work and enjoy our lives" said Mr. Doung. Villagers seem not to care so much about how long they can live. The evidence was that farmers do not remember their ages and when asked how long a person should live, most of the people laughed and answered "not too long-may be one should live around 70-80 years". People seem to see death as a natural norm, and they have less tension on life expectancy.

1.1.4 Perceptions of well-being and happiness in Nam Yone village

Figure 9: Conditions for Well-being and Happiness Nam Yone village

Conditions for well-being and happiness	Male group	Female group	Poor households
Rice	*	*	*
Money	*		*
Household assets (land, house, hand tractor)	*	*	*
Social infrastructures (road and electricity)	*	*	*
Natural environment			
Health (healthy and long life)	*		
Education	*	*	
Social relations	*	*	
Family relations		*	*
Cultures			

Key: * = priority

Villagers in Nam Yone understood that rice, cultivation land, infrastructures are the most important for them as the means to perceive well-being and happiness. Second priority included money, family relations, social relations, education and health. Culture and natural environment were considered less important.

Poor households reported that land is the most important means for well-being and happiness. It is described by Mr. Somchit (50): "Happiness for me means that our family has a place for growing rice and maize, to have a good harvest that give us enough rice to eat and have maize to be sold." Similar to Mr. Somchit, Mr. Nguem (55) reported that he was quite happy because, for the time being, he still had enough rice to eat and had some

money, but is not very happy because he does not have any good piece of land, a good house, a tractor as other people in the same community.

Regarding family and social relations, love among members in the family is considered very important. Mrs. Yand (43), wife of Mr. Somchit said that: "Happiness means having the husband and children" It is confirmed by in women group discussion that "Happiness means the spouse love each other. They always think about each other even they live far away from each other." Relationship among relatives is also considered important as Mr. Chansouk (32) reported: "I am quite happy because we have good relationship in our family, but I am not happy because I do not have enough rice to eat. I am not satisfied with the amount of income we earned today, but I am happy that my relatives still able to help me sometimes when I needed help"

Villagers reported that social infrastructure such as road access is important. Mr. Khamtan (53) said that "Right now, I am happy because we live along the road; it is convenient for travelling to the town for buying goods, and the buyers are able reach our village easily" Money is also perceived very necessary. Farmers reported that they need at least 500 \$USD per household per year in order to have minimum level of well-being and to be happy.

1.2 Agricultural extension

1.2.1 Agricultural extension in farmer point of view

All interviewed farmers in Mok Khouan have never heard about word "agricultural extension" even though, there has just been a European Union livestock extension project in the village. The project has been launched for a few month as the first project in the village. Head of the youth union has been sent to attend a series of training on livestock vaccination, breed selection and proper feeding and maintenance. Agricultural extension is a very new concept to all villagers.

Regarding needs for extension in Mok Khuan, Mr. Phonexay (43) said that "we have lack of labor in weeding our fields and this year we had drought. I want to try growing maize becausel know how to grow it and I see a lot of people now growing it. I want to learn new techniques on growing maize." There are also some problems on pest and diseases as mentioned by Mr. Doung (30): "we have enough labor but there are always problems about rats. They destroy our rice fields every year. In 2005, all of my chicken and pigs were dead because of diseases. I want to have lowland field for growing rice, to grow maize and to raise chicken. I really need support on trainings, seeds and chicken breeds" Small livestock especially the chicken was defined by many farmers especially women. Mrs. Vankham (25) said that "I want to reduce growing rice in the upland because it is a lot of work on weeding. I want to raise more chicken because raising chicken is very simple. It does not require a big area, need small amount of capital and does not require a lot of labors."

In Houay Hok, farmers have some idea about agricultural extension through observing extension projects in villages nearby. Farmers gave a definition of agricultural extension as a service of providing seeds, breeds and credits. The village authority told a story about an intervention from an agricultural extension in 2006 at the neighboring village: "The project

tried to promote lowland rice cultivation. The project aimed to move upland farmers down to the flat area by providing them new job with 'lowland rice'. The project prepared rice field with small irrigation and 'new improved rice variety' Farmers who joined this project ended up with zero harvest due to problems regarding adoption of new seeds. Now all farmers went back to the same jobs and the extension workers are not daring to come to them." The village head man was laughing after ended the story.

Regarding needs on agricultural extension in Houy Hok, most of interviewed persons reported problems on water management in the productions, pests and rats. Soya bean is a new crop in the village, so there is lack of technical knowledge on this production. Farmers reported low yield and pest problems. The village authority said that: "we asked soya seeds from our relatives, then we produce seeds our selves. We are not sure whether the low yield was caused by the seeds or because of our cultivation techniques." Declining in cultivation land has been a problem because of the increase of family members. Mr. Maiphone (48) reported that "I have smaller land than before since I am married and moved to live with my wife. If I have more land, I will grow maize, rice and soya bean." Farmers see importance in training as the process of gaining new knowledge. The needs on training are diverse. Mr. bounyong (29) said that "I want to learn growing maize because maize has high yield and it does not requires a lot of labor to weed the field. In the training process, I want to learn through practicing and demonstration." "I want to learn how to control pest on the rice and soya bean productions" said Mr. Maichan (67), and Mr. Bounma (36) said that "I want the extension agent to introduce to me alternative agricultural productions such as agar wood production and livestock husbandry."

In Boam lao village, agricultural extension means "maize seed and credit providers". Mr. Phone said that "Extension for me means someone come to promote production of maize, they provide maize seeds and some documents on how to grow maize" Many farmers reported problems on land quality as the main constraint of declining yield of maize production. The poor households reported that they do not have enough land for growing maize which is the main cause of their poverty at the present time. Mr. Loo (28) reported "the main reason I am poor because I do not have enough land. I only have about 0.5 ha of land, and the land is located in the upland where it is very dry. I want to have a big piece of land nearby the river. Last year, we have about seven month of rice shortage. We had to work for other people daily to survive, and we borrowed money from other villagers to buy rice. Most of our harvest this year was paid back the debts from last year. If I have a big land like you (he told to the village head man) I will not be a poor man" In the case of Mr. Loo, Mrs. Phout, wife of Mr. Loo, mentioned that she wanted to raise pigs, and she would like extension agents to help providing credits to her. "Pigs have a very high price today and there are many traders are looking to buy them" said Mrs. Phout.

Needs on credits are very high among interviewed farmers especially the poor households. Money is considered very important for the poor because they wanted to use the money to buy land, maize seeds, to hire people to help them when they have lack of labor and to hire tractor to plough and plow their fields. Mr. Phone (28) said that "I need some money to buy rice for our family and to buy a tractor. The tractor will help to save me a lot of work on maize transportation because my field is very far from the road."

In Nam Yone village, most of farmers know extension as 'seed providers'. At the present time maize seeds are brought into the village though district extension workers. The

extension workers play roles in ordering maize seeds from companies at the provincial level based on requests from the village focal point (normally the village head man). None of villagers have ever received any extension services from extension staff, so they do not know exactly the meaning of agricultural extension.

Regarding agricultural extension in Nam Yone, villagers reported problems with livestock diseases. Mr. Somchit (50) said that "I do not have any livestock today because all of my chickens died last year. I do not want to raise chicken anymore because it is very risky due to the disease." Villagers also reported problems regarding soil degradation and unstable maize yields. Farmers wanted to know how to manage the soil properly to avoid declining in maize yield. Moreover, farmers wanted to try alternative cash crops. Mr. Nguem said that: "I need advice on alternative productions badly because I can see that we cannot go on growing maize like this forever."

Informal credits are problematic. The poor reported that they have to borrow money from their wealthier neighbors during food shortage "I have to borrow money from other people every year. Last year I borrowed 100 \$US and I had to pay them 150 \$US this year. Most of our income from maize was used to pay our debt. We need the money because if one of our family members is sick, we need money to go to the hospital and when we have rice shortage we use the money to buy the rice." Said by Mr. Chansouk (32), one of the poor household, with three small children.

In conclusion, farmers have not seen extension workers playing roles on capacity building or learning facilitation. Farmers are more interested to see extension workers play a better role in providing credits. Regarding content of training, most farmers are interested to learn more on what they are currently working on (maize in the case of Boam Lao and Nam Yone and rice and chicken in the case of Houy Hok and Mok Khoun). Many farmers are also interested to have alternatives such as other people do in other villages (in this case maize is playing an influential role).

1.2.2 Agricultural extension in extensionist point of view

Agricultural extension

Most extension workers define agricultural extension as the government's interventions on transferring new knowledge to farmers through training, information dissemination and demonstration. Mr. Naen, head of the Provincial Agriculture and Forestry Office (PAFO) commented that "agricultural extension is a campaign and dissemination of information to the farmers. Extension activities are including working together with farmers in the field in order to demonstrate new knowledge and to build model farms." Mr. Houmpheng, deputy head of Provincial Agriculture and Forestry Extension Center had similar definition: "agricultural extension is a difficult task because we have to work in the field with the farmers. We work with them in order to improve their knowledge. We also try to provide them production inputs such as seeds and fertilizers." Mr. Khamphai, deputy head of planning division of PAFO gave a definition that highlights today's extension approach: "agriculture extension is the process of transferring knowledge and information to farmers in order to improve their own productions. Farmers take a lead in solving their own

problems, and we as the extension workers play roles on supporting them. If farmers have ownership it reduces also our workload." Definitions of agriculture productions are perceived in more concrete manner by the staffs in district level. Mr. Thongsouk, deputy head of district agriculture and forestry office (DAFO) said that: "agriculture extension is about growing crops, raising animals and conserving the forest."

In particular, the head of livestock unit of DAFO, Mr. Somsack reported that "there are two extension projects in livestock promotion. One is funded by the EU livestock project and one funded by the IFAD. The EU livestock project provides credits to farmers (5% of interest per year) on pig and cattle productions. For the IFAD livestock project, each poor household in the target village received 50 \$US grant for initial cost of pig production". Mr. Vannasak, head of cropping unit reported that "maize, soya bean, job's tears and rice are the potential crops of the district. Extension plays roles on providing information, techniques and seeds to the farmers". Mr. Vannasak added that "private sector especially the seed company plays an important role on providing seeds to the farmers. The unit has been working with the seed company for a long time, we have tested the seeds in our area before sending them to farmers, we demonstrate good seeds in the demo-plots and we coordinate to get seeds from the company for the farmers". Regarding forestry sector, Mr. Kanphay, head of forestry unit said that "extension means to create better jobs for farmers" He added that "some non timber forestry products have potential to grow as commodities. We should conserve the natural forest and at the same time promote the productions of non timber forestry products. There is currently a project funded by IFAD since 2002, this project has been training farmers on producing seeding and growing some non timber forestry products".

"Extension activities include training, information dissemination, seed multiplication, connecting to private sector, demo-plots, and land and forest allocation. All activities are based on the direction of the government on creating permanent jobs and generating income for the farmers" commented by Mr. Thoungsouk, deputy head of Houn DAFO.

However, agricultural extension programs do not systematically function in Houn district. Extension activities are fragmented on project basis in each technical unit. They use different approaches. The only training being conducted is by the livestock units through EU and IFAD livestock projects. Forestry unit has the main focus on allocating land and forest while the cropping unit is focusing on dealing with seeds. Moreover, so far the district extension workers play more roles in dealing with the private sector in the form of contract farming (rubber plantation) and facilitating for maize seeds rather than providing technical knowledge or facilitating the learning process.

Agriculture improvement for the poor

At the strategic level, leaders of provincial agriculture and forestry office (PAFO) and district agriculture and forestry office (DAFO) defined land and forest allocation as priority for agricultural improvement. It was followed by promotion of commodity productions such as maize, soya bean, rice and NTFPs. In order to do that Mr. Naen, head of PAFO suggested "we need to train our extension staff (200 staffs at the present time), then we need to allocate them down to the fields at the village cluster level. The extension staffs are the key people who make changes in agricultural productions. They have to support techniques as well as to gather information from the farmers (such as need for seeds). Mr. Thongkhoun, deputy head

of DAFO, sees that it is necessary to allocate land and forest, so everyone could have enough land to make a living. He added "we expected to finish allocating land and forest to all villages in our district by the end of 2008."

"To help the poor improving their agriculture production is very difficult" said by Mrs. Thongkhoun, provincial extension workers. She added that "no one wants to be a poor person, most of the poor have lack of cultivation land (suitable land such as lowland rice fields) and they still have lack of appropriate knowledge about agriculture productions." However, most of extension workers see that the poor need funds as the key to overcome poverty. Mr. Thongsouk mentioned "to help the poor, I think we need to provide them some funds for initial phase of agricultural productions. There is a project in our district that give 50 \$US for each poor household. The project used that money to buy fish fingerlings for the farmers. After that the project trained them one how to raise fish. This is an effective project that could help the poor to make more money" Concerning the way to get the money for the poor, Mr. Khamphai gave a comment: "for the poor, we should help them to get together working in group in order to access to credit scheme. Then extension workers should help them with technical issues. The topic for trainings must be based on their problems."

Knowledge is a key factor in overcoming poverty issue. Mr. Naen said that "basically the poor have lack of knowledge to be able to overcome their problems. Traditional practices are not sufficient to make a good living. The main obstacle in doing extension with the poor is that they are familiar with their traditions which blinded them from seeing alternatives, and they do not want to change. The second obstacle is that the extension workers do not have enough capacity to be able to reach the poor and the last main obstacle is that the markets of agricultural products are not stable. Sometimes, the demands are high and sometimes they are not. The poor are very sensitive to change of market process because they do not have capital to cope with marketing problems" On the contrary, Mr. Houmpheng sees important of indigenous knowledge. He said that: "some traditional knowledge is very good, and I think we can integrate it in the modern techniques. Farmers have a rich of knowledge on using the nature to control pests and diseases and they are very good in making simple agricultural tools. I often copy their techniques and apply it to my own productions" Mr. Khamphai added that compromise is the key word: "I think farmers have their traditional know-how. To expand that know-how is a very interesting issue because normally traditional know-how is good for the local area only. I think it should be a compromise between traditional and modern techniques."

Lao Extension Approach

The Lao Extension Approach has been launched in Oudomxay province since 2007. Unfortunately the Houn district is not the target area of launching the LEA. Thus, in this study it is difficult to assess how well the approach has integrated in the extension structures as well as its effects on the village level. However, the study has some interesting opinions from some local extension workers (in provincial level) who have been promoting the LEA and also some feedback regarding the approach from district extension workers.

Basically at the provincial level, interviewed extensionists have a clear understanding about the concept of the LEA. Mr. Khamphai commented that: "the LEA has just been introduced in our province in 2007, so it is still new for both extension workers and farmers. Personally, I

think that the approach is very challenging in our area because this is the first time that extension focuses on empowering farmers. The approach aims to enhance knowledge of the farmers rather than giving them production inputs and funds". Mr. Houmpheng said that "within the frame work of the LEA, we support district extension workers in working with farmers" Mrs. Thongkhoun added that "the approach started from collecting village baseline data in order to understand constraints of the village, then we assess needs for training together with farmers, after that we provide them the trainings."

However, there are some constraints on implementing the approach. Mr. Khamphai mentioned "the main obstacle in applying the approach in the field is that farmers might not have motivation in the learning because we do not provide them any funds or production inputs. The farmers often compare this extension approach to other extension approaches which have been implemented by other projects, thus they expected to receive materials from us." Mr. Houmpheng also replied the same that "the weakness of the LEA is that it does not provide any funds to the farmers, but the farmers expected from us. It is difficult to convince the farmers that knowledge is more important than funds." Mrs. Thongkhoun raised the issue of expanding the approach "we do not have budget for expansion of the LEA yet, I am afraid that we will not able to expand the approach without financial support from projects".

Regarding opinions regarding the LEA from extension workers in district level, there are two extension workers out of 6 interviewed persons that knew a little bit about the approach. Mr. Somsack , head of livestock unit said that "I knew the about the LEA when I attended a meeting in provincial level. The approach aims to do extension based on the needs of farmers and to promote their potentials. However, I think the government does not have ability to provide such services that cover all needs of farmers." Ms. Souksamone said that "I have learnt about the LEA when I was in the college. I have graduated from faculty of agriculture last year. I do not remember exactly about the approach, but I think it is important that we do extension that fit to the needs of the farmers. Farmers will have motivation because they like it. However, it is difficult to find the real needs of the farmers. I am afraid that they cannot define the needs correctly." Mr. Vannasak gave an opinion regarding demand driven extension approach: "I think this approach can become sensitive issue, because it is dealing with promises. We should not make promises to farmers when we are not able to make it come true. In our office, we have lack of budgets, so it is hard to implement it in the reality"

1.3 Agricultural extension and perceptions of well-being and happiness

In this study, most of farmers did not understand about agricultural extension because there have not been any agricultural extension projects yet. Except in Mok Khuan village where the EU livestock project has just been introduced in 2007, but therefore, all interviewed farmers in Mok Khuan reported that they did not know about extension. In consequence, asking whether farmers consider agricultural extension in improving their well-being and happiness did not make sense to them. The hypothesis that farmers have some ideas about agricultural extension are not really correct, so it makes more sense to ask whether they consider agricultural improvement as improving their well-being and happiness.

Farmers found it easy to answer the above question. All the interviewed farmers say 'yes' that improving agricultural productions are contributing a lot to improve their well-being and happiness. Agricultural extension that helped to raise cash income would directly contribute to improve well-being and happiness of the people. Village authority of Boam Lao village made a comment that: "In the past when we have not grown maize, we had very poor living conditions but since we have grown maize we have more cash income. In consequence, many households have improve their houses, there are many hand tractors, motorbikes, televisions" Mr. Say, deputy head of Baom Lao village who has the biggest area of maize production added "I have a lot of more cash income through selling maize, I use the money to by rice, upgrade the house, buy maize threshing machine, motorbike and I have been sending two of my sons to study in other bigger city (in Luangprabang province)." Mr. Vannasouk commented that "at the present, there are many households that could manage themselves to get out of poverty. In our district there are 15 households that can produce over 50 tons of maize per season. Those households are rapidly wealthier than before."

Most of interviewed farmers reported that they did not want to do other jobs. Agricultural productions are the only skill that they have, doing other jobs are considered of secondary importance (such as weaving, making rice whisky, trading, selling groceries, etc.), so improving agricultural productions directly improve food security as well as incomes for the farmers. Especially among the poor households who have lack of knowledge and capital to work in other sectors, agricultural improvement will contribute to improving their well-being and happiness.

In the views of extension workers, it is clear that agricultural extension contribute to improving well-being and happiness of the poor. Mr. Houmpheng commented that "agricultural extension makes the poor feel good because they have increased their knowledge. If the poor have better knowledge, they can improve their productions, and they know better how to cope with their problems." Mrs. Thongkhoun added that "I think agricultural extension contribute a lot to improve well-being and happiness of the poor households. Recently, I have visited a farmer who was trained on chicken productions. When I visited the farmer was very happy because he could sell many chickens this year than other years before, so he killed the chicken for welcoming us." Mr. Somsack, Ms. Souksamone and Mr. Khonesavanh, district extension workers agreed that "when the yields increase, problems on the fields resolved, farmers have more food and income, so they have better living standards and they are happy."

Poverty has been seen by extension workers as the main obstacle that prevents the poor from achieving well-being and happiness. Mr. Khamphai said that "in my opinion, agricultural extension plays an important role in poverty reduction. Agricultural extension contributes to improving agricultural productions for all farmers in both subsistence and commercial level." "without poverty farmers are happy" added Mr. Kanphay, head of forestry unit of Houn DAFO. Farmers in Houy Hok also mentioned in group discussion that improving agricultural productions is the only way to overcome poverty in their village.

2. Interpretation of findings

2.1 Perceptions of well-being and happiness

Figure 10: Conditions for Well-being and Happiness all target villages

Conditions for well-being and happiness	Male group	Female group	Poor households
Rice	****	****	***
Money	****	***	****
Household assets (land, house, hand tractor)	***	**	***
Social infrastructures (road and electricity)	****	*	*
Natural environment			
Health (healthy and long life)	***	***	***
Education	*	*	
Social relations	**	*	
Family relations		**	****
Cultures			

Key: **** = the most important

The above figure is a summary of table 5, 6, 7 and 8. It shows some similarity and differences between how men and women in perceiving well-being and happiness. The table also shows perceptions of the poor compare to general perceptions of men and women.

In general, all men and women, including the poor see rice as the important factor to determine well-being and happiness. It followed by money and health. On the other hand, all interviewed persons did not see the links between natural environment, education and the cultural aspect in well-being and happiness. The data are more interesting when compared between men and women. Specifically, beside rice, money and health, men considered assets (especially land, house and tractors), social infrastructure (road and electricity) and social relations as conditions for well-being and happiness while women consider additionally fine family relations (love and unity) as one of the key conditions for well-being and happiness.

For the poor, they have not reached a sufficient level yet, so it is not so surprising that rice is the key factor in pursuing well-being and happiness. Money, health and land are also considered very important for the poor. The most interesting finding is that the poor also considered their family relations as one of the most important factors determining well-being and happiness. It is interesting to have a look deeper in to each issue as this following:

1. Rice and well-being/happiness



Picture 1: Rice harvesting in Houy Hok village, Houn district, Oudomxay province, Laos

"Making rice field is eating rice, and eating rice is everything; not enough rice means that there is not enough everything. To eat rice means to be alive but to not eat rice means $\operatorname{death}^{56}$

Rice production in Laos has a long history as long as history of the country. Archaeological evidence shows that rice has been grown in this region for at least 6,000 years. It is also believed that Laos is probably the original area in of "glutinous" or "Sticky" rice. ⁵⁷ Currently in Laos, rice is the main crop that accounted for more than 80% of total agriculture area of the country. Laos also has the highest production and consumption of the "glutinous rice" in the world.

"Paddy cultivation is not only an economic strategy; it is part of a way of life; it contributes to the cultural dimension of rural life such as rural social structure (community life is organized around the cultivation cycle), cultural identify (traditional foods and crop varieties are a key part of happiness), religion (spiritual life is tied to the cultivation process) and aesthetics (landscape, taste, texture, symbol...)" 58

Schiller, J.M, Chanphenxay, M.B, Linquist B, Rao Appa, S, Rice in Laos, IRRI, Manila, 2006, page. 81.

⁵⁷ Schiller, J.M, Chanphenxay, M.B, Linquist B, Rao Appa, S, Rice in Laos, IRRI, Manila, 2006, page. 10.

⁵⁸ Groenfeldt, David, "Accounting for culture in paddy cultivation: toward a broader definition of 'livelihood'" in Toriyama K, Heong KL, Hardy B (Eds), <u>Rice is life: scientific perspectives for the 21st century</u>, IRRI, Manila, 2005, page. 328

Rice represents as Lao cultural identity. Rice appeared in the national symbol, and rice is integrated in local lifestyles such as it includes in traditional dances, plays and songs. In Lao, people say: "Khon Lao Kin Khao Neal Cham Padek" which means that "Lao people eat Sticky rice with fish-paste". This proverb simply describes identity of Lao people. One very well-known song, by the name "Yen Sa Bai Sao Na" (Contented Rice Farmers) reflects very much about rice and livelihood of Lao people. It is describes in this following:

"We are rice farmers' children,
We take plows and buffaloes to the fields,
We look for food in the forest,
We look for food in the forest

After sunset, we go home,
Everyone in our village is very happy and contented,
Very happy, very contented.
In our village, there is rice and there are fish in the rice fields,
When the wind blows, we have fresh air,
Contented, contented farmer; contented, contented farmers

In the afternoon, we ride wild buffaloes,
We sing songs, dance, and play the Khaen (wind instrument from bamboo),
We urge everyone to come together to play, work and develop the nation,
Contented, contented farmer; contented, contented farmers

The direction of our lives is a happy thing,
In the fields, our skin turn dark, but we are still happy to work for our nation,
To work to fight hungry and poverty,
Contented, contented farmer; contented, contented farmers

We are proud to use our work to develop our nation,
We have buffaloes as powerful friends,
Our leaders direct us on the right path
Contented, contented farmer; contented, contented farmers"

Cultural practices revolve around cultivation and consumption of rice. In Lao Loom traditions (including Lue ethnic group in this study), there is one cultural festival each month throughout the year. It is called "head Sip Song" which means "12 traditions". Six out of 12 traditions are concerning rice 60 . For example, the 8th tradition is called "Kao Phan Sa" which

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⁵⁹ Schiller, J.M, Chanphenxay, M.B, Linquist B, Rao Appa, S, Rice in Laos, IRRI, Manila, 2006, page. 66.

⁶⁰ National University of Laos, Lao Culture, Vientiane, 2006, pp. 22-26.

means "entering raining season" or in the other word "the Buddhist rain" this tradition started in August to November. In this period, the monks stay only in the temple and practice religious rituals-villagers prepare food and offer to them at the temples. At the same time this period people do not organize party. This is very much fitted to the rice production because July and August is the busiest time in rice planting. In Khmou traditions (one of the ethnic minorities of this study), there is a ritual in each step of rice planting which includes rituals in selection of the field plots, clearing the field (slash and burn), planting, calling for rain, harvesting and threshing, transporting and storing, and end of harvest ceremony (New Year celebration) Rice is very important for Lao people not only as the main food but also as the cultural food that is integrated in the lifestyle of the people. Lao people are not happy if they do not have rice to eat. For instance, in Boam Lao where people could improve their living standard through selling maize, all people still eat rice-they do not eat maize.

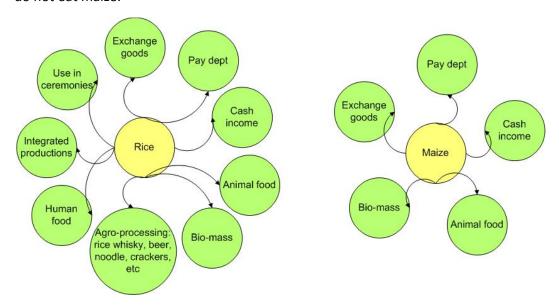


Figure 11: Comparison of benefits between rice and maize

From an economic and ecological point of view, rice field has value more than the rice in itself. The rice plant as a whole is considered valuable. Rice straws are used as the main feeding for cattle and buffaloes during dry season after harvesting. Farmers usually release their big livestock on the rice fields. Wastes from the livestock and roots of the rice plants are digested in the soil which organically fertilize the field for next season. Rice husk, rice bran and broken rice are used to feed small livestock such as pigs and poultry as well as for the fish. Within the lowland rice fields there are fish, crabs, shrimps, vegetables while in the upland rice fields, farmers enjoy wild vegetables that are grown naturally. Upland rats are the common protein source for people in upland area (especially among the Khmou). It is founded commonly in the upland fields. Other protein source such as insects (grasshoppers, crickets and bugs) are also found in the rice fields. Moreover, some kinds of mushroom are also grown in the rice straws. Rice is the main ingredient for making various types of rice whisky such as the symbolic Lao drink "Lao Kao" in Lao Loom traditions and the "Lao Hay" in

⁶¹ Schiller, J.M, Chanphenxay, M.B, Linquist B, Rao Appa, S, <u>Rice in Laos</u>, IRRI, Manila, 2006, pp. 82-101.

Khmou traditions. Rice and rice whisky are used in all traditional ceremonies and parties. Calculating the value of rice in numerous seems impossible. Comparing to maize production, maize only has economic value- it is mainly used as animal food.

In this research, rice is considered as the basic need as well as 'basic happiness'. People reported that rice is the key factor of indicating well-being. The more rice you have the richer you are. On the same hand, poverty is defined by rice shortage. It is not hesitating in this research to say that rice is the "happy food" for Lao people.

2. Money and well-being/happiness

There is a strong link between income and happiness. "The wealthy people tend to be happier than the poorer ones." ⁶² In this study, all farmers accepted that money is very important for today's life. Money has become the essential means to achieve well-being and happiness-the more money, the happier the person because with the money, farmers could buy rice, improve their houses, spend on their health care and send their children to go to schools.

However, farmers in mountainous areas, isolated from markets need less money than the ones who live near markets. Farmers in Mok Khoun village (Khmou/isolated) need money between 200- 1000 \$US per year per household (to be satisfied) while farmers in Nam Yone (Khmou/nearby town) needed money between 500 -2000 \$US. The result in comparing needs of incomes among Lue groups was similar to that for the Khmou groups. For instance, farmers in Houy Hok village (Lue/isolated) needed the money between 500-1000 \$US per household per year while farmers in Boam Lao (Lue/nearby town) needed the money in minimum 1000 \$US and up as much as possible.

3. Health and well-being/happiness

Most of interviewed farmers did not remember their ages exactly including the village authority. People always asked his partner or friends about their ages. Asking them how long they would like to live was quite depressing. However, people said that they would like to live for about 70s to 80s (summary of villagers in targets villages). People wanted to live as long as the oldest one in their community.

All interviewed farmers expressed that living healthy is the key to successful well-being and happiness because with a good health they could work on the field, maintain their house and move freely. Health is more important among the poor because labor is everything they have. If they are sick, they could not work. If they could not work they have no food. At the same time they have to go to hospital. Thus, they have to borrow money from other peoplethen the debt cycle has started.

⁶² Nissanke, Machiko, Thorbecke, Erik (Ed), <u>The Impact of Globalization on the World's Poor</u>, Transmission Mechanism, UNU-WIDER, Palgrave Macmillan, New York, 2007, Page. 273.

4. Household assets and well-being/happiness



The poor households have lack of land and capitals, their houses are small with temporary basis (grass roof and bamboo wall). While at the same time the rich household has a bigger house, they have many piece of land and their houses are equipped with TVs, VCD players and tractors. The poor households are not happy with their current living conditions comparing to the living conditions of richer households in the community.

<u>Picture 2</u>: ICT in Houy Hok village, Houn district, Oudomxay province, Laos

Moreover, the standard of living has been raised rapidly since the villager have had access to information from outside through television and radios. Widespread dissemination of commercial information aiming to boot up consumption has been effectively increasing the desires among rural community. Pictures of Western civilization appeared on the screens through movies and advertisements. Rural households wished that one day they will have the same living standard as appeared on the screens.

The poor hope to have more lands so they could produce enough rice to consume in the family. The poor also hoped to have more money to pay debts, buy rice and spend on their health. While the richer households hoped to have more money so that they can buy tractors, improve the house, trading, vehicles, generators and entertainments (TV and VCD).

5. Culture and well-being/happiness



Interviewed farmers did not considered culture as important factor to pursuit happiness because the term "culture" is not easy to understand. Culture is integrated in daily life of the people. It is indicated on what people eat (food), how they dress, how people communicate (languages), how the community organized (authority, believe, respect, rituals), etc. When asked about culture it is important to break down into smaller questions.

<u>Picture 3</u>: A broken drum at a collapsed temple in Houy Hok village, Houn district, Oudomxay province, Laos

In this study, it is clear that poor farmers do not see culture as priority for well-being and happiness. However, culture is considered important to them. People feel bad (embarrassed) to do different from majority of the community. People confirm that they are not happy if their children do not respect the culture such as do not speak indigenous language, do not know traditional songs, do not practice rituals, dress inappropriately, move to live together without being married, etc.

By observation, at the present time, the appearance of culture can be seen as the way people make a living such as the shifting cultivation, the way people use bamboo to make house, rice container and other agricultural tools. Even though, people did not mention directly cultural aspects as part of happiness, but in the reality cultural activities are respected. Both Khmou and Lue still use their own language including the new generation.

However, traditional culture has been declining due to influences of powerful communication. Western movies and songs (pop, rock, and hip hop) have been the favorite channel among all youth, while at the same time, the English soccer league is favored by the head of the family. Television has brought not only information to rural farmers, but it has also brought consumption pattern and desires to them. Many youth are no longer happy with their current lives; they are looking forward to get out of their home town toward bigger city seeking for civilization. The picture 9 shows a broken drum in Houy Hok village which probably explained in itself that religion has been declining its influence in people's livelihood. Village authority has reported that they have sent one young man to the town to learn at a temple about the religion, so that he could come back to live in the village as the master of the temple-the man never came back because he preferred to live in the bigger city.

6. Family relations and well-being/happiness



It is interesting that family relation appeared as one of the top factors to achieve well-being and happiness among the interviewed farmers. None of men in group discussion addressed that while women see it so important for them. Fined family relation also appeared very important among poor households.

Picture 4: Mr. Phone, Mrs. Ma and their son, Boam Lao villa

It is interesting to investigate why men do not perceive family relations as so important while women care about it so much. May be the woman want the husband to love her because the husband normally does not love her enough, or there might be domestic violence that plays influences in the background, or there is not good family relation which women suffered from it. Unfortunately, this research could not find out enough information to be able to make such investigations.

The poor households have completely addressed that fine family relations may be the only value they have. Love among the couple is apparently necessary to keep them not worrying too much about little penny they have, and encourage them to live along the hard days.

7. Social relations and well-being/happiness



Picture 5: Villagers of Boam Lao village were maintaining their primary school

Many people raised the issue of social unity, peace and security as conditions for well-being and happiness. Living together peacefully without conflicts and helping each other are considered very important. Systems of exchanging labor for instance is very reasonable for the rural community because one household alone does not have enough labor to complete the most labor intensive periods such as rice transplanting and rice harvesting. During rice transplanting and harvesting time, farmers work together as one unit, each day all members go at once to help one member, after that they move on to other members until all work has finished. This system works for the poor household as well. The village authority sometimes gathers people to help the poor household for free of charge.

Public work is an activity of strengthening social relation. I have seen people working together to maintain a primary school in Boam lao village. Each household sent a representative; they all worked together for the whole day. During working, farmers were talking together about their lives. This kind of informal discussion is very good for strengthening understanding among villagers.

Social relation is very important in rural area because people live together as a big family. Information can be spread throughout the village by face-to-face communication rapidly for example if there is a death of a person or a baby was born or there is a wedding-all villagers know and come to be involved in the events. Villagers always make some contribution, more or less to the household that has problems such as death or unfruitful harvesting.

8. Social Infrastructures and well-being/happiness



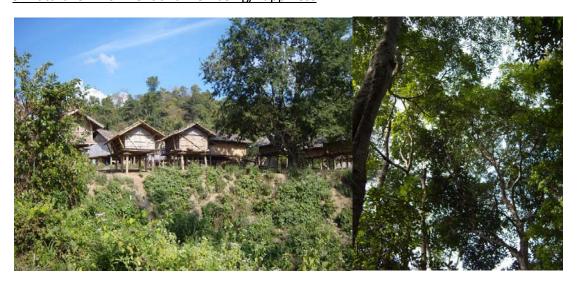


Picture 6: Road conditions to Mok Khuan (left) and Houy Hok (right) village in dry season

Villagers in Houy Hok and Mok Khuan expressed that they wanted to have a good road. The current road condition was reported very difficult and dangerous for transporting products in to the town. There were many accidents throughout the year for instant that tractor went off the path due to deep slope. It is not accessible in rainy season. Good road appeared as a dream for many people. They believe that their lives will be better through the better road.

Villagers in Boam Lao and Nam Yone that are located along the road N:2 reported that they want to have electricity. Currently, villagers generate electricity from using diesel motors. It is noisy and needs a lot of fuel. It is powerless and not reliable. Access to national grid will enable villagers to use more energy consuming applications such as bigger rice or maize unhusking machines and there will be more household appliances such as refrigerators, televisions, stereos... Villagers believe that good living standard is to have good road, access to water and access to national grid.

9. Natural environment and well-being/happiness



<u>Picture 7:</u> Natural environment situation is Mok Khuan village

It is quite surprising that rural people who live in the forest do not mention 'nature' as part of their definition of happiness and well-being as priority. However, it does not mean that the nature is not necessary to them. People often do not see importance of their existing resources, but they see the importance of the nature when they do not have it. Through observation and interview with farmers, the nature should be considered as one of the important factors. Farmers in Mok Khuan are completely dependent on the natural environment. Their shifting cultivations are dependent on the shifting from field to field, in which the natural bio-mass plays an important role in determining good yield. The shifting cultivation is also completely dependent on rainfall. In Houy Hok, villagers grow rice using water from natural creeks and rainfall and they use the natural "giant bamboo" to make houses and various kinds of tools.

Non timber forestry products such as mulberry bark, broom grass, rattans, cardamom, etc are the main income sources for the poor. Non timber forestry products also provide food for all rural villagers. In Mok Khuan village, poor households collected wild roots, to replace rice during rice shortage. Wildlife such as wild pigs, fish, rats and birds are also serve as protein sources for the poor households while vegetables, bamboo shoots, mushrooms and hundreds of plants can be harvested as food seasonally.

Happiness can be explained through freedom of accessing nature. A simple explanation is to compare lifestyle of 'traditional chicken' and 'commercial layer'. Traditional hen is normally small because it does not have plenty of food. It takes more than three months for a local hen to reach one kilo. However, the traditional hen has full freedom in searching for food in the nature; it enjoys diversity of food such as worms, grains, bugs and vegetables. Now, look at the 'layers'. They grow very fast and fat, it takes only 45 days to reach one kilo. This is simply because the layer is well-fed and provided with necessary conditions such as vaccines, good environment and security. However, they are kept in a tiny case which doesn't have enough space for them to turn around. Their tasks are to eat the same food in the same amount and to lay egg daily until they die or unable to lay eggs.

Rural people have freedom to access to the nature. They set houses along the creek/river, and their lives are part of nature. They are free to move, to enjoy the variety of food provided by the nature directly (food from the forest) and indirectly (food produced by the people by using nature).

However, freedoms to access natural resources have been interrupted a lot due to economic development activities and policies of the government. Villagers of Mok Khuan reported that they do not want to leave their fields as a result of government policy on resettlement. Mrs. Kham (37) head of women union said that: "we do not want to move as requested by the district governor. In here we are happy with our livelihood; we have land and forest to make the living here. If we are moved to other place we will be poorer because in the new village a single piece of land is already owned by other people, thus if we need land, we have to buy it." In Houy Hok village, there has been a search for mineral. During the study, a Chinese company came with their big truck to search for mineral. They reported that the government has approved them for concession on this area (10km2), if the study shows economic

viability, the villagers will have to move to somewhere else. Mr. Maiphone, head of Houy Hok village reported that "there have been different people coming into our village asking to see the place that the minerals were founded in the recent years. The technicians from department of mining also came to dig some rocks in our village. The Chinese company said that we will have better road and more jobs to do if they come to do the mining. The Chinese company also said that they will be responsible for the impact to our livelihood. They said if they dig the rice fields they will fill it up later. Moreover, they will buy rice for us in the same amount that we make in the fields."

10. Education and well-being/happiness



Findings show that none of female interviewed farmers finished primary school while a few male interviewed farmers finished secondary school. All the poor households have worse situation, they have no school or have about 2-3 years schooling only. The picture 15 was taken during the transect walk in Boam Lao village. This primary school has one room and one teacher. The class is combined three grades together for all student (25 students)

Picture 8: A primary school in Boam Lao village

Education was not mentioned as priority to achieve well-being and happiness. However, when asked if people consider education as part of wellbeing condition, they answered yes. The reason is that education could help to protect their family and to make their children knowledgeable. The poor households explain that the reason they have low education is because there are no schools around, and they do not have money to afford children to study out of the village (for example in the case of Mok Khaun village). Female kids usually are out of school earlier because they have to stay home to look after the younger brothers/sisters, collecting water, and cook. At the same time they have to work in the fields in duties such as transplanting, weeding, feeding chicken. It is believed culturally that it is not necessary for women to have high education because when she is married she will stay at home to look after the family anyway.

2.2 Agricultural extension

The concept of agricultural extension among farmers in Houn district is very new, in particularly in the four target villages, farmers are not aware such kind of extension services are available. In the same time, district extension office has lack of budget to carry out such effective extension services to the farmers.

Farmers have lack of confidence on new techniques introduced by extension agents as presented earier, the case of Houy Hok village where farmers distrust the extension workers because they had seen failure of previous extension project on introducing new rice variety. Some farmers in Boam Lao and Nam Yone reported that they know already quite well on

how to grow crops and animals, thus they do not need trainings on agricultural productions. In point of fact, though, farmers do need to improve their knowledge about agricultural productions, especially on maize and soya bean because they are not the same as growing rice as farmers have been growing for thousands of years.

All farmers requested financial supports especially from the poor households. They wanted extension agents to play roles in providing credits and production input such as seeds, tree seedlings and animal breeds. Again, the term knowledge is not so attractive to the farmers.

It is interesting in this study that farmers believe in what other people believe, and they do what they believe. In this way, maize has been believed as a common alternative for those who have not planted it. It is true that maize production has contributed a lot in improving well-being of farmers in Boam Lao and Namyone village, but it is not sustainable. There is a clear tension between maize and big livestock in Boam Lao and Nam Yone. Yet, the question about marketing such as price and demand is not realistic because 100% of maize produced here is exported to China and Thailand. Farmers who have planted maize for more than three years seem to be going back to planting rice due to problems regarding lower yield of maize productions and higher price of rice. The common beliefs ignore local constraints and potentials. Not all farmers could grow maize because each farmer is heterogeneous - they do not have the same quality of land or not all farmers have the same amount of money and labor.

Not only maize that has been becoming the new belief among the farmers. There is now the new commodity: "the rubber". Rubber plantation now has been spreading all over the province of Oudomxay as well as in Houn district. The promotion of rubber plantation is played by private sector (Vietnamese company for instance) with facilitation from the district agriculture and forestry office in the form of 2+3 policy. The 2+3 policy means that the farmer is responsible for land and labor and the company is responsible for seedlings, technical support and marketing. Outputs from the production will be divided 60 percent for the farmers and 40 percent for the company (reported by farmers in Boam Lao village).

Currently, it seems that the belief on alternative production is directly governed by the market (private sector) while the intervention from public side is very weak. For example a role of extension workers in Houn is concerning mainly on bridging the farmers to seeds. This can become a serious problem because the farmers have lack of knowledge to anticipate the future, for instance, many farmers are facing problems regarding soil degradation due to overuse of land in maize productions.

The Lao extension approach which is demand-driven extension approach (knowledge is the key word of this approach) could be the key government intervention to empower the farmers, so they could be able to better anticipate about their future as well as doing the best with their current agricultural productions. However, mainstreaming this approach is challenging. First of all, farmers themselves do not see knowledge as so important; they prefer the government to provide funds and production input rather trainings and second, extension workers themselves in local level have lack of understanding about the demand-driven extension approach; they still think that their main roles are to introduce new seeds, new production techniques and new technologies to the farmers without being aware of strengthening local knowledge or empowering people to overcome local production problems.

2.3 Agricultural extension and perceptions on well-being/happiness

In this study, agricultural extension has not really contributed to improve well-being and happiness of the poor farmers yet. In fact, agricultural extension has not reached most of social groups in the target villages (including rich and poor). There are some aspects of agricultural extension that have contributed to improving well-being of farmers in Houy Hok village (soya bean) and Boam Lao and Nam Yone village (maize), but this was not the interventions from the government-It was the farmers themselves that initiated this change influenced by the markets.

Agricultural extension has not improved well-being of the poor farmers because basically there have not been any agricultural extension services for the poor in this study. Public extension services have not reached villagers while at the same time private extension services do not target the poor. The poor are simply excluded from both public and private extension agents. Moreover, agricultural extension agents still have lack of understanding in values of local knowledge. For example in the rice field, there are economic values (rice + livestock), ecological value (Biodiversity), social and cultural values (faith, pleasure). Extension agents have been so far looked at this complexity in a simple manner: they have focused on economic value only without taking to account other values. In this manner, extension agent focus on introducing new seeds, new crops, new breeds, new techniques and new technologies which is generally economic-oriented, but does not necessary address sustainability of the production system as well as social and cultural values.

Thus, agricultural extension agents should understand that improving well-being and happiness of rural farmers is the ultimate goal of rural development. They should be aware of possibilities to carry out extension activities that fits to appreciation of the farmers. At the present time, this might not be realistic because happiness is not the goal of the government. However, food security is a goal of the government, the extension workers have good knowledge on rice cultivation and rice is a happy crop of the farmers. Thus improving rice production is a possibility to promote well-being and happiness for the poor farmers. Possible activities include selecting the best local seeds, promotion of intercropping, use of organic fertilizers, improved post-harvest techniques, use of integrated pest management techniques, production of organic rice, etc.

All in all, the extension workers are the key in promoting well-being and happiness of the farmers. It is important that they have enough competence to be critical and to be aware about cultural values of rural livelihood. Therefore, the key knowledge that is required for extension workers includes analytical skills, knowledge on facilitation and information management. In the other word, extension workers should have capacity to understand the local context and values, be able to link farmers to production means, information and markets; be able to facilitate learning process among farmers; be able to work with farmers to define production problems and to define potential for improvements.

For poor farmers, agricultural extension alone is not enough to improve their well-being and happiness. For the poor, land issue is the main constraint, followed by lack of knowledge and funds. In order to improve well-being of the poor, the government needs to better work on land reform, while extension agents should play roles in making sure that farmers know better how to deal with their problems and have an idea of improvement.

Handing over all roles of agricultural extension to the private sector will worsen well-being and happiness of rural community because the private sector are interested in short term benefits and maximizing its profits only. In other words, they care about outcome of the production (maize for instance) without taking into account the process of producing it and sustainability of the production system. Especially, the private sector does not necessary have to be accountable to the farmers; they do not have to be responsible for environmental impact caused by mono-cropping by farmers themselves for instance. However, it does not mean that the government should regulate the market strongly. The private agricultural extension agents have the important roles in linking farmers to markets and production means as well as production information. Thus, there is a need to govern the market while the modern know-how must complement the local know-how. The public agricultural extension agents must play roles in creating this balance.

The Lao Extension Approach has laid a good foundation for promoting well-being and happiness because this approach takes into account the needs of the farmers as well as considering local values, constraints and potentials. Mainstreaming the LEA is the initial step and integrating perceptions of well-being and happiness of the poor within the frame work of the LEA is another importance for future pro-poor extension activities.

Conclusion

"Harvesting happiness" is an effort to understand what make the poor farmers happy and what conditions the poor perceive as well-being. It further seeks to understand context of agricultural extension and to explore opportunities to improve well-being and happiness through agricultural extension. Findings have resulted in the following conclusion:

- 1. Regarding well-being and happiness, farmers themselves have defined 10 perceptions as follows: rice, money, health, household assets, family relations, social infrastructures, social relations, education, natural environment and culture. Rice is the "happy crop" for all farmers both rich and poor. Rice determines living condition of individual, the more rice, the happier the person is; if there is lack of rice it is the sign of poverty and rice makes people happy because they like to eat rice. For the poor, they perceive rice as the first priority, followed by money, family relations and health. It is not hesitating in this research to say that rice is the "happy food" for Lao people.
- 2. Agricultural extension has not been well known by farmers. Most interviewed farmers have no idea about such services. Some farmers understand that agricultural extension is the agents that provide seeds and capitals. Most of extension workers understand their roles as introducing new seeds/breeds and production techniques to the farmers. Thus, there is a big gap between perceptions between farmers and extension workers. Mainstreaming the Laos Extension Approach will be difficult because "knowledge" is not perceived by the farmers as priority (especially among the poor) and the extension workers still have lack of understanding about their roles as learning facilitators and they have lack of capacity to analyze local values.
- 3. Agricultural extension has not improved well-being and happiness of the poor farmers. This is basically because public agricultural extension services have not reached the farmers while at the same time, the private sectors do not target the poor. It is true that a lot of farmers in Boam Lao and Nam Yone village have improved their living standards a lot through selling maize, but this is not sustainable. Moreover, the poor do not benefit so much from growing maize.

In order to sustain well-being as well as to promote happiness among the poor farmers, agricultural extension agents must understand that improving well-being and happiness is the ultimate goal of development. Extension workers should pay more attention listening to the farmers, and they should understand that the farmers are heterogeneous. For example, not all farmers could be better off and happier through a common approach (maize production for instance). Moreover, it is necessary for the agricultural extension workers to spend more time with the farmers in order to identify interventions that complementing local values. The Lao Extension Approach would lay the good path for agricultural extension agent to better contribute to improving well-being and happiness of the poor farmers because this approach takes into account the needs of the farmers as well as considering local values, constraints and potentials. Mainstreaming the LEA is the initial step and integrating perceptions of well-being and happiness of the poor within the frame work of the LEA is another importance step for future pro-poor extension activities.

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Annexes

Annex 1: Context of the research targets

1. Context of Laos



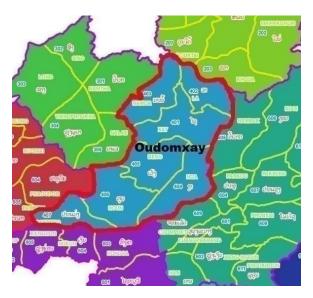
Map 1: Map of Laos

Laos is located in South East Asia. It shares boarder with China in the North, Cambodia in the South, Thailand and Myanmar in the West and Vietnam in the East. The population census in 2005 shows that total population in Laos is about 5.62 million people. The Census identified 49 different ethnic groups (classified by languages) which is categorized into three main groups: Lao Loum 68%, Lao Thueng 22% and Lao Sung 8 %.

The leading religion was Buddhism which presented 67 percent. About 85 000 people or 1.5 percent declared themselves as Christians. Muslim and Bahai represented less than 1 percent. Animism was not regarded as a religion and was included in "Other" which accounted for about 30.9 percent of the population.

Total area of Laos is mounted to 236,800 Km2. The country is administrated into 17 provinces, 139 districts, 10,552 villages and 952,386 Households.

2. Context of Oudomxay province.

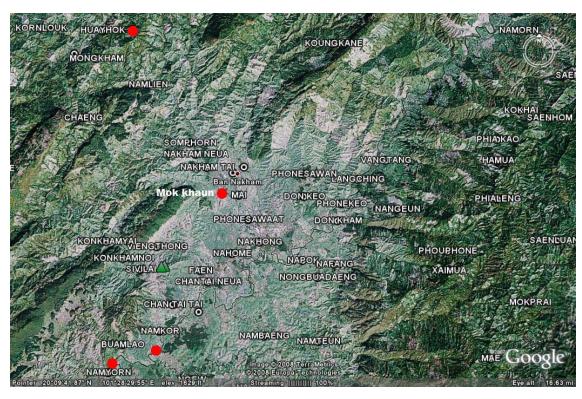


Odomxay is one of the seven Northern provinces of Laos. The province share broader with Phongsaly province and China in the North, Sayabouly province in the South, Luangprabang province in the East and Luangnamtha and Bokeo province in the West. The province is administrated into seven districts and 583 villages with total area of 1,537,000 ha. Forest amounts to 375,400 ha and agriculture production amounts to 49,800 ha. The total population is about 271,000 people, 42,832 households.

Map 2: Map of Oudomxay province

Regarding agriculture productions, Oudomxay province has a remarkable change in maize production. The area of maize production increased from 3,918 ha in 2002 to 9,697 ha in 2003, 10,898 ha in 2004, 15,327 in 2005 and 17,534 in 2006.

3 Context of Houn district



Map 3: Location of selected villages: Houyhok, Mokkhaun, Buamlao and Namyorn.

Houn is the second biggest district and has the biggest area of maize production in Oudomxay province. It is located in the Southern part of Oudomxay province (92 km from center town of the province). Over 80 percent of the district is mountainous (429-1,936 Meter above sea level). It shares a broader with Nalea district, Luangnamtha province in the North, Hongsa district, Sayaboury province in the south, Nga and Beng district in the East and Pakbeng and Keooudom district, Bokeo province in the West. With the total area of 208,868 ha, forest still covers 43 % and agriculture land amounts to 14,654 ha. It includes maize production 8.500 ha, upland cultivation 1,320 ha, lowland rice field 2,454 ha, industrial trees 1,505, fruit trees 80 and other crops (Soya bean, vegetable, Sesame...) 795 ha.

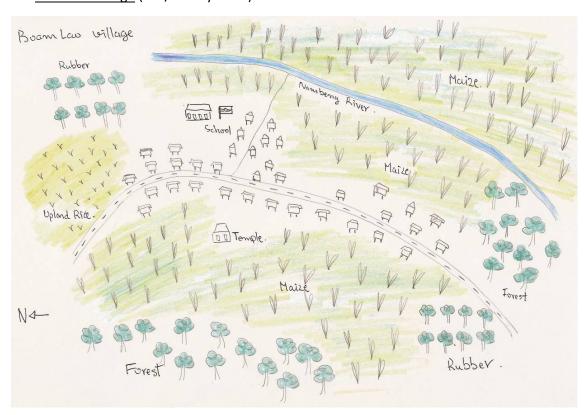
Socio-economic infrastructure in the district is quite limited. Even though the district is linked from East to West through the national road N: 2, but there are still 44 villages with no road and 15 villages have accessibility in rainy season. There is one high school, 6 secondary schools and 96 primary schools. Public hospital account to one district hospital and nine health posts in cluster level. Moreover, the whole district has not access to the national grid, so the people have been using generators and micro-hydro power as the source of electricity.

Regarding agricultural productions, Maize in Houn has been increasing rapidly since the year 2003. The production areas of maize increased from 4,913 ha in 2003 to 5,813 ha in 2004, to 8,200 ha in 2005 and to 8,500 ha in 2006. Many farmers abandon their rice paddy and upland cultivation to grow maize. The upland rice yield is about 1.5 T/ha, 3-4T/ha for lowland paddy and 4-5T/ha for maize.

Total population is about 62.300 people (31.000 women) which bring population density to about 22 people/km2. Houn is different from other district in Laos in term of social group. The main ethnic group in Houn is not "Lao Loom" but "Lao Thueng". Lao Loom amounts to 20 %, while Lao Thueng is accounted to 65 % and Lao Sung has about 15 %. The district is divided into 14 clusters which include 114 villages and contains 10,135 households. About 80 villages are still defined as poor (4,200 households which count 25,200 people). GDP/per capita in 2005 is about 238 USD (83% of income is from Agriculture and Forestry)

4. Context of target villages

4.1 Boam lao village (Lue/nearby town)



Map 4: village map of Boam Lao village, Houn, district, Oudomxay province

Boam lao is one of the first villages that shifted from growing rice to growing maize and presenting today one of the biggest villages in maize production in the district. It is located along the road N: 2 which is the key condition for growing maize for the markets. People in this village originally lived in this area, but they had moved a little closer to the road later in 1974 when the road N: 2 was built. In 1974, there were only 45 households at that time.

Villagers lived on upland cultivation which each household has more than seven pieces of land and they had many big livestock (buffaloes). At the present day, there are 124 households that counts to 556 people (281 women). The new commodity crop-the maize was introduced in the year 2000 by Vietnamese seed company. It started from 15 households in the area of 27 ha. Up to now most of the villagers have abandoned their rice production and have shifted to maize production.

There are together 250 ha of maize while the rice paddy remain less than 20 ha (15 ha is upland fields). There is no big livestock while pigs and poultry raising is remaining stable (120 pigs and over 1,500 of chicken).

All villagers are Lue. Lue is defined in the group of Lao Loom (Lowland Lao). There are about 119,000 of Lue people living across the country. Lue has Buddhism background but mixed with animism. There is one temple for religious practices. However, villagers still believe in spirits. Villagers said that they used to believe in the spirit before, than since Buddhist monks came to teach them about Buddhism in 1950s, they then stop some traditions. However, there are some traditional beliefs that people in this village still practice for example: villagers still conduct ceremonies to worship spirit of the village two time per year-one in June before rice planting and once in December before rice threshing.

Agricultural income from maize and rice (some of the poor households are still growing rice in upland area) production in poor household varied between 270 to 320 USD per year. However, soil degradation is becoming problematic. Many households who have been growing maize for over five years are facing lower yield. It is the case of Mr. Sai, deputy head of the village who has the biggest area of maize production. He has been using the same seeds and the same technique in the same land (about 5 ha) for 5 years. The yield was very impressive in the first year but it has been falling down from 8T/ha in 2003 to 6T/ha in 2004, then to 5.6T/ha in 2005, after that he got 4.4T/ha in 2006 and in 2007 the yield was only 4T/ha. This shows that the yield was decreased by half.

The real problem of agriculture production is that farmer themselves have a lack of technical knowledge. None of interviewed people seem to have solutions to deal with soil degradation or ideas for alternative productions. They said if maize is not profitable anymore they will try new crop. When asked what the new crop? They answered "no idea". Moreover, there are no cattle and buffaloes in this village. People no longer raise big animal because: a. there is no land available (no rice fields, most of land are covered with maize two seasons per year), b. people cannot afford to pay for damage caused by the livestock in cropping area, and c. it takes a lot of labor to keep and feed the animals.

Regarding opinion from village authority, farmers now have increased desire to grow rice, in order to reduce risks of dependency on the market. Farmers said that they have to buy rice at higher prices than before while the price of maize is unstable. Moreover, a serious syndrome of declining yield in maize productions warns maize growers of a vulnerable future in their food sufficiency.

4.2 Houy Hok village (Lue/isolated)



Map 5: village map of Houy Hok village, Houn, district, Oudomxay province

Houy Hok village is located about 20 Km from central town of Houn district. Originally the village had 39 households, but recently in 2005 the village was combined with one Khmou village. This has increased the number of households to 100 today. The total population of this village is 584 people. Even though the village is announced as new combined village but in reality, they are still separated. The original villagers still own their own land and have the same administration committee (there are two village head men). So, this research focuses on original households only (the Lue community).

The Lue people have lived in this area for a long time (estimate for over 100 years) they moved from Phongsaly province. Back in 1960s, the village was renamed from Nam Yao to Houy Hok because the Houy Hok creek runs through the village. Houy Hok means a creek of "Mai Hok" which is "giant bamboo". This is no wonder because there are so many giant bamboos in this area. Local people use "Mai Hok" in various ways from baskets to houses. Moreover, the "Mai Hok" is also used particularly for religious event of Khmou ethnic such as it is used for carrying the dead.

Traditionally, Lue people grow rice in lowland area. Their main cash crop in the past was opium and cotton. One of the main occupations of Lue people in the past was not to produce food but to produce cloths, They traded cloth for rice from the Khmou people who

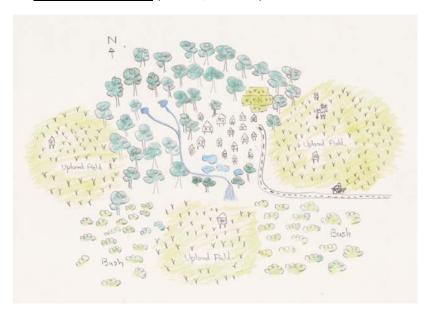
grow upland rice. Moreover, the Lue people in the past raised horses which were used for transportation and trading.

Since the road has reached the village in 2001, there have been many changes. First of all, the government does not allow growing opium anymore. Moreover, people stopped growing cotton as well as producing cloth because cloth from market is cheaper. One of the major changes was that people sold their buffaloes and horses to buy small tractors for growing rice and trading. The shift to the era of "hand tractor" started since 2001. It was more popular in 2004.

Regarding culture, the people still practice their main traditional event especially the New Year celebration which is normally conducted in April. The Lue people believe that when a person is dead, he/she will become a spirit and look after the village. The New Year ceremony involves sacrificing buffaloes or pigs to the spirits. The ceremony can last from seven to nine days. During this period, villagers are not allowed to go out from the village and the outsider is also prohibited entry to the village. Moreover, one of a very interesting set of beliefs that show harmony with the nature is that villagers identify forest surrounding the village as spiritual forest (or protected forest). In this forest, people settled a spirit house and they believe that this is a place for all spirit. So in this forest, people are not allowed to cut any trees or harvest any NTFPs including fire wood.

At the present time, there are two main crops: lowland rice (rainy reason) and soya bean cultivation (dry season crop). The yield of rice cultivation is stable-there is no report on decreasing of rice yields. However, there are not any buffaloes in this village. People are now using hand tractors which will decrease quality of soil in the long term due lack of bio-mass from animal waste. In soya bean cultivation, the major problem is lack of good seed and cultivation techniques. Yields vary from 0.5 to 2.3 t/ha only (normally the yield should be more than 2 t/ha). Average agriculture income from rice, maize and soya bean in poor households of Houy hok village varies between 230 - 400 USD/year.

4.3 Mok khouan village (Khmou/isolated)



Map 6: village map of Mok Khouan village, Houn, district, Oudomxay province

Mok khouan is the most difficult site to access in this study. The village is only 15 km from district town, but it takes more than 2 hours to reach by motorbike. It is not accessible during rainy season. Because of its limited accessibility, the nature is still rich. People live peacefully on top of the mountain and practice traditional agricultural production through "shifting cultivation". Shifting cultivation in this village is a combination of 3 major crops: rice, sesame and job's tears and other crops such as chili, eggplants, cucumber, roots and other vegetables.

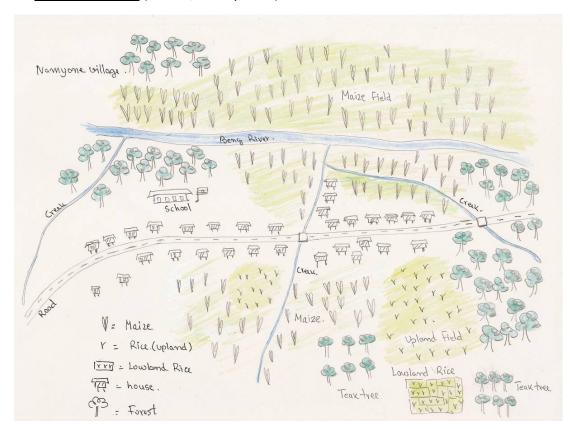
Mok khouan is an original village. The village was established in 1970s after the country's independence. The village is comprised of 37 households which counts 45 families and 240 villagers (158 are women). There is no school, health post, water tap system or electricity. The villagers themselves built a very tiny temporary house and hired a teacher from other village to teach their kids for the first and second grade. The village authority reported that they did not know exactly how many hectares of land they have, but they know exactly their territory. However, regarding figures from extension workers, the village has about 1,000 ha (10 km2) of land. Forest covers 20% of the total area while the rest of the land is for upland cultivation. There are about 22 buffaloes, 32 pigs and over 700 chickens.

Regarding culture, the villagers still practice their traditions. The New Year celebration is the biggest event of the year. It is conducted after rice harvesting (Any day from December to beginning of January). The ceremony is organized for worshipping the ancestor's spirit of each household and spirits of the village. At the festival, each household prepares food and drinks to worship the house's spirit and invite friends and relatives to join the meals. There are many beliefs that people in this village still practice for example: a belief of bad luck days: villagers count the day of the village establishment as day 1. Then in every 10 days from that, villagers have to prepare some offerings to worship the village spirit at the spirit house. At the same time, the villagers are banned to carry wood from the forest (wood that requires more than a person to be able to carry) into the village.

Farmers report unstable rice yield caused by seasonal factors (rainfall and pest outbreak). The yield of 2007 varied from 0.5 to 2 T/ha, depending on location and quality of weddings. Income from rice, sesame and job's tears in poor households ranges between 140 and 360 USD/year. Most of households have some chicken below their houses and some households have pigs. Farmers reported problem regarding animal diseases in pigs and poultry which happened every year.

Agricultural production has a very close link to nature. Shifting period from one plot to another is more than 5 years which leave enough time for the nature to recover the soil nutrition by itsself. The main problem causing lower yield is 'labor'. Households that could not weed well will get lower yield. Non timber forestry products play important roles, not only as a source of cash but also as a source of food. Farmers reported that they normally go to the forest to look for food. When they need vegetables, they go to 'hai' (up land rice field); if they need meat they go to hunt. Farmers collect about seven items of non timber forestry products to be sold. Some of them such as cardamom and bamboo worms are very expensive (3-4 \$/kg).

4.4 Nam yone village (Khmou/nearby town)



Map 7: village map of Nam Yone village, Houn, district, Oudomxay province

This village is quite big (1,189 people) because it is a village that is comprised of eight relocated villages from mountainous area together. The village was established in 1975 by moving villagers in "Phousae" mountain (Phoutoum, Longkhou, Dou, Phouxang, Kongvang, Tanglon, Kongmuang, and Phousae village). The main objective in that time was to protect the road N:2 that was built in 1972. However, it is a combination of the same pattern of ethnicity.

When the village was first established, the people still lived in the traditional way. They lived on shifting cultivation. Then people shifted from the shifting cultivation to maize production in 2001. The main reason of shifting toward commodity production was very simple. Villagers saw success of maize production from a Lao Sung man named "La moa" that lived in other village nearby. Since 2001 more and more villagers are growing maize following him, especially in the year 2003 because there was no problem with marketing (good price and high demand from Thailand). Another change in agricultural production was the changes in livestock system. Farmer sold their big livestock due to lack of land for grazing and increasing need for "hand tractors". Villagers bought tractors, motorcycles and electronic appliances since 2003 (at the present time there are 46 hand tractors).

At the present day, there are 166 households which count 183 families (1,189 villagers) in the village. The total area is not certain. However, maize production is accounted to 179 ha, lowland rice is about 15 ha, upland rice is 82 ha and leave the rest of the land as forest (13 ha is defined as spiritual forest). There are 78 buffaloes, 137 pigs and over 1,300 chickens.

Regarding social infrastructures, there is a primary school, there is no health post and no electricity. However the village has the road N:2 run through from North to South and the village is very close to the center town.

Maize and rice production are the main agricultural activities for the people to make living. Farmers reported problem regarding lack of suitable land for maize production and its lower yield due soil degradation. One of the main problems of maize production is that farmers have limited understanding of techniques in maize production because this is still new for them (since 2003). One farmer reported that he did not need training or information because he knew it already. He said that he learnt from description which was printed on the back of the seed's container.

Rice cultivation is no longer sufficient because most of the farmers have limited land, maximum 3-4 plots. A lot of the upland rice field was turned to maize production. The maize production has resulted in good income for most of the people. Agricultural income from maize and rice in poor household (average land per poor households is 1.8 ha) varies from 46-400\$/year. The poorest is the one who has a bad land, and the land is far from water source, or the household that does not have enough time to look after the field.

Annex 2: Poverty of the target areas

What is poverty?

Officially, "'Poverty' is the lack of ability to fulfill basic human needs such as not having enough food, lacking adequate clothing, not having permanent housing and lacking access to health, education and transportation services" (Instruction No 010/PM, June 25, 2001). Poor households are "households with an income (or the equivalent in kind) of less than 85,000 kip (100,000 kip for urban and 82,000 kip for rural) per person per month (at 2001 prices). This sum allows the purchase of about 16 kilograms of milled rice per person per month; the balance is insufficient to cover other necessities, such as clothing, shelter, schooling and medical costs" Farmers in this study has similar definitions of poverty. Rice is the most important factor for good life. Any household that have insufficient rice is defined as poor and the higher degree of rice insufficiency the poorer the person is. In Nam Yone village, some of the poor households have rice shortage for over 7 month or the whole year round. Cash income is the second factor. Farmers believe that money can buy any necessities especially rice and medicines as well as sending their children to school. However, all of the poor I interviewed do not have surplus products which can be turned into cash.

Causes of poverty

The primary cause of poverty identified by villagers in the national participatory poverty assessment II is "limited access to cultivation land", especially for rice production. This situation, villagers reported, is due to attempts by local officials to carry out land reform, consolidate villages, and to reduce or eradicate shifting cultivation. These policies have led to population pressure and scarcity of land resources⁶⁴. In this research, it is quite the same. All the interviewed persons of villages with nearby roads (Boam Lao and Nam Yone) report lack of cultivation land as the main cause of poverty (0.5-2.6 ha/household). This can be seen clearly in Nam Yone district. The Government had allocated eight mountainous villages together into this place in 1975. The reason is according, to the Government policy in moving people to live nearby road (people reported that the Government asked them to protect the road against enemies). At the beginning it was workable. People were able to carry on shifting cultivation sufficiently. However, at the present time there is more pressure on cultivation land because: a. there are more people, b. a big area of cultivation land was lost because the army camp which recently set up their base in this village, c. land and forest allocation/shifting cultivation eradication policy was introduced (protected area identified, cultivation land reduced to three plots per household).

However, it seems a little bit different in Mok Khouan (isolated village) where each household has 6-8 piece of land (4-5 ha/household). In Mok Khouan, lack of labor (especially on the weeding process) is the main cause of poverty. The poor household usually does not have enough labor to work on their field because of different reason such as: a. they have many small children and elderly to look after, the spouse is sick, they have to work for other people (exchanged labor or compensate for debts). The poor have no access to formal credit, so they instead access funds available from the rich, to whom they have to pay over 50% of interest per season (6 month). Normally the poor pay back the debt by their harvests, and If they could not pay back, they will have to work for them.

National Committee for Planning and Investment, <u>National Growth and Poverty Alleviation Strategy</u>, Laos, 2004, pp. 35-36

⁶⁴ Chamberlain, James. R, <u>Participatory Poverty Assessment II</u>, National Statistic Center and Asian Development Bank, Laos, 2007, pp. 9-45

Annex 3: Interview guidelines

3.1 Interview guideline 1a

Target group: Village Authority

Objective:

- 1. to understand the village context (history, social, economy and agro-ecological conditions)
- 2. to understand overview of agricultural practices
- 3. to understand situation of agriculture extension

Questions

- 1. What is the context of the village (social, economic and agro-ecological conditions)?
 - a) Facts (villagers, school, hospital, market, service providers, religions, main cultural events, etc)?
 - b) Can you show me the village map or draw me village boundary? (to have an overview about land use and locations)
 - c) What do people do for living? (farming, trading, fishery, collecting NTFPs, sell labor, etc)
 - d) How do people manage water, land and forest? (area of public forest, productive forest, protection forest, private land, rice field, pasture field; system of harvesting NTFPs and system of managing water)
 - e) When the village established?
 - f) What is the meaning of the village's name?
 - g) Where did the people come from?
 - h) What did people do to make a living?
- i) What are important events that happened as a major change from time to time since the establishment of the village such as population movement, development of social and economic infrastructure (road, electricity, irrigation, school, hospital), disasters (flooding, drought, land slide), pest & disease outbreak, change in agriculture production (seed, fertilizer, pesticide, new breeds, new technique), market, logging, environment destruction, ICT, etc?
- 2. Looking at agriculture production

- a) What do people grow? How big the area for each crops and what are the yields?
- b) What are techniques and input (including labor) used for each major crop?
- c) What do people raise? How many heads of each herd?
- d) What are techniques and input used (including labor) used for each major livestock?
- e) When do people grow crop and raise animal (Agriculture calendar)?
- f) Are there any major changes in agriculture productions? If yes what are the changes (seed/breed, vaccination, fertilizer, pesticide, machinery, new techniques)?
- g) Are there enough labors for agriculture production in this village?
- h) Where do farmer sell their farm products?
- i) Where do farmer buy production input such as seed and fertilizer? what are the prices?
- j) What are prices of each major farm products such as rice, maize, cassava, soya bean, buffalo, cow, pig, goat, chicken, etc.
- k) What are problems and constraints of agriculture production?
- 3. Looking at agriculture extension
- a) Are there any agriculture extension services/programs from public or private sector in this village?
- b) If yes what type of agriculture extension are there (training, input supply, technical support, micro-finance...)?
- c) Who are the service providers, who are the clients?
- d) How about in the past, were there any agriculture extension services or program?
- e) If yes what were the activities, who were the service providers and who were the clients?
- 4. About happiness
- a) What is happiness?
- b) How do people pursuit happiness in the reality?
- 5. About Wellbeing
- a) What conditions people consider as Wellbeing (e.g. education, health, living standard, access to natural resource, cultural preservation...)?

- b) Do people consider education as a condition to Wellbeing? if yes in which level of education and what kind of education (formal, informal or traditional)?
- c) Do people consider health status as a condition to Wellbeing? if yes what kind of health people consider as minimum status such as live long, live healthy, low mortality of child...?
- d) Do people consider living standard as a condition to Wellbeing? if yes what kind of living standard people consider as minimum status such as amount of food, income, assets (land, house, livestock...)
- e) Do people consider rights to access to natural resources (land, water and forest) as a condition to Wellbeing? if yes what are the conditions?
- f) Do people consider cultural preservation as a condition to Wellbeing (such as language, religion, traditions, customs, food...)?
- 6. Do you think that agriculture extension will contribute to happiness and wellbeing of poor farmers?

3.2 Interview guideline 1b

<u>Target group</u>: Farmers (man and woman)

Objective:

To understand general view of happiness/wellbeing that people perceive

Questions

- 1. About happiness
- c) What is happiness?
- d) How do people pursuit happiness in the reality?
- 2. About Wellbeing
- g) What conditions people consider as Wellbeing (e.g. education, health, living standard, access to natural resource, cultural preservation...)?
- h) Do people consider education as a condition to Wellbeing? if yes in which level of education and what kind of education (formal, informal or traditional)?
- i) Do people consider health status as a condition to Wellbeing? if yes what kind of health people consider as minimum status such as live long, live healthy, low mortality of child...?
- j) Do people consider living standard as a condition to Wellbeing? if yes what kind of living standard people consider as minimum status such as amount of food, income, assets (land, house, livestock...)
- k) Do people consider rights to access to natural resources (land, water and forest) as a condition to Wellbeing? if yes what are the conditions?
- Do people consider cultural preservation as a condition to Wellbeing (such as language, religion, traditions, customs, food...)?
- 3. Do you think that agriculture extension will contribute to happiness and wellbeing of poor farmers?

3.3. Interview guideline 2

Target group: Poor farmers (man or woman)

Objective:

- 1. to understand about context of the poor (history, social, economy and agroecological conditions)
- 2. to understand about agricultural productions and needs of extension for the poor
- 3. to understand views of happiness/wellbeing that poor farmers perceive
- 4. to understand links of agriculture extension and happiness/wellbeing of poor farmers

Questions

1. Baseline data

Name of interviewee:

Village:

a) Family members

Name	Age	Sex	Education	Health status	Family status

- b) Capital (Land, house, production tools, household assets, livestock, etc)
- c) What does she/he do for living? (farming, trading, fishery, collecting NTFPs, sell labor, etc)
- d) Any support from relatives in Laos or abroad?
- e) Is she/he a member of community committee (village authority, woman, youth union, trade union, elderly group, etc)?
- f) Is the interviewed access to education? And how?
- g) What does the interviewee do when she/he is sick?
- h) Is she/he allowed to harvest forestry and non-forestry products and fish?
- 2. Look at the interviewee history

- a) Is the person moved from other location? When the person came to the village, when and why?
- b) How was the socio-economic condition in that time (land and forest management, social and economic infrastructure)?
- c) What did the person do to make a living?
- d) What were the agriculture productions (shifting cultivation, paddy rice, livestock, fruit tree, etc) and how (technique)?
- e) Major changes in the person history that make the interviewee as today(married, bought/lost land, sick, production lost, debt, etc)
- f) Has she/he ever heard about agriculture extension? Have she/he ever received the services? If yes what exactly did she/he receive and how the services improve her/his life?

3. Look at agriculture productions

- a) What are the agriculture productions (shifting cultivation, paddy rice, livestock, fruit tree, etc)?
- b) What is purpose of each production (is it for home consumption or for sell)?
- c) What are technical dimension of agriculture production such as yield, input (including seed, fertilizer, pesticide, labor...), techniques?
- d) What are economic dimensions of agriculture production such as input cost, prices of products, outcome, profit, etc)
- e) Does she/he sell her/his product to market? If yes how easy/difficult to sell product in market? (distance, transportation, quality and quantity issue)
- f) Problems and constraints?
- 4. Look at needs of servicing agriculture extension with the poor
 - a) What is priority purpose of agriculture production? (Does the interviewee want to produce intensively in the market chain? or the interviewee want to increase yields of the productions in order to have more food for their own consumption)?
 - b) What is priority of agriculture improvement? (increasing yield, better land management, better labor use, better pest and disease control, etc)

- c) What kind of support does the interviewee want to receive in order to improve their agriculture productions such as access to land, credit, input and information, knowhow, infrastructure, etc.?
- d) What is priority of the above support needed?
- e) What support does the interviewee want to receive from extension workers? (Trainings, linking to markets/private sector, information dissemination, technical supports...)?
- f) What are contents of trainings would be necessary for the poor in order to improve their productions?
- g) Can some indigenous knowledge be extended? (Are there any good seeds, traditional techniques that are efficient, effective or environmental friendly)?
- h) What method of training does the interviewee prefer? (For example: local language, more demonstration, more practices, on-farm training, study visits...)
- 5. Views regarding happiness and Wellbeing
 - e) What is happiness?
 - f) How does the interviewee pursuit happiness in the reality?
 - g) In totally, are you happy with the life you lead?
 - h) What is the level of your happiness? A. not at all, B. quite happy, C. happy and D. very happy.
 - i) What conditions does the interviewee consider as Wellbeing (e.g. education, health, living standard, access to natural resource, cultural preservation...)?
 - j) Does the interviewee consider education as a condition to Wellbeing? if yes in which level of education and what kind of education (formal, informal or traditional)?
 - k) Does the interviewee consider health status as a condition to Wellbeing? If yes what kind of health people consider as minimum status such as live long, live healthy, low mortality of child...?
 - Does the interviewee consider living standard as a condition to Wellbeing? If yes
 what kind of living standard people consider as minimum status such as amount
 of food, income, assets (land, house, livestock...)
 - m) Does the interviewee consider rights to access to natural resources (land, water and forest) as a condition to Wellbeing? if yes what are the conditions?

- n) Does the interviewee consider cultural preservation as a condition to Wellbeing (such as language, religion, traditions, customs, food...)?
- 6. Try to clarify if agriculture extension contribute to improve happiness and wellbeing of the poor
 - a) Does the interviewee think that improving agriculture production (such as increasing yields) will contribute to improve happiness and wellbeing?
 - b) How the improvement would contribute to happiness and wellbeing? (For example: more food security, more cash which can be used to send children to school...)
 - c) Would the interviewee feel happy to make changes in order to improve the production such as change of techniques (from tradition to modern), increase investment (input, more labor...) and produce accordingly to demand of the markets?

3.4 Interview guideline 3

<u>Target group</u>: Provincial/District Extension Workers

Objective:

- 1. to understand overview of agriculture extension in the local level
- 2. to understand the current situation and outcome of the Laos Extension Approach in local level
- 3. to understand links of agriculture extension and happiness/wellbeing of poor farmers

Questions

- 1. Overview of agriculture extension
- a) What are definitions of agriculture extension?
- b) What are the extension vision, goal, strategies, priority and plans?
- c) What are profiles of current extension programs/projects/activities (what activity, who is service providers/clients, where and when)?
- d) When agriculture extension was first launched, by whom, what were the activities and how it had been carried out?
- 2. Look at needs of servicing agriculture extension with the poor
- i) What is priority of agriculture improvement? (increasing yield, better land management, better labor use, better pest and disease control, etc)
- j) What kind of support does the interviewee think that necessary for the poor in order to improve their agriculture productions such as access to land, credit, input and information, knowhow, infrastructure, etc.?
- k) What is priority of the above support needed?
- I) What support does the interviewee think that he/she can provide? (Trainings, linking to markets/private sector, information dissemination, technical supports...)?
- m) What are contents of trainings would be necessary for the poor in order to improve their productions?
- n) Can some indigenous knowledge be extended? (Are there any good seeds, traditional techniques that are efficient, effective or environmental friendly)?

- o) What method of training does the interviewee think that suitable for the poor?
 (For example: local language, more demonstration, more practices, on-farm training, study visits...)
- 3. Look at the Lao Extension Approach
- a) Has the interviewee ever heard about Lao Extension Approach?
- b) Has the interviewee ever received any training or information about the LEA? If yes what exactly did she/he receive?
- c) What is the current extension situation of using of the Lao Extension Approach (how many districts, villages, villagers involved)?
- d) How the interviewees carry out extension activities in their local area accordingly to the LEA principles? (is it demand driven? is it involve woman, does the poor included? level of participation, etc)
- e) What are strength and weakness of LEA?
- f) What is the main problem and constraint of applying the LEA?
- 4. Try to clarify if agriculture extension contribute to improve happiness and wellbeing of the poor
 - d) Does the interviewee think that improving agriculture production (such as increasing yields) will contribute to improve happiness and wellbeing of the poor?
 - e) How the improvement would contribute to happiness and wellbeing? (For example: more food security, more cash which can be used to send children to school...)
 - f) Would the interviewee think that the poor will feel happy to make changes in order to improve the production such as change of techniques (from tradition to modern), increase investment (input, more labor...) and produce accordingly to demand of the markets?

Annex 4: List of interviewed people

A. Extension workers

N:	Name	Position	Organization
1	Mr. Naen Viengvongsit	Head PAFO	PAFO Oudomxay
2	Mr. Houmpheng	Deputy head	PAFEC Oudomxay
3	Mr. Khamphai Manivanh	Deputy head	Planning division of PAFO Oudomxay
4	Mrs. Thongkhoun	Technician	PAFEC Oudomxay
5	Mr. Thongsouk Inthavong	Deputy head	DAFO Houn
6	Mr. Somsack Phanthavong	Head	Livestock unit, DAFO Houn
7	Mr. Vannasak Chindamany	Head	Cropping unit, DAFO Houn
8	Mr. Kanphay Mingboupha	Head	Forestry unit, DAFO Houn
9	Ms. Souksakhone	Technician	Livestock unit, DAFO Houn
10	Mr. Konesavanh Southivong	Technician	Cropping unit, DAFO Houn

B. <u>Villagers</u>

N:	Name	Position	Village
1	Mr. Maichanthong	Head of the party	Houy Hok
2	Mr. Maithone	Head of the village	Houy Hok
3	Mr. Pheng	Elder	Houy Hok
4	Mr. Maiphou	Elder	Houy Hok
5	Mr. Maionta	Elder	Houy Hok
6	Mr. Thitonkeo	Elder	Houy Hok
7	Mr. Maijoy	Villager	Houy Hok
8	Mr. Maikone	Villager	Houy Hok
9	Mr. Onchanh	Villager	Houy Hok
10	Mr. Maikome	Villager	Houy Hok

11	Mr. Maibounvong	Villager	Houy Hok
12	Mrs. Khammone	Villager	Houy Hok
13	Mrs. Kongseng	Villager	Houy Hok
14	Mrs. Kiengkham	Villager	Houy Hok
15	Mrs. Kood	Villager	Houy Hok
16	Mr. Bounyong	Poor household	Houy Hok
17	Mr. Maiphone	Poor household	Houy Hok
18	Mr. Maichanh	Poor household	Houy Hok
19	Mr. Bounma	Poor household	Houy Hok
20	Mr. Thongluer	Head of the village	Mok Khuan
21	Mr. Bounyong	Deputy head of the village	Mok Khuan
22	Mr. Ai	Elder	Mok Khuan
23	Mr. Khammy	Elder	Mok Khuan
24	Mr. Phongsavanh	Security	Mok Khuan
25	Mr. Phout	Finance	Mok Khuan
26	Mr. Vongxay	Head of youth	Mok Khuan
27	Mr. Siphonge	Taxes collector of the village	Mok Khuan
28	Mr. Khamoune	Villager	Mok Khuan
29	Mr. Bounmy	Villager	Mok Khuan
30	Mr. Kuey	Villager	Mok Khuan
31	Mr. Phone	Villager	Mok Khuan
32	Mr. Thaep	Villager	Mok Khuan
33	Mrs. Yuem	Villager	Mok Khuan
34	Mrs. Luer	Villager	Mok Khuan

35	Mrs. Mone	Villager	Mok Khuan
36	Mrs. Manh	Villager	Mok Khuan
37	Mrs. Kham	Villager	Mok Khuan
38	Mr. Phonexay	Poor household	Mok Khuan
39	Mr. Doung	Poor household	Mok Khuan
40	Mr. Leure	Poor household	Mok Khuan
41	Mrs. Dip	Poor household	Mok Khuan
42	Mr. Bounnan	Head of the village	Nam Yone
43	Mr. Bounphuem	Deputy head of the village	Nam Yone
44	Mr. Khamsay	Head of youth	Nam Yone
45	Mr. Lap	Elder	Nam Yone
46	Mr. Binh	Elder	Nam Yone
47	Mr. Khamdeng (1)	Taxes collector	Nam Yone
48	Mr. Khamdeng (2)	Security	Nam Yone
49	Mr. Ingkham	Head of parent association	Nam Yone
50	Mrs. Mai	Head of women	Nam Yone
51	Mrs. Sip	Deputy head of women	Nam Yone
52	Mrs. Pheng	Villager	Nam Yone
53	Mrs. Chansamone	Villager	Nam Yone
54	Mrs. Ny	Villager	Nam Yone
55	Mrs. Onkham	Villager	Nam Yone
56	Mr. Somchit	Poor household	Nam Yone
57	Mr. Ngeum	Poor household	Nam Yone
58	Mr. Chansouk	Poor household	Nam Yone

59	Mr. Khamtan	Poor household	Nam Yone
60	Mr. Neuy	Head of the village	Boam Lao
61	Mr. Sai	Deputy head of the village	Boam Lao
62	Mr. Thithong	Elder	Boam Lao
63	Mr. Hao	Elder	Boam Lao
64	Mr. Xiengone	Elder	Boam Lao
65	Mr. Xiengthong	Elder	Boam Lao
66	Mr. Phoutthavone	Villager	Boam Lao
67	Mr. Xiengsakk	Villager	Boam Lao
68	Mr. Somekhit	Villager	Boam Lao
69	Mr. La	Villager	Boam Lao
70	Mr. Samuen	Villager	Boam Lao
71	Mr, Xiengtoui	Villager	Boam Lao
72	Mr. Phan	Villager	Boam Lao
73	Mr. Phuey	Villager	Boam Lao
74	Mr. Toui	Villager	Boam Lao
75	Mr. Thitphuern	Villager	Boam Lao
76	Mr. Chanphone	Villager	Boam Lao
77	Mr. Mr. Pa	Villager	Boam Lao
78	Ms. Saune	Villager	Boam Lao
79	Ms. Pheng	Villager	Boam Lao
80	Ms. Chanh	Villager	Boam Lao
81	Ms. La	Villager	Boam Lao
82	Ms. Lit	Villager	Boam Lao
83	Ms. Tha	Villager	Boam Lao

84	Ms. Pheng (b)	Villager	Boam Lao
85	Ms. Chit	Villager	Boam Lao
86	Ms. Vanh	Villager	Boam Lao
87	Ms. La (b)	Villager	Boam Lao
88	Mrs. Yai	Poor household	Boam Lao
88	Mr. Loo	Poor household	Boam Lao
90	Mrs. Joy	Poor household	Boam Lao
91	Mr. Phone	Poor household	Boam Lao