# HOW MUCH IS ENOUGH?: CONSTRAINTS OF POPULATION, TEMPERATURE RISE, POLITICS AND ECONOMICS: A CONCEPT PAPER.

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Abstract: How Much Is Enough? Can be thought of generally in terms of sustainability. This paper broadly adopts that approach but also mentions The Sufficiency Economy (SE) Thailand which is derived from Buddhist philosophy and which promotes the idea that we should open our mind and implement practices to the needs (not wants) of all people and that those needs be modest i.e. sufficient. Proponents of this sufficiency economy were EF Schumacher (1911-1977) of the UK and King Bhumibol Adulyadejj (Rama 9 (reign from 05-05-1950 to 13-10-2016) in Thailand. This concept paper considers major factors influencing the Sufficiency Economy worldwide (not only for Thailand) namely: population (whether it involves growth, stability or decline); changes to global climate; preferred political system/s; preferred standard-of-living; employment opportunity.

*Keywords:* Sufficiency economy; World population growth and dispersion; political systems; economic systems; standard of living, employment opportunity, King Bhumiphol Adulayadej (Rama IX).

#### **Introduction:**

A vital component of sustainability and the Sufficiency Economy (as proposed by King Bhumiphol Adulyadej (Rama IX) apart from the environment and the quality of life, is population. The world population is currently 7.3 billion and is projected to grow to 9.7 billion by 2050 (www.un.org/en/development/desa/news/p opulation/2015-report.htm\_accessed 01022017)

Global population is largely spread over the worlds six continents below

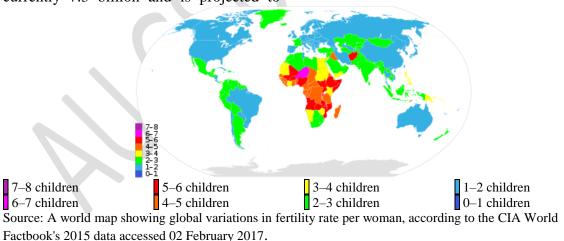


Figure 1 Population Growth Regions of The World

<sup>1</sup>Head of Tourism Research Graduate School of Business, Assumption University, Bangkok Thailand **e-mail** <u>barnesjohn2010@gmail.com</u> <sup>2</sup>Lecturer, Graduate School of Business, Assumption University, Bangkok Thailand The CIA Factbook (2018) proposes that during 2005–2050, twelve countries are expected to account for half of the world's projected population <u>increase</u>: India, China, United States, Indonesia, Nigeria, Pakistan, Brazil, Democratic Republic of the Congo, Ethiopia, Philippines, Mexico and Egypt, listed according to the size of their contribution to population growth. Several of these countries are the poorest on our planet when viewed in terms of personal income.

From 2010 to 2015, the average world fertility rate was 2.5 children per woman, which was about half the level in the period 1950 to 1955 (then 5 children per woman). In the medium variant, global fertility is projected to decline to 2.25 children per woman in 2045 to 2050 and further to 2.0 in 2095 to 2100 (Newmark and Alvarado,2002; Martínez, DE (1998).

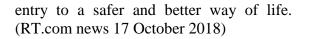
Conversely global life expectancy at birth, is estimated to have risen from 46 years in the period 1950 to 1955 up to 65 years in 2000 to 2005, and is expected to keep rising to reach 75 years in the period 2045 to 2050. In the more developed regions, the projected increase is from 75 years today to 82 years by mid-century. Among the least developed countries, where life expectancy today is just under 50 years, it is expected to reach 66 years in the period 2045to 2050. The population of 31 countries or areas, including Ukraine, Romania, Japan and most of the successor States of the former Soviet Union, is expected to be decline in the period 2050 compared to the year 2005. Apart from populations and unforeseen at the time when the above forecasts were developed, were mass migrations of refugees fleeing war zones during 2016 due middle-eastern wars. Migrant-refugees, fled with intention of reaching Europe which was regarded as both a safe-haven and a possible place to obtain employment income. In fact, many of those European countries had naturally declining populations due to low birth rates and those countries sought immigrants to stabilize their populations and add to the productive work-force. However, recent migrations were on a massive and largely uncontrolled basis and have caused untold misery and death to the escapees and many economic, political and judicial, difficulties within the host nations.

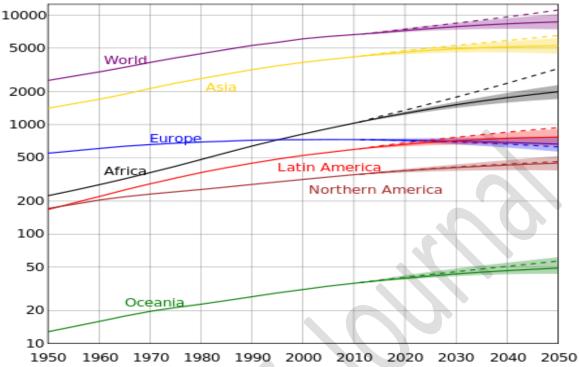
# Projected Migration to Western countries

The United Nations, claims that during 2005–2050 the net number of international migrants to more developed regions is projected to be 98 million. Because deaths are projected to exceed births in the more developed regions by 73 million during the period 2005 to 2050, population growth in those regions will largely be due to international migration. In the period 2000 to 2005, net migration in 28 countries either prevented population decline or doubled at least the contribution of natural increase (births minus deaths) to population growth. Those countries include Austria. Canada, Croatia, Denmark, Germany, Italy, Portugal, Qatar, Singapore, Spain, Sweden, the United Arab Emirates and the United Kingdom. (United Nations accessed at http://www.un.org/News/Press/docs/2005/ pop918.doc.html 02\_ February\_ 2017

\_deadlink) According to the CIA Fact book (2018) by 2050 (Medium variant), India will have 1.660 billion people, China 1.425 billion, United States 440 million, Nigeria 391 million, Indonesia 327 million, Pakistan 308 million, Brazil 238.3 million, Bangladesh 201.8 million, Democratic Republic of Congo 195.3 million, Ethiopia 188.5 million. Mexico 164 million. Philippines 157.1 million, Egypt 142 million, Russia 133 million, Tanzania 129.4 million, Vietnam 112.8 million, Japan 107 million, Uganda 101 million, Turkey 96 million, Kenya 95.5 million, Iran 92.1 million, Sudan 81 million, Germany 78 million and the United Kingdom 75 million. show that the population of Earth will stop increasing around 2070-(United Nations Population Division in 2015)

It is notable that the above statistics omit South American countries (but see graph below) which have large and poor populations. As we write this paper in Mid October 2018 large numbers of emigrants are walking from Honduras towards the southern US border seeking





**Source:** Estimates of population levels in different continents between 1950 and 2050, per the United Nations. The vertical axis is logarithmic and is in millions of people

Figure 2 World population Projected to The Year 2050

In a 2004 long-term prospective report, the United Nations Population Division projected the world population to peak at 9.22 billion in 2075. The report suggests that after reaching this maximum, it would possibly decline slightly [for unspecified reasons] and then resume a slow increase, reaching a level of 8.97 billion by 2300, which is about the same as the projected 2050 figure predicted then with continued growth beyond 2100–(*He; Goodkind; Kowal, 2015*).

Meanwhile a 2014 paper by demographers from several universities and the United Nations Population Division forecast that the world's population will reach about 10.9 billion in 2100 and continue growing thereafter. (Gerland, Raferty; Ev; Li; Gu; Spoorenberg; Alkema; Fosdick; Chunn; Lalic; Bay; Buettner; Heilig; Wilmoth, 2014).

Additionally Jørgen Randers, who was one of the authors of the seminal 1972

long-term simulations in his, *The Limits to Growth*, offered an alternative scenario in a 2012 book, arguing that traditional projections insufficiently take into account the downward impact of global urbanization on fertility rates. Randers' "most likely scenario" predicts a peak in the world population in the early 2040's at about 8.1 billion people, followed by decline [reason unspecified].

These projected growth patterns depend on assumptions about vital rates. Total fertility is assumed to continue to decline, at varying paces depending on circumstances in individual countries, to a below-replacement level of 1.85 children per woman by mid-century. Countries already at this level or below, and other countries when they reach it, will (it is proposed) eventually return to replacement level over a period of a century and stay at replacement going forward. All countries are projected to have reached replacement fertility by 2175.

Some of the authors of the 2004 UN report say that life expectancy is assumed to and continuously. rise slowly The projections in the report assume this with no upper limit, though at a slowing pace depending on circumstances in individual countries. By 2100, the report assumes life expectancy to be from 66 to 97 years, and by 2300 from 87 to 106 years, (depending on the country). Based on that assumption, the authors of the UN report said that rising life expectancy will produce small, but continuing population growth by the end of the projections, ranging from 0.03 to 0.07 percent annually.

However, based on recent research, many expect that life expectancy will leap ahead and indefinite human lifespans are not necessarily unfeasible (Anonymous 1 2017) This could significantly raise the population estimates. In an essay within the U.N. report, Tim Dyson said,

"A rapid increase in life expectancy, which would raise the population pyramids, seems within

reach, since it responds to an old and powerful demand for longevity."

(Anonymous 1 2017)

Population projections are based on current and projected birth and mortality rates and <u>assumes</u> other factors such as ecology, climate, land mass, politics, and economic and population distribution will continue as forecast.

In summary, we face a world with a growing population which is increasingly mobile from poorer to richer countries and whose members based on current observations seek an improved quality of life both materially and spiritually.

#### **Climate Change:**

Current forecasts of climate change based on a combination of man-made and natural factors and our own recently experienced climate changes, indicate that rising temperatures which in-turn promote hotter ambient conditions, previously unseen or rarely experienced weather conditions; will result in a loss of both Northern and Southern polar and Icelandic ice masses and an expansion of oceanic increased volumes due to ocean temperatures, will contribute to rising levels and increased ocean coastal inundation and erosion The latest IPCC (October 2018) report on Climate change informs of the measures necessary to limit temperature rise to 1.5 Celsius by 2050 after which a tipping point will be reached beyond which life as we know it on earth will be irretrievable.

Rising temperatures will melt the perma frost in Alaska and other Artic regions releasing methane a combustible green-house gas and carbon monoxide into the atmosphere. Permafrost comprises 24% of the northern hemisphere's land mass and is 100 metres deep in some areas. Those high temperatures will also liberate vast amounts of methane trapped in the sediment below the worlds largest lakes. (Melting Permafrost 2018). The release will be sudden. cataclysmic and likely unstoppable. Our atmosphere will burn.

In terms of elevations in sea levels, major capital cities such as New, York, London, Venice, New Orleans, Bangkok Manila, Singapore and the major capital cities of Australasia (all of which are coastal), to name but a few located either beside rivers or oceans, will need to be evacuated to escape rising tidal levels. This major reversal of current population movement which is currently taking place from rural to urban, will cause considerable loss of all types of existing infrastructure and the need to replace it. We are currently witnessing the beginning of this rise in ocean levels in low lying areas of Thailand, Bangladesh and some remote island nations.



Sources: Map of major cities of the world most vulnerable to sea level rise The IPCC TAR WGII report (*Impacts, Adaptation Vulnerability*) Human Development report 2007/2008. hdr.undp.org/media/hdr\_20072008\_summary\_english. Figure 3 Effects of Sea Level Rise Due to Climate Change.

The sources cited above suggest that current and future climate change would be expected to have numerous impacts, particularly on coastal systems. (Levine, 2002, pp. 12-19). Such impacts may include increased coastal erosion, higher storm-surge flooding, inhibition of production processes, primary more extensive coastal inundation, changes in surface water quality and groundwater characteristics, increased loss of property and coastal habitats, increased flood risk and potential loss of life, loss of nonmonetary cultural resources and values, impacts on agriculture and aquaculture through decline in soil and water quality, and loss of tourism, recreation, and transportation functions.

The implication is that many of impacts will be detrimental, these especially for the three-quarters of the world's poor who depend on agriculture systems<sup>±</sup> (Patel, 2005). The Human Development Report 2007/2008 notes that owing to the great diversity of coastal environments; regional and local differences in projected relative sea level and climate changes; and differences in the resilience adaptive and capacity of ecosystems, sectors, and countries, the

impacts will be highly variable in time and space.

The Intergovernmental Panel on Climate Change (IPCC) report of 2007 estimated that accelerated melting of the Himalayan ice caps and the resulting rise in sea levels would likely increase the severity of flooding in the short term during the rainy season and greatly magnify the impact of tidal storm surges during the cyclone season. A sea-level rise of just 400 mm in the Bay of Bengal would put 11 percent of the Bangladesh's coastal land underwater, creating 7–10 million climate refugees.

Sea level rise could also displace many shore-based populations: for example, it is estimated that a sea level rise of just 200 mm could make 740,000 people in Nigeria homeless. (Hunter, 2002)

Future sea-level rise, like the recent rise, is not expected to be globally uniform. Some regions show a sea-level rise substantially more than the global average (in many cases of more than twice the average), and others a sea level fall.-(Field, 2001). However, models disagree as to the likely pattern of sea level change. (Klein, 2016)

#### **Island Nations**

The Intergovernmental Panel for Climate Change (IPCC) assessments suggest that deltas such as in Thailand, Vietnam and Bangladesh and small island states such Kiribati. Fiji and the Solomon Islands, are particularly vulnerable to sealevel rise caused by both thermal expansion of and increased volume of ocean water from polar melt water. Sea level changes have not yet been conclusively proven to have directly resulted in environmental, humanitarian, or economic losses to small island states, but the IPCC and other bodies have found this a serious risk scenario in coming decades. (Soons, 1989)

Maldives, Tuvalu, and other lowlying countries are among the areas that are at the highest level of risk. The UN's environmental panel has warned that, at current rates, sea level would be high enough to make the Maldives uninhabitable by 2100. (Hussein, 1989, Jacobson, 2012). Many media reports have focused on the island nations of the Pacific, notably the Polynesian islands of Tuvalu, which based on more severe flooding events in recent years, were thought to be "sinking" due to sea level rise. IPCC TAR WG1 2001. A scientific review in 2000 reported that based on University of Hawaii gauge data, Tuvalu had experienced a negligible increase in sea level of 0.07 mm a year over the past two decades, and that the El Niño Southern Oscillation (ENSO) had been a larger factor in Tuvalu's higher tides in recent years Yale. (2013).- A subsequent study by John Hunter from the University of Tasmania, however, adjusted for ENSO effects and the movement of the gauge (which was thought to be sinking). Hunter concluded that Tuvalu had been experiencing sea-level rise of about 1.2 mm per year. Yale. (2013). The recent more frequent flooding in Tuvalu may also be due to an erosional loss of land during and following the actions of 1997 cyclones Gavin, Hina, and Keli.- (Miamidade.gov, 2014)

Besides the issues that flooding brings, such as soil salinization, the island states themselves would also become dissolved over time, as the islands will become uninhabitable or completely submerged by the sea. Once this happens, all rights on the surrounding area (sea) are removed. This area can be huge as rights extend to a radius of 224 nautical miles (414 km) around the entire island state. Any resources, such as fossil oil, minerals and metals, within this area can be freely dug up by anyone and sold without needing to pay any commission to the (now dissolved) island state. (National Geographic, 2017) Options that have been proposed to assist island nations to adapt to rising sea level include abandoning islands, building dikes, and building upwards.-(Smith, 2016)

## Cities

A study in the April, 2007 issue of *Environment and Urbanization* reports that 634 million people live in coastal areas within 30 feet (9.1 m) of sea level. The study also reported that about two thirds of the world's cities each with over five million people located in these low-lying coastal areas. Future sea level rise could lead to potentially catastrophic difficulties for shore-based communities in the next centuries: for example, many major cities such as Venice, London, New Orleans, and New York City already need storm-surge defenses, and would need more if the sea level rose, though they also face issues such as subsidence. (Yin & Griffies, 2015). Goddard, Yin, Griffies & Zhang, 2015). However, modest increases in sea level are likely to be offset when cities adapt by constructing sea walls or through relocating. -(NASA/JPL 2017)

Re-insurance company Swiss Re estimates an economic loss for southeast

Florida in 2030, of \$33 billion from climate-related damages. (Nerem;,2010,CUSL Nerem; Chambers, Choe; Mitcham, (2010). Miami has been listed as "the number-one most vulnerable city worldwide" in terms of potential damage to property from storm-related flooding and sea-level rise.- (CNES/CLS, 2011).

#### Habitats

Coastal and Polar habitats are facing drastic changes as consequence of rising sea levels. Loss of ice in the Arctic may force local species to migrate in search of a new home. If seawater continues to approach inland, problems related to contaminated soils and flooded wetlands may occur. Also, fish, birds, and coastal plants could lose parts of their habitat. White, N. (2011-07-29). "CSIRO Global Mean Sea Level Estimate". Commonwealth Scientific and Industrial Research Organisation (CSIRO) / Wealth from Oceans National Research Flagship and the Antarctic Climate and Ecosystems Cooperative Research Centre (ACE CRC). Retrieved 2011-07-29.

In 2016 it was reported that the Bramble Cay melomys, which lived on a Great Barrier Reef island, had probably become extinct because of sea level rises. (LSA (2011-03-16). "Laboratory for Satellite Altimetry / Sea level rise". NOAA: National Environmental Satellite, Data, and Information Service (NESDIS), Satellite Oceanography and Climatology Division, Laboratory for Satellite Altimetry (LSA). Retrieved 2011-07-29.

## **Extreme Sea Level Rise Events**

Downturn of Atlantic meridional overturning circulation (AMOC), has been tied to extreme regional sea level rise (1-in-850 year event). Between 2009–2010, coastal sea levels north of New York City increased by 128 mm within two years. This jump is unprecedented in the tide gauge records, which collects data since a couple of centuries-(IPCC AR3, Le Page (2015).

#### The World's Political Systems:

There are broadly speaking two ways of classifying political systems namely anthropological and Sociological. This paper considers the sociological classification as it is deemed more relevant to the content of this discussion.

The sociological interest in political systems is determining who holds the power in the relationship of the government and its people and how the government's power is used. There are three types of political systems that sociologists consider.

#### Authoritarianism

Under authoritarian governments, the people have no power or representation and are characterized by absolute or blind obedience to [formal] authority, as against individual freedom and related to the expectation of unquestioning obedience. The elite leaders handle all economic, military, and foreign relations. Dictatorships are examples of authoritarianism.

Totalitarianism is the most extreme form of authoritarianism, because it controls all aspects of life including communication between citizens, censors the media, and threatens by means of terror.

#### Monarchies

A monarchy is a government controlled by a king or queen determined by a predisposed line of sovereignty. In other words, it can be seen as an undivided rule or absolute sovereignty by a single person. In the modern world there are two types of monarchies, absolute monarchies and constitutional monarchies. An absolute monarchy works like a dictatorship in that the king has complete rule over his country. A constitutional monarchy gives the royal family limited powers and usually works in accordance with an elected body of officials. Social revolutions of the 18th, 19th, and 20th century overthrew the majority of existing monarchies in favor of a more democratic governments and the rise of the middle class.

#### Democracy

А democracy is a form of government in which the citizens create and vote for laws directly, or indirectly via representatives (representative democracy). The idea of democracy stems back from ancient Greece and the profound works of ancient academics. However, the presence of democracy does not always mean equally citizen's wishes will be example, represented. For in many democratic countries' immigrants, and racial and ethnic minorities do not receive the same rights as the majority citizens.

During the preceding century, the world witnessed many changes to political systems such as the fall of traditional absolute monarchies to be replaced with either constitutional monarchies or by authoritarian regimes of various types. Some of those authoritarian regimes continue (North Korea and Cuba where a dictator established a dynasty which persists) whilst others have been replaced by democratic systems either parliamentary with a prime minister or a republic with a president such as France and USA.

As of the writing of this paper (early February 2017) the developed world is witnessing many changes within the global political system brought on by popular uprising against what is perceived as stark inequality in income within countries having democratically elected governments. This has recently been called the 1% versus the 99% where 1% of the population controls 99% of the wealth and which many people feel to be not merely inequitable but unjust and likely to lead to political instability. Joseph Stiglitz in his book The Price of Inequality was one of the first to raise this issue in the west. Pasuk Pongpaichit and Chris Baker in their book Unequal Thailand frame the issue in a Thai context as does Arthur Keyes in his book Finding Their Voice.

A common belief is that this disparity in wealth has been achieved through illegal means such as money laundering or tax evasion or through unethical practices such as tax avoidance. Many cases od illegal activities have been detected at the highest levels of government and businesses internationally and brought to court, resulting in prosecution and imprisonment of the culprits in more severe regimes such as North Korea and earlier in China the culprits were executed.

Another explanation is also possible, namely, mis-placed valuesystems by many members within the general population of developed, consumer market- driven societies.

In those societies, a portion of the population place exorbitant and inordinate value on a small number of people, who offer them ephemeral pleasures, rather than substantive benefits to the society at large. Gullible and misguided members of the society are wooed in their pursuit of immediate pleasure by entrepreneurs encouraging large numbers of people (consumers) to purchase shares in speculative businesses through a casinostyle economy built on transient values, rather than substantial products/services. Real estate speculation by a small coterie of wealthy individuals (the so-called elite) in major cities who inflate prices of land and residential and commercial properties, to the point where young people can no longer afford to buy a home or must be satisfied with purchasing over-priced chicken coop style condominiums. These high-density residential or commercial developments are supported by local government which benefit initially from income from increased property taxes. In fact these developers gain by free riding on often established infrastructure (funded from the general income tax) such as roads, electricity and water supply, telecom and transportation systems Another parasitic aspect of speculators concerns insider trading of stocks and shares; Yet another symptom of this largely western- generated culture involves over-valued pop-stars of entertainment of screen, stage and sport who are in-turn promoted by oligopolistically controlled mega-media organizations both traditional and electronic often in the hands of (or heavily lobbied by) leading politicians.

Our societies (it seems) are increasingly addicted to instant gratification. In many ways, our societies have become broken into a collection of selfish individuals who value fame and fortune of the few over creating an enduring legacy for human-kind.

It is important that, as teachers, we highlight to our students the sad and sorry demise of many people, due to drug addiction or psychoses, breakdown of marriage and suicide of younger family members who cannot continue living in their parents distorted world. Here money and fame have become terrible masters rather than valued servants. Much of this was predicted by futurist Alvin and Heidi Toffler in their 1970 book *Future Shock*.

#### **Desired Economic System:**

An economic system is a system of production. resource allocation, and distribution of goods and services within a society or a given geographic area. It includes the combination of the various institutions, agencies, entities, decisionprocesses, and patterns making of consumption that comprise the economic structure of a given community. As such, an economic system is a type of social system. The mode of production is a related concept All economic systems have three basic questions to ask: what to produce, how to produce and in what quantities, and who receives the output of production.

Three broad categories of economic systems are identified; Capitalist, Socialist and Mixed Economy. There is no precise of a "mixed economy". definition Theoretically, it may refer to an economic system that combines one of three characteristics: public and private ownership of industry, market-based

allocation with economic planning, or relatively free-markets with some state interventionism.

In practice, "mixed economy" generally refers to market economies with some degree of state intervention and/or sizable public sector alongside a dominant private sector. Actual mixed economies gravitate more heavily to one end of the spectrum.

After the opening of China to the USA in 1972 with a visit by President Richard Nixon and his wife Pat and later the dissolution of the former USSR (December 26<sup>th</sup>,1991) most economies in the world are now mixed economies. Cuba and North Korea remain largely Socialist economies.

Focusing on Thailand now, we can say that for much of Thai and earlier Siamese history involved trading between people in rural communities and later trading between people in city states initially within the region and later internationally.

International trading brought with it, the influence and customs of diverse religions. Buddhism from Sri Lanka; Brahmanism and Hinduism from India, Muslim influences from the Middle East; Taoism and Confucianism from China, to name but a few.

Buddhism gradually became the dominant religion in Siam and later Thailand. In more recent times Buddhist Economics has surfaced as an alternative to earlier barter and later market-based economics with emphasis of application in Thailand's numerically dominant rural communities.

### Buddhist Economics A Very Brief History

Buddhist ethics has been applied to the running of a state's economy since the rule of the Indian Buddhist emperor Ashoka (c. 268 to 232 BCE). Ashoka was famous for his extensive philanthropic and public works program, building hospitals, hostels, parks, and nature preserves. The term "Buddhist economics" was coined by E. F. Schumacher in 1955, when he travelled to Burma as an economic consultant for the then Prime Minister at that time U Nu. The term "Buddhist Economics" is used by followers of Schumacher and by Theravada Buddhist writers such as Prayudh Payutto, Padmasiri De Silva, and Phrabhavanaviriyakhun.

Schumacher's essay "Buddhist Economics" was first published in 1966 in Asia: A Handbook, and republished in his influential collection Small Is Beautiful (1973).

The first Conference of the Buddhist Economics Research Platform, 23–24 August 2007 was held in Budapest, Hungary and the second at Ubon Rachathani University, Thailand from 9–11 April 2009.

#### A Buddhist Perspective Of The Economy

Suppose we consider the demand for a commodity, say cigarettes and consider that it has been showing an increasing trend. This trend will be supported by an increase in production of cigarettes. These cigarettes are then put into the market and purchased and consumed by people. When it is consumed, demand is satisfied and normally, nobody bothers about the stage after consumption. But Buddhist economists go beyond that and investigate how these trends affect the three intertwined aspects of human existence: the individual, society, and the environment. Specific to an increase in the consumption of cigarettes, Buddhist economists try to decipher how this increase affects the pollution levels in the environment, its impact on passive smokers and active smokers, and the various health hazards that come along with smoking, thus taking into consideration the ethical side of economics. The ethical aspect of it is partly judged by the outcomes it brings and partly by the qualities which lead to it. Payutto, Ven, (1992)

The Buddhist point of view ascribes to work three functions: to give man a

chance to utilize and develop his aptitude; to enable him to overcome his selfaggrandizement by engaging with other people in common tasks; and to bring forward the goods and services needed for a better existence (Schumacher, 1968)

#### Differences between Western and Buddhist Economics

several differences There are between Western and Buddhist economics. While Western economics concentrates on self-interest, the Buddhist view challenges it by changing the concept of self to Anatta or no-self. It posits that all things perceived by one's senses are not actually "I" or "mine" and therefore, humans must detach themselves from this feeling. They believe that the self-interest based, opportunistic approach to ethics will always fail. According to them, generosity will work because human beings are homines reciprocantes who tend to reciprocate to feelings (either positively or negatively) by giving back more than what is given to them. (Zsolnai, 2012)

Western economists give importance to maximizing profits and individual gains while the underlying principle of Buddhist economists is to minimize suffering (losses) for all living or non-living things. Studies conducted by them have shown that human beings show greater sensitivity to loss than to gains and therefore people should concentrate more on reducing the former. (Zsolnai, 2012)

There is a difference with respect to the concept of desire. Western economics encourages material wealth and desire because of which, people try to accumulate greater wealth-sometimes at the cost of others-to satisfy those cravings. In economics, contrast, in Buddhist importance is given to simplify one's desires. According to them, apart from the basic necessities like food, shelter, clothing, and medicines, other materialistic needs should be minimized. They say that overall well-being decreases if people pursue meaningless desires. Wanting less will benefit the person, the community they live in, and nature. (Zsolnai, 2012)

Views on the market are different. Western economists While advocate maximizing markets to a point of saturation, Buddhist economists aim at minimizing violence. According to them, Western economists do not take into consideration "primordial stakeholders" like the future generations and the natural world because their vote is not considered important in terms of purchasing power. They think that other stakeholders such as poor and marginalized people are underrepresented because of their inadequate purchasing power and preference is given to the strongest stakeholder. Therefore, they believe that the market is not an unbiased place, truly representative of the economy. Thus, Buddhist economists advocate ahimsa or non-violence. According to them, ahimsa prevents doing anything that directly causes suffering to oneself or others and urges to find solutions in a participatory way. Community supported agriculture is one such example of economic activities. community-based They believe that it fosters trust, helps build value based communities and brings people closer to the land and the farm. Achieving sustainability and non-violence this restructuring of dominating requires configurations of modern business, which advocate. This leads to they deemphasizing profit maximization as the ultimate motive and renewed emphasis on introducing small-scale, locally adaptable, substantive economic activities. (Zsolnai, 2012)

Western economists try to maximize instrumental use where the value of any entity is determined by its marginal contribution to the production output while Buddhist economists feel that the real value of an entity is neither realized nor given importance to. try to reduce They instrumental use and form caring organizations which will be rewarded in terms of trust among the management, coworkers, and employees.-(Zsolnai, 2012)

Western economists tend to believe that bigger is better and more is more, whereas Buddhist economists believe that small is beautiful and less is more.

Western economics gives importance to gross national product whereas Buddhist economics gives importance to gross national happiness. (stephensp.net16.net/articles/grossnatl%20 happylongbuddhist.do\_accessed 8<sup>th</sup> February 2017)

Thailand is an interesting mixture of a socialist economy, a mixed economy and a Buddhist economy in that traditionally, as an agricultural economy, Thai villagers cooperated with each other in their agricultural activities plowing, planting and harvesting, and in many respects still do so today. In this respect they can be considered socialistic.

With the signing of the Bowring treaty between United Kingdom and Siam in 1857 (Manarungsan 1989) the Siamese economy opened up to outside trade beyond the traditional spices, cloth and ceramics with China and Middle-Eastern countries. The Siamese economy diversified in order to meet the diverse needs of a growing international clientele. Extensive industrialization occurred during the 1970's with establishment of numerous industrial estates throughout the country. Factories and businesses on those estates were offered exemption from corporate income tax and import duties on raw materials and equipment and export duties on finished products if they employed a n agreed number of Thai employees and exported all of their finished products for a period of five years.in this respect the Thai economy is a mixed economy.

The Thai nation comprises people of all religions and the non-affiliated but is predominantly Buddhist. As such Thai people attempt to excel in all that they do, whether it is in farming manufacturing, commerce or the arts. Traditionally time was regarded as monochromic to be used to excel in one's activities. This is however changing rapidly where today western polychromic influences have a speeded up he daily activities of the younger generation of many Thai people.

# Another Measure of the Economy the Standard of Living:

We are informed that the standard of living Is "the degree of wealth and material comfort available to a person or community". But as mentioned above material comfort alone is insufficient to make us happy or fulfilled.

#### The Difference between Standard of Living and Quality of Life

Sometimes, "standard of living" and "quality of life" are used interchangeably; but thev are two independent terms each with a different focus and impact on your life. When you're thinking about your current and future goals, it's a good idea to understand both concepts and see how they relate to each other. Your standard of living is defined by the way that you can afford to live, which makes it dependent on your salary or income, expenses and savings. Your determines standard of living the neighborhood you can afford to live in, the type of material goods you can buy, the type of vacations you can take, and so on. Standard of living does have some optionality to it, because although you may be able to afford very expensive items, high-priced neighborhoods, etc. you don't have to choose to spend your money in that way. Instead, you can choose to live below your means. However, you can also choose to live above your means-which means you create a standard of living that your income can't support. While you can live below your means forever, living above your means is not sustainable and will eventually catch up with you. It could also create so much debt that it severely impacts the real standard of living you can afford now and later.

Quality of Life. Your quality of life has little to do with income. Instead, Quality of Life focuses on your ability to spend your time doing those things that mean the most to you. While someone with a low income may have to spend, more hours working and have fewer personal hours, their quality of life can still be determined by how they decide to spend those few hours of personal time. The quality of your life is also affected by your health. Because your wellness can impact what you can invest in living life the way you want to. Investing in Standard of Living and Quality of Life You can make important moves right now to help boost both your quality of life and standard of living in the future.

- Get healthy, and stay healthyphysically, [to which I have added mentally and spiritually].
- Save sufficient money. This can increase your quality of life by allowing you more time to do what you want and less time to work. [this is largely a western perspective. In the east true artists and professionals live for their work] It can also increase your future standard of living by helping you afford more, later. i.e. delayed rather than instant gratification.
- Stay out of debt. Debt ties up future dollars for purchases you want to make today. Having little to no debt in the future means having more money for improving standard of living later or investing in time for quality of life. Again, this is largely a western perspective. In-fact today is all we have, whilst tomorrow is promised to no one. This eastern perspective does not mean that we should not plan and save for tomorrow, but instead that we should cherish the present and those around us and put sufficient aside for a possible future whilst at the same time continuing to contribute each day that we are physically and mentally able to do so. I have seen to many friends and acquaintances retire and wither in a relatively short time after they retire either voluntarily or

upon reaching a statutory retirement age. Interestingly the statutory retirement age is being raised in many developed countries as government funds are inadequate for the purpose. Staying out of debt requires that we manage our money instead of our money managing us. It is a truism that "time and money are wonderful servants and terrible masters."

• To paraphrase Aristotle, the ancient Greek philosopher who stated "Get to know yourself." You can only have a high quality of life, when you know yourself and understand what you enjoy doing. This in-fact should be our life-long process.

Striking a balance between Standard of Living and Quality of Life doesn't have to be mutually exclusive, but (it is suggested) they are tied together to some extent. They feed into each other with sacrifices made in one helping to bolster the other, but balances can be achieved. For example, for one who wants a high standard of living, there may be intense sacrifices in time early in life as they work to amass enough wealth to realize their standard of living goal, however, once they do amass that wealth, they can then begin to relax and may be able to increase their quality of life substantially. For others, their focus on quality of life brings about a standard of living that they enjoy—so there seems to be no sacrifice at all. When you're carving out your dream for the future, take a careful look at how both concepts fit and start making decisions now that will allow your individual priorities to be realized later. Conclusion:

So it us up to you my dear readers to decide whether or not we have given you sufficient food for thought for you to answer the question posed in the title of my paper today. The Sufficiency Economy -*How much is Enough and What Are The Constraints On This Philosophy and Practice: A Concept paper.* Frankly, each of us must find our own answer. We are all human but each of us is unique in our own way and in the way we relate to those around us and to our surroundings. In seeking happiness or at least peace of mind we all must navigate our way through this life seeking not to do harm to other beings and at the end of our life hopefully to make the world a better place than when we began this life journey together. If we can do that then I am sure our parents would be proud of us, as will be our children and students.

Two books well worth reading are Status Anxiety (Alain De Botton, 2005) and Faster (James Gleik 2000) provides numerous anecdotes of people who made themselves ill by focusing on material wealth and trying to live life and work in the fast lane to the exclusion of their artistic and creative selves. Their role models were the neighbors and work colleagues who had bigger houses; flashier cars; weekend properties; expensive club memberships or expensive water craft or aero planes. Another book The Pleasures and Sorrows of Work by Alain de Botton, describes the working lives off a small number of men and women working on what at first glance appear to be mundane jobs but in which they excel and find fulfilment. All of these books are relatively inexpensive and are available in Bangkok.

#### References

- Anonymous 1 2017, Projections of Population Growth available at <u>https://en.wikipedia.org/wiki/Projecti</u> <u>ons\_of\_population\_growth-accessed</u> <u>2nd February 2017</u>
- Central Intelligence Agency World Fact Book online 2015, <u>https://www.cia.gov/.../resources/the-world-factbook/index.htm\_accessed</u> 02 February 2017.
- CNES/CLS (2011). "AVISO Global Mean Sea Level Estimate". Centre National d'Etudes Spatiales/Collecte Localisation Satellites (CNES/CLS): Archiving, Validation and

Interpretation of Satellite Oceanographic data (AVISO). Retrieved 2011-07-29.

- De Botton, Alain, (2005), *Status Anxiety*, Vintage Books, New York
- De Botton, (2009, *The Pleasures and Sorrows of Work*, Vintage Books, New York,
- Field, Michael J. (December 2001). "Sea Levels Are Rising". Pacific Magazine. Archived from the original on 2005-12-18. Retrieved 2005-12-19.
- Gerland, P.; Rafferty, A. E.; Ev Ikova, H.;
  Li, N.; Gu, D.; Spoorenberg, T.;
  Alkema, L.; Fosdick, B. K.; Chunn,
  J.; Lalic, N.; Bay, G.; Buettner, T.;
  Heilig, G. K.; Wilmoth, J. (2014).
  "World population stabilization unlikely this century". *Science. AAAS*.
  346 (6206): 234–7. doi:10.1126/science.1257469
- Gleick, James, (2000), *Faster*, Vintage Books, New York.
- Global Warming Of 1.5 °C ipcc.chipcc.ch/pdf/specialreports/sr15/sr15\_spm\_final.pdf\_AC ESSED 17 October 2018
- Goddard, Paul, B., Jianjun Yin, Stephen M.
  Griffies & Shaoqing Zhang (24
  February 2015). "An extreme event of sea-level rise along the Northeast coast of North America in 2009–2010". Nature Communications. 6: 6346. doi:10.1038/ncomms7346.
- Goodell Jeff, (2013). "Goodbye, Miami". *Rolling Stone*. Retrieved June 21, 2013. The Organization for Economic Co-operation and Development lists Miami as the number-one most vulnerable city worldwide in terms of property damage, with more than

\$416 billion in assets at risk to storm-related flooding and sea-level rise.

- Greiling, Walter, 1954, : Wie werden wir leben? (*"How are we going to live?"*) Econ publishers, Munich
- He, Wan; Goodkind, Daniel; Kowal, Paul (March 2016). "An Aging World: 2015 – International Population Reports" (PDF). United States Census Bureau. Retrieved 26 June 2016.
- Human Development report 2007/2008. "Climate Shocks: Risk and Vulnerability in an Unequal World, hdr.undp.org/media/hdr\_20072008\_s ummary\_english.pdf
- Hunter, J.A. (August 12, 2002). "A Note on Relative Sea Level Rise at Funafuti, Tuvalu" (PDF).
- Hussein, Shihab, (ed.) (1989) ), "Policy Implications of Sea Level Rise: The Case of the Maldives". Proceedings of the Small Island States Conference on Sea Level Rise. November 14–18, 1989. Malé, Republic of Maldives. Retrieved 2007-01-12.
- IPCC TAR WGII report (Impacts, Adaptation Vulnerability)
- IPCC AR3. "Mean sea level change from satellite altimeter observations".
- Jacobson, Rebecca. "Engineers Consider Barriers to Protect New York From Another Sandy". PBS. Retrieved 26 November 2012.
- Keyes, Charles, *Finding Their Voice: North-Eastern Villagers and The Thai State*, 2014, Silkworm Press Chiengmai
- Klein, Alice. (2016) "Five Pacific islands vanish from sight as sea levels rise". *New Scientist*. Retrieved 2016-05-09.

- Le Page Michael (2015). "Apparent slowing of sea level rise is artefact of satellite data"
- Levine, Mark , (2002). "Tuvalu Toodle-oo" Outside Magazine. Retrieved 2005-12-19.pdf
- LSA (2011-03-16). "Laboratory for Satellite Altimetry / Sea level rise". National Environmental NOAA: Satellite, Data, and Information Service (NESDIS), Satellite Oceanography and Climatology Division, Laboratory for Satellite Altimetry (LSA). Retrieved 2011-07-29.
- Manarungsan, Sompop, 1989, Economic Development in Thailand, 1850-1950: Response to the Challenge of The World Economy, Institute of Asian Studies, Chulalongkorn University, Bangkok.
- Martínez, DE (1998). "Mortality patterns suggest lack of senescence in hydra". *Exp Gerontol.* **33** (3): 217–225. *doi:10.1016/S0531-5565(97)00113-*7. PMID 9615920.
- Melting Permafrost | Weather Underground available at <u>https://www.wunderground.com/reso</u> <u>urces/climate/melting\_permafrost.asp</u> <u>accessed</u> 17 October 2018
- Melting Permafrost Is Turbocharging Climate Change <u>https://www.newsweek.com/2016/06</u> /10/permafrost-greenhousegases...acessed 17 October 2018
- Miami Dade.gov (2014), "Climate Change and resilience building: a reinsurer's perspective" (pdf)
- NASA/JPL 2017"Ocean Surface Topography from Space"available at www.jpl.nasa.gov/missions/surface-

*water-and-ocean-topography-swot.* accessed 8th February 2017

- Nerem; R. S.;Chambers, Don, P., Choe, C., Mitcham, Gary., T., (2010)
  "Estimating Mean Sea Level Change from the TOPEX and Jason Altimeter Missions", *Marine Geodesy.* 33: 435– 446. doi:10.1080/01490419.2010.491031. University of South Florida.
- National Geographic, Sea Level Rise available at <u>http://www.nationalgeographic.com/</u> <u>environment/global-warming/sea-</u> <u>level-rise/ accessed</u> 8<sup>th</sup> February 2017
- Newmark, PA; Sánchez Alvarado, A (2002). "Not your father's planarian: a classic model enters the era of functional genomics". *Nat Rev Genet.*3: 210–219. doi:10.1038/nrg759. PMID 11972158.
- Patel, Samir S. (April 5, 2006). "A Sinking Feeling", Nature. Retrieved 15 November 2007.
- Payutto, Ven. P. A. "Buddhist Economics - *A Middle Way for the Market Place*" (PDF) available at <u>www.urbandharma.org/pdf/Buddhist</u> <u>Economics.pdf</u> accessed 8th February 2017

Phongpaichit Pasuk and Baker, Chris, eds.,2015 Unequal Thailand, National University, Singapore: Pollock, Rufus 2008, Buddhist Economics \_ accessed 8 February 2017, at http:www.rufuspollock.org/2008/11/ 03/buddhist-economics

Randers, Jørgen (2012). 2052: A Global Forecast for the Next Forty Years. Vermont: Chelsea Green Publishing. p. 62

- Schumacher, E., F., 1968 Buddhist Economics, *Resurgence Magazine*.
- Schumacher, E.,F, 1973 Small is Beautiful; Economics as if people mattered. Blond and Briggs, London.
- Smith, Lauren (2016). "Extinct: Bramble Cay melomys". *Australian Geographic*. Retrieved 2016-06-17.
- Soons, Alfred Henry Adriaan, (1989). Sea borders and rising sea levels: international law considerations about the effects of rising sea levels borders on at sea: speech, pronounced with the acceptance of the post of professor in international law at the University of Utrecht on 13 April 1989] stephensp.net16.net/articles/grossnatl %20happylongbuddhist.do\_ accessed 8<sup>th</sup> February 2017
- .Stiglitz,Joseph, E., (2013), *The Price of Inequality,W W Norton, New York* United Nations accessed at http://<u>www.un.org/en/development/d</u> <u>esa/news/population/2015-</u> <u>report.htm\_accessed</u> 01022017)
- United Nations accessed at http://www.un.org/News/Press/docs/ 2005/pop918.doc.html 02\_February\_ 2017\_deadlink
- United Nations Department of Economic and Social Affairs, Population Division. 2004, "World Population to 2300" (PDF) \_accessed 02 February 2017.
- White, N. (2011). "CSIRO Global Mean Sea Level Estimate". Commonwealth Scientific and Industrial Research Organisation (CSIRO) / Wealth from Oceans National Research Flagship and the Antarctic Climate and Ecosystems Cooperative Research

Centre (ACE CRC). Retrieved 2011-07-29.

- Yale. (2013)"IPCC's New Estimates for Increased Sea-Level Rise"
- Yin, Jianjun & Stephen Griffies (2015). "Extreme sea level rise event linked to AMOC downturn". CLIVAR.
- Zsolnai, Lazlo, 2011, "Buddhist Economics for Business" corrected (PDF). laszlozsolnai.net/sites/default/files/3/docu ments/Buddhist\_accessed 8<sup>th</sup> February, 2017