



Konrad
Adenauer
Stiftung



**ECOLOGICAL, SOCIAL & ECONOMIC
SUSTAINABILITY**

Perspectives for Thailand and ASEAN

Edited by
Roman Meinhold

ECOLOGICAL, SOCIAL AND ECONOMIC
SUSTAINABILITY

Perspectives for Thailand and ASEAN

Konrad-Adenauer-Stiftung

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Ode on Sustainability

Glen Chatelier

The shades of darkness around fall
Night descends in a dark pall
With the death of day, evil ends
Night shall cover what ill impends
Distraught voices reach to horizon's limit
Fukushima's dented with the tsunami split
Nuclear waste imperils a human settlement
Nature wastes under humankind's ill intent
Green fields turn parched brown under a chemicalized sun
Barren, the valleys in hazes along the balding hills run
Rotting carcasses of human, bird, animal and fish
Lie in wastelands grey and putrid, fecund the stench
The earth's spirits whisk away the last of nature's delights
What remains is but despair and frights
Man the Shawian superman must now keep low
His handiwork the scratches and stabs only show
What he sought in greed turned others to bleed
Mountains crumbling into oceans, trees into weed
Intellectual thought and endeavor all yield
Only empty facades to what prowess needs shield
The poet on this specter can only gaze with soul bereft
The greed of man leads to plunder and theft

Such dreams must end for their impacts demoralize
Civilization's glories must endure to chastise
The reckless search and scramble for more
Billions of currencies only for ill-health's store
Voices from towering heavens come streaming
Choric serenades to enliven man's higher realities
Urging, calling encouraging Man's higher existence to effect
The scourge of greed to defeat, thus the greater glory to reflect
Through dialog, through peace, understanding and solidarity
The world of equity and sustainability to create
In the abode of abiding knowledge and wisdom to assemble
Through thoughts, words and gestures, a new world erect
Where bad effects end and new hopes emerge
Through concerted effort and dignified will
To enjoy the present, but to maintain still
Resources for the morrow with character and zest
Effect that new world which would stand the test
Of the mistakes of yesterday, but for the morrow store
The ideal world which to humankind's future we bestow
Through sustainability, sustenance and nobility
The greater panacea, the renaissance of creativity
To such will, let the new dream be born, take shape
A new undying world, let our goodness create.



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Preface

Michael Winzer

In 2015 the inception of the ASEAN Economic Community (AEC) will bring a fundamental change to the dynamics of Southeast Asian countries and their neighbours. A single market and common production base for all ten member states will boost the economic growth and competitiveness of the whole region.

Such a development with many chances of success also brings some challenges. Economic growth often takes a toll on our planet and nature. Moreover, if there is neither a fair distribution of income nor an appropriate social security for the growing number of employees in the industrial and service sectors, a growing economy can have many negative impacts and lead to deadweight costs.

The AEC will only succeed if the stakeholders are successful in finding a balance between economic, ecological and social interests. Traditional values and religion play important roles in finding ways for a sustainable development of the AEC. Concepts like Sufficiency Economy can be an important inspiration in developing perspectives for the sustainable growth of the ASEAN economies.

This anthology aims to contribute to discussions on enhanced social and environmental values in the development of the AEC. For this reason, recalling the cultural and religious background of the region is indispensable. In today's global competition, economic considerations are essential to short-term success. In order to be successful in the mid- and long term, it is paramount to maintain the natural foundations of life, as well as to ensure the protection of social justice and the security of all human beings. This can only be provided by a value-oriented economic and social order based on sustainability. In this book the discussion of such values, nurtured by

local culture, tradition, history and religion, will initiate and present future perspectives on this concept.

It is a very enriching experience to read the papers published in this anthology. They present various points of view and perceptions of philosophical, religious and economic nature; all together, they give a broad assessment of sustainability in the ASEAN region. The major aim of this publication is not necessarily to give advice or to recommend certain models for sustainability in Thailand and ASEAN, but rather to enrich the discussion with various ideas and theories, keeping in mind the cultural and historical background of the region.

In cooperation with the Graduate School of Philosophy and Religion at Assumption University of Thailand, distinguished academics have contributed to this project. Their findings will hopefully add substance not only to further academic but also to political debates. I would like to thank the Graduate School of Philosophy and Religion for our longstanding cooperation and the successful completion of this project, and all the distinguished speakers of our joint conference for their insightful presentations and valuable contributions to this anthology. I would like to give special thanks to Roman Meinhold whose work and expertise have been invaluable.

The Konrad-Adenauer-Stiftung has been active in Thailand for more than 33 years, with the primary goal of promoting democratic structures, pluralism and the rule of law based on such values. Therefore, our foundation cooperates closely with local partners in the pursuit of a common vision for human development, societal progress and political and social stability. We are committed to our vision of a freer and more prosperous development which shall be a source of inspiration for our future activities.

Introduction

Roman Meinhold

This anthology aims to extend and deepen our awareness of ecological, social and economic sustainability in Thailand and the ASEAN region and thus to intensify the discourse amongst decision makers, academics, students and the wider public. The objective of the papers in this volume is to give recommendations on how sustainability in economic, social and environmental sectors could be promoted. The book brings together most of the papers presented at the conference *Ecological, Social and Economic Sustainability—Perspectives for Thailand and ASEAN*, which was held on 28 November 2013 at Assumption University of Thailand. This conference was jointly organized by Konrad-Adenauer-Stiftung, Bangkok and the Guna Chakra Research Center, Graduate School of Philosophy & Religion, Assumption University of Thailand. The papers presented at the conference have been summarized by George Okoroigwe at the end of the book. Three additional papers have been fused into the collection so as to complement the presented papers and to complete the scope of the anthology.

Over the last few decades the Thai economy has been developing and successively integrating with other economies in and beyond the ASEAN region. Due to the ASEAN countries' integration processes, the community is facing political, economic, social, educational and environmental challenges. In order to turn challenges into opportunities that serve Thailand and the ASEAN region in an inter-generational way, it is pertinent to draft, disseminate and discuss perspectives for sustainability and well-being. The ASEAN declaration on Environmental Sustainability states:

ASEAN shall work towards achieving sustainable development as well as promoting clean and green

environment by protecting the natural resource base for economic and social development including the sustainable management and conservation of soil, water, mineral, energy, biodiversity, forest, coastal and marine resources as well as the improvement in water and air quality for the ASEAN region. ASEAN will actively participate in global efforts towards addressing global environmental challenges, including climate change and the ozone layer protection, as well as developing and adapting environmentally-sound technology for development needs and environmental sustainability.¹

The United Nations Millennium Declaration in the section on “Values and Principles” considers “*respect for nature*” as a “*fundamental value*” that is “*essential to international relations in the twenty-first century*”.² And further:

Prudence must be shown in the management of all living species and natural resources, in accordance with the precepts of sustainable development. Only in this way can the immeasurable riches provided to us by nature be preserved and passed on to our descendants. The current unsustainable patterns of production and consumption must be changed in the interest of our future welfare and that of our descendants.³

The papers in the three sections of this book address environmental problems, values and perspectives implied in the United Nations

¹ Overview of ASEAN Cooperation on Environment, ASEAN Socio-Cultural Community (ASCC) Blueprint 2009-2015, Section D. Ensuring Environmental Sustainability: <http://environment.asean.org/about-us-2>

² Resolution adopted by the General Assembly, [without reference to a Main Committee (A/55/L.2)], 55/2. United Nations Millennium Declaration: <http://www.un.org/millennium/declaration/ares552e.htm>

³ Ibid.

Millennium Declaration and the ASEAN Declaration on Environmental Sustainability. **Part I: Nature & Destruction** highlights problems and implications of nature's destruction and offers general as well as concrete perspectives for economic, social and ecological sustainability. **Part II: Ecological & Economic Sustainability** renders Sufficiency Economy as a 'philosophy' that significantly contributes to the local and regional discourses on sustainability, and **Part III: Utopias & Perspectives** utilizes the freedom of "*philosophers who dream that sweet dream*"⁴ of creating 'utopian thought experiments' in order to draw tangible conclusions for sustainability perspectives.

Charn Mayot's paper on *Philosophical Foundations of Agri-Nature Farming for Sustainable Development in Thailand and the Mekong River Basin* looks at Eastern and Western philosophical values, virtues and other implications of green, natural and organic farming concepts that are contributing to sustainable development that is of significant importance to the Mekong River Region. Chamniern Paul Vorratnchaiphan addresses a number of transboundary problems caused by hydropower dams, monoculture plantations, wildlife trafficking and illegal deforestation. He hopes that an emerging integration of ecology and spirituality will help to address the current local and regional transboundary environmental problems. *Chiron and the Machines of Loving Grace* by John T. Giordano takes nature's destruction and our related credo of efficiency and 'technophilia' as signals that remind us that we are in a need of a "breaking of time" and an "arresting of momentum", requiring new perspectives and creativity. This, he claims, also necessitates a re-questioning of ourselves, not as individuals, but as a mysterious and conscious part

⁴ Immanuel Kant is referring in his essay "*To Perpetual Peace. A Philosophical Sketch*" (1795) to the philosophers' freedom (and implicit obligation) to think forward even though the suggestions brought forward might not be pragmatic or practical *prima facie*. [AA 343]

of life and nature. Apichai Puntasen in his contribution *Buddhist Economics and Ecology: A Lesson for the Future of the ASEAN Community* contrasts mainstream economics, which is an economics of greed, with Buddhist economics whose goal is not to maximize utility but to promote a healthy life for the individual and wellness, peace and tranquility for the society. The three highly pertinent and also in principle compatible concepts of Sufficiency Economy, ecofeminism and sustainability are brought into relation in Subhavadee Numkanisorn's contribution *Ecofeminism, Sustainability and Sufficiency Economy – Perspectives for ASEAN*. Swiss economist Hans Christoph Binswanger's perspective on *Plato's Concept of a Sustainable Economy* infers eight tangible and pertinent sustainability criteria from the philosopher's last and most voluminous but seldom read dialogue *Nomoi*. Binswanger reminds us that the concept of sustainability is at least 2000 years older than its *terminus technicus*, but sustainability as a widely lived value is still a desideratum. In my own *Reflections on Sustainable and Holistic Lifestyles in Ecotopia* I explore lifestyles in Ernest Callenbach's novel *Ecotopia* and highlight their relevance for sustainability and well-being in the context of ASEAN. For the purpose of giving a normative orientation for holistic-sustainable development I propose an index of holistic well-being.

Sustainability promoting suggestions brought forward in this volume range from general remarks (concerning environmental relevant virtues, revaluation and adjustments of attitudes and lifestyles) to concrete recommendations. Such more tangible recommendations include green farming techniques, ethically justifiable forms of land and water usage, distribution and management, stronger promotion of green urban areas and ecosystems, pricing and taxing mechanisms that include sustainable and ecological dimensions, and the promotion of alternative energy, just to name a few.

Being in contact with the contributors for some time it did not escape my attention that the topic of sustainability and related nature valuing concepts are issues that are dear to all the authors who have contributed to this volume. There surely is a more or less implicit hope that this commitment of taking care of the environment in the ASEAN region will soon reach beyond the circles of nature-respecting academics, decision makers, NGO representatives and environmental enthusiasts. This collection of articles seeks to make a contribution to extend this hope and commitment by explaining why we have to protect the environment in the ASEAN region and it suggests a spectrum of perspectives how that could be pursued.

This anthology and the conference would not have been possible without the generous support from Konrad-Adenauer-Stiftung (KAS), Bangkok and the enthusiastic encouragement from Assumption University of Thailand (AU). I therefore would like to thank the decision makers and supporters from both institutions, as well as the conference presenters and the authors of this anthology for their valuable contributions. In particular I would like to thank Mr. Michael Winzer, Resident Representative of KAS, Ms. 'Kiad' Sarinya Tankaew, Project Assistant of KAS, Asst. Prof. Dr. Warayuth Sriwarakuel, Dean Graduate School of Philosophy & Religion (GSPR), AU, Arjan Wanida Nanthawanij, Guna Chakra Research Center (GCRC) at GSPR, Jonathan L. Catalano, GCRC/GSPR and Asst. Prof. Dr. Alexander J. Klemm, GCRC / Graduate School of English, AU for their support in all matters related to the conference and this anthology.

In order to make further contributions to the promotion of the discourse on environmental issues in the ASEAN region, Konrad-Adenauer-Stiftung and Assumption University are jointly organizing a conference in September 2014 and publishing an anthology that is dealing with "Environmental Values Emerging from Cultures and Religions of the ASEAN Region".

Part I

Nature & Destruction

ECOLOGICAL, SOCIAL AND ECONOMIC
SUSTAINABILITY

Perspectives for Thailand and ASEAN



Ficus Religiosa L.

Photograph. Catalano, J. L. 2014. *Ficus Religiosa* L: species of tree within the Moraceae (Fig) family. It is commonly called Bo, or Bodhi tree.

1:

Philosophical Foundations of Agri-Nature Farming for Sustainable Development in Thailand and the Mekong River Basin

Charn Mayot

Introduction

Thailand, from the beginning was an agricultural country in which the majority of the population lived in close-knit communities. On the positive side, it is a communal way of life in which care and share are patterns of living together. On the negative side, however, it is a patronage system in which clan relationship is the dominant foundation of mutual support, sharing, and co-existence. Due to the abundance of natural resources, Thai people exploited these without any concern for conservation. Some were for consumption in the country. The majority were for export in exchange for foreign currencies. Products exported to foreign markets were retrieved from nature and/or supplied by nature from waterways, beneath the ground, forests, and fertile lands. To maintain foreign trade, timber was cut down for export until forest coverage was reduced from 75 per cent in the 1960s to 15 per cent in the 1990s. Raw minerals were excavated from underground for export, while habitable/arable lands were completely destroyed. Rice planting was expanded and promoted increase in the GDP. Each year rice export accommodated

60 per cent of the GDP until the 1980s. Farmers were considered the backbone of the country. However, they always remained the poorest. The advent of the 'green revolution' in early 1990 was said to help farmers to increase the rice production per rai, to increase their income, and to eradicate their poverty.¹

The Plight of Agricultural Practice on the Basis of the Green Revolution Movement

The application of modern agriculture techniques of the green revolution movement led to wealth and prosperity for large scale farming owned by entrepreneurs, but had opposite results for the small-scale Thai farmers of Thailand and other developing countries (Pretty et. al., 1992, pp. 97-98). It led to numerous negative consequences such as deep-rooted indebtedness, shortened life expectancy, environmental crises, and the loss of long lasting social and cultural bonds. In this section, the author will give a short illustration of how the modern agricultural techniques of the West led to the aforementioned negative results.

Most of the problems were connected to the increased use of pesticides and insecticides. This increased use of pesticides and insecticides endangers farmers' health: When the chemicals are sprayed indiscriminately over the targeted plantation area, only a small portion hits the target, the rest dissipates into the air as vapor. The vapor is inhaled by the farmers who spray the pesticides and by other farmers who work in farms nearby. The longer the hours they spend on spraying these insecticides and pesticides, the greater is the amount they inhale. The poisonous chemical gradually deteriorates their health and shortens their life span. According to the World Health Organization report, there were 4046 cases of patients suffering from pesticide poisoning with a reported death toll of 289 in 1990 (WHO, qtd. in ADB/ESCAP on Human Health ch. 16, p. 425).

The Thai agricultural society is paternal in the sense that the father is the key leader whose function is to earn an income to support the whole family. When the father of the family dies prematurely, the whole family, especially small children, will lack important opportunities in life.

The accumulation of poisonous chemicals in fruit and vegetables endangers the consumers' health. When people eat these fruits and vegetables, they gradually accumulate poisonous chemicals in their body. Even though there is no scientific proof for the number of the Thai people suffering or dying from consuming food poisoned by insecticide and pesticides, there is clear evidence showing that Thai rural people die from diseases that were not common among them in past generations, e.g. cancer in their lung, liver, and respiratory system.

Insecticides weaken and kill wild life of other living species in the same region. In natural settings, certain kinds of insects are predators of other kinds of insects and different kinds of these insects eat and live on different kinds of plants. When pesticide is sprayed indiscriminately, all kinds of insects are killed and the natural system of insect control is gradually destroyed. In addition, targeted insects that survive develop greater resistance to insecticides, which results in a demand for a greater amount of insecticides and more investments by the farmers. A great amount of chemicals sprayed on targeted plants and insects accumulates in the soil. This accumulation is gradually washed away into the ground water, polluting rivers, flora and fauna. Eventually, sources of food and drinking water of the whole community become contaminated.

The increased use of chemical fertilizer undermines the quality of the soil in the long run. This requires the farmers to use more fertilizer. Amphur Samerng, Chiangmai Province, is an area in Thailand that is very well known for growing strawberries. During their strawberry festival held at the end of January each year, award

winners show giant strawberries weighing at least a kilogram. Pra Ajarn Toang, the abbot of Wat Prathat Doi Phasoam, Moo Baan Oamlong, Amphur Samerng says that the failures behind successes, especially by those of low scale farmers, are greater than the apparent successes that they show to tourists and visitors. Since strawberries are not of Thai origin, they need a lot of chemical fertilizer, pesticides, and insecticides. Farmers have to increase the volume of chemicals each year. At the beginning and during the plantation season (Oct. to Dec.) farmers are not required to pay for the chemicals they need. They just write and sign their names and take the chemicals they want from the local suppliers. They pay for the chemicals after they have sold their crop and products. They can make millions each year, but they have to invest more. The more money they earn, the deeper in debt they become. Some of them try to survive by borrowing money for greater investments, and they are pulled down deeper in a vicious circle. In the first stage of his involvement, Pra Ajarn Toang advised his followers to use organic fertilizers and organic insect repellents; but they failed. When other farmers in the nearby plantation areas use chemicals, unwanted insects and fungus that flee from their farm populate the farms of other farmers who do not use or use less chemicals.

In reality, financial losses of these farmers and other farmers in Thailand and in other Asian countries have been turned into the gain and the wealth of few chemical suppliers and MNCs such as Dupont, Bayer, Ciba-Geigi, Shell, and Monsanto. When farmers become poorer due to their debts, a solution for them is to migrate to Bangkok or other big cities to sell their labor on construction sites, in factories, or on commercialized farms in the Kanchanburi, Ratchaburi, and Chonburi provinces. Because of their limited income, only parents and other working family members can migrate to cities, while children and people of old age are left behind at home in the care of aging people who cannot generate an income. The practice of

feeding children by post (Lieng Luke Thang Praisanee) eventually leads to other social problems such as a broken home, youth violence, absence from school, sexual permissiveness, cohabitation, and an increasing rate of sexually transmitted diseases.

Suggested Solutions to the Problems

The economic crisis in 1996-1997 was both good and bad news to country people moving to Bangkok for jobs. The bad news was that when factories closed, they were unemployed and had to return home. The good news was that their families were united again. When they lost jobs in Bangkok, they had to create jobs for their own on the farmland that they had left. Though such farmland might not have enabled them to earn as much money as they did during their stay in cities, it did enable them to survive. In the midst of hopelessness, the King of Thailand shed light on his subjects by reminding the Thai people of His words he told them years ago when Thailand was trying to run after the West to be the fifth tiger of Asia. In his royal address on the eve of his birthday anniversary on 4 December 1997, His Majesty said: "In fact I have often said ... to be a tiger is not important. The important thing for us is to have a self-supporting economy. A self-supporting economy is to have enough to survive." (Chamnong, 2006, p. 23)

On other occasions the King has reminded the Thais that their land is rich² in a sense that it is located in the tropical zone in which the rainy season lasts four to eight months per year. Fertile soil suitable for growing almost all kinds of plants such as fruit, vegetables and especially rice is found in the low land and along water ways. Even the soil on highlands along the hills and mountains is fertile and suitable for planting different kinds of fruit, vegetables and highland rice.

The Thai tropical rain forest is bio-diversified. According to 'Thailand's Biodiversity' report of the Office of Natural Resources and Environmental Philosophy and Planning (ONEP):

Thailand has approximately 15,000 species of plant which account for 8% of estimated total number of plant species found globally (OEPP, 1992). These numbers clearly exceed the numbers of plant species in temperate countries such as Norway and Sweden which have approximately 1,800 plant species each (WRI, 1992). Thailand also has approximately 1,721 species of terrestrial vertebrate (mammals, birds, reptiles and amphibians) (Theerakupt and Panha, 2002) in comparison to 299 and 328 species found in Norway and Sweden, respectively (WCMC, 1992).” Our coastal mangrove is abundant with marine life. “Thai waters support more than 2,000 marine fish species, accounting for 10% of total fish species estimated worldwide (Wongratana, 1989). Thailand also has approximately 2,000 marine mollusk species (Pasuk et al., 1993) and 11,900 species of marine invertebrate.³

The dilemma for Thai farmers is how to conduct their farming in such a way that they will not fall in the trap of a debt circle. (1) If they use the same farming method they used before, they could be in deep debt again. (2) If they change to a new farming method that requires a new way of understanding of their relationship with nature and the world, they have to learn and make a radical change. During the period after the economic downturn in 1996-2000, there were at least two interrelated-farming methods offered to them. (1) The New Theory of His Majesty the King based on the Philosophy of Sufficiency Economy, and (2) Natural Farming or Agri-Nature. However, these two farming methods are intertwined. Most of the natural farming practices in Thailand find their foundation in the Philosophy of Sufficiency Economy.

Agri-Nature Farming and Related Farming Concepts

Three closely related farming concepts will be briefly explained in the following section:

Natural Farming probably refers to the ecological farming method founded by Masanobu Fukuoka, a world-famous Japanese farmer-philosopher. Fukuoka describes his farming method in Japanese as 自然農法 meaning ‘the Fukuoka Method’, ‘The Natural Way of Farming’ or the ‘Doing-Nothing Farming’, which is based on “a nature free of human meddling and intervention”. Non-interference with nature is considered strife “to restore nature wrought by human knowledge and action, and to resurrect a humanity divorced from God” (Fukuoka, *The Natural Way of Farming: The Theory and Practice of Green Farming Philosophy*).

Organic Farming, according to the HDRA (an Organic Farming Organization) is a farming method “in harmony with nature rather than against it. This involves using techniques to achieve good crop yields without harming the natural environment or the people who live and work in it.”⁴

Agri-nature Farming, according to Agri-Nature Foundation, refers to integrated farming activities such as plantation, fishery, husbandry, and forestry that are based on the ‘New Theory’ and the ‘Philosophy of Sufficiency Economy’ of His Majesty King Bhumibhol Aduljadej.⁵

Though the definitions of these three terms are more or less different, they share common practices: (1) They all say no to chemical fertilizers, pesticides and insecticides. (2) They keep and build good soil structure and fertility by using recycled and composted crop wastes and animal manures, the right soil cultivation at the right time, crop rotation, green manures and legumes, and mulching on the soil surface. (3) They control pests, diseases and weeds by means of careful planning and crop choice, the use of

resistant crops, good cultivation practice, crop rotation, encouraging useful predators that eat pests, increasing genetic diversity, using natural pesticides. (4) They use water resources and natural resources with care and respect for optimal results.

The four aforementioned common practices suggest their deep respect for other forms of life and nature founded in Buddhism.

Philosophical Foundations of Agri-Nature Farming⁶

Thailand is a Buddhist country. The majority of the Thai population, around 96 percent, are Buddhists, and Buddhism is practically regarded as the national religion, though not by the constitution. Buddhism is therefore a way of life for Thais. Most of the Thais integrate Buddhism into their practical life, most of the time without realizing this. In the same way, their practice of agri-nature farming has found a deep root in Buddhist philosophy. Buddhist principles that have direct influences on the practice of agri-nature farming are the respect for other forms of life, the respect for mother earth and nature, the middle path, and the virtue of frugality.

Respect for Other Forms of Life

A common practice of agri-nature farming is the rejection of insecticides for fear that such practice would kill other kinds of insects and life forms indiscriminately. Agri-nature farming drives away unwanted insecticides with other means that do not pose dangers to other kinds of insects and life forms by careful planting and crop choice, the use of resistant crops and useful predators that eat pests and natural pesticides (if necessary), good cultivation practice, crop rotation, and increasing genetic diversity. These practices could find a foundation in the first Buddhist *sila*, *panatipata*. Buddhism considers the destruction of life and bad treatment of

humans and animals a violation of the first *sila* (*panatipata*) leading to bad *karma* (bad acts) that becomes an obstacle of the attainment of *Nibhana* and prolongs the term of the karmic circle.

In the *Vinaya* Buddhist monks and nuns are instructed to refrain from digging the ground, performing agriculture or clearing the temple yard to make sure that they will not kill and harm even the smallest living beings intentionally, unintentionally, directly, and indirectly (Vin iv, 125). Buddhist monks are required to confine themselves in a temple during the lent period (*Khaophansa*) to assure that they will not step on small living beings that come out to the surface during the rainy season (Vin, I, 137). Buddhist monks are not allowed to cook by themselves for two reasons: (1) to keep them away from killing any living thing for cooking and (2) to allow believers to do merit. Buddha allows monks and nuns to eat meat, but only when they have not seen or heard the act of animal killing, or suspect that the animals were killed to prepare food especially for them (see also *Jiva Sutta*, M, I, 368-9). Moreover, Buddhist monks are not allowed to tell anyone of their wish to eat certain kinds of flesh so to make sure that they have neither any intention to kill, nor any indirect involvement in or support of the act of killing. In the same *Sutta*, “Buddha says that anyone who kills an animal, especially for a monk, acquires demerit, as the animal experiences pain and distress” (de Silva, 1998, p. 212). As a middle path Buddhism does not require people to follow the strict rules of monks and nuns. However, the Lord Buddha regards activities⁷ involving destroying, killing and injuring life directly and indirectly unworthy and considers them unworthy to pursue. The positive connotation of the first Buddhist precept involves the rejection of violence and the cultivation of the positive values of love (*karuna*) and compassion (*metta*) towards humans and animals

The Lord Buddha preached the love for all kinds of creatures in Sn.V.143-52 thus:

Whatever breathing beings there may be,
No matter whether they are frail or firm,
With non expected, be they long or big
Or middle-sized, or be they short or small
Or thick, as well as seen or unseen,
Or whether they are dwelling far or near,
Existing or yet seeking to exist,
May beings all be of blissful of hear.
(S.V.143-152)

Respect for Mother Earth and Nature

Agri-nature generally calls soil the 'Mother Earth'. It is Mother Earth because it is the origin of all kinds of plants and the sustainer of all life forms, including plants, animals, insects, and human beings. For them, Mother Earth is not merely a name but it is the entity that deserves treatment with respect and due care. Agri-nature farming keeps and builds good soil structure and fertility by using recycled and composted crop wastes and animal manures, the right soil cultivation at the right time, crop rotation, green manures and legumes, and mulching on the soil surface. There exist four soil treatment principles according to agri-nature farming:⁸

1. Feed the soil and let the soil feed the plant.
2. Grow vetiver grass to protect soil erosion.
3. Mulch the soil with leaves or straw to reduce the evaporation of moisture.
4. Avoid chemical fertilizers, because that it will harm 'Mother Earth'.

These practices connote respect for mother earth which is also grounded in Buddhist philosophy. Though Buddhism does not mention bad treatment against plants and natural objects a violation against first prescription explicitly, the Lord Buddha instructs his monks and nuns neither to dig the ground, nor to cut trees, nor to pull out vegetables for two reasons: (1) to avoid unintentional killing and harming tiny creatures, and (2) to avoid terminating the natural growth of plants and vegetables (Vin, IV, 34; I, 137; IV, 296; IV, 32-33; iv 49,125). Moreover, “violent and irresponsible attitude (including treatment) to nature may have indirect moral and karmic relevance” (de Silva, 2009, p.15), affect the attainment of Nibhana and prolong the karmic circle indirectly. This Buddhist appreciation of nature is seen clearly in two examples. Firstly, Lord Buddha chooses to stay under the shade of the Bo-tree to attain enlightenment. Secondly, he links the natural environment with spirituality through his instruction to his monks to seek solitude and peace in forests, roots of trees, or empty places. Thus Buddhism sees the connection between nature and spirituality in two respects. Firstly, nature is seen as a cradle that provides a suitable environment for meditation to the attainment of *Nibhana*. Secondly, an aesthetic experience in the beauty of nature leads the development of pure calmness and joy that uplifts spirituality. However, such a place should be made accessible to nearby villages so that Buddhist monks could perform the functions of food-collection and preaching village people.

Agri-Nature Philosophy and Philosophy of Sufficiency Economy

Agri-nature farming in Thailand is actually an application of the Philosophy of Sufficiency Economy in the agricultural sector. In the opinion of the author, the Philosophy of Sufficiency Economy is a practical version of Buddhist philosophy that integrates Buddhist ethics, social thoughts, epistemology, and metaphysics into one

holistic system that can be understood and practiced by scholars, religious people and the general public. All key principles of the Philosophy of Sufficiency Economy are contained in Buddhism. In practice, a community that performs agri-nature farming adopts the Philosophy of Sufficiency Economy as a basis for the individual, family, and communal life. In the following, the author will give a brief explanation of their relationship.

Principle of Middle Path and Virtue of Frugality

The principle of moderation is actually at the heart of Buddhism, i.e., the religion and philosophy of the middle path. In the same token, the Philosophy of Sufficiency Economy is a socio-economic theory based on the middle-path of Buddhism, and moderation is one of its three key components, those being moderation, reasonableness, and self-immunity. The implementation of the middle-path principle in daily social and economic life can be illustrated by the adherence to the lifestyle of frugality. According to the Longman Dictionary of Contemporary English (1978), frugality means “the quality of being economical in money, and food.” Helena Norberg-Hodge, who spent some years studying the lifestyle of frugality of the Ladakh people, describes it as “being careful with limited resources [...] not misery rather that it is frugality in the original sense of fruitfulness, getting more out of little the Ladakh people will find further employment out of it” (Norberg-Hodge, 1992, p. 46 qtd. in de Silva, 1998, p. 154).

Frugality according to the dictionary definition and the definition by Helena Norberg-Hodge’s field study is a common lifestyle of a family and community that practices agri-nature farming. The expressions of their commitment to the lifestyle of frugality are seen in (1) a system of family balance to keep overall expenses below incomes, (2) the reduction of expenses by eating what they plant and plant all what they need for their daily diet and for

producing what they need for their daily use, such as soap, shampoo, and detergents, (3) the optimization of all items they have, (4) share and trade inside the community first so as to reduce costs of transportation and to save energy.

The lifestyle of frugality has its foundation in the teaching of the Lord Buddha. Though the Lord Buddha denounces an attachment to material wealth, He admits the fact that lay people have duties and responsibilities to earn financial support for their family. He advises them to work with the “sweat of one’s brow” in order to mount up riches “as ant-heap growing high” (D Tr., III, 189). However, he advises them to earn and to use worldly riches with the spirit of detachment, not to be too delighted with the gain and too disappointed with the losses. They should hold a scale to keep balance between incomes and expenses (A, iv, 281 qtd. in de Silva, 199, p. 154). When income has been abundantly accumulated to great wealth, he also gives the advice how to use their wealth in the right way:

When the good layman wealth has so amassed
Able is he to benefit his clan.
In portions four let him divide that wealth.
So binds he to himself life’s friendly things.
One portion let him spend and taste the fruit.
His Business to conduct let him take two.
And portion four let him reserve and hoard.
So there’ll be wherewithal in time of need.
(D Tr., III, 189)

Buddha also instructs his monks to maintain frugality. One good example is the way he advises them of how to use robes. The researcher quotes de Silva’s description with reference to Vin., II, 291 in length:

When the monks receive new robes, the old robes are not completely discarded but to be used as coverlets; when the coverlets are old, they are to be converted to be mattress covers; the old mattress covers are again, when old are to be converted to be rugs, the rugs into dusters, and even the tattered are to be put together with clay and to be used for repairing cracks on the floor and wall. (Vin., II, 291)

In theory, the Philosophy of Sufficiency Economy is a socio-economic theory based on the principle of the middle path in Buddhism. It comprises three components, which are moderation, reasonableness, and self-immunity, and is driven by two conditions: knowledge condition (expert knowledge, prudence, and care), and integrity condition (honesty, diligence, and perseverance).⁹ Buddha's advice for living frugally is: firstly to practice self-restraint in eating, drinking, seeing, and speaking; and secondly to practice mindfulness and concentration. The lifestyle of frugality is living on self-immunity and wisdom. It is a living on self-immunity because the future is uncertain. An economic downturn is unavoidable and it comes unexpectedly. During the period that farmers cannot earn by selling their agricultural products due to economic slowdowns, they can live on rice, fruit, and vegetables they grow, domestic animals they keep, and their savings. It is also a living on wisdom and the lifestyle that generated wisdom. De Silva explains that wisdom in Buddhism is "a genuine insight and the possibility of 'perceiving things differently', which is '*panna*'" (de Silva, 1998, p. 142). The term *panna* here means a mode of understanding of the unity between humans and the non-human world that gets "people to practice compassion (*metta*) and loving kindness (*karuna*)" (de Silva, 1998, p. 142). De Silva explains that a householder who gets to this point will "collect wealth for his

needs in a way that a bee collects honey without injuring the flowers” (de Silva, 1998, p. 142 cf D Tr, III, 189). It means agri-nature farmers are those who practice farming with ‘*panna*’. Though they make use of nature and natural resources for their daily life, they care for and preserve these resources at the same time.

According to a Buddhist analysis, the root causes of social, economic, and environmental problems in human society are greed (*lobha*) and ignorance. In terms of economics, greed means a lack of moderation and self-restraint, and in terms of social interaction it means a lack of moderation and concern (*metta*) for fellow humans, non-humans, and future generations of humans and non-humans. Ignorance (*avijja*), refers to the lack of the understanding (wisdom) of the proper relationship (1) between moderation and self-immunization, (2) between humans and humans, their interdependence in society, and their mutual dependence with the natural environment, and (3) with the interconnected system of the world (living and non-living things). The interaction between greed and ignorance intensifies (1) consumption and expenses, and (2) aggression (*dosa*) against fellow humans, society, and the natural environment. Consumption to satisfy greed without any concern for bad consequences (*avijja*) in the consumer society is an example of such aggressions and is the root cause of the current problems of indebtedness and environmental degradation. Buddhism views a technical and managerial quick fix approach to economic, social, and environmental problems just as a “dealing with the symptom of the deep rooted malady” (de Silva, 2009, p. 11), whereas the real solution to the problem is to deal with causes of the disease. If the lack of right understanding (*avijja*) is the cause of the problem, the development of the right understanding (*panna*) is the solution to the problem.

Sustainable Development, Philosophy of Sufficiency Economy, and Agri-Nature Farming

There are several definitions of sustainable development. The most quoted comes from the World Commission on Environment and Development, which defines sustainable development as “development that meets the needs of the present generations of people without compromising the ability of the future generations to meet their needs.”¹⁰ (WCED, 1987, p. 43) World leading states made the critical observation during the ‘World Summit’ that sustainable development comprises three necessary “interdependent and mutually reinforcing pillars” which are “economic development, social and environment protection.”¹¹

Ed Barbier (1987) posits that any process of sustainable development needs three interactive systems: “the biological or ecological recourse system, the economic system, and the social system.” (Holmberg, 1992, p. 24) Though the success of sustainable development depends on the attainment of the goals of each system which will eventually lead to “poverty eradication, changing unsustainable pattern of productions and consumptions and protecting and managing natural base of economic and social development,”¹² the betterment of the world and its people, the achievement of each sub-goal in the three interrelated systems is an “adaptive process of trade off. It will not be possible to maximize all goals all the time, and there may be conflicts among intra-system goals. Choices must therefore be made as to which goals should receive greater priority during a certain period.” (Holmberg, 1992, p. 24)

The fundamental objectives and the key drivers of sustainable development are the sustenance of natural environment for people and people themselves. However, people are also the root cause of the destruction of the natural environment. The King of Thailand

reminds us that the only way to implement Sufficiency Economy Philosophy and sustainable development is to educate and raise people's awareness to preserve natural resources and keep an ecological balance. (Chamnong, 2006, p. 51) He also reminds them that working with people takes time and needs patience. He says that "in bringing about progress and prosperity, it is imperative to build up gradually, one step at a time, implementing measures, while contemplating and improving them. Never make the efforts with haste, spurred by eagerness to bring novelty."¹³ However, it is worthwhile doing since it means solving a problem at the root cause. "When the base is complete and firm, you can start developing further, building on the base, working, developing and improving at the same time".¹⁴

Though agri-nature farming is a kind of farming, in practice it is more than that. All the requirements for successful agri-nature farming are found in sufficiency economy and sustainable development. They are (1) people's participation, (2) a radical change in lifestyle, (3) the right understanding of the relationship between human beings and the natural environment, (4) the belief in human capability, (5) the integration of conservation and development, (6) as well as an economic and social development that meets (a) the satisfaction of basic human needs, (b) equity and social justice, (c) social self-determination and cultural diversity, and (d) ecological integrity.¹⁵ Pretty et. al. (1992, p. 109) in their book chapter 'Regenerating Agriculture: The Archeology of Low-External Input and Community Based Development' have provided consistent observations that sustainable agriculture requires involvement from people by (1) incorporating local knowledge, (2) their participation, (3) project flexibility, and (4) farmer-to-farmer extension. He emphasizes that "where these factors are not involved, projects are less effective as fewer people adopt new technologies, and these are often not sustained."

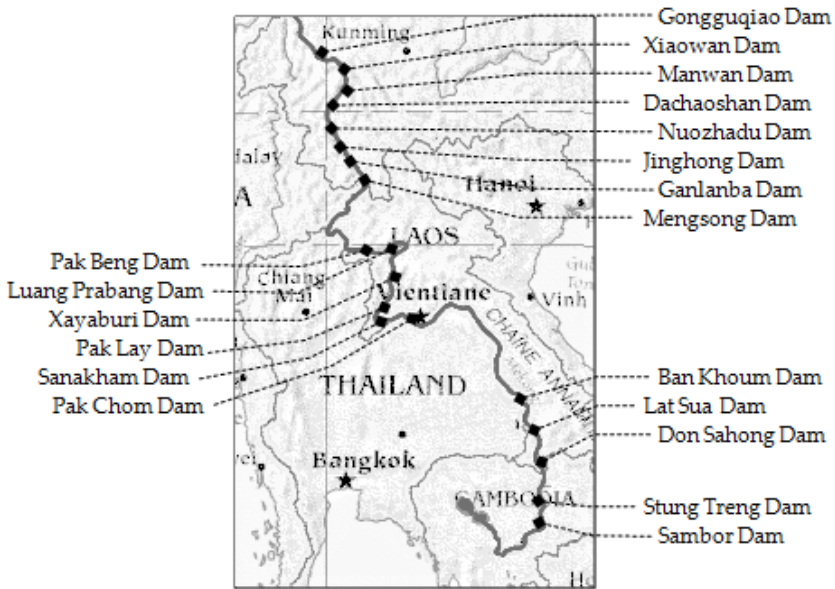
Sustainable Development and Dialogue for Peaceful Co-Existence in the Mekong River Basin

The Mekong River is the world's twelfth longest river with a length of 4,800 kilometers. It is divided into the Upper Mae Kong Basin (UMB), which covers Tibet, and the Lower Mae Kong Basin (LMB), which consists of six countries, namely China (Kunming, Yunnan), Laos PDR, Thailand, Myanmar, Cambodia, and Vietnam.

The focus in this paper lies on the LMB region, which has a population of 55.5 million. The LMB population consists of 70 distinct ethnic groups with different cultures, customs, traditions, languages, dialects, and levels of development. Most of the 55.5 million LMB population consists of subsistent farmers whose livelihood is dependent on wetland and water supplies from the Mekong River for consumption, agriculture, transportation, and other purposes.

A possible water shortage crisis could lead to conflicts and war between people and countries. The sign of possible conflicts due to the struggle to access water from the Mekong River is seen in the attempt by the countries through which the river passes to build dams to block water from flowing downstream and from being used by other countries (see Map I below). China will have eight dams: the Gongguqiao Dam, the Xiaowan Dam, the Manwan Dam, the Dachaoshan Dam, the Nuozhadu Dam, the Ganlanba Dam, the Jinghong Dam, and the Mengsong Dam; Lao PDR is going to have nine dams, which are the Pak Beng Dam, the Luang Prabang Dam, the Xayaburi Dam, the Pak Lay Dam, the Sanakham Dam, the Pak Chom Dam, the Ban Khoum Dam, the Lat Sua Dam, and the Don Sahong Dam. And Cambodia will have two dams: the Stung Treng Dam and the Sambor Dam.

Map I: Dams on the Lower Mekong Basin



When countries that are upstream of the Mekong River block water from reaching countries that are downstream, those countries suffer from water supply shortage. The suffering could eventually lead to conflicts and wars. Differences in culture, customs, traditions, and language could reinforce misunderstandings, mistrust, and lead to further conflicts.

In a situation in which people are divided by differences and conflicts, having dialogs could be the best solution (1) “to create a bridge across the chasms of differences” in cultures, customs, traditions, and languages, (2) “to help gain greater skill in both communicating and working more effectively across social and ethnic boundaries” (3) to enable the counterpart to “explore alternative viewpoints” for a greater understanding, mutual respect and trust”, and (4) to transform an old way of habit and thought to new behaviors of caring and sharing with one another, and working

together to protect the Mekong River. (The Institute of Multi-Track Diplomacy, <http://www.mitd.org>)

Also economic reasons could lead to dialogs. Though the six LMB countries are under three different social and economic conditions, all of them have adopted capitalism. China was under communist rule for decades and has transformed into a state that embraces market socialism and state capitalism. Laos PDR, Cambodia, and Vietnam, were in states of civil war for decades. After the civil wars they were under communist rule and during recent decades they have gradually adopted capitalistic and globalized ways of life. Myanmar was under a military dictatorship for decades and opened the country for market capitalism over the last three years. Thailand is the only LMB country that was in a market capitalist system for the past century.

Capitalism and globalization cause changes in terms of social and economic development, industrialization, and urbanization. These changes pose positive and negative impacts on people's lives. Positively, they have been provided with better facilities for transportation, communication and higher incomes. However, there are also a lot of negative impacts such as deforestation, reduction of bio-diversity, and reduction of complexity. These negative impacts make their life worse and eventually push these people to major cities in Thailand, Malaysia, Singapore, and Hong Kong where they look for employment.

Among the LMB countries, Thailand is at the front in the pursuit of capitalism and is also the first country that has suffered the 'sickness' of capitalism, especially during the years 1996 to 2000. Farmers in other LMB countries have not yet suffered economic, social, and environmental crises as serious as Thailand has. There are good reasons to believe that poor people in agricultural communities in rural areas of other LMB countries share similar problems that Thai farmers face. There could be differences, but they are differences in

degree rather than in essence. Therefore, there are many reasons to believe that dialog among people in this region is necessary so as to share experiences and help one another to solve problems. Thailand should be the leader due to these reasons. Dialog and sharing of experiences on individual, communal, and national levels to solve the common problems mentioned above, would certainly lead to mutual understanding and pave the way for the possibility of sharing water resources from the Mekong River, which would lead to win-win situations for all countries involved.

Buddhism can be a common spiritual language in the communication for dialog and experience sharing since the majority of LMB countries' population is Buddhist. 96% of Thais are Theravada Buddhists. 95% of Cambodians are Theravada Buddhists. 16% of Vietnamese are Mahayana Buddhists. 89% Burmese are Theravada Buddhists. And 61% of Laotians are Theravada Buddhists. The dialogs on the application of Sufficiency Economy Philosophy for sustainable development in LMB countries are about social, economic, and environmental protection development. They are also about the basis of Buddhism since sufficiency economy theory is a practical version of Buddhist social, economic, and ethical theory. It could be assumed that it could make the dialog more fruitful since it is grounded in the spiritual dimension, which is considered deeper than social and economic dimensions of human life. However, it is significant since its target is the betterment of the lives of LMB populations in a sustainable manner. It could also make the dialog more easily understood, since (1) key concepts and terminologies of the Sufficiency Economy Philosophy are derived from Buddhism, and (2) LMB cultures and traditions are greatly influenced by Buddhism. In other words, the dialog on the application of Sufficiency Economy Philosophy in LMB regions is one on the bases of LMB's common culture for the better life of LMB people, individually, communally, and socially.

Endnote

- 1 The expression 'green revolution' is used to refer to the practice of transformation of conventional farming to a modern farming system. The key features of green revolution farming comprise: (1) growing a single crop in a certain farming area, (2) using machines and fuels in farming, (3) building an irrigation system, (4) increasing the rice product per rai by using a chemical fertilizer, (4) ridding of unwanted plants and insects by using pesticides and insecticides, and (5) commercializing agricultural products.
- 2 "Our country is rich. And strategic. So that if there is any struggle in the world, people want to get into this country. And there is always a struggle in the world. We still stand here. We stand here for the good of the whole world." (Royal Interview to National Geographic 1992)
- 3 *Source:* chm-thai.onep.go.th/chm/Doc/Publication/ThaiBiodiv/ThailandBiodiversity_eng.pdf
- 4 *Source:* www.infonet-biovision.org/res/res/files/488.OrgFarm.pdf
- 5 *Summary from:* www.agrinature.or.th/index.php?option=com_content&view=article&id=7&Itemid=8
- 6 The content of pages 6-11 are modified passages of the author's Ph.D. dissertation 'Ecosophy and Environmental Education in the Philosophy of Arne Naess', Graduate School of Philosophy and Religion, Assumption University, 2012.
- 7 They are fishing, slaughtering, as well as making and selling weapons and poisonous materials.
- 8 Wiwat Salayakamtorn. The Conceptual Initiation of Agri-Nature Foundation. (Power Point Presentation). dynamic.psu.ac.th/economics.psu.ac.th/Download/SuffiFile-Conceptual.pdf

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- ⁹ Further elaboration on the Philosophy of Sufficiency Economy can be seen in the article written by Assoc. Prof. Dr. Seri Phongphit in the same volume.
 - ¹⁰ World Commission on Environment and Development.
 - ¹¹ UN Doc. A/Res/60/1, 24 October 2005, par. 48 as cited in Geenugten, 2006, p. 119.
 - ¹² UN Doc. A/Res/60/1, 24 October 2005, par. 48 as cited in Geenugten, 2006, p. 119.
 - ¹³ His Majesty's Royal Address on 11 July 1980 as cited in Chamnong, 2006, p.51.
 - ¹⁴ His Majesty's Royal Address on 11 July 1980 as cited in Chamnong, 2006, p.52.
 - ¹⁵ 4-7 based on Jacobs and Munroe, 1987 as cited in Holmberg, 1987, p. 27.

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- วิฑูรย์ เลี่ยนจำรูญ 2535 *ไปให้พ้นยุคปฏิวัติเขียว เบื้องหลังปัญหาการเกษตรและการแสวงหาทางเลือกใหม่ ศูนย์เทคโนโลยีเพื่อสังคม สุพรรณบุรี และกลุ่มพีชพันธ์ นนทบุรี*

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Wood Grain

Photograph. Catalano, J.L. 2014. *Wood grain*: image taken from the neck of a mandolin instrument.

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Transboundary Ecology, Governance and Spirituality: The ASEAN Way

Chamniern Paul Vorratnchaiphan

Introduction

ASEAN is one of the most bio-diversified regions on the planet; whilst occupying only 3% of the earth's surface area, it is host to 20% of the world's known flora and fauna and marine species. Nature and environment do not stop at borders or man-made boundaries as they are transboundary in character.

However, the increased population, the economic growth and particularly the current development practices and trends in the ASEAN region have resulted in serious transboundary problems. These problems are also caused by mega-hydropower dams, large scale monoculture plantations, wildlife trafficking and illegal logging. All of the above problems are creating seriously negative impacts on water and food security, biodiversity, community livelihoods, health and the environment, making increased conflicts, national instability, and challenges to country's sovereignty in the ASEAN region unavoidable.

Thailand's Rosewood Case

The illegal trading of rosewood in Thailand illustrates well how transboundary crime has been cleverly organized by various interest groups in the region. Siamese rosewood (*Dalbergiacochinchinensis*) is a hardwood tree species classified as vulnerable by IUCN's Red List of Threatened Species and is listed in Appendix II (regulated international trade) under the Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES). Rosewood, or Mai Phayung (ไม้พะยูน), traditionally and historically was rarely felled and was used primarily for home construction or household furniture. The wood is believed to be the home of forest spirits. If cut or used it would bring a bad omen to the cutter and user. Until recently, this protected species has been one of the most luxurious commodities and has been demanded predominantly by wealthy Chinese. In China rosewood is sought for decorative high-end furniture and ornaments, luxury flooring, temples or historical building restorations, and even for funeral caskets.

However, due to the depletion of rosewood in China and a domestic logging ban adopted in 1998, the vast majority of rosewood used commercially is imported. According to China Customs, the volume of reported imports of rosewood has increased by 1,650% within 10 years (60,000 m³ in 2003 to 1.05 million m³ in 2013) and the price of a single chair made of rosewood can be valued as high as USD 500,000 to USD\$1 million.¹

Thailand recorded an 851% increase in the number of rosewood poaching cases nation-wide from 2009-2014 and a 722% increase in the number of suspects. The total estimated value of confiscated timber from the same period from the Department of National Parks, Wildlife and Plant Conservation, Royal Forestry Department, and Customs exceeds USD 345,000,000.²

Rosewood furniture and other items are considered luxury goods and status symbols in China, but this type of luxury has made huge impacts, ecologically on soil, socially and politically in Thailand and in neighboring countries. Ecologically, after rosewood trees have become rare, lesser valued trees such as Burmese Padauk (*Pterocarpus macrocarpus*), known in Thai as Pradu (ไม้ประดู่), are now being sought. Young trees are cleared away for big tree cutting and transportation. Many species, including gaurs, wild pigs, civets, hornbills, and dholes (Asiatic wild dogs) are hunted in protected areas.

A total of 28 rangers have been killed with more than a hundred rangers being injured in the past two years during confrontations with poaching groups nationwide. The relationship between the national parks' officers and the communities in most of the parks has critically worsened after an increasing number of local government officers and community members have become supporters of poachers. Community development activities have been almost impossible to organize since the poaching issue has been introduced and rooted in the livelihood of the communities.

The higher price of rosewood is due to the higher rate of corruption. Though there has been no scientific research conducted, it is believed that these environmental crimes, meaning the trafficking of wildlife and rosewood, have reached the equal monetary value of drug trafficking, and both have involved more or less the same groups of people. National and local politicians, law enforcement agencies, local communities and even some park officers are engaged in this malpractice, which can expand to other illegal activities and criminal groups.

Cross-border or transboundary conservation of nature and environment is therefore a necessary mandate as well as a challenge in protecting and maintaining large ecosystems and enhancing the socioeconomic development of the region. The root causes of the

transboundary crime need to be analyzed and a deeper approach to the issue should be considered.

Transboundary Governance and Justice

ASEAN has been criticized for allegedly having prioritized economic development over a just, equitable and sustainable development model that truly places people and their wellbeing at the center. The Declaration of ASEAN on Environment (2007), asking “to honor and implement commitments to multilateral and regional sustainable development and environmental agreements, [...] to implement measures and enhance international and regional cooperation to combat transboundary environmental pollution”³, and “to combat illegal logging and its associated illegal trade”⁴, has almost completely failed.

Broadly speaking, the ASEAN way of non-interference, consensus building and cooperation, which is considered to be a strength, has also been a weakness as states have divergent views of dealing with urgent situations and issues, and not all state members can reach a consensus. For the last two decades of ASEAN, only a few transboundary environmental laws have been issued and implemented with only little success. While the ASEAN way of non-interference and consensus building and cooperation is respected, space should be opened and encouraged for individual nations to negotiate and collaborate on common issues and interests.

The ASEAN Civil Society Conference/ASEAN Peoples’ Forum (ACSC/APF) 2014 has recently stated that the “Corruption and lack of transparency and accountability exacerbate negative impacts of development projects and investment on local communities.” and that the “[m]ilitarisation of resource rich areas results in intensified repression” are main causes of the failure. The ACSC/APF is “deeply concerned that the advent of the ASEAN Economic Community will

only worsen the situation if it continues with these harmful development policies.”⁵

So far there is little evidence that there are sufficient, efficient and concrete regionally agreed measures or instruments to fight against environmental degradation and unjust practices and to strengthen environmental governance. However, there have been signs of hope for improvement.

With a new development view of the ASEAN Secretariat, Public Outreach and Civil Society Division, the decision to open up and to engage with civil society has been very positive and promising. The recommendations of the ACSC/APF 2014 Forum should be considered by the high level ASEAN authorities to select and to encourage individual country members to support non-state organizations to act together.

One of the first and most important transboundary environment moments in the ASEAN region was on Tuesday, 24 June 2014, when

the Supreme Administrative Court accepted the lawsuit filed by 37 Thai villagers against the signing of the Power Purchase Agreement for the Xayaburi Dam. In an unprecedented ruling, the Court ordered the five government bodies, against which the lawsuit was brought, to ‘undertake their duty under the Constitution, laws and resolutions of the [Thai] Government, through the notification and dissemination of appropriate information, adequate hearing and consultation and further environmental, health and social impact assessment for the Xayaburi Dam.’ This is a landmark case, as it is the first to recognize the transboundary impacts for Thailand of a project being built in a neighboring country, and the first to require a Thai state-owned company building a project overseas to comply with Thai laws. We hope that this case becomes a new standard for Thai state-owned companies building and investing in projects overseas.⁶

There has been a call from a number of regional organizations for ASEAN to seek, strengthen and elevate social development and sustainability goals by integrating them into the pursuit of economic growth and project development. Through certain international environmental standards such as EIA and EHIA, eco-labeling should be strengthened and promoted as regional measures to guide and monitor impacts of transboundary development projects. An ecosystem service system, comprising provisioning, supporting, regulating and cultural services, could be promoted and used in conserving biodiversity of protected areas both in rural and urban contexts.

Ecology, Sustainability and Spirituality

However, all the development models, policies, laws or standards mentioned above will become unachievable if we cannot put a cap on our greed for materials and resources. Present economic development models are based on increased production and consumption to satisfy greed. Spirituality can help in keeping our greed for materials and resources in check by reasoning and by differentiating need and greed.

The fear of greenhouse gases, climate change, and predictions by scientific organizations about the coming of catastrophes could not truly contribute to behavioral change of human beings, unless there is a change from within, a right state of mind: through spirituality. There have been numerous existing and emerging organizations, movements and conservation projects that embrace spirituality and ecology as 'deep ecology philosophy', viewing humans as just one important part of nature, with neither more nor less value than other parts. This emerging integration of ecology and spirituality will be able to address the reasons and solutions for combating the current local and regional transboundary environmental crises and concerns.

People and communities with intimate links to nature tend to respect it more than people who are detached from it. Animists should give us some deep thoughts on this aspect. The Karen people believe that nature is sacred, that there are spirits in the lands, the mountains, the trees and the sky, where their products and livelihood rely on. Therefore, their production, consumption and their ways of life should be in harmony with nature and with each other in their community.

This sense of respect for nature used to be the true ASEAN way, but has been disappearing rapidly with the powers of globalization and consumerism. There is a need to remind and recreate a movement of respect for nature and of living with nature in ASEAN, rather than to extort or to detach from it, as a foundation of sustainable development. ASEAN should add spiritual components and values in education and the conservation of nature, showing respect and care for all of flora and fauna during the planning and implementation stages of development projects of any size. Respect and care for nature helps to create a better life for present and future generations of the ASEAN community.

Endnote

- 1 Department of National Parks, Wildlife and Plant Conservation (DNP), Ministry of Natural Resources and Environment
- 2 Thailand Rosewood Crisis, Freeland Foundation, June 2014
- 3 *Source:* environment.asean.org/asean-declaration-on-environmental-sustainability-2
- 4 *Source:* forest-chm.asean.org/document_center/knowledge_networks/arkn_fleg/general_documents/briefing_paper_on_promoting_forest-law_enforcement_and_governance_asean.pdf
- 5 *Source:* aseanpeople.org/wp.../03/Official-Statement-of-ACSCAPF-2014.docx
- 6 *Source:* www.internationalrivers.org/blogs/259-0



Chiron teaching Achilles

Graphite on smooth paper. Catalano, J.L. 2014. *Chiron teaching Archilles*: modern drawing references to imagery attributed by Oltos in 6th century B.C.E.

3:

Chiron and the Machines of Loving Grace

John T. Giordano

*"I am putting myself to the fullest possible use, which is
all I think that any conscious entity can ever hope to do."
(HAL 9000, the Computer in the film "2001: a Space Odyssey")*

I will return now to the beginning.

I was asked by Roman Meinhold to present a paper for this conference on environmental philosophy. Although I seldom write about it, this topic is very close to me and lies in the background of much of my work and many of my beliefs. In my undergraduate years at college I studied Wildlife Ecology and after graduation, worked as an environmental engineer for the coal mining industry in southern West Virginia.

My interest in nature also eventually led me into philosophy and finally to my dissertation topic on the poetry of Hölderlin. I used to wonder how the human being can be a part of nature, a part of its

cycles and circulations of forces and elements, and at the same time develop an understanding of these cycles and circulations. Does the circle close on itself? And why at the moment that we are able to see our place in nature clearly through our theories and technologies, nature is increasingly in danger of being destroyed. Is there some (tragic) necessary connection with our more lucid visions of the world and its decline?

While I still have no answers to these questions, they continue to become ever more complex. It seems as though our increasing understanding of our place in nature does not necessarily lead to a wiser political or economic adjustments. In fact it often leads to the opposite. And we now watch in horror, not only as the destruction continues, but is also rationalized.

So the topic I wish to address today drew me back to my younger self and the concerns, which continue to circulate deep inside of me.

Cybernetics

This paper is about Nature and about the span of one's life. It is about machine intelligence and about poetry. It is about optimism and pessimism.

When researching the paper I discovered another of my favorite poets being quoted by Silicon Valley Singularity theorists. It is a poem by Richard Brautigan. He was my favorite poet in high school. Recently this poem was read approvingly by the "technology forecaster" Paul Saffo at a Singularity Summit.

**All Watched Over By Machines
of Loving Grace**

I like to think (and
the sooner the better!)
of a cybernetic meadow
where mammals and computers
live together in mutually
programming harmony
like pure water
touching clear sky.

I like to think
(right now, please!)
of a cybernetic forest
filled with pines and electronics
where deer stroll peacefully
past computers
as if they were flowers
with spinning blossoms.

I like to think
(it has to be!)
of a cybernetic ecology
where we are free of our labors
and joined back to nature,
returned to our mammal
brothers and sisters,
and all watched over
by machines of loving grace.

(Richard Brautigan, from *The Pill versus
The Springhill Mine Disaster*)

As you may know, Singularity is a moment – an event – in the development of technology where the power of artificial intelligence surpasses the power of human control. And many theorists are concerned with the danger of human beings losing control and being manipulated or even exterminated by their machine creations. They wonder if it is even possible for machines to be programmed to promote human goals.

But the appropriation of the above poem reflects the optimism of many in the technological fields. Perhaps built into their theorizing about the harmony of technology and nature, it involves a certain leap of faith about integrating the world under a single system. From the perspective of information, everything can be connected and inter-penetrated. And so it is easy to understand the optimism of some theorists.

Even with the high development of our sciences and our remote sensing capabilities, we can ask if this optimism about the harmony of humans, machines and nature is justified. And in a much wider sense, we must ask in an age when more and more economic and political decisions are entrusted to our systems (computers, information systems and stock markets): Can we steer towards harmony with the environment?

One famous writer concerning systems theory and cybernetics is Gregory Bateson. In his famous lectures collected in his book, *Steps To an Ecology of the Mind*, he describes the interconnectedness of human beings with their environment. He proposes a *cybernetics* of thought where our computer systems are harmonized with ecology.

He warns:

Cybernetics has integrity within itself, to help us to not be seduced by it into more lunacy, but we cannot trust *it* to keep us from sin. For example, the state departments of several nations are today using games theory, backed up

by computers, as a way of deciding international policy. They identify first what seem to be the rules of the game of international interaction: they then consider the distribution of strength, weapons, strategic points, grievances, etc., over the geography and the identified nations. They then ask the computers to compute what should be our next move to minimize the chances of our losing the game. The computer then cranks and heaves and gives an answer, and there is some temptation to obey the computer. After all, if you follow the computer you are a little *less responsible* than if you made up your own mind. But if you do what the computer advises, you assert by that move that you support the *rules of the game* which you fed into the computer. You have affirmed the rules of that game. (p. 482)

Bateson goes on to suggest that we need to “change the rules,” and guard against letting “our cybernetic inventions – the computers – lead us into more and more rigid situations...”

We can in fact see how far we have come since 1969. Now these systems theories have been applied to every aspect of society. Adam Curtis in his documentary *The Trap* explains how game theory used in the Cold War between the United States and the Soviet Union, has been gradually applied to economics, politics and every aspect of society. Politics has given way to the market, and the governance of the world is to be conducted by information. Everything has been connected to a neo-liberal template, which has been superimposed over the globe, which involves the recording, ownership and exchange value of all things, and which continues to survive through the constant intensification of this process.

Even we academics are plugged into this system. Our performance is measured by how it facilitates the preparation of students to participate in this system itself. I believe our school

receives one point for my presenting this paper today. And based upon this tendency, the humanities are gradually disappearing from the university because their contribution cannot be quantified within the systems of business and finance.

This tendency was anticipated by Heidegger. He believed that cybernetics will eventually supplant philosophy. In his book *The End of Philosophy*, he writes:

No prophecy is necessary to recognize that the sciences now establishing themselves will soon be determined and regulated by the new fundamental science that is called cybernetics. This science corresponds to the determination of man as an acting social being. For it is the theory of the regulation of the possible planning and arrangement of human labor. Cybernetics transforms language into an exchange of news. The arts become regulated-regulating instruments of information. The development of philosophy into independent sciences that, however, interdependently communicate among themselves ever more markedly, is the legitimate completion of philosophy. Philosophy is ending in the present age. It has found its place in the scientific attitude of socially active humanity. But the fundamental characteristic of this scientific attitude is its cybernetic, that is, technological character. (p. 434)

Philosophy, which tried to create a consciousness of our place in nature – or Being – is replaced by the mere circulation of information, which extinguishes this consciousness of place.

Bateson tries to correct what he considers the failures of Western Epistemology. To do this he considers that thought is not isolated in the individual or in the computer but as a part of a larger inter-connection with our environment:

Now, let us consider for a moment the question of whether a computer thinks. I would state that it does not. What “thinks” and engages in “trial and error” is the man *plus* the computer *plus* the environment. And the lines between man, computer, and environment are purely artificial, fictitious lines. They are lines *across* the pathways along which information or difference is transmitted. They are not boundaries of the thinking system. What thinks is the total system which engages in trial and error, which is man plus environment. (p. 488)

The temptation to consider the potential harmony of natural and man-made systems must have been very strong when ecology as a science and a system began to be developed by such researchers as Howard and Eugene Odum in the 1950s.

But we might insist that in the present day, our environment is generated by our computer systems themselves. Nature is encoded into the system as a “resource,” as something that facilitates the system and its circulations of wealth. With this encoding of the environment, the deeper essence of our relationship to our environment (which includes its unfathomable complexities, its beauty and its ambiguities) is increasingly lost. This relationship becomes simplified and codified, and as a result, a true harmonious cybernetic system is obscured.

Our computer systems can diagnose our dis-harmony with our environment, but they are plugged into a global economic system which has its own momentum and which cannot take the necessary steps to correct it. Our computer systems cannot correct it because they cannot go backwards; they are adapted growth, expansion and consumption.

So the pathologies of thought, which Bateson speaks of, have actually been encoded into the cybernetic system itself. Nature or the environment is not a deeper reality to be adjusted to, but a reality that

has been shaped and manipulated and moves with the movement of our systems. The destruction of nature has created and is reinforced by its own feedback loops within our systems. Decline has become our reality.

Momentum

Hölderlin recognized this in his writings on Pindar. Humanity conditions nature, changes nature in its interaction. Much of his poetry uses river imagery. A young river is still bound by its banks and the surrounding landscape. But as a river grows in strength, it develops a power over surrounding nature. Likewise as humanity matures, it moves away from its dependency on its immediate environments and grows in its power to technologically condition nature. It is no longer bound to a fixed destiny and increasingly develops free will. So our free will is also a symptom of our distance from the source.

The free will of consumer society is likewise a condition of disconnectedness.

We have not only manipulated nature, but we have hidden these manipulations. We have encapsulated the mechanisms that drive things: the wires, ducts, circuits and software. We interact only at certain nodal points. So our thinking has become appendages of our machines. And the machinery itself has a mind of its own – programed by our mind – with certain preconceptions of time, development, progress, etc. Our machines have their own temporality encoded within them.

Paul Virilio, in his book *Speed and Politics*, speaks of the present global situation as being characterized by “speed.” This has been created by our technologies that are the direct result of the on-going militarization of society. Speed has taken on its own reality, but one of dis-connection with life. In his later work *The Great Accelerator*, he

continues this analysis applying it to our stock markets and economic systems.

Trying to describe the catastrophic swings observed over such a long period through the Single Market, Mandelbrot introduced multifractal time and thus ushered the history of finance into a dynamic world, where stock market trading time no longer has anything in common with physical time, since, in this new model, 'trading time speeds up the clock in periods of high volatility, and slow it down in periods of stability, the space of fractal geometry combining here with the 'multifractal' chronometry of the fourth dimension. With our professor emeritus, then, it is no longer just 'critical space' that is heralded, but the effraction of History, the 'critical spacetime' of times to come. (p. 81)

Our understanding of nature and our connection with it involves understanding its processes and flows of energy. These are things which unfold in time. But our ability to manipulate physical time itself would constitute our severing of our connection with nature.

Jared Diamond, in his famous book *Collapse*, speaks of the type of thinking which maintains these decadent activities leading to the collapse of various civilizations. He speaks of how civilizations use reason to justify this destruction.

Some people reason correctly that they can advance their own interests by behavior harmful to other people. Scientists term such behavior "rational" precisely because it employs correct reasoning, even though it may be morally reprehensible. (p. 427)

This thinking is allowed to continue even as it leads to collapse because

the perpetrators are typically concentrated (few in number) and highly motivated by the prospect of reaping big, certain, and immediate profits, while the losses are spread over large numbers of individuals. (*Collapse* p. 427)

He also discusses “irrational behavior” when people are invested in certain beliefs and values which inhibit them from abandoning their destructive behavior. He cites much religious belief as an example.¹

Diamond’s surprising optimism near the end of the book rests upon his belief that it is the human being, communicating with one another as consumers, can begin to steer towards a harmony with nature and avert the collapse of civilization.

And yet, it is difficult to see how this is possible as these ostensibly rational destructive economic systems also condition people’s isolation from one another, preventing their unity into a homogenous mass, conditioning their thinking and reasoning, and their expectations for the future. The human being, as a consumer, is shaped by the same rational and irrational decisions and values which work against the interest of society as a whole. Our destruction of the environment is interconnected with our very ideas of development, progress, economic growth, the manner in which money is valued by oil, and our economic systems based on the stock markets and investorship.

Naomi Klein in her book *Shock Doctrine* demonstrates the manner in which destruction has become big business. Huge corporations now profit from warfare. Recently we have seen how climate change has become an opportunity for such corporations, for new shipping routes and oil drilling through the Arctic, and for reconstruction after hurricanes and typhoons.

We are now economically dependent upon destruction and have rationalized it in Bateson's and Diamond's sense. We have internalized it within the very technologies that we use to communicate.

Ambivalence

But where does this leave us? To answer this we need to return again to the beginning.

Chiron was a centaur, a kind of mythical creature in Greek mythology representing the primordial forces of nature. Chiron was the wisest of the centaurs and was the teacher of many Greek heroes such as Achilles. In the vase illustration, you can see him holding and instructing Achilles. He represents the wisdom of nature itself. He was also a friend and mentor to Hercules.

Once when Hercules was on his way to capture the Erymanthian Boar, he stopped for a visit with the centaur Pholus. Hercules asked to drink of the wine that Chiron had once reserved specially for him. When the wine was opened, the centaurs grew wild and began to attack. Hercules drove them off with poisoned arrows, but one arrow accidentally hit Chiron in the thigh. He was in great pain and the special poison had no antidote. But since Chiron was immortal, he also could not die. So Hercules arranged with Zeus for Chiron to trade his immortality to free Prometheus the Titan who was being punished for stealing fire for mankind.

Notice what is suggested in this story is the eclipse of the wisdom of nature represented by Chiron, by the power of humanity represented by Hercules.

The poet Hölderlin invoked Chiron in one of his odes:

Chiron

Where are you, thought-provoking one, that always must
move aside at times, where are you light?
Surely my heart is awake, but I am enraged,
constricted by astonishing night.

That is, I once followed the herbs of the forest and listened
for soft wild animals, in the hills; and never in vain,
never deceived, also not even once by your
birds, because all too quickly you came,

when foal or garden invited you,
giving advise, for the heart's sake; where are you, light?
My heart is surely awake, still heartlessly
powerful night constricts me.

Surely I was once that way. And the crocus and thyme
and the grain were given by the earth in bouquet.
And under the cool stars I learned,
but only of the nameable. And disenchanting

the wild fields, mournful, came
the Demi-God, servant of Zeus, the upright man;
I sit alone, silent, from one hour
To the next, and my thoughts now create shapes

From the fresh earth and clouds
of love, because a poison is between us,
and I listen far off, whether a
friendly Savior will perhaps come.

Then I hear often the thunderer's chariot
at noon, when he draws near, and is known best,
when the house trembles and the ground
is purified, and the anguish becomes an echo.

Then at night I hear the deliverer, I hear
him killing, the liberator, and down below
thick with weeds, as in a vision
I see the earth, an immense fire.

The days however change, if one
observes them, both lovely and evil, Pain
if one is divided, and
no one can alone know the best.

But that is the sting of the Gods; otherwise
one cannot love divine injustice.
indigenous is the God, then
evident, and the earth becomes other.

Day! Day! Now truly you breathe again; now you drink,
willows of my stream, a sight,
and the sure steps go onward, and like a
Lord, with spurs, and in your

place, star of the day, you appear
and you O earth, peaceful cradle, and you
the house of my fathers, who went uncivilized
among the clouds of beasts.

Now take a horse, and armor and take
a light spear, O youth! The prophecy will not be
disrupted, And not in vain waits for its
fulfillment, Herakles' return.

This is a reworking of an earlier ode called "The Blind Singer." What Hölderlin added to the earlier version is a strange ambivalence: the necessity of pain and despair and their alternation with joy and hope.

The distance from nature is represented by poison, "a poison is between us," which is the poisoned arrow that strikes Chiron. In some versions of the myth, Chiron earlier gave Hercules this very poison that will lead to his own downfall. There is the recognition of the inevitability of the fulfillment of the prophecy. "The prophesy will not be disrupted." Our pain and dividedness is likewise inevitable: "But that is the sting of the Gods; otherwise one cannot love divine injustice."

But how can we "love divine injustice"?

All Resistance is Futile

In other words, how can we *accept* the inevitability of destruction? And how can we use this to reflect on our place in this destruction? How can we *slow* this momentum that human thought and technological systems used to wrest control of the earth from the gods of nature? How can we readjust our cybernetic systems with our environment?

The clue is provided by Hölderlin. It is pain that unites us to what is lost. It is our dividedness, which gives life to an imagination – a poetic imagination – that can ultimately maintain a connection at a distance.

There is a quotation by Aby Warburg that I am fond of repeating in many of my presentations.

The lightning imprisoned in wire – captured electricity – has produced a culture with no use for paganism. What has replaced it? Natural forces are no longer seen in anthropomorphic or biomorphic guise, but rather as infinite waves obedient to the human touch. With these waves, the culture of the machine age destroys what the natural sciences, born of myth, so arduously achieved: the space for devotion which evolved in turn into the space required for reflection [...] The modern Prometheus and the modern Icarus, Franklin and the Wright brothers, who invented the [...] airplane, are precisely those ominous destroyers of the sense of distance, who threaten to lead the planet back into chaos. Telegram and telephone destroy the cosmos. Mythical and symbolic thinking strive to form spiritual bonds between humanity and the surrounding world, shaping distance into the space required for devotion and reflection: the distance undone by the instantaneous electric connection. (p. 54)

That is, it is the *consciousness of distance* that is important. The fruits of what humans have achieved in knowledge and technology has come at the price of a certain estrangement from nature. But this estrangement – this distance – also allows for a kind of perspective and consciousness. We cannot return to our source, but can only maintain this connection from a distance. The danger is that our various technologies, which have created this distance needed for reflection, are also in danger of collapsing this distance and our consciousness of nature. Our consciousness of our estrangement from nature is also our connection to nature, hence our alternations of joy and despair, and the deep relationship between conflict and creativity. The problem with our systems of artificial intelligence is that they cannot feel this pain.

We mentioned Virilio earlier, and his solution in his work *Information Bomb* is similar. There he promotes what he calls “stereo-reality.”

As with *stereoscopy* and *stereophony*, which distinguish left from right, bass from treble, to make it easier to perceive audiovisual relief, it is essential today to effect a split in primary reality by developing a *stereo-reality*, made up on the one hand of *the actual reality* of immediate appearances and, on the other, of the virtual reality of media trans-appearances. Not until this new ‘reality effect’ becomes generally accepted as commonplace will it be possible really to speak of globalization. (p. 15)

For me, I can see, I can feel, the process of aging. I remember my youthful energy – much of it spent walking alone in the forest, investigating every tree, rock and burrow. I remember the rhythm of my thinking gliding over the landscape, circulating through it. And now with experience and age, I feel a gradual distancing, a hardening, my thoughts now moving through deeply incised channels, often at odds with the surrounding landscapes. Closer to death, and yet ... I am sometimes gifted with moments of fleeting awareness concerning the arc of my life, with the arc of humanity in general, with the arc of nature and its changing face through time. My own alternations are buffeted between joy and despair. And out of these ambivalences it seems clear to me that what is most human is to respect something that exceeds calculation, balance, and efficiency. Some form of grace that cannot be encoded into our machines.³

But yet how can this individual consciousness of loss have any relevance for the system as a whole?

The famous French economist and philosopher Jaques Attali, wrote a very interesting book on music called *Noise*. In it he addresses the problem of breaking free from the repetitive codes of

contemporary capitalism and draws upon the idea of creativity and composition in music.

He suggests that we must move beyond a society focused on the use of objects and move to one that values the production of objects. We must move beyond a society based on repetition and replication towards one based on creativity and composition, “the production of instruments rather than music.” He then continues with this insight that “mysterious and powerful links exist between technology and knowledge on the one hand, and music on the other.”

Everywhere present, lurking behind a form, knowledge molds itself to the network within which it is inscribed: in representation, it is a model, a schema, the value of which depends on its empirical suitability to the measurement of facts; it is the study of partitions (*partitions*, also “scores”). In repetition, it is genealogy, the study of replication. In composition, it is cartography, local knowledge, the insertion of culture into production and a general availability of new tools and instruments. Composition thus leads to a staggering conception of history, a history that is open, unstable, in which labor no longer advances accumulation, in which the object is no longer a stockpiling of lack, in which music effects a reappropriation of time and space. Time no longer flows in a linear fashion; sometimes it crystalizes in stable codes in which everyone’s composition is compatible, sometimes in a multifaceted time in which rhythms, styles, and codes diverge, interdependencies become more burdensome, and rules dissolve. (*Noise*, p. 147)

He suggests that after the disappearance of usage and exchange:

It announces something that is perhaps the most difficult thing to accept: henceforth *there will be no more society without lack*, for the commodity is absolutely incapable of filling the void it created by suppressing ritual sacrifice, by deritualizing usage, by pulverizing all meaning, by obliging man to communicate first to himself. (*Noise*, p. 147)

The consciousness of distance also shows itself in the form of the commodity. Capitalism according to writers like Attali and Bataille involve a move away from sacrifice in which the accumulation of goods is returned to the earth. Consumer society would be based upon *lack* or distance. Society lives on with this wound which can never completely heal. And yet, this lack can lead us forward if we approach it creatively.

The mistake of the optimistic technophile theorists is that their idea of the harmony of thought and nature involves a collapsing of distance. Whereas the poetic imagination is alone able to hold on to something outside of the calculations which increasingly distance us from nature, even as they create the illusions of harmony and cybernetic efficiency.

Even the contemporary inventor and technophile Daniel Hillis has reservations about the manner in which systems that we depend upon have become too homogeneous, fragile and potentially destructive. One of his projects is to build a giant mechanical clock – the Clock of the Long Now – inside of a mountain which will be designed to run for 10,000 years. This is to get people to think about the future of humanity itself, to lead them beyond their short-term concerns.⁴ So even the champions of technology are realizing that we cannot completely trust our Machines of Loving Grace.

The only solution that I can gesture towards is related to the word cybernetics itself. The word cybernetics comes from the Greek word “to steer.” One can see this in Heraclitus’ definition of *Logos*: that which steers all things through all things. It also suggests a process that can re-direct in a controlled manner. If our cybernetic reality involves our machines and their pathologies, we need to envision systems of steering and not a system of resistance, or for that matter, a strategy of revolution which would be extremely destructive and play into the economic penchant for war.

The breaking of time, the arresting of momentum requires new possibilities of creativity. It requires a re-questioning of ourselves, not as individuals but as a mysterious and conscious part of life and nature. Not as names in conferences, banks, records, professions, but as something which participates in the span and arc of life, connecting past with the future – something that alternates between joy and pain.⁵

Richard Brautigan was also a writer of short novels. One was called *In Watermelon Sugar*. It is about a small post apocalyptic community called iDEATH. In iDEATH everything is made of watermelon sugar. This community is adjacent to a previously collapsed society called the Lost Works, which has become a forbidden zone. The book is about the lives of the people in this community and how their lives are disrupted when some of the characters out of curiosity begin to venture into the Lost Works. Maintained throughout is the tension between the purity of an ecologically harmonious commune in which identity has no meaning, and the natural curiosity of the technological inventions which led to the destruction of the previous society. We now see how far Brautigan was from the thinking of the singularity theorists. And in his story he writes:

My Name

I guess you are kind of curious as to who I am, but I am one of those who do not have a regular name. My name depends on you. Just call me whatever is in your mind.

If you are thinking about something that happened a long time ago: Somebody asked you a question and you did not know the answer.

That is my name.

Perhaps it was raining very hard.

That is my name.

Or somebody wanted you to do something. You did it. Then they told you what you did was wrong—“Sorry for the mistake,”—and you had to do something else.

That is my name.

Perhaps it was a game you played when you were a child or something that came idly into your mind when you were old and sitting in a chair near the window.

That is my name.

Or you walked someplace. There were flowers all around.

That is my name.

Perhaps you stared into a river. There as somebody near you who loved you. They were about to touch you. You could feel this before it happened. Then it happened.

That is my name...

Endnotes

- ¹ We can contrast this with Herman Daley's discussion of religion in his book *Beyond Growth*. Daly sees religion as useful as it contains a rich set of values resistant to the destruction of nature.
- ² We see this insistence on the necessity of humanity's eclipse of nature in the ending of Wagner's *Ring Cycle*. In what is called the "Feuerbach ending," Brünnhilde announces the replacement of the old Gods and their laws, with a human society ruled by love:

The holiest hoard of my wisdom I bequeath to the world.
Not wealth, not gold, nor godly splendour; not house, not court,
nor overbearing pomp; not troubled treaties' deceiving union,
nor the dissembling custom of harsh law:
Rapture in joy and sorrow comes from love alone.

In what is called the "Schopenhauer ending," Wagner takes a more Buddhist approach emphasizing self-negation.

Were I no more to fare to Valhalla's fortress, do you know
whither I fare? I depart from the home of desire, I flee

forever the home of delusion; the open gates of eternal becoming I close behind me now: To the holiest chosen land, free from desire and delusion, the goal of the world's migration, redeemed from incarnation, the enlightened woman now goes. The blessed end of all things eternal, do you know how I attained it? Grieving love's profoundest suffering opened my eyes for me: I saw the world end.

Notice how close the "I saw the world end" is to Hölderlin's "I saw the earth, an immense fire." In Wagner's final version, these themes are expressed not by words but by music alone.

- 3 When I studied Wildlife Ecology, a major concern was with the "carrying capacity" of the land and the manner in which it supports wildlife populations. Mass die-offs, disease and starvation, are natural occurrences that reestablish the harmony of the ecosystem. Hunting is an economically valuable process for achieving the same results. This must call into question the possibilities of machinic grace.
- 4 Danny Hillis in 1995 was inspired by the approaching millennium and he wrote of his ideas for the clock in *Wired Magazine*.

In the universe, pure information lives the longest. Bits last. Just before Jonas Salk died, I was lucky enough to sit next to him at a dinner. I didn't know him well, but in past conversations he had always encouraged my more mystical lines of thought. I was sure he would like the millennium clock.

I was disappointed by his response: "Think about what problem you are trying to solve. What question are you really trying to ask?"

I had never thought of the clock as a question. It was more of an answer, although I wasn't sure to what. I talked more, about the shrinking future, about the oak trees. "Oh,

I see," Salk said. "You want to preserve something of yourself, just as I am preserving something of myself by having this conversation with you." I remembered this a few weeks later, when he died. "Be sure you think carefully about exactly what you want to preserve," he said.

OK, Jonas, OK, people of the future, here is a part of me that I want to preserve, and maybe the clock is my way of explaining it to you: I cannot imagine the future, but I care about it. I know I am a part of a story that starts long before I can remember and continues long beyond when anyone will remember me. I sense that I am alive at a time of important change, and I feel a responsibility to make sure that the change comes out well. I plant my acorns knowing that I will never live to harvest the oaks.
I have hope for the future.

- ⁵ My colleague Roman Meinhold reminds me of the deep philosophical sense of the German term "innehalten." Indeed, Heidegger has also emphasized this poetic sense of "halten" – a "pausing," "holding within oneself," or "dwelling." This is also a theme also found in Hölderlin where the artist is the one who delays the path of men so they can reflect on the divine.

Still no less is that one attracted to men,
They love in return, as they are loved,
And delays often, the path of men,
so that they may long delight in the light.

("The Voice of the People," Werke, Band I, s. 337)

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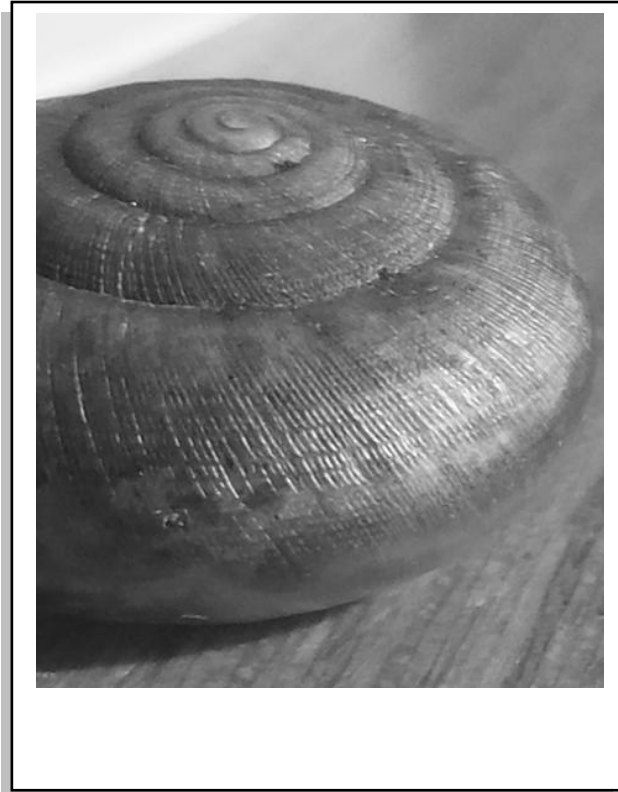
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Part II

Ecological & Economic Sustainability

ECOLOGICAL, SOCIAL AND ECONOMIC
SUSTAINABILITY

Perspectives for Thailand and ASEAN



Shell of a Gastropoda

Photograph. Catalano, J.L. 2014. *Shell of a Gastropoda*: of the many asymmetrically spiraled shell Mollusc species that exist in Thailand.

4:

Buddhist Economics and Ecology: A Lesson for the Future of the ASEAN Community

Apichai Puntasen

Abstract

This paper focuses on the concept of sustainable development through ecological balance by applying Buddhist economics.¹ The goal of Buddhist economics is not to maximize individual utility and social welfare the way it has been set in the mainstream economics. The goal is a healthy body and mind that will lead to a healthy life for the individual, and to wellness, peace and tranquility for the society. Such a goal does not require excessive production and consumption, but a good ecological balance and rigorous training of the human mind. As for the coming ASEAN Community in 2015, with the anticipation of intensified economic cooperation, it can be predicted that more resources will be utilized without sincere consideration of ASEAN values and knowledge, even though Buddhist economics has already been available.

¹ This paper draws from my previous publication of *“Buddhist Economics: Evolution, Theories and Its Application to Various Economics Subjects”*. The Chulalongkorn Journal of Buddhist Studies, Special Issue One, Center for Buddhist Studies, Chulalongkorn University, 2008.

Introduction

Buddhist Economics is formed by the two words “Buddhist” and “Economics”. The word Buddhist refers to the teaching of Buddha or the *Buddha Dhamma*. The word *dhamma* means nature or the law of nature. *Buddha Dhamma* actually means the teaching of Buddha explaining nature or the law that exists in nature for human beings to understand, so that human beings can live their lives consistently with it. Buddhism uses the term *dukkha* to mean many things, including conflict, contradiction, alienation, worry, anxiety, pain, and suffering. This *dukkha* is caused by a person living their life in conflict or in a way that is inconsistent with the law of nature.

The main reason for *dukkha* is ignorance or lack of understanding of everything in its own nature. It can be further explained, in part, that most of the time human beings use their own imagination or make presumptions based on their own subjective judgments. They normally wish everything to be as they desire. This understanding is inconsistent with reality and creates a problem, as reality will never change to accommodate such wishful thoughts. Instead of trying to gain a clear understanding of how nature operates on its own, human beings continue to ignore the need to gain clear understanding of real nature and end up accumulating more ignorance within themselves with more and more contradictions between human thoughts and the real nature of things. Holding fast onto something that is not realistic is *micchaditthi* or a false view that leads to conflict, contradiction or *dukkha*. This *dukkha* is the result because human beings do not try hard enough to understand everything in its own nature. On the other hand, with a clear understanding everything can be explained. No conflict, contradiction or *dukkha* will remain.

Economics is a subject studying human behavior related to the consumption of goods and services for survival and beyond. When consumption is considered, production and distribution are also

involved. All of these should take into consideration the limited amount of resources at any specific time, including the limitation of time itself as a resource. This leads to a consideration of production efficiency, which should be considered as well.

Buddhist economics implies the application of the Buddha's teachings to economics. Although economics as the world knows it today, as a study of production, distribution and consumption of goods, is of universal interest and value, economics as the world knows it today is a subject developed in the West and rooted in Western civilization. As we look at Buddhist economics, the part of the *Buddha Dhamma* that we will be applying is the understanding of the real nature of human beings and the relationships between human beings and nature. This specific view point is vastly different from what has been developed in the West and what is taught in most academic institutions that are offering the subject of economics. In short, Buddhist economics is generally defined as *the subject that is derived from the lessons of the Buddha's discoveries on his path to enlightenment to explain economic activities with the aims for both individual and society to achieve peace and tranquility under resource constraints.*

The term *Buddha Dhamma*, i.e. the teaching of Buddha, is used in this paper instead of the term of Buddhism to avoid confusion. *Buddha* is not the name of a person. It rather means the one who knows, awakens, and is enlightened. If we look at that definition, we might ask: How is it that one knows, awakes and becomes enlightened? It must be achieved by *pañña*. *Pañña* is not the same as wisdom. It literally means the ability to understand a thing in its own nature. Since the word *Buddha* also implies the person's ability to know or to understand the truth of nature, or the truth of one's own life, *pañña* will serve as the most useful tool to understanding natural truth. Being the knower, the awakened one, or the enlightened one results from the development of *pañña*. It is not a mere understanding

in a shallow sense but the knowing from actual experience. The word *experience* implies some action of training and/or practice. If it were merely a matter knowing or understanding in a shallow sense, it could be achieved through contemplating or logical deduction without any training or practicing.

As a result, *Buddha Dhamma* is neither a religion nor a philosophy in the Western understanding, as it does not require a set of *a priori* faith or belief. It is not simply a philosophy since it is not merely a well thought out proposal or idea. It is the result from practical experience. Therefore, its actual status is a proven theory in that all of Buddha's teachings are derived from the result of actual practices that confirm the underlying theories conceptualized before.

Because of this nature of a tested theory, *Buddha Dhamma* has its own scientific base known as a mind-based science. This kind of science is beyond physics, the subject that studies matter and energy and the conversion of the two. According to this understanding, the mind is a separate and third dimension formed by the unification of matter and energy. It emerges as a new entity of its own with its own property uniquely different from both matter and energy. This third dimension was not recognized, especially in Newtonian Physics. However, it shares a common element of uncertainty of knowledge available in Quantum Physics. A mind-based science proposes that truth can be varied by different levels of mind development. As the mind is formed into a new dimension, there are various levels of mind development. For example, a two-year-old child will have a different level of mind development from a newborn baby or from that of a teenager. Thus, the level of this child's perception and understanding will also be different from that of a newborn baby or a teenager. However, the scientific part of the mind-based science is that at the same level of mind development, the same truth can actually be perceived by those who are at the same level of such development. As a result, a mind-based science provides a new

dimensional reality of uncertainty of any knowledge that is a more realistic one than the old scientific paradigm.

Core Values

Economics, as a subject developed in the West, and based on the old scientific paradigm, usually claims to be a scientific subject free of value, as it is claimed to be based on positive or observable phenomena. It can be actually shown that, in fact, it is a value laden subject. Its operational value is human greed condemned by all known religions. The scientific part for this condemnation by religion is because it has been proven time and again throughout the development in human history that when greed appears in a significant way, such a phenomenon would usually bring chaos, conflict or problems to a society. Therefore, refraining from greed is a virtue of human conduct.

In general, human greed develops from a sense of insecurity originated from an animal instinct in its solitude. As a human being is a kind of animal, this sense prevails instinctively. For an animal, a herd can improve its individual security, and a tribal community can offer the same function for a human being. Unfortunately, a community or tribal community is achieved at the cost of individual freedom or individualism. Actually, technological development that serves as a coping tool for each individual can also improve individual freedom. As technical know-how has been developed so that an individual can enjoy personal freedom through more dependence on technology than on community, more individuals prefer depending on technology to community. More dependent on technology implies more dependent on personal wealth, which will lead to increased human greed.

Buddhist economics views the human being as a special animal that has a potential for the mind to be developed to the highest level.

A good human life can also be obtained not through having more sophisticate technologies and materials to support life, but through a good balance between communal life and the accumulation of *pañña*, the ability to understand everything in its own nature. Through continuous and rigorous training of one's mind, greed from the sense of insecurity can be replaced by *pañña*. Instead of being greedy and trying to accumulate wealth to satisfy a sense of insecurity, *prayotesukha*, happiness can be derived, for example, from giving or helping others or being useful for others.

From what has been discussed above, one can compare the core value of the two sets of economics. One is the economy based on greed, known as mainstream economics, or capitalism. The other is Buddhist economics, or economy based on *sukha*, being useful for others, also known as *paññaism*. The comparison of the two core values is shown in the chart below.

Note that in the chart below, the author uses the word “premise” for both 1 and 2, as they are not necessarily chosen that way. There can be many different ways in explaining life and human progress or development. Unfortunately, mainstream economics chooses to believe so. This is why it is a value laden subject.

Economy based on human greed	Economy based on <i>sukha</i>
Core values	Core values
<p>Premise 1 For any living thing, life itself is most important. As a result, the act of self-interest is a rational behavior.</p> <p>Premise 2 Competition is the selection process for the fittest. Competition leads to progress. Therefore, the core values of this kind of economy are self-interest and competition.</p>	<p>Basic understanding Once born, all living things especially animals and human beings can never avoid <i>dukha</i> or pain. Helping each other to reduce pain is a rational behavior. Hence, compassion and cooperation should be consequential acts, and they serve as core values in Buddhist economics.</p>

Economy based on human greed	Economy based on <i>sukha</i>
End result	End result
More is better than less, and winning is better than losing. There will be both winners and losers and it is a zero sum game. If the winner feels compassion for the loser, the result is a 'lose-lose' situation.	Beyond basic necessity for life sustenance, part of <i>niramissukha</i> or <i>sukha</i> from non-acquisition can be gained from being useful for the others. Both provider and receiver achieve <i>sukha</i> . It is a 'win-win' situation.

For Buddhist economics, the author uses the term “basic understanding” to represent the way Buddha looks at all kinds of life. Buddha views that *dukkha*, i.e. pain or suffering, is the unavoidable result of birth. Therefore, once any living thing is born, it does not make any sense to gain sensual pleasure or happiness from inflicting pain on the other, as no one can actually escape suffering or avoid pain. The basic pains resulting from the fact of being born are aging, sickness, and death. The more sensible thing to do is to help reduce the pain for each other as much as possible. The least one can do is not to cause any additional pain to anyone. This is why compassion and cooperation should be the consequential acts rather than competition which focuses on self-interest only. Self-interest is not actually the means for long-lasting peaceful coexistence.

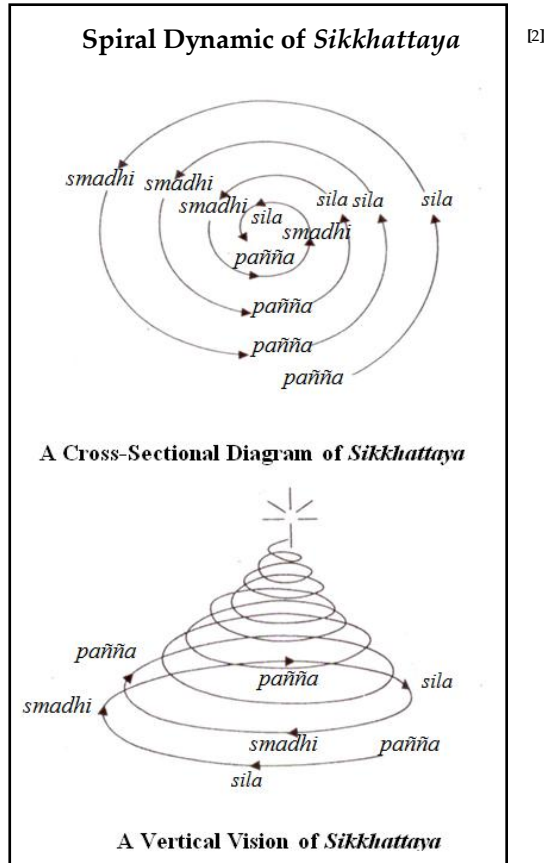
Production and Consumption in Buddhist Economics

Unlike mainstream economics where capital is the mode of production, *pañña* is the mode of production in Buddhist economics. When *pañña* is the mode of production, the ultimate goal of production in Buddhist economics is not only to minimize the cost of production, although it is the necessary condition, but the sufficient condition is to reduce waste and to use a minimum of renewable

natural resources and energy. To use non-renewable resources and energy only when it is absolutely necessary.

Consumption does not help to enjoy life. In fact, consumption is also a production process to sustain a healthy life, consisting of a healthy body and a healthy mind. A healthy mind must only come from rigorous training of the mind, the same way as physical exercise is appropriate for a healthy body. Such training actually requires appropriate consumption which implies less rather than more consumption. As for an appropriate consumption, the goal is to consider useful aspects of things to be consumed and they should be consumed moderately. This is optimal for a healthy life.

Since *pañña* is the most crucial factor in Buddhist economics, it should be explained further how *pañña* can be generated and accumulated. The method for training of *pañña* is known as *sikkhattaya* or the threefold training in a spiral-like, dynamic way. It can be subdivided into *adhisilasikkha* (training in higher morality), *adhicittasikkha* (training in higher mentality or mental discipline) and *adhipaññasikkha* (training for higher level of *pañña*). The word *sikkha* means the process of knowing or learning through actual practice to the point that everything becomes clearly evident or fully understood. The word *adhi* means greater, bigger, or higher. It implies that each level of training will lead to a higher level of training and understanding. In other words, the three components of *sila*, *smadhi* or concentration derived from *adhicittasikkha* and *pañña* must be trained together to increase the progression of the three at the same time. Such form of training is shown in the diagram below.



The training must follow this order: *pañña* → *sila* → *smadhi* → *pañña* → *sila* → *smadhi* → etc. *Pañña* in this context means the right understanding. At this level, it may not be a clear understanding. It may begin with a set of beliefs or faith, though it must be the right one. For example, this could be the belief that if one always does good things

² Diagram 1: “Buddhist Economics: Evolution, Theories and Its Application to Various Economics Subjects”. The Chulalongkorn Journal of Buddhist Studies, Special Issue One, Center for Buddhist Studies, Chulalongkorn University, 2008. p.77

such as speaking the right way, conducting oneself the right way, living the right way, one would receive something good in life in return. Practicing the way of the right speech, right conduct and right livelihood is actually practicing the training of *sikkha*. When one always does good things only, there will be nothing to be concerned about. This way the mind will be calm and can concentrate on the useful things more easily. As the mind becomes more concentrated, it can focus and achieve enlightenment more easily. This is how the higher level of *pañña* is generated. In the next round, the practice of the higher level of *sila* will come with better understanding through experience from actual practice from the previous round. The practice of *sila* at this level will be with better intention and with more intensity. The mind will focus more easily, and understanding will be gained at a much deeper level. The whole process then will continue in a spiral dynamic pattern.

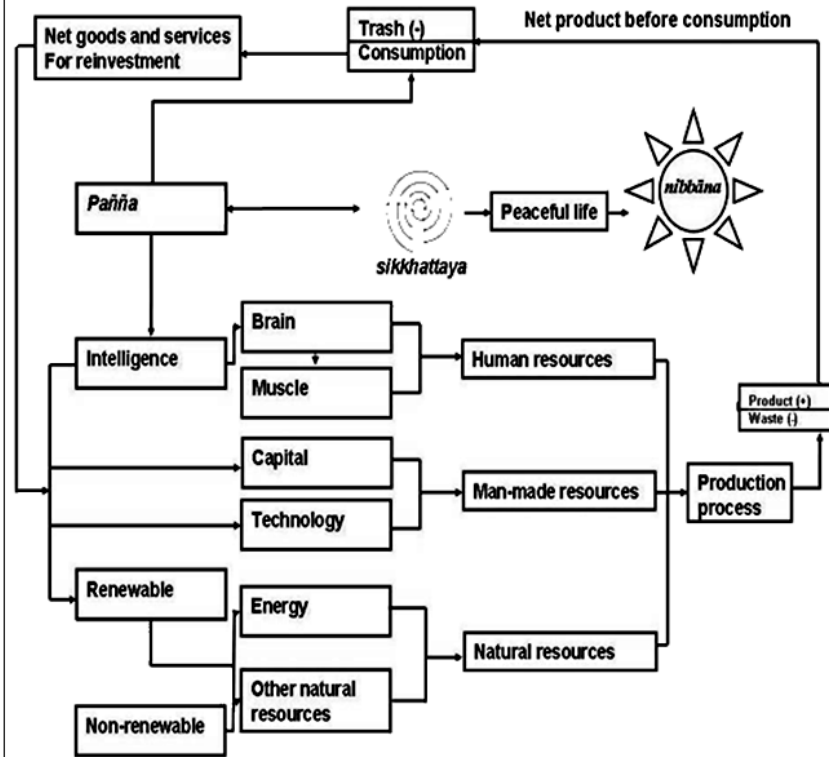
Sustainable Development in Buddhist Economics

Putting production and consumption together the way they have been explained earlier, results can be seen in the diagram below.

This diagram shows that production yields net products and waste from production in compensated form from the surplus of the gross product. This net production will be used for consumption. The remainder is waste resulting from the consumption process itself.

Consumption and Production Theories of Buddhist Economics.

The system of production and consumption under the conditions of sustainable development and promotion of a peaceful life.



Sustainable development and the reduction of conflict or contradiction yielding a more peaceful body and mind is the condition when net goods and services produced are more than enough to maintain the existing system of production. The rest can be used to reduce pain and suffering of those who need it. With the help of technology, production efficiency can be improved.

[3]

³ Diagram 2: "Buddhist Economics: Evolution, Theories and its Application to Various Economics Subjects". The Chulalongkorn Journal of Buddhist Studies, Special Issue One, Center for Buddhist Studies, Chulalongkorn University, 2008. p.78

Consumption in Buddhist economics is not to gain “satisfaction” as explained in mainstream economics, but rather for the maintenance of physical needs of human beings, as well as the physical production process to continue on its own course. The goal of the whole production process is actually to produce wellness that eventually reaches the stage of *nibbana*. The main emphasis in this diagram is a circular flow of goods and services for the maintenance of the whole production process. The nature of such flow will indicate whether the system is sustainable or not.

In the diagram, *pañña* serves as the main control mechanism of both production and consumption. What ought to be emphasized here is that no matter how *pañña* has been used in both production and consumption processes, unsustainable development could still be one of the possible outcomes. This fact may result from rapid resource depletion leading to a point at which they cannot be used further to maintain the full function of the system. This may also happen in a very difficult environment that cannot actually support human lives. It could also be caused by the fact that the existing technological development of the community is not at a sufficiently high level, for example, in some difficult areas on the earth or on the moon. In these cases the survival of human beings must depend on external sectors that still have surpluses to support the non-viable system for a certain period of time while waiting for the improvement in technology. In this case self-reliance might come later on.

The second case demonstrates base-line sustainability. In this case available goods and services are just sufficient to maintain the system to continue at the existing pace. It is the likely case under the existing resources and the level of technology available resulting from human intellectual ability, if human intelligence is used well under the control of *pañña*.

The third case, and the most likely one, is where the net product exceeds the needs required for maintenance of the system. The surplus can be used to support those who are still in pain or *dukkha* from having inadequate resources to maintain their basic needs (or those who are still poor in the true sense). The wellness of this group can be improved from the existing surplus. If the surplus is still excessive, it can be used to improve the existing environment and the eco-system as well. The efficiency of production factors can also be improved from the said surplus.

The real wellness of human beings only depends on *sikkhattaya*, which is a separate process but directly related to *pañña*. *Pañña* controls production and consumption processes directly. Notice the two-way arrow-head between *sikkhattaya* and *pañña*. It demonstrates the dynamism between the two concepts. The two represent the possibility to solve the current crisis causing great damage resources and the environment by both the consumption and the production processes. Without any attempt at improving the existing situation, the whole system can easily move in the direction of self-destruction. The only way out of this undesirable situation is to develop *globalpañña* within this system as quickly as possible.

Having analyzed production and consumption in the framework of Buddhist economics, it can be clearly seen that peace and tranquility can actually be achieved with sustainable development. The rest is how to apply such a framework to the real world. Action toward such an idea seems to be formidable. Nevertheless, the light already appears at the end of the tunnel. The most important task is to develop *sikkhattaya* into an actual operating tool that will result in much more improvement of *pañña*. At the same time transformation from capitalism to *pañña-ism* must be accomplished as soon as possible.

Ecology

Ecology or ecological system is a specific sub-set of an environment that implies anything externally to a human being. The important nature of environment is that if it is well utilized and maintained it can be the most important factor to support a human life. However, if it is not well maintained it can be harmful to human life. Thus, a well maintained environment is vital to human survival. The ecosystem is like a chain that links all living and non-living things that support lives of living things including human beings. All parts are interdependent. If any interdependent part of this system is damaged or broken, the entire system can no longer function properly. Some parts of living entities can be destroyed. Such a damage can be a serious challenge to the survival of human beings. Therefore, the quality of the environment and a well-functioning ecological system are crucial to the survival of human beings in the future. As a result, ecological balance is decisive for the continuation of the human race. Without human beings all knowledge accumulated by them in the past will be useless. While resources are important factors of production and support the continuation of a human life, the environment is the quality part of those factors, and the ecological system is the crucial factor for the environment and for resources which are in turn factors of production. While production is important for the maintenance of a human life, careful consideration of the maintenance of the ecological balance in the production process is also critical for human survival in the long run. The discussion of production and consumption in Buddhist economics for future sustainability is relevant here because the whole process must also take the ecological balance into consideration.

One can see that wellness or peace and tranquility are not at all based on more consumption but on more rigorous training of the human mind. The method suggested in *Buddha Dhamma* is *sikkhattaya*.

As a result, sustainable development with peace and tranquility under the condition of ecological balance is possible in Buddhist economics. Production at a level higher than satisfying the healthy human life can result in an over-utilization of resources. Eventually, it can also result in threatening the existence of a human life, because the ecological system can be badly damaged beyond the point where human life can actually be supported effectively.

Ethics in Utilization of Natural Resources and Environment

The way resources are used in any production process for an eventual consumption must conform to existing ethics. In the West, there are two streams of ethics in the utilization of natural resources and environment. They are humanist and naturalist ethics. Humanist ethics in the narrow sense accepts the domination of human beings as individuals or as a community over natural resources and environment. It is because God creates all those things for the benefit of a human being which in turn is created in the image of God himself. Such domination may include care and respect for other beings but the judgment is at the sole discretion of a human being only. This ethics can be further divided into two streams, i.e. utilitarianism and liberalism. Utilitarianism believes in the common good which can be generally accepted. The difficult part of this approach is how to measure or to identify such common good in an explicit and generally acceptable way. Because of such difficulty, it is almost impossible to have a common agreement. Liberalism, on the other hand, suggests an additional criterion that such action must not infringe on individual right, or to make or to result in any individual being worse off. Those who advocate individual rights will have no difficulty in agreeing with such an additional criterion.

Naturalist ethics starts from a completely different angle. Nature has existed long before human beings, and the human being is only a

small part of nature. It is only a part of the ecosystem. Therefore, the domination of human beings over other beings, natural resources and environment, is unacceptable. As nature and ecological systems have existed long before the human race, they must be treated with respect, and must not be acted upon in the way that results in the degradation. This naturalist ethics is the origin of one stream of thought known as *deep ecology*.

Environmental ethics in *Buddha Dhamma* is similar to that of naturalism, which is close to deep ecology and emphasizes the balance of nature without any human interference because the human being is also a part of nature. The only difference is that the law of impermanence in *Buddha Dhamma* is a general rule and not an exception. As a result, sustainability is not permanent or relevant either. Therefore, the focus should not be on sustainability but more on wellness of the human being.

To treat the environment with great care is also crucial for Buddhist economics. By doing so, the end result can be the same for both approaches. Hence, human interference is acceptable in Buddhist economics, but such interference must be under the condition of mindfulness, i.e. doing only the right things and to avoid doing any harmful things to nature. *Buddha Dhamma* also shares the ethical value of liberalism but on a much higher level in the sense that one must try to liberate oneself from *kilesa*, or all defilements of the mind. By doing so, one will be freed from unnecessary consumption and acquisition. This way a human being can be developed to the highest possible potential and be able to contribute more to a societal welfare at a level that is higher than conventional utilitarianism. Environmental ethics in *Buddha Dhamma* embraces all Western humanist and naturalist ethics in a more harmonious way in the sense that it is close to naturalism but accepting impermanence and allowing human interference in a good way. Such interference must be done by a liberated person who is free, or close to free, from all

defilements. Such a person can follow a kind of utilitarianism at a higher level by providing social welfare to the public, and by that contributing to peace and tranquility for all humanity.

Lessons for Our Future ASEAN Community

We are close to the dawn of the ASEAN Community (AC) in 2015. This community is promising three pillars: economic benefits, national and common security, and maintenance of social and cultural values. Unfortunately, most members look mostly forward to the economic benefits. Such benefits can be gained from the nature of a larger market, as tariff barriers among different countries will be cut down significantly. This situation will allow more free flow of commodities and services among its members. On the other hand, countries with more resources and reasonably cheaper labor cost will receive more investments together with better production technology. Such changes will result in more production and consumption throughout the region. From the point of view of mainstream economics, this situation is the way to social welfare improvement for all.

But from the view point of Buddhist economics and the ecological system, it is the way to hasten all members of the Community to an eventual dead end, as there will be more production and consumption than what is needed to support the wellbeing of everyone. It is because an economy based on greed will be working with its full force.

Actually, if sanity is still prevailing, what should be shared more among the AC members are not the so called economic prosperity and benefits. First and foremost, each member should try to learn from the others, from their social and cultural values. Learning from such diversity in values among ASEAN members is much more interesting. Actually, the rich diversity among most ASEAN members

lies in their spiritual values. Such form of learning will enhance our wisdom and will enable us to proceed on an economic cooperation in a more sensible way, because our common survival, peace, and tranquility will also be taken into consideration. In the world where business activities reign, economic benefits in a shortsighted manner will always be the dominant issue. As a result, our common survival will be at stake, even though the means for peaceful coexistence are already known.

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Evening Moon among the Clouds

Photograph. Catalano, J.L. 2014. *Evening Moon among the Clouds*: taken during the full supermoon of 10-Aug-2014, in Bangkok, Thailand

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Ecofeminism, Sustainability and Sufficiency Economy: Perspectives for ASEAN

Subhavadee Numkanisorn

Abstract

During the past decades, the Association of Southeast Asian Nations (ASEAN) has experienced mixed results of development. While success in economic progress has been achieved, improvements in the social sector seem to lag far behind. Meanwhile, natural resources and the environment have been deteriorating. Also, rapid urbanization, population explosion and increased income and consumption inevitably lead to mass generation of waste. Traditional environment management pursues reactive policies with monitoring, legal regimes to reduce pollution. This is not sustainable. In order to achieve sustainable development, a paradigm shift must be reunited with ethics that are more caring of the human-nature based. Such ethics may be found in alternative sustainable development based on religious, spiritual, environmental, or feminist values. Ecofeminists, for their part, stress the need to take into account the principles governing nature in order to achieve sustainable development. The power relations and values underpinning the socio-ecological system that we - human beings and nature - constitute must be revised.

These proposals could be enriched by incorporating a wider variety of perspectives, leading to the adoption of a holistic approach that should characterize sustainable development which is consistent with the approach of the Philosophy of Sufficiency Economy. Therefore this paper also addresses the Philosophy of Sufficiency Economy, bestowed by His Majesty King Bhumibol Adulyadej, which is a holistic concept of moderation that acknowledges interdependency among people and with nature. It calls for a balanced and sustainable development as its objectives of development.

Introduction

In 1980, the 'World Conservation Strategy' underlined that the conservation of natural resources is essential for sustainable development of humankind (IUCN, UNEP and WWF, 1980). Seven years later the World Commission on Environment and Development (WCED) defined the concept of sustainable development more precisely in its report *Our Common Future*. This publication paved the way for the United Nations Conference on Environment and Development (UNCED), which was held in Rio de Janeiro, Brazil, in 1992. In 1992, the international community focused on the United Nations Conference on Environment and Development (UNCED) where a plan for sustainable development, Agenda 21, was conceived. 'Sustainable development' can be defined as a development approach which aims at accommodating the needs of present generations without compromising the availability of resources for future generations. Equity among present generations and between this generation and those that follow is a critical component of this concept. It is also important to note that this concept is additionally compelling because it comprises two objectives usually considered to be conflicting, namely development

and the protection of the environment. However, in reality it is not easy to achieve sustainable development.

Several studies have shown a correlation between income growth and environmental degradation. One such study is that of Naidoo (2004), which showed the impact of the depletion of resources, e.g. through forest clearance, on income growth. The findings indicated a strong positive relationship between the two: the larger the forest clearance of a country, the faster the growth rate. Likewise, Thomas (2001) investigated a relationship between GDP growth and the indicators of environmental sustainability (for example, changes in carbon dioxide emissions and changes in forest cover). The result showed a strong negative relationship. All the evidence confirms that high income growth of a country is achieved by the depletion of natural resources and the environment.

One of the common characteristics of sustainable development is that it links the ecological dimension to the social and economic dimensions in which humankind develops. A balanced relationship between these dimensions of reality is what sustainable development envisions.

ASEAN Environmental Management Framework

In the case of The Association of Southeast Asian Nations (ASEAN), the economy of the region continues to grow at the moderate pace driven by an expanding global and regional consumption of goods and utilization of services. This implies increasing use of natural resources with the concomitant generation of residuals. The principal sources of pressures on the environment are contingent on the extraction and processing of raw materials as inputs to industrial production, construction of infrastructures and generation of energy, the poor management of wastes, and other externalities resulting from economic activities. The challenge for the region is to enhance or

maintain this economic growth in a manner that will have a minimum of adverse impact on the various ecosystems of the region. The leaders in effect have declared that sustainable development - where there exists a dynamic and mutually supportive balance between economic growth, social equity and environmental integrity - shall be the guiding principle for the region in its efforts to establish an ASEAN Community. Accordingly, the leaders envision a “clean and green ASEAN with fully established mechanisms for sustainable development to ensure the protection of the region’s environment, the sustainability of its natural resources and the high quality of life of its people” (ASEAN Environmental Education Action Plan, AEEAP, 2014-2018).

The AEEAP contributes to this vision by providing a regional framework for enhancing public awareness on environmental management for sustainable development, and to accelerate the development and advancement of environmental education as a key component for achieving sustainable development in the region. Environmental Education (EE) has been defined as the process of helping people through formal and non-formal/informal education to acquire understanding, skills and values that will enable them to participate as active and informed citizens in the development of an ecologically sustainable and socially just society.

It has been more than 20 years since the United Nations Conference on Environment and Development took place. It shone a spotlight on the serious ecological deterioration of our planet and its implications for human well-being, and yet we are still facing the same problems, compounded by new challenges that have resulted from the absence of a global perspective and the limited action taken. Some progress has been made, but we are still far from achieving sustainable development. In the case of ASEAN also, in order to achieve sustainable development, a paradigm shift must be reunited with ethics that are more caring of the human-nature base. Such

ethics may be found in alternative sustainable development based on religious, spiritual, environment, or feminist values.

Ecofeminism

The ecofeminist perspective propounds the need for a new anthropology which recognizes that life in nature is maintained by means of cooperation and mutual care. Therefore, ecofeminism is culturally oriented. But there is also a more spiritual line, which celebrates women's greater humanism, pacifism, nurturance and even motherhood, and calls for 'sisterhood' and for reweaving the world and forms of knowing (Diamond and Orenstein 1990). The term ecofeminism was introduced in the mid-1970s by the French feminist writer Françoise d'Eaubonne. The emergence of ecofeminism has been highly influential within the women, gender and development debate. Ecofeminists, like Carolyn Merchant (1980) in her seminal work *The Death of Nature, Women, Ecology and the Scientific Revolution*, have built a strong critique on the construct of science, which is reductionist in nature. They argue that women are closer to nature than men, and they see a connection between male domination of nature and male domination of women. Vandana Shiva, an Indian physicist, was very strong on this in her publication *Staying Alive* (1988) and in her later publications. She argues that paternalistic, colonial and neo-colonial forces and values have marginalized women and women's scientific knowledge, as well as nature. In order to recognize the interconnections between people from different parts of the world, and between human beings and ecosystems, it is necessary to dismantle dualisms such as public/private, feminine/masculine, reason/emotion, and progress/conservation (Plumwood, 2002). One of the key contributions of ecofeminism is that it fundamentally questions the dominant model of development and emphasizes the validity of

marginal people's knowledge. It contributes to a challenge of epistemological assumptions in science, technology and development, and highlights its negative effects on people, nature and local cultures. Ecofeminists have highlighted the need to challenge the invisibility of women, which shares many characteristics with the invisibility of nature and stresses the need to take into account the principles governing nature in order to achieve sustainable development. The power relations and values underpinning the socio-ecological system that we - human beings and nature - constitute must be revised. These proposals could be enriched by incorporating a wider variety of perspectives, leading to the adoption of a holistic approach that should characterize sustainability which is consistent with the approach of the Philosophy of Sufficiency Economy.

The Philosophy of Sufficiency Economy

The Philosophy of Sufficiency Economy (PSE), bestowed by His Majesty King Bhumibol Adulyadej, is a holistic concept of moderation that acknowledges interdependencies among people and nature. It calls for a balanced and sustainable development as its objectives of development. The Philosophy of Sufficiency Economy has originated from a life-long accumulation of knowledge and experiments by His Majesty King Bhumibol Adulyadej. His long devotion to provide a means toward self and community development has been evident for more than 30 years. He has been concerned with sustainable development so that people can live in balance with nature and with other beings. After the UN Secretary General, Kofi Annan presented a Human Development Life-Time Achievement Award to the King in 2006, and after the publication of UNDP Thailand Human Development Report in 2007, his work

became more known internationally as a means for sustainable development with a great emphasis on human development.

As a result of the Asian Financial Crisis in 1998, His Majesty the King re-emphasized the importance of the Philosophy of Sufficiency Economy during a speech on his birthday that year. The Philosophy of Sufficiency Economy can be defined as:

A philosophy that stresses the middle path as the overriding principle for appropriate conduct and way of life by the populace at all levels. This applies to conduct and way of life at the levels of the individual, family, and community, while providing a choice of a balanced development in line with the forces of globalization and shielding against inevitable shocks and excesses that may arise. 'Sufficiency' means moderation and due consideration in all modes of conduct, together with the need for sufficient protection from internal and external shocks. To achieve this, the application of knowledge with prudence is essential. (Cited in the unofficial translation from remarks made by His Majesty the King on various occasions, Sufficiency Economy Organization 1999).

The King also explained the meaning of 'self-sufficiency' as follows:

Having enough to live on and to live for means self-sufficiency. If everybody has enough to live on and to live for, that is good. And if the whole nation reaches that status, that is even better... Formerly, Thailand had enough to live on and to live for... Self-Sufficiency, in English, means that whatever we produce, we have enough for our own use. We do not have to borrow from other people. We can rely on ourselves as people say, we can stand on our own legs. But Self-sufficiency carries a broader meaning. It means having enough and being satisfied with the situation. If people are satisfied with their needs, they will be less greedy. With less

greed, they will cause less trouble to other people... If any country values this idea - the idea of doing just to have enough, which means being satisfied at a moderate level, being honest and not being greedy, its people will be happy [...]. Being self-sufficient does not restrict people from having a lot, or possessing luxurious items, but it implies that one must not take advantage of others. Everything must be within limits. Saying what is necessary, acting just as is needed, and working adequately... Therefore, self-sufficiency here means within proper bounds and reasons. (Cited in The Chaipattana Foundation Journal 1999).

The Philosophy of Sufficiency Economy promotes gradual development on the basis of self-reliance and having enough to live and to eat, and the three principles of this philosophy include Moderation, Reasonableness, and Self-Immunity (Piboolsravut 2004; Senanarong 2004; Israngkul & Pootrakool 2008). These three principles are interconnected and interdependent. *Moderation* conveys the idea of people living their lives on the middle path, not the extremes. People should rely on themselves without overindulgence. This way of living occurs when people have *reasonableness* - accumulated knowledge and experience, along with analytical capability, self-awareness, foresight, compassion and empathy. They must be aware of the consequences of their actions, not only for themselves but also for others. The third principle, *self-immunity*, refers to the ability of people to protect themselves against any external turbulence and to cope with events that are unpredictable or uncontrollable. It implies a foundation of self-reliance, as well as self-discipline.

The principle of self-reliance has five aspects (quoted from UNESCAP 2006):

1. **State of Mind:** One should be strong, self-reliant, compassionate and flexible.
2. **Social Affairs:** People should help one another, strengthen the community, maintain unity and develop a learning process that stems from a stable foundation.
3. **Natural Resource and Environmental Management:** The country's resources need to be used efficiently and carefully to create sustainable benefits to develop the nation's stability progressively.
4. **Technology:** Technological development should be used appropriately while encouraging new developments to come from the villagers' local wisdom.
5. **Economic Affairs:** One needs to increase earnings, reduce expenses, and pursue a decent life.

Apart from the principles of moderation, reasonableness and self-immunity, two other conditions support the principles of the Philosophy of Sufficiency Economy work: knowledge and morality. *Knowledge* encompasses accumulating information with insight to understand its meaning and the prudence needed to put it to use. Without knowledge, it would be impossible to be reasonable and self-immune, as these two principles require rational decisions, information gathering, previous experience, analytical skills and adaptability. Accumulating knowledge, therefore, is essential, whether through a formal educational system or through real-life experience. *Morality* refers to integrity, trustworthiness, ethical behavior, honesty, perseverance, and a readiness to work hard.

By practicing these three principles with the two underlying conditions, people would be able to live securely and harmoniously in a sustainable society and environment. Such a way of living does

not signify self-sufficiency; rather, it reflects self-reliance - the ability to tolerate and cope with all kinds of malign impacts of globalization.

Thus, the Philosophy of Sufficiency Economy provides holistic and sustainable perspectives for human development in two respects. One is through the Philosophy of Sufficiency Economy process (that is, the three principles), which can be used for analyzing situations, identifying objectives, setting plans and taking decisions (UNDP, 2007). This process is applicable at any level of society. The other is the mental and spiritual development aspect of the Philosophy of Sufficiency Economy. When embraced in any type of development, these values yield mental and spiritual well-being at the individual level and provide an ethically focused culture at the organizational level.

Application of the Philosophy of Sufficiency Economy

One serious case of unreasonable immoderation in environmental consumption is deforestation or forest clearance. Deforestation denudes mountains, giving rise to mudslides during heavy rainfall. In Thailand, there have been mountain mudslides that cost people their lives and destroyed property, including houses, infrastructure and cultivated lands. After a devastating mudslide in 1996, Ban Wang-lum village, a small community in the southern Thai province of Ranong (NESDB 2005), began adhering to the Philosophy of Sufficiency Economy. To preserve the forest, villagers – following the principles of moderation, reasonableness and self-immunity - stopped cutting trees from the mountains and in 1999 started planting timber trees in their own ‘community forest’. A seven-member committee was formed to monitor the utilization of the forest. Now, instead of cutting trees from the forest for the construction of houses, the villagers use the proceeds from the community forest. The community forest is viewed as a resource for

the community's immunity and prevents further depletion of the environment.

Another practice of the Philosophy of Sufficiency Economy in addressing problems of environment degradation and natural resource depletion is sustainable agriculture. Sustainable agriculture adopts PSE in the sense that one needs to be moderate, reasonable, and self-immune, together with being hard-working and acquiring knowledge. Sustainable agriculture practices organic farming, which eliminates the use of chemical fertilizers and chemical pesticides. The utilization of chemical fertilizers is one of the main causes of soil degradation (in this case, soil acidity), which reduces the productivity of crops. Chemical pesticides not only kill insects but also endanger the environment, which in turn harms people. Instead, the natural materials that can be found locally are used to make organic fertilizer and insecticide.

The PSE concept on environmental sustainability does not only play an important role in rural areas but also in cities. With moderation, reasonableness, self-immunity and awareness of social well-being, people, businesses and public organizations will be more conscious of environment protection. The essence of this philosophy regarding environmental issues is to guide people to live in harmony with nature. By being reasonable and moderate in natural resources utilization, and by being self-immune through environmental conservation, people can successfully live in harmony with nature.

Conclusion

The Philosophy of Sufficiency Economy provides a process for development applicable to all levels of practices: an individual, a community, a business entity and a country. It also emphasizes ethics, particularly with the focus on self-improvement, sharing, honesty, perseverance, and patience. Through adopting the PSE

approach by following the main practice guidance of the Middle Path, all units and levels can develop higher economic and social security as well as a capacity to respond to changing environments.

Coupled with the above philosophies, ecofeminist living means life in a natural way through means of cooperation and mutual care. It also places its stress on the characteristics of invisibility of nature, which is the key to achieve sustainable development. ASEAN needs a paradigm shift, taking ethical approaches into consideration that are more caring of the human-nature based to achieve sustainable development. The PSE takes a holistic approach towards sustainable development, and by practicing PSE it is more likely that people will live in harmony and with security in a sustainable society and environment, at the same time being able to tolerate and cope with certain effects or impacts of globalization.

With a balanced way of living, morality lifts up people's spirits and shows that living is a deeply meaningful phenomenon. This represents another kind of freedom, i.e. freedom from the trap of materialism in which many people find themselves today.

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Part III

Utopias & Perspectives

ECOLOGICAL, SOCIAL AND ECONOMIC
SUSTAINABILITY

Perspectives for Thailand and ASEAN

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Plato's Concept of a Sustainable Economy: After Two-and-a-Half Millennia; a Still Unfinished Task¹

Hans Christoph Binswanger

Not quite two and a half thousand years ago, three elderly gentlemen went for a walk on a nice warm summer's day on the island of Crete; Clinias, a Cretan, Megillos, a Lakedemonien (Spartan), and an Athenian, simply called "the Athenian". Plato, the great philosopher of antiquity, who lived from 427 to 347 BC, reports this in his Dialogue on "Laws" (Nomoi). The three elders are on the road from Knossos to the cave of Zeus, which is situated on the Lassithi plateau. Anyone who knows Crete knows that this is a very long way which allows plenty of time for an equally long conversation, especially as the men do not want to rush. "On the way there are," says the Athenian at the beginning of the conversation, "presumably under the tall trees some shady areas for rest, as they are desirable in the oppressive heat today. It is right for us at our age to often take a break there and to cheer each other again through conversations, and so to go all the way at a leisurely pace". And the local Clinias confirms this: "Indeed,

¹ This essay is a translation of the German original *Platons Konzept einer nachhaltigen Wirtschaft: eine nach zweieinhalb Jahrtausenden noch unerledigte Aufgabe*. Translator: Alexander J. Klemm.

this is so ...: while continuing in the groves, wonderfully high and beautiful cypress trees can be found and meadows where we would probably like to rest and linger." And so the "laws", as a result of this long walk, have become a very comprehensive book; it is the longest dialogue of Plato. So the reader may understand that I can present the contents only very briefly in this paper.

What are the three men talking about? They are talking at length about the question of whether and under what circumstances the consumption of wine is to be allowed. They come to the conclusion that it is only allowed under restriction, for instance, when it comes to test a man, for example in order to find out whether he is fit for higher office. If he can control himself even under the influence of wine, then he is fit, if he can't, he isn't. *In vino veritas!* In wine there is truth! But in general the enjoyment of wine is also allowed, when it is a time of celebration, but only when courageous men are there who, remaining sober, make sure that the consumption of wine is not excessive. It therefore does not count to principally forego all the pleasures of intoxication, but it is important to be moderate even when intoxicated!

Be mindful of moderation! This is the general idea with which the laws that govern public life and particularly the economy are designed to align themselves. Now the conversation centers on the question about the nature of these laws. Here "the Athenian" is the leader. He is none other than Plato himself.

In order to adhere to this postulate Plato is against a social and economic development in which not the concern for the satisfaction of vital needs is important anymore, but rather career aspiration at all cost, a form of growth that knows no moderation. This growth leads, as Plato says, to a drifting apart of rich and poor and consequently to injustice, but also – having this thought already in his mind – to the over exploitation of nature. Thus Plato in his dialogue "Critias" reports of the karstification of Greece by excessive deforestation. If we

compare the present state with the former, he writes, then there is "as it were the skeleton of a body left, which was consumed by a disease: all around the fertile and soft soil has been washed away, and only the meager skeleton of the land is left."

Plato wants to build the market (which he recognizes as the new basis of the economy) on certain rules that guarantee a lasting, socially and ecologically friendly economy, thus – as we would say today – bringing the economy under the concept of sustainability.

To understand why Plato dealt with this question about 2500 years ago, we must be aware of the fact that the expansion of the economy began in Asia Minor and Greece about 700 BC, i.e. about 300 years before Plato, when people began to mint coins. With coinage the tedious weighing of individual gold and silver coins became unnecessary. This enabled the start of trading on a broad basis, and thus the structure of an economy that orients itself according to the market, in which the gain of money is the theme of trade and of action. With this the economy got a whole new dimension. It no longer served primarily the satisfaction of the needs, which has the (finite) goal of the saturation of the needs, but the sale of goods that have been bought cheaply in order to be sold at a high price, so that the result is a surplus of money which can be used again for further gain, etc. The gain of money does not lead to saturation, but rather stimulates the appetite for further gain that is aligned with a steady growth of trade and, together with trade, with production and wealth. One never has enough of wealth. It is an infinite goal that, since it can never be satisfied, pushes itself to the front of all finite goals that can be met.

That such an orientation of the economy began with coinage was already recognized by the famous seven sages of the antiquity who lived in the 7th century BC and who were thus witnesses of the beginning of this new economy. Especially the statement of Solon, the great statesman of Athens, is known. It says: "Wealth has no limit

which is tangibly set for man." And Pittacus, another one of the seven wise men, adds: "Profit is insatiable." This quest for evermore, which was naturally linked to large differences in the distribution of wealth, to political unrest and even – as we have seen – to an over-exploitation of nature, Plato opposed 300 years after the beginning of coinage and the spread of trade and of the market with his utopia of a moderate and thus sustainable economy supposed to counteract the trend to gluttony.

Plato's proposals for reform are dressed as proposals for the creation of a new city. However, it is probably about the reform of Athens. It must be remembered that "state" and city with their rural environment in what was then Greece were identical.

The laws upon which "the city of the future" is based will now be formulated according to Plato, so that the city remains stable in terms of population and that there is no need and no drive for a steady economic expansion which destabilizes the city. Rather, the laws are to guarantee a sustainable order. How is this achieved?

The legislation is preceded by the question of the location of the newly founded city, where "location" is not to be understood as the exact location, but as the distance from the sea and thus the degree of integration into the international trade (sea trade). When Plato says that the city is supposed to be about 80 stadiums (about 15km) from the sea, it means: While the city shall have the option to import the really necessary things that it does not produce itself, it should not be connected directly to a port; it must have a certain "distance" from international trade, both literally and figuratively, and remain partially self-sufficient.

We can now summarize Plato's ideas on reform in eight postulates on stability and sustainability.

The first postulate of stability concerns the population. It should neither decrease nor increase. The natural trend to propagation is inhibited on the one hand by certain moral and institutional barriers,

such as those related to the marriageable age; but any eventual overpopulation should be addressed by emigration in to a colony. (Today, given the overpopulation of the world, emigration as a way of limitation of population growth is largely obstructed; family planning is now at its place - as a corresponding way out, one could perhaps argue.)

Secondly, the number of households is also to be fixed once and for all according to the total size of the population. How many households should there be in a city? In answering this question, Plato searches for a number that enables a diverse yet stable order of the city. Each order requires grouping and sub-groupings which, depending on their function, should include a different number of households. The total number of households must therefore be a number that has as many dividers as possible. Such a number that is about the size of the cities then, such as Athens, is 5040. 5040 is $7!$ ($7! = 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1$). This number, which - as Plato points out - can be divided by all numbers from 1 to 12, except for 11, determines the size of the city and the 12 "tribes" (provinces) into which the city is mainly divided. "The beginning of laws that are now to be drawn up by us should be the following, starting with religion: Here we must repeat especially how easily the number 5040 can be divided... both as a whole and in the individual tribes, which we have put as $1/12$ of the whole, which is then exactly 20 times 21. The integer can be divided by 12, and the same is true for the number of the individual tribe. We must therefore consider each part as a sacred gift from heaven because the number corresponds to the number of months and the circulation of the world."² (20×21 is 420; 420 is $1/12$ of 5040).

In this regulation of numbers the view is expressed that a moderate order actually must be based on solid, binding dimensions. These dimensions or measures should be practical in the sense of divisibility, but they also acquire a sacrosanct character through correspondence with the cosmic order.

² 771 A-771 E

Within this order the principle of justice can also be realized. The third postulate requires that each family at the founding of the city be granted the same opportunities in the allocation of land, regardless of the wealth brought with them. Today, we would speak of a land reform. There shall be 5040 lots; each lot is divided into two pieces, one of which lies close and the other far from the center of the city. For the purpose of the postulate of equal opportunities, the part located in the center of the city should form a lot with the part located at the outermost boundary of the countryside, the second closest to the center of the city with the second farthest in the rural area, etc. In the same sense a balance with respect to the inferiority or quality of the soil is also to be sought. Also within the city, every citizen has two apartments: one in the city center, the other at the outskirts. This allocation implies the notion that everyone is an urban and rural resident simultaneously, and thus there is no real division of labor between city and countryside; rather, each household has its own basis of self-sufficiency.

The private property of land and of other assets is the basis of the economic system; tillage is thus individual and not collective. In this sense, the Platonic utopia significantly differs from a communist system. The private ownership of the soil, however, is – we come to the fourth postulate – limited to the use of land and the appropriation of the products of the soil, thus excluding the sale and the investiture of the land (the property thus includes a right of use but not of sale). Similarly, the right of ownership includes an obligation of management, by which way land is ideally considered as common property of the whole state: “Because now all land belongs to the fatherland, the owner must also maintain and service it like a mother her child; because the land of one’s home is for us mortal humans a commanding eternal power of God.”³ In addition there is the restriction that

³ 7398 E-740 D

only part of the products of the soil and the cattle may be offered on the market, while part is intended for self-sufficiency.

Even when every immigrant receives a share of the land, still one will have come with larger, the other with smaller possessions. Specifically, this means: one has inherited more, the other less. Also, over time different services will lead to different income. For these reasons, some will be richer, others poorer. This difference should not and cannot be canceled. However, there should be neither extreme poverty, nor extreme wealth. Therefore, – this is the fifth postulate – an upper and a lower limit of income is to be determined. The lower limit is formed by the income from the originally allocated land that the owner cannot sell and that can also not be taken away from him under any title. As the upper limit Plato proposes four times the amount of this income; an eventual surplus is to be delivered to the State. This proposal includes the idea that the economy must not be destabilized by excessive greed for possession which would destroy the moderate order.

For Plato, money is the actual core of unrest and intemperance. However, the use of money cannot be avoided, since on the market goods are exchanged for money. In principle – this is a sixth postulate – money should not be lent for interest and thus become capital. The capitalization of money is hampered because the creditor can sue in a court of law neither for the original sum nor for the payment of interests.

The monetary system is thus designed according to this role of money. Gold and silver coins, which are regarded as an expression of wealth and are coveted for their own sake, shall – in the sense of a seventh postulate – have no domestic validity and only play a role in the external trade. Domestically only coins of base metal are to circulate.

A sustainable management of land and nature is to be connected with these postulates for moderation. Social and environmental

objectives of sustainability are intertwined. But in addition, Plato also argues-this is an eighth postulate-for the direct protection of nature, by calling for the expansion and further creation of sacred groves. These are indeed, in a certain sense, nature reserves where all logging should be prohibited. In addition, no birds may be hunted in them, which was, given the passion for bird hunting by the Greeks and all Mediterranean peoples, obviously already then an important concern for the maintenance of biodiversity.

Now for Plato the question arises whether it is at all possible to realize such philosophical proposals. He himself is skeptical. He would therefore like his proposals to be understood only as a model, through which the legislator can orient himself, while a complete realization does not have to be expected: Everywhere "the legislator" seems - as Plato says in reference to his own ideas, "almost dreamlike" - we would say 'utopian' - to express suggestions or to knead from wax a city with its citizens. Such objections are certainly not unfounded; but again one also has to take heed of the following. Again the legislator directs the words to us: "Do not think, dear friends, that the objections raised in our deliberations have remained unknown to me; I confess that with good reason one can assert them in some sense. But in dealing with all schemes for the future, the fairest plan, I think, is this: that the person who exhibits the pattern on which the undertaking is to be modeled should omit no detail of perfect beauty and truth. The one who encounters the impossibility in the execution seeks to avoid it [...]; however, he will work with all available means toward the realization of that which is the closest among the other things of this stage and, by its very nature, is closest related with what should actually happen."⁴

Now the question arises: What does Plato's "legislation" mean for today's debate about sustainability? Since Plato's time, the economy has expanded in unexpected ways by an ever-increasing globaliza-

⁴ 745 D-746 C

tion of markets – despite centuries of delays due to the vicissitudes of history. This created new opportunities which Plato could not foresee. However, with new opportunities new risks have emerged. So Plato's key question is always asked anew, today to a particularly acute degree given the worsening of the ecological crisis.

It is about the question of the measures of compliance with certain dimensions in terms of risk reduction. Such a concept of risk reduction is also the current concept of sustainable development, which was declared at the Rio Summit of 1992 as an official guideline for the entire international world. Today, it stands next to the concept of economic growth.

As you know the concept of sustainability is derived from the field of forestry and means that you should not log timber above the rate according which trees grow, i.e., a certain amount of moderation should be adhered to when cutting wood. Limits are being set. Certain proportions must be adhered to. At the Rio conference this notion of the necessity of moderation was transferred from forestry to the global economy.

Such a postulate of moderation always seems to be associated with the idea of justice, as Plato makes particularly clear. It also applies to the modern postulate of sustainability. It comes in a robe of justice. You know the definition of sustainable development from the Brundtland Report, which was based on the Rio Conference. It reads: "Sustainable development is development that meets the needs of the present generations without compromising the ability of future generations to meet their own needs."⁵

This means that one should – for the sake of "justice" – leave future generations the same opportunities in life as the current generation has (expressed in economic terms, this means: for the sake of justice one should not discount any future income and thus diminish to irrelevance). Nevertheless, the present needs are to be

⁵ Brundtland Report, 1987, p 46

satisfied, and this in such a way, that – this was pointed out particularly – a "fair" balanced development within individual countries and between countries is possible, and that in particular the less developed countries can participate in the prosperity of the industrialized world. Thus, according to the Brundtland Report, it is about both an inter-generational and an intra-generational justice.

This idea is now substantiated to some extent by the climate conventions for the reduction of greenhouse gases under the Kyoto Protocol. In the interests of future generations the greenhouse gases are to be reduced within well-defined time-limits to a specific amount that is distributed by quota. The industrialized world should bear the brunt of the reduction in the interest of the less developed countries, i.e., the less developed countries should even be allowed some increase in greenhouse gases.

These postulates of justice are held up against an economic development – the trend development – which does not fulfill these postulates, or fulfills them not in a sufficient way. It must be kept in mind that the postulates of justice receive an even greater importance by focusing on the concept of sustainability and by the necessity of moderation associated with it. As long as expansion and growth is possible, anyone can imagine benefiting themselves sooner or later by partaking in this expansion. When all get more, or could get more, then it is not really important whether some get more and some get less of more. If, however, in terms of sustainability certain barriers must be maintained, the issue of distribution and the issue of justice receive far greater significance. No one wants to constantly be neglected! The relationship between the postulate of moderation and the postulate of justice catches the eye almost obtrusively. Each debate about sustainability has to deal with it!

In connection with the postulate of sustainability another issue arises, the question namely: how are the dimensions, predetermined by sustainability, to be associated with the markets that are aligned

with expansion and growth? The new concept of sustainability has been placed only next to the growth concept, it has not substituted it. Expansion and growth continue to dominate the field.

One way to resolve the conflict is to create new markets within the limits set by the postulate of sustainability, which can then expand again as such. This path has been taken, e.g. through the establishment of the various instruments for market-related transfer of greenhouse gas quotas, i.e. of emission trading in connection with the Joint Implementation and the Clean Development Mechanism. The other way is, as Plato suggests, conversely, the possibility to restrict the development of certain markets, such as the markets of land, natural resources, capital and foreign exchange. This of course is completely against the present development. At least it is also thought about here and there, e.g. in relation to the foreign exchange market via the introduction of a Tobin tax, i.e. via the collection of a tax on foreign exchange transactions, which are intended to limit these.

More current are the Platonic proposals for the sustainable development of the local units, as part of the Local Agenda 21, as well as for the need to inhibit the growth of the population and to extend the protected areas for nature. But if the goal of sustainability should be or must be maintained because there is no infinite growth in a limited world, the thoughts by the three elders on their way from Knossos to the Cave of Zeus could, very generally and in the future, play a bigger role again. They are, I think, definitely worth it to be taken as food for thought.

Further Reading

Binswanger, Hans Christoph: *Money and Magic – A Critique of the Modern Economy in the Light of Goethe's Faust* (englische Ausgabe von "Geld und Magie"). Chicago: University of Chicago Press, 1994.

Binswanger, Hans Christoph: *The Growth Spiral, Money, Energy, and Imagination in the Dynamics of the Market Process*, Berlin, Heidelberg 2013



Tea Café along a Canal

Photograph. Catalano, J.L. 2014. *"Tea Café along a Canal"*: urban lifestyle along Khlong Saen Saep, Bangkok, Thailand

7:

Reflections on Sustainable and Holistic Lifestyles in 'Ecotopia' as Perspectives for Well-Being in the ASEAN Context

Roman Meinhold

Abstract

This paper explores sustainable and holistic lifestyles in Ernest Callenbach's Novel *Ecotopia* and posits their relevance for well-being in the ASEAN regional context. The utopian ecologically-oriented novel deals with a wide variety of sustainable and holistic issues and illustrates how they could be addressed ideally and practically. A few of those measures have been already implemented in some countries in the ASEAN region, others are still debated by environmentalists, politicians, and economists. The detailed and practical ecological solutions in *Ecotopia* include, but are not limited to, all possible types of waste management encompassing recycling programs, plant-derived bio-degradable durable plastics, renewable energy, combustion engine-free, private and public forms of transportation, a wide variety of public transport opportunities (high and simple tech, such as free public bicycles), organic farming, renaturation, and reforestation.

In *Ecotopia* ecologically compatible high-technology exists right next to post-materialistic lifestyles and attitudes of its citizens.

Environmental paradigms include: intergenerational justice, sustainability, 'steady-state economy', prices of goods that reflect real costs (speak the 'ecological truth'), anti-consumerism, a slowly declining population, and strict environmental laws. The ecocentric worldview gives preference to the quality of life, not to the economic paradigm of growth.

This paper will examine which of *Ecotopia's* sustainable and holistic measurements are still desired for sustainable progress and holistic well-being, especially in the light of the fast growing major cities in the ASEAN region. For the purpose of giving a normative orientation for holistic-sustainable development an index of holistic well-being, comprised of 10 sub-indices, will be proposed.

Introduction

Why is it worth revisiting this utopia of *Ecotopia*,¹ first published in 1975, which is a dream world realized in the form of a novel? The utopian dimension in Callenbach's *Ecotopia* does not only point to a place (Greek: 'topos') that does not (yet) exist (Greek negation: 'u-'), but to a place which is good (Greek: 'eu'). Hence in many ways *Ecotopia* is also an 'eu-topia'. It is a place with a high quality of life in many aspects related to environmental, physical and psychological health, politics, education, technology, and social coherence. What is even more important, especially in order to relativize the visionary status of the novel's narrative, are suggested practical solutions for a variety of ecological, social, political, and demographical problems that are outlined in ways which appear to be practically implementable and not in the realm of Platonic idea(l)s. Seen from this perspective, *Ecotopia* is a place which really could and does exist

¹ *Ecotopia* in italics refers to the novel or to its title; *Ecotopia* non-italicized refers to the fictitious state *Ecotopia* in the novel.

in a more or less similar fashion. This paper is pointing to the relevance of the novel's importance and topicality for discourses on holistic well-being and sustainability in the light of the successively progressing ASEAN economy and the growing cities in the ASEAN region.

From a contemporary and objective perspective *Ecotopia*, as any other utopian concept, also entails a number of improbable, impossible, or unthinkable features, such as Callenbach's idealization of its inhabitants' character traits and his outline of a not adequately addressed educational system. But this investigation will not concentrate on deconstructing such features as long as they do not interfere severely with other measures which are of major importance in the context of this paper's main thrust. The task is rather to evaluate measures and features for their relevance in the present-day ASEAN context.

The first section situates *Ecotopia* in the context of the utopian genre.

In order to elucidate some of *Ecotopia*'s holistic and sustainable provisions and measures in the light of its present importance, the paper explores *Ecotopia*'s holistic lifestyles in the second section and its sustainable ecological economy in the third. The fourth section pinpoints measures that could be relevant in the context of today's increasing city population, overconsumption, and economy driven politics. The last section renders ecotopian measures in the light of contemporary discourses of holistic well-being and sustainability.

Situating Ecotopia

The prefix 'Eco' (Greek: 'household', 'home') in *Ecotopia* refers to the word Ecology or to the understanding that the ecological system is the absolute frame in which anything else happens. The novel takes as a guideline what the ancient Stoics already propagated: living

according to nature (Diogenes Laertios 1990, II, 49). While the Stoics did not specify environmental or ecological implications in their philosophy, Callenbach in his novel 'designed' a society and its nation-state which strictly functions almost exclusively according to guidelines shaped by environmental and ecological facts.

According to the Swiss economist Hans C. Binswanger (2014)² Plato had already developed a set of sustainability rules in his late-period dialog utopia *Nomoi* (347 BCE). Thomas Morus' *Utopia* (1516) has been credited for labeling an entire genre of literature which describes ideal societies in a different time and/or at a different place. Ernest Callenbach coined a name for the sub-genre dedicated to ecological utopias. Usually ecological or environmental utopias are eu-topias, whereas negative utopias are also called 'dystopias', a term coined by the British philosopher John Stuart Mill in 1868. Examples of famous dystopias are Aldous Huxley's '*Brave New World*' (1932) and George Orwell's '*Nineteen-Eighty Four*' (1948); more popular recent dystopias include, for example, the Wachowski brothers' movie trilogy 'The Matrix' (1999a/b, 2003; cf. Meinhold 2009).

According to the German political scientist and utopia researcher Richard Saage, *Ecotopia* is one of the important post-material utopias, besides Aldous Huxley's '*Island*' (1962), an esoteric-romantic 'ecotopia', and Ursula Le Guin's science-fiction '*The Dispossessed*' (1974), contrasting a semi-anarchic eu-topian and a materialist dystopian world. Seen from a wider angle the popular science-fiction TV Series *Star Trek* could also be labeled as post-materialist; especially if the existence of the *replicator* is taken into account, a device which can generate almost any desired matter. In post-materialist utopias, the achievement of and the striving for material goods is of less significance rather, emphasizes are on non-material values and goods

² Cf. Binswanger's contribution in this anthology.

such as personal, social and environmental health, flourishing, freedom, culture, and education.

That said, *Ecotopia* can be grouped into a category of ecological, post-materialist, *eu-topias*. But it is a utopia with pragmatic and realistic outline that, with a few adaptations, could exist beyond the novel, i.e. in the real world. This practical and realistic outlook, the carefully thought through details, and the convincing integration of humans in nature alongside a sustainable interlocking of basic technology and high-tech make the novel worthwhile to revisit and to reevaluate; especially when considering it in the context of ASEAN region's economic development in which problems of increasing overconsumption of middle and higher income milieus, increasing urban population, and environmental problems precede. (For the purpose of facilitating easier primary source access in the following text, the numbers in brackets without authors' name and year refer to Callenbach's novel *Ecotopia*.)

Holistic Lifestyles

Holism refers to the idea that any integrated system is of higher importance or value than the simple addition of its parts. Moreover, a whole system cannot simply be explained or determined by its parts alone (cf. Aristotle, *Metaphysics* 1045 a 10). The meaning in an ecological context is similar to the medical context: The ecosystem or an organism as an integrated system is not to be judged, cured, or created by considering its parts only. A similar idea is inherent in African concepts of community ethics (e.g. 'Ubuntu'), according to which a coherent social entity (e.g. an extended family or a tribe) is not only the addition of some people, but a person is only a person qua membership of the whole social entity (Mbiti 1969: 141). This is why a randomly chosen group of people in the street usually does not constitute a socially coherent entity. According to medical holism, a

disease is not cured by treating one of its symptoms because the whole organism and its psychological and sociocultural context need to be taken into account as well. Absolute holism might be an epistemic and ontological illusion or could be categorized as one of Plato's ideas. But in day-to-day reality holism means that as many aspects as practically possible have to be taken into account for addressing an issue. There is a similar holistic concept inherent in the conception of sufficiency economy.³

In Ecotopia many issues are seen from such a practical holistic perspective and include individual pleasure, social bonding, and ecosystemic stability. One such example are communities in Ecotopia. Such a social entity is not simply a group of people but the community serves several purposes, and its members stand in a variety of interrelations.

Ecotopians live in communities in which the members are comprised of nuclear and extended family members, or they can include close friends, people related by profession, vocation, etc. There exist also professionally homogeneous communities of scientists, artists, or company owners and workers. The holistic purpose of living together is perceived to have positive impacts on family coherence, social bonding, and professional issues, and it leads to a gain of experience, fun, and pleasure.

Such communal living groups share houses or apartments with multiple rooms. They cook and clean collectively (68) and give each other emotional group support (73). Usually around 5 to 20 people per 'family' share the raising of and caring for children (140). In Ecotopia the individual is always a social being (74), a *zoon politikon* (Aristotle, *Politics*, 1253 a 2-3). Ecotopians are also very hospitable (205) and their streets are extended living rooms. The experience of

³ Cf. The contributions by Apichai Puntasen and Subhavadee Numkanisorn in this anthology.

spending a lot of time outdoors very much depends on the regional climate and can be made in many Mediterranean countries and almost throughout the ASEAN region.

Downtown multi-purpose apartment-complexes in ecotopia feature grocery shops, restaurants, offices, nurseries, and even small hospitals or clinics (34, 137) - a picture that is familiar to urban Bangkokian dwellers. Some core-stores sell basic food, clothes, and other standardized products (204). Small standard cargo containers are used for delivery and reusable stable bags for shopping (58). Street vendors sell food (30), similar to many countries in the ASEAN region today.

A key characteristic of the Ecotopian lifestyle is the intermingling of work and private time, a relaxed work ethic (147), and an unclear distinction between work and leisure (329). People enjoy their work (330) because no one is compelled to work due to an absence of financial pressure. The national welfare system secures minimal funds for food, housing, and medical care, especially for the elderly and disabled, but also for artists who make use of this security system so that they may focus exclusively on their work (201). This kind of attitude towards work and the ecotopian lifestyle is also explainable because of the small income differences between the lowest and the highest income brackets. This feature is reminiscent of Plato's *Nomoi* (744 e – 745 a): the wealthiest should have not more than four times of the value of one with minimum possessions.⁴

The correlation of income/wealth and well-being is an independent and highly controversial research field. But significant income differences within a group usually impact negatively on the aggregated well-being of the group.

⁴ Cf. Binswanger's contribution in this volume.

In Ecotopia a lower income is well accepted in exchange for a more comfortable workplace (199). Here again is an important holistic aspect of work since professional activity includes the experience of fun, social bonding, earning income, and the conviction that one is doing something useful for oneself, the community, and the environment.

Ecotopian cities and their surroundings are full of trees and other plants, gardens (including rooftop gardens), parks, especially water parks, and other recreational facilities (28, 57, 59, 186). Trees and water surfaces hold an almost religiously appreciated, admired, and adored status. There is a kind of sentimentality about nature (19), but also an intellectual awareness of the functioning of ecosystems the understanding of which is strongly fostered by the educational system (22). This is also manifested by the fact that banknotes display landscape scenes (174). Instead of picking flowers Ecotopians tend to practice what has recently been called 'guerrilla gardening': e.g. growing plants in potholes (30, 38). The parks serve holistic purposes, such as social bonding, relaxation, recreation, and exercising (81, 187). In general people enjoy their body, they exercise, do yoga, engage in a lot of intercourse (69), and practice sports, which are usually not very competitive and are mainly conducted outdoors (78-9).

Ecotopia's progressive urban vision comprises a decentralized society in which small cities, towns and villages are connected by a ring and/or network-shaped interurban train system (56, 64) which guarantees fast, energy-efficient, and free-of-charge transportation. But Ecotopia already has a complex intercity high-speed train network (22) among other frequent and regular public transport systems (18) comprised of electric vehicles, including taxis, minibuses, and delivery cars (27). Most of the slower transportation systems such as the slow jump-on electric-automatic controlled minibuses are free of charge (29). The system is supplemented by basic public bicycles which are free of charge as well (32).

Combustion engines have been outlawed for regular traffic (16), which is why petrol stations do not exist anymore (24).

Taxes are used for services such as the transportation networks but also other public services such as courts, police, medical service, phone-data network, water, power, housing, and recycling.

Sustainability of Ecology, Lifestyles, and Economy

Amongst Ecotopian citizens there is a widespread environmental awareness due to in-depth ecological education (29). The resulting consumer awareness as well as state intervention for ecological reasons shape the economic market structure (92-3, 100). These circumstances are converse to the US economy (in the year 1974), which seems to be the dystopia in Callenbach's understanding. Against this paradigm of continuous growth, Ecotopian politics sets the paradigm of holistic post-material well-being.

The sustainable ecology paradigm dominates all other spheres in ecotopian everyday life - education, technology, and economics. In Ecotopia ecological economics' ideal of sustainability, as science and economic practice, has been implemented by reaching sustainability in all three sectors: the ecological, the social, and the economic sectors. Ecological costs are calculated and included in the product or service prices, which thus 'speak the ecological truth' (Bartmann 1996: 5), a paradigm also called 'internalization of external effects' by ecological economists (cf. Meinhold 2011 a). In Ecotopia there exists 'zero-tolerance' for polluters (145). Culprits will be sentenced by imprisonment if the pollution was committed deliberately (183). Producers, not consumers, are held accountable for health and environmental risks and impacts (49). Recycling and reuse are strictly enforced (19). Food, sewage, and organic garbage for example are used as fertilizers (41). Human death is even seen as part of the entire systemic recycling process (299).

Large global corporations are not allowed to exist in Ecotopia's economic system. Small (and medium-sized) enterprises are owned by the people working for them (101, 193). All such workers of any enterprise are at the same time partners, the maximum number of which is limited to no more than 300 (195, 198).

As the ecological ideal dominates all other spheres of life, trees can be seen throughout the city and wood is the primary building material (57). According to ecotopian law, all buildings must be made of renewable resources (206). There are, for example, extruded 'plastic' module houses the material of which is derived from cotton (256). These houses can be bought together with an 'integrated system' module which digests sewage and produces methane gas that operates heaters. The module also filters water, which is used for watering the garden, and sludge for fertilizing plants (259-60). Other natural building materials include rock, adobe, reused wooden boards (23), a practice which is currently very popular in Thailand, especially if it comes to valuable teak wood planks. Before someone can buy larger amounts of wood, they need to work in a forest camp. The period of time needed to work in such a camp corresponds to the amount of wood to be purchased. This is supposed to shape the attitudes of people towards wood and trees in particular, as well as towards sustainability in general (114). In the process of cultivation and harvesting of trees there is no clear cutting, but a balanced and mixed (non-mono) tree culture in which different species of trees are grown (122). The advantage of this way of cultivation and harvesting is the prevention of soil erosion and the maintenance of the ecological balance (125).

Besides the extruded houses, other products are also made from the same or similar plant-derived durable 'plastic', such as beverage containers, coins, and car bodies (168). Other plant-derived plastics start to biodegrade immediately when they come into contact with soil, moisture, and oxygen. Both kinds of plastic do not leach and

thus do not pose any health risk. Therefore both sorts can be used for food containers (165). But only little processed food is available anyway (46). This is quite interesting due to the fact that just in recent years processed food has been increasingly discredited due to its negative implications for health and the environment.

Ecotopians produce and consume sugarless organic food (48, 53). Chemical fertilizers are prohibited, but animal manure is used (42). They also hunt and eat game (36). Chewing gum is neither available nor allowed (50) – as in Singapore for the last 22 years.⁵ Seawater distillation – also currently experimented with in Singaporean water production projects – is a common ecotopian practice (233).

Purchasable products are usually of high quality and easy to repair. In general there exist only a small variety of products. Clothes, often domestically made, are comfortable and without any synthetics, but they 'speak the ecological truth' (39). Un-ironed cotton shirts (15), leather, and fur clothes are common (17, 22). Hues for cloth, which is hardly dyed, are derived from plant and mineral materials (91). Electronic products are modularized, compact, light, and feature low power consumption (92-3). Machines are noise-proof or (almost) soundless (175).

Electric energy is expensive due to its taxation and the high cost of energy production (260). Due to power saving policies nights are quiet and dark (37, 66). Electric energy is produced by solar, geothermic, wind, tide, and thermal gradient sea power plants (215, 219). There is an emphasis on local energy production.

⁵ Chewing gum was banned in Singapore in January 1992 because gum was disposed by vandals on public transport seats, on elevator buttons, in keyholes and mailboxes (the ban was partially lifted for gum of therapeutic value in 2004.)

Ecotopian Measures in the Light of Current Attempts for Sustainable Development and Holistic Well-Being

While some of Callenbach's proposed measures in *Ecotopia* are part of an everyday lifestyle and politics in certain parts of the world, other suggested provisions are still highly demanded desiderata, especially by ecologists, ecological economists, or otherwise holistically oriented economists and politicians. If measured in terms of gross domestic well-being, flourishing, and 'happiness', according to my reading and interpretation, Ecotopia scores high due to its holistic and sustainable provisions.

The National People's Congress in China has recently raised the issue of promoting happiness, or gross national happiness (GNH), instead of Gross Domestic Product (GDP) as orientation for successful development. In the light of such a value-shift, some of Callenbach's reasonable holistic and sustainable measures in *Ecotopia* do not sound that utopian anymore. The background of the Chinese government's decision is a statistically backed fact, that during initial economic growth of an economy, the well-being of a country's citizens increases simultaneously. But once an economy has reached a certain level, further economic growth has only little or less impact on the citizens' well-being. According to the Chinese Economics Professor Hu Angang, China has already reached this advanced economic stage and a further increase of well-being will not be achieved by simply focusing on economic growth. This is why according to Hu Angang "China must measure happiness" (2011). But happiness is a far-reaching philosophical issue and a complex human and social experience. Aristotle wrote in his *Nicomachean Ethics* that happiness, flourishing or, to use the original philosophical term, 'eudaimonia', is a holistic issue which needs to be clearly distinguished from pleasure (1095-7). For Aristotle 'eudaimonia' is a holistic long-term concept, an experience which involves the individual and its virtues. But the

concept also involves the community to a certain degree, the coverage of basic needs, a healthy environmental context, and diverse intellectual-cultural components (1098). Those factors are difficult, if not impossible, to express in monetary figures.

After scanning different indices which measure happiness, well-being, or quality of living, a holistic composite index of well-being can be created synthetically which includes a variety of highly important factors as sub-indices. A synthetic approach, a detailed account of which needs to be developed in depth in further studies, would assume that many people in different cultures would subscribe to the following sub-indices of such a holistic well-being index:

1. individual and public health; life expectancy
2. eco-systemic health and ecological sustainability
3. general safety, security, and peace
4. integration of disadvantaged individuals and groups
5. subjective feeling of happiness and well-being, level of self-fulfillment, and social embeddedness
6. good governance, political transparency, fair governmental procedures, freedom of speech
7. conducive educational infrastructure and reasonably wide access to education
8. cultural facilities and information infrastructure
9. adequate and fair distribution of income (as proposed, for example, in the Rawlsian Theory of Justice)
10. economic sustainability and stability

Ecotopia, if existent, would score high in all ten sub-indices. While a number of Western countries or cities score high according to many of the mentioned indices, some of them have problems despite being in “well-livable places” (for example if it comes to the social segregation of elderly in retirement homes or other less privileged groups). Whether the subjective feeling of happiness or well-being is higher in countries with a higher per capita, GDP is an issue of controversy amongst sociologists as well as economists. Empirical findings point into opposite directions (cf. Welzel 2010).

There is a positive correlation between low income-differences and overall satisfaction of citizens. In countries where the highest and lowest incomes differ severely people are generally less satisfied.

A related terminological problem is that the notion “rich” is usually and foremost applied to monetary quantities. While almost all African countries are “poor” in terms of per-capita income, many are rich in resources. Most, if not all, are rich in familial, social, and intra-tribal coherence. This is one of the most important values in many African cultures. The same applies to the number of children in rural parts of Africa – many children are considered as a holistic form of wealth (although this has diverse positive and negative economic implications for many parents). But a person or a couple with no or only one child is perceived as rather unfortunate from such a perspective. In this context a big family is one source from which subjective feeling of happiness emerges.

Another serious problem impacting negatively on holistic well-being is the segregation of elderly citizens in Western societies, especially in urban contexts. Elderly people in such circumstances often die a “social death” before they die biologically – as the French philosopher and sociologist Jean Baudrillard suggested (1982). Monetary wealth is not per se solving the problem of the segregation of the elderly, but probably even making this particular problem in

certain contexts worse, because where financial resources are restricted, families cannot afford to pay for old pensioners' homes.

These examples demonstrate that there are important factors of well-being or holistic wealth that reach much deeper than monetary wealth. To improve well-being on a holistic scale as outlined above, bearing in mind the aforementioned index of holistic well-being, the following provisions in Callenbach's *Ecotopia* are worth considering in the context of development in the ASEAN region, especially in the light of problems such as overconsumption, dense population within cities, and the controversial paradigm of constant economic growth:

- Holistic and sustainable well-being is of higher value for individuals, a nation, and the environment than following the paradigm of continuous economic-financial growth.⁶
- In the health care sector the emphasis should be placed on preventive and holistic healthcare rather than on symptom treatment (cf. Meinhold 2011). That is why in *Ecotopia* symptom relieving medication is limited and psychotropic drugs had been phased out.
- Under hygienic circumstances the exclusive consumption of organic food that is grown in poly-culture (non-mono culture) contributes to individual and general health, fosters sustainability of the ecosystem, and meliorates cultivated fields and their aesthetic appearance.⁷
- Parks, other green areas, and water surfaces in the city have holistic effects on mental and physical health of individuals and social groups. They promote social bonding and contribute significantly to the aesthetic appearance of the cityscape. In particular they tend to improve the air-quality, invite physical exercise, and facilitate social bonding.

⁶ cf. Apichai Puntasen's contribution in this anthology.

⁷ cf. Charn Mayot's contribution in this anthology.

- Natural resources and ecosystems should be treated according to the paradigms of intergenerational justice and ecosystemic sustainability.
- Prices should speak the ecological truth: The internalization of external effects (e.g. pollution) requires the monetarization of environmental and health impacts and their inclusion in the prices of goods and services.
- The taxing of energy should be used to repair ecosystems and the development of ecologically sustainable technology.
- Energy production and industries in general, should be geared towards low-emission, zero-radiation, renewable resources utilization, and other alternative low impact energy production. This will have holistic impacts on the health of people and ecosystems.
- The use of electric mobility and utilizing alternative energies will reduce air, water, soil, and noise pollution.
- It is obvious that parts of the world – especially particular parts of major cities - are overpopulated. But the handling of population issues is a sensitive problem and is much depending on cultural and economic implications. Ecotopia's population is very slowly declining (mainly due to contraceptive methods) which has had positive impacts on the population density in more congested areas.
- Unemployment and underemployment in Ecotopia had been tackled by a twenty-hour work-week, which had doubled the jobs and halved the incomes. Additionally some tasks, for example dish-washing, had been personalized rather than mechanized. In some countries part-time jobs in many forms become more common. Many, if not most, of the jobholders are women, few of the jobs are occupied by men (not all of them work

voluntarily in part time positions). But the self-esteem and the social standing of a person in countries in which the individual defines her/himself through a profession is very much dependent on the quality (and quantity) of work. A shift in the direction of quality, rather than quantity, would help in that regard.

- Education is the key to address a variety of issues. Ecotopia places emphasis on holistic, yet pragmatic ecological and environmental education supplemented by humanities and specific sciences especially at the higher educational level. Despite all the science and humanities topics education should cover, there is also a need for education of values and life-skills where students learn about issues directly related to their daily life. In many countries this is either not done well enough or the counter-influences of corporations with hidden educational agendas are still overcompensating the educational efforts. Otherwise our style of consumption and our small knowledge about health issues has trouble being explained (cf. Meinhold 2011c).

- In Ecotopia, therefore, citizens are not flooded with commercials, but all adverts need to give facts instead of praising values beyond the real consumer item which are usually linked to the product via the adverts (cf. the term and concept of 'meta-goods' in Meinhold 2007).

- Related to the two aforementioned implications of education is a kind of self-education process through reading any kind of literature, which is in Ecotopia more important than passive consumption. The e-book increases the world-wide availability of reading material on the wired side of the digital divide. But whether this digital potential leads to a revival of popular reading culture is questionable. The small portioned text snippets now commonly found on websites seem to condition readers for limited quantities (and qualities) of text.

- The democratic involvement of citizens in Ecotopia is fostered by interactive ICT systems which let people raise their concerns and make contributions in democratic decision making. Despite all the risks of fraud related to the Internet the political involvement of citizens via modern ICT is an avenue worth exploring.

Conclusion

As a reflection on sustainable and holistic lifestyles 'Ecotopia' can serve as stimulating outlook for well-being in the ASEAN context. The compelling large-scale societal architecture in the simulated worlds of social utopias might blind the reader and researcher from seeing the grass-root levels in reality. But viewed as forward-thinking thought-experiments for possible solutions of recent problems, political, social, ecological, and literary utopias are great sources for creative thinking. Callenbach's *Ecotopia* has challenged some of the mainstream lifestyles and concepts of living together and suggested some holistic measures which are not only worthwhile exploring in the light of current progress within the ASEAN region, but many measures are also worth implementing.

Both holistic and sustainable perspectives are widening the understanding and planning of human individual and social well-being. From a philosophic-anthropological viewpoint, attempts to widen perspectives and to open horizons of mainstream understanding are specific human abilities signifying human intellectual identity. From a cultural perspective such attempts to widen horizons are among the main driving momenta for the development of culture, science, technology and spiritual-intellectual spheres. Holistic perspectives broaden not only the special dimension, but any dimension that could be thought of. Especially sustainable perspectives increase the temporal dimensions,

particularly toward future generations, environments and ecosystems. (For traditional indigenous cultures this widening of the temporal perspective in particular considers the timeline into the direction of the negative historical dimension, including the past, ancestors, myths and what Mircea Eliade called 'primordial time dimensions'). Due to this spatially transcending and sustainability encompassing perspective of holism, sustainability needs to be seen as a subset of holistic thought.

Thinking about the concrete development of the ASEAN region currently taking place, taking holistic and sustainable perspectives into consideration is absolutely pertinent, if well-being of individuals, social entities and ecosystems are to be taken seriously. A holistic composite index of well-being may be used as an input for fostering discourses on holistic-sustainable future developments in the ASEAN region.

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Appendix

ECOLOGICAL, SOCIAL AND ECONOMIC
SUSTAINABILITY

Perspectives for Thailand and ASEAN

Conference Summary:

**Papers presented on the
28th November 2013**

George Okoroigwe

First Session

Topic: **Sufficiency Economy**

Speaker: **Prof. Dr. Seri Phongphit, Rector, Learning Institute
for Everyone, Thailand.**

In this paper presentation, the speaker introduced the concept and ideological focus of Sufficiency Economy. He put much emphasis on the fact that Sufficiency Economy was still mainly a philosophy and only at the level of ideas. Sufficiency Economy, he stated, starts off in the manner of many other philosophical ideas and theories like Capitalism and Socialism. In the speaker's opinion, it is not yet an economic and political system. The speaker, to buttress his point on the philosophical nature of Sufficiency Economy, made reference to an encyclical document of the Catholic Church, *Rerum Novarum*, "Rights and Duties of Capital and Labor", issued by Pope Leo XIII on May 15, 1891. This was an open letter sent to all Catholic bishops, addressing the working and living conditions of the working classes.

This document has guided the Catholic Church in her approach to economic and political issues. In much the same way, Thailand and other countries around her, like Bhutan, started to develop their own philosophical frameworks to drive their economic and political machineries. In the speaker's view, referring to the economist and Nobel Prize Winner Prof. Robert Alexander Mundell, "Sufficiency Economy is necessary for national development, especially for small-sized countries like Thailand."

The speaker defined Sufficiency Economy as "A way of living dedicated to moderation, reasonableness, and readiness (ability) to withstand unexpected failure or economic downturn." He enumerated the three components of Sufficiency Economy as follows:

1. **Moderation:** This involves the human person following the Middle Way, a very Buddhist orientation and teaching. There needs to be balance and harmony in personal lives and in society.
2. **Reasonableness (Knowledge):** This is a call for families to be reasonable in their consumption of goods and services. This reasonableness is also a result of the application of moderation in daily life.
3. **Immunity:** To practice moderation or the Middle Way and to be reasonable in the use of goods and services would lead to the family and society becoming immune to poverty, greed and unnecessarily excessive lifestyle.

In addition to the points raised, that is, moderation, reasonableness and immunity, the speaker advocated a return to basics as the way to self-sufficiency. By return to basics he meant a simple lifestyle, a going back to alignment with nature to our roots and to good moral and social values.

Application of Sufficiency Economy

The speaker then moved on to address the issue of the applicability of Sufficiency Economy. The first step was to teach the people how to apply Sufficiency Economy. He enumerated four approaches or plans to achieve this: Life Plan, Financial Plan, Occupational Plan, and Health Plan.

- a. **Life Plan:** There is a need to teach people how to plan and regulate their lives so that they can reduce their constant desires and need for more goods and services.
- b. **Financial Plan:** This would help the people save more and reduce their expenditure and improve their lives by proper use of money.
- c. **Occupation (Professional) Plan:** Through this plan, the people are taught how to improve themselves and their society in the domain of their occupation by boosting professional earnings and by engaging in simple and creative projects, especially in the area of farming.
- d. **Health Plan:** People need to be taught about the importance of a proper health plan so that they are well prepared for eventualities in the area of health. People are taught about health insurance and the need for preventive health care as well as affordable health services.

In the speaker's view, important things in life must start from the family. The family must be taught how to be self-sufficient and how to make effective use of scarce resources. He stated that consumerism contradicts Sufficiency Economy. Sufficiency Economy in Thailand is currently still at the level of a philosophy and it would take a new awareness and spirituality on the part of the people and a concerted effort and political will on the part of the government to make it into an economic and political system.

Recommendations

1. There has to be a new form of education for the nation. This must be accompanied by a new way of teaching and learning.
2. There have been efforts to reform education but without much progress because the approach which did not carry everyone along in Thailand.
3. Education must emancipate people from every kind of exploitation
4. Education must empower people to be self-sufficient and self-reliant.
5. There must be appropriate financial means to achieve the goals of Sufficiency Economy.

Second Session

Topic: **Buddhist Economics and Ecology: A Lesson for the Future of the ASEAN Community**

Speaker: **Prof. Dr. Apichai Puntasen, Director of Rural & Social Management Institute Foundation for Thailand Rural Reconstruction Movement under Royal Patronage**

Keywords: Buddhist economics, mainstream economics, ecological system, environmental ethics, ASEAN Community (AC)

In this paper the speaker focused on the concept of sustainable development through ecological balance achieved through the application of Buddhist economics. The goal of Buddhist economics in the speaker's view is not to maximize individual utility and social welfare the way it has been set in the mainstream economics. Rather, it is aimed at achieving a healthy body and mind that will lead to a healthy life for the individual, and to wellness, peace and tranquility for the society. To achieve such a goal, there is no need for excessive production and consumption of goods and services; on the contrary, what is needed is a good ecological balance and rigorous training of the human mind. In the speaker's view, regarding the commencement of the ASEAN Community in 2015, coupled with the anticipation of intensified economic cooperation, "it can be predicted that more resources will be utilized without sincere consideration of ASEAN values and knowledge, although Buddhist economics has already been available".

Main Points of Discussion:

1) Definition of Buddhist Economics 2) Core Values 3) Production and Consumption in Buddhist Economics 4) Ecology 5) Ethics in Utilization of Natural Resources and Environment.

1. **Buddhist Economics is generally defined as “The subject that is derived from the lessons of the Buddha’s discoveries on his path to enlightenment to explain economic activities with the aims for both individual and society to achieve peace and tranquillity under resource constraints”.**

The teaching of Buddha is known as Buddha Dhamma. It is neither a religion nor a philosophy in the Western sense. It has its own scientific base known as a mind-based science. It is beyond Newtonian physics but close to quantum physics in the sense that “truth” can be varied by different levels of mind development. As a result, a mind-based science provides a new dimension of “reality” a more realistic one than the old scientific paradigm.

2. **Buddhist economics views the human being as a special animal that has a potential for highest level mind development.** Unlike in the Western model that is motivated by greed and insecurity and competition, Buddhist Economics replaces greed with *pañña*, the ability to understand everything in its own nature, Hence, *prayote sukha*, happiness, being useful to others, is also possible. *Pañña* is, therefore, the crucial factor that can help upgrade an animal with a sense of survival through self-interest and competition to a human being with compassion and cooperation. The accumulation of *pañña* can be achieved through the process of rigorous training of the mind known as the Threefold Training or *sikkhattaya*, consisting of trainings on morality (*silā*), concentration (*samādhi*) and *pañña*, the ability to understand everything in its own nature, or also known as the Noble Eightfold Path.

3. **Buddhist Economics is *pañña* and its economic system is known as *pañña-ism*.** Mode of production is not capital but *pañña*, which is a sufficient condition to reduce waste as much as possible, to use non-renewable resources and energy only if absolutely necessary and, if possible, to use renewable natural resources and energy instead.
4. **Buddhist Ecology believes that all ecological parts on this planet are interdependent.** When one part is over-utilized or damaged, it could result in the harm of other parts. Ecological balance is crucial for the continuation of the human species. Thus, factors of production must be kept in such a balance as to sustain a healthy ecological system.
5. **Regarding the utilization of natural resources and the environment, the Buddha Dhamma expounds concepts that embrace both naturalism, as well as humanism, utilitarianism and liberalism all at the same time.** The concept of good intention (or *kusalacittā*) is close to that of Immanuel Kant's categorical imperative. The concept of compassion for all beings is similar to that of R.A. Watson's environmental ethics. Thus, in Buddhist understanding, the whole process of production and consumption is to achieve a healthy life (good life) and healthy society (good society) with a minimum of resources and a minimum of ecological impact.

Recommendations

1. It is important not to just talk about Buddhist Economics but rather to understand it and to make every effort to practice it.
2. In Thailand there is a movement involving 7,000 schools to teach Sufficiency Economy and to encourage institutions that practice it through awards and gifts.

Third Session

Topic: Earth Charter, Sustainable Development, Trans-boundary Natural Resources and Environmental Justice: Implications for AEC/ASEAN

Speaker: Prof. Dr. Chamniern Paul Vorratnchaiphan, Country Rep., International Union for Conservation of Nature

The speaker started off by showing power point slides of the effects of environmental degradation in Thailand and in the ASEAN region. Notable amongst the slides were pictures showing the devastating floods that affected all parts of Thailand in 2011. The speaker then went on to speak about the need and necessity of ensuring environmental sustainability since it was the only solution to future natural and environmental calamities. He did this by first stating the ASEAN declaration on Environmental Sustainability.

Main Points of Discussion

Sustainable Development from:

1. Partnership
2. Equity
3. Carrying Capacity for Nature
4. Future Generations

Ensuring Environmental Sustainability (ASEAN Declaration)

ASEAN shall work towards achieving sustainable development as well as promoting clean and green environment by protecting the natural resource base for economic and social development including the sustainable management and conservation of soil, water, mineral, energy, biodiversity, forest, coastal and marine resources as well as the improvement in water and

air quality for the ASEAN region. ASEAN will actively participate in global efforts towards addressing global environmental challenges, including climate change and the ozone layer protection, as well as developing and adapting environmentally-sound technology for development needs and environmental sustainability.

In section D of the ASEAN Charter, the declaration on ensuring environmental sustainability was highlighted as follows:

Section D. Ensuring Environmental Sustainability

- D1. Managing and preventing trans-boundary environmental pollution
- D2. Promoting sustainable development through environmental education and public participation
- D3. Promoting Environmentally Sound Technology (EST)
- D4. Promoting quality living standards in ASEAN cities/urban areas
- D5. Harmonizing environmental policies and databases
- D6. Promoting the sustainable use of coastal and marine environment
- D7. Promoting sustainable management of natural resources and biodiversity
- D8. Promoting the sustainability of freshwater resources
- D9. Responding to climate change and addressing its impacts
- D10. Promoting Sustainable Forest Management (SFM)

On the subject of transboundary environmental governance issues, the speaker discussed the problem of haze from land and forest. He spoke about the challenges posed by the destruction of wetlands, marine and coastal ecosystems, and poor river quality. Added to these issues were the challenges experienced from industrial

pollution and the construction of dams for electricity which has cut off water supply for some countries and many communities. Then there is the problem of deforestation and the loss of biodiversity. The speaker addressed a particular case study regarding the felling of rose wood trees in parts of Thailand in order to cater to the demands for expensive life-styles of particular 'customers', especially from China.

In dealing with the issues raised above, the ASEAN regional body has to first deal with a weakness that is apparent in its declaration. The speaker highlighted the weakness as follows:

The "ASEAN way" of non-interference, consensus building and cooperation also has significant implications for addressing shared environmental issues in ASEAN. Whilst reasonably equipped to deal with issues where there are shared interests and consensus, the ASEAN way is poorly suited for dealing with urgent situations and issues where states have divergent views that can result in the evasion of difficult issues, which are metaphorically 'brushed under the carpet'.

The Earth Charter

The speaker then went on to propose what he termed "The Earth Charter", which for him represents a global consensus on shared values and ethics for building a more sustainable and peaceful world. The Earth Charter is comprised of four core sustainability values and sixteen shared ethical principles. The four basic aspects are: 1. Respect for Nature; 2. Universal Human Rights; 3. Economic Justice; and 4. Culture of Peace.

The sixteen Shared Ethical Principles are:

1. Respect earth and life in all its diversity
2. Care for the community of life
3. Build democratic societies
4. Secure earth's bounty and beauty
5. Protect and restore earth's ecological systems
6. Prevent harm, apply a precautionary approach
7. Adopt [sustainable] patterns of production, consumption, and reproduction
8. Advance the study of ecological sustainability
9. Eradicate poverty
10. Ensure that economic activities; promote human development
11. Affirm gender equality; ensure universal access
12. Uphold the right of all to a natural and social environment
13. Strengthen democratic institutions
14. Integrate [sustainability] into formal education and life-long learning
15. Treat all living beings with respect and consideration
16. Promote a culture of peace.

The speaker then explained that the Earth Charter is promoted through "The Earth Charter Initiative". This is a global network of people, organizations, and institutions who participate in promoting the Earth Charter and in implementing its principles in practice in different areas, including education for sustainable development, youth action and empowerment, international law & ethics, business engagement in global ethics, religion and sustainability, arts and culture.

Recommendations

The speaker recommended as the way forward a healthy relationship of human beings and nature. He referred to the concept

GALAYANAMITRA, which means *benevolent friendship* and highlighted five ways to achieve this friendship between human beings and mother Earth:

1. **Reasonableness:** This is a sort of *“Mindful living that helps people realize that everything comes from the same “energy”*.
 2. **Moral Values and Living:** This, in the speaker’s view, meant *“benevolent friendship; giving and sharing”*.
 3. **Self-Immunity:** In the speaker’s view, this relates to *“practical actions self-help, community organization networking/partnership e.g. waste management, eco labelling, etc”*.
 4. **Moderation:** This is the *“sustainable consumption of food, goods and services; avoidance of meat, eating only seasonal vegetables, fruits, and organic farm products”*.
 5. **Knowledge:** This is *“Thoughtful hearing and learning. Utilization of science and technology for a more sustainable world”*.
- The instrumentality of ASEAN, brings member nations back to the Middle Way.
 - Local governments (e.g., individual nations) should be allowed to develop sustainable programs as appropriate for their regions.
 - In Thailand, and in other ASEAN nations, communities need to be encouraged to plant more rose-wood in order to meet the demand and thus reduce deforestation. In the short-term it is pertinent to formulate programs to provide economic sustainability for the communities affected.
 - There should be a promotion of fair distribution of wealth in ASEAN.
 - Rose wood poaching and other local issues should be addressed legally, both at the local and at international levels.
 - There are needs to create awareness for transformation, with spirituality as the source of all values.

Fourth Session

Topic: **Chiron and Machines of Loving Grace**

Speaker: **Dr. John T. Giordano, Graduate School of Philosophy and Religion, Assumption University of Thailand**

In his presentation, the speaker reflected on how the human being could be a part of nature, a part of its cycles and circulations of forces and elements, and at the same time manage to develop an understanding of these cycles and circulations. He wondered whether the circle closed in on itself. He posed the question of how it was possible that at the moment when we can see our place in nature through our theories and technologies, nature is increasingly in danger of being destroyed. He asked the question whether there was a connection between the fact that we have more lucid visions of the world and the decline of the same. It would seem that human's better understanding of his or her place in nature does not necessarily lead to a wiser political or economic adjustment. Thus, one can only watch in horror as the destruction continues which is even rationalized away. The speaker admits to still be on the search for answers.

Main Points of Discussion

1. Harmonizing cybernetic systems to the environment.
2. Need to change the rules.
3. Unbridled fast-paced technological and cybernetic development could lead to the death of our civilization.

Cybernetics

The speaker introduced his paper as mainly concerned with "Nature and the span of the human life". It concerns machine intelligence and poetry, optimism and pessimism.

The speaker, using the poem titled “*All Watched Over by Machines of Loving Grace*” by Richard Brautigan, (1967) in “*The Pill versus the Springhill Mine Disaster*”, stated that the singularity theorists seemed to show optimism in believing in the harmony of technology and nature, a sort of leap of faith that hoped to shape the world under a single system. The speaker however went on to ask whether this sort of optimism was justified, especially when one considers that we live in an age where more and more economic and political decisions are entrusted to our cybernetic systems, computers, information systems and stock markets. The question arises, “how can we move towards harmony with the environment?”

The speaker also cited the work of Gregory Bateson concerning systems theory and Cybernetics. In the writer’s famous lecture collected in his book “*Steps to an Ecology of the Mind*”, he describes the interconnectedness of human beings with their environment. He proposes a Cybernetics of thought where our computer systems are harmonized with ecology. But he warned that we must not allow the computers to lead us into more and more rigid situations whereby we only follow the calculations of our cybernetic inventions and blame the results on the computers rather than taking responsibility for our actions. This is particularly so when one considers the implications of the systems theories (which have been applied to every sphere of life) as applied by developed nations using their super computers.

Bateson on Western Epistemology

Bateson considers the question of whether a computer thinks and states that it does not. What “thinks” and engages in “trial and error” is man *plus* computer *plus* environment. And the lines between man, computer, and environment are purely artificial, fictitious. They are lines *across* the pathways along which information or difference is transmitted. They are not boundaries of the thinking system. What

thinks is the total system which engages in trial and error, which is man plus environment.

Momentum

Regarding the idea of momentum, the speaker espoused the position of Hölderlin as highlighted in his writings on *Pindar*. In Hölderlin's view:

Humanity conditions nature, changes nature in its interaction. As the river grows in strength, as humanity matures, it develops a power over its surrounding, it develops a free will. But this free will is also a symptom of its distance from the source.

In much the same way, the free will of consumer society is likewise a condition of disconnectedness. Also, our machines, though programmed by our minds, have developed a mind of their own though with their temporality encoded within them. Paul Virilio, in his book *"Speed and Politics"*, talks about the present global situation as being characterized by "speed". This is seen in the way the stock market transaction is carried out. An immoral thinking process that mainly focuses on profit at any cost continues to perpetuate this fast and furious pace of global affairs. Jared Diamond, in his book *"Collapse"*, speaks of the type of thinking which maintains these decadent activities leading to the "collapse" of various civilizations. He speaks of "irrational behavior" that tries to succeed at the expense of others. A sure way against such behaviors in Diamond's view is for the masses to rise up and stand against such people who would exploit them for profit. The only challenge is that such destructive economic systems have also put in place mechanisms to control the people. But the problem that Diamond ignores is that the destructive rational and irrational beliefs have been intertwined. It is, as he acknowledges, very difficult to know which values to give up and

which to retain. In the speaker's view, our destruction of the environment is interconnected with our very ideas of development, progress, economic growth, the manner in which money is valued by oil, and our economic systems based on the stock markets and investorship.

Oscillation

Using the Greek mythology of Chiron, a centaur, which is a kind of wild earth deity, the speaker described how humanity had created the very "poison" that is turning out to be its destroyer. As he put it:

The distance from nature is represented by poison, "a poison is between us", which is the poison which led to Chiron's downfall. In some versions of the myth, Chiron earlier gives Hercules this very poison that will lead to his own downfall.

The pain and dividedness of humanity is inevitable. This is the result of our pursuit of "progress and success."

All Resistance is Futile

The speaker then asked the question about how it was possible to *accept* the inevitability of destruction. How can we use this to reflect on our place in this destruction? How can we *slow* this momentum that human thought and technological systems used to wrest control of the earth from the gods of nature? How can we readjust our cybernetic systems with our environment?

In the speaker's view, the clue to answering this question is provided by Hölderlin who states that it is *pain* that unites us to what is lost. It is our dividedness, which gives life to an imagination – a poetic imagination – that can ultimately maintain a connection at a distance.

In the speaker's view, the "consciousness of distance" was the important thing. If humans have made any "progress" at all, it comes from a certain estrangement from nature. Going back is difficult. We can only maintain a connection from a distance. Technologies as created and applied in modern times pose a danger to the consciousness of nature. Our consciousness of our estrangement from nature is our connection to nature, hence the alternation of joy and despair, and the relationship between conflict and creativity.

Applying this alternation between joy and despair, the speaker said this of himself:

For me, I can see, I can feel the process of aging. My youth – much of it was spent walking alone in the forest, investigation every rock and burrow, the rhythm of my thinking caressing, circulating through the landscape. And with experience and age, a gradual distancing, a hardening, my thoughts now moving through deeply incised channels. Closer to death – and yet, moments of fleeting visions about the arc of humanity, its conceits, its hubris, my own alternations between joy and despair.

In his view, what is *most human* is to respect something that exceeds calculation, balance, and efficiency. Some form of *grace* that cannot be encoded into machines. As the famous French economist and philosopher Jacques Attali once suggested: "[W]e must move beyond a society based on repetition and replication towards one based on creativity and composition."

Singularity Theorists

The speaker took issues with singularity theorists. In his opinion, their mistake is that their idea of the harmony of thought and nature involves a collapsing of distance. The poetic imagination is alone able to hold on to something outside of the calculations which

increasingly distances us from nature, even as it creates the illusions of harmony and cybernetic efficiency. Daniel Hillis, an inventor, has reservations about the manner in which the internet protocol has become the platform by which all communication takes place and calls for a plan B. He also plans to build a giant mechanical clock, the "Clock of the Long Now," inside of a mountain which will run for 10,000 years, to get people to think about the future of humanity itself, to lead them beyond their short-term concerns.

Recommendations

The speaker offered a solution to the problem by first analyzing the word "cybernetics", which comes from the Greek word "to steer". He argued that one could see this in Heraclitus' definition of Logos; i.e. that, which steers all things through all things. It suggests a process which can re-direct in a controlled manner. He suggested that if our cybernetic reality involves our machines and their pathologies, there was a need to envision systems of steering and not a system of resistance, or for that matter, revolution which would be extremely destructive and play into the penchant for war.

In his view, the breaking of time, the arresting of momentum requires new possibilities and creativity. It requires a re-questioning of ourselves, not as individuals but as a mysterious and conscious part of life and nature. Not as names in conferences, banks, records, professions, but as something which participates in the span and arc of life, connecting the past with the future; something which alternates between joy and pain.

Fifth Session

Topic: Environmental Philosophy's Perspectives of Agriculture Farming for Social and Economic Sustainable Development in the Mekong River Basin.

Speaker: Dr. Charn Mayot, Director: St. Martin Center for Professional Ethics, Assumption University, Thailand.

Traditional Thai Mode of Farming and the Green Revolution

The speaker started this session with a description of the early Thai traditional way of farming, which consisted mainly of subsistence methods. People mostly farmed to feed their families and sold excess produce for profit, which was quite little. Then, in the 1970s, the Green Revolution was introduced into Thailand. This came with practices like growing a single crop in a certain farming area, the use of machine appliances and chemical fertilizers to increase crop yield per rai, use of pesticides and insecticides, building irrigation systems, and commercializing agricultural products.

The Green Revolution came with many promises and corresponding failures. The promises were in areas like the following: increased rice production per rai; increased income for rural farmers; eradication of abject poverty. Correspondingly, failures were observed in such areas as the deep-rooted indebtedness cycle; loss of land ownership; shortening of life expectancy; environmental crisis; urban and city migration from villages; and loss of social and cultural bonds (Lieng Luke Thang Praisanee).

The speaker, noting the failure of the old Thai farming methods, went on to propose some solutions and recommendations.

Recommendations

- There is a need to create a self-supporting economy.
- Imbibing and applying Sufficiency Economy Theory developed by King Rama IX was proposed by the speaker.
- Nature Farming or Agri-Nature Farming:
 - The ecological farming method developed by Masanobu Fukuoka, a world-famous Japanese farmer-philosopher
 - Organic farming in harmony with nature
 - Agri-nature farming which involves growing plantations, fisheries, husbandry and forestry
 - Sustainable agriculture, which over time enhances the environmental quality, is economically viable, and enhances the quality of the life of farmers and society.
- Common Practices of Sufficiency Economy
 - Avoidance of chemical fertilizers, pesticides and insecticides
 - Keep and build good soil structures and fertility using recycled crop wastes and animal manures.
 - Natural pest control measures
 - Optimal use of water resources
- Philosophical foundations of agri-nature farming
 - Sufficiency Economy Theory
 - The Middle Path in social and economic life
 - Respect for nature
 - Human resource development

Sixth Session

Topic: Ecological Change, Social Impact and Climate Change. Adaptations after the 2011 Flood: Perspectives for Thailand and ASEAN.

Speaker: Prof. Dr. Kampanad Bhaktikul, Dean, Faculty of Environment & Resource Studies, Mahidol University.

The speaker focused mainly on methods of adaptation during natural and environmental disasters. He described such adaptations as “actions taken to help communities and ecosystems moderate, cope with, or take advantage of actual or expected changes in climate conditions”. He highlighted the symbiotic relationship of the people of the Lower Mekong Basin to the marine and aquatic resources of the river and also the high employment opportunities this holds for all communities that share the Mekong River and its resources. The damming of the river for electric power production has a negative chain effect on all communities that depend on the river for sustenance.

The speaker also highlighted some environmental challenges in the sub-region, such as: land degradation, threats to biodiversity, inland water pollution, inadequate waste management, toxic contamination, air pollution by stationary sources, mobile source pollution, threats to coastal zones, climate change, ozone layer depletion, water resource management, fishery resources, forest resources, threats to the Mekong’s vital functions, illegal trade in wildlife, and lack of harmonization of policy target and evaluation tools. The speaker then went on to propose the following recommendations for adaptation in environmental crises.

Recommendations

Five Guiding Principles for Adaptation (Nairobi Principles)

- 1 - **The Development Principle:** Adaptation must be addressed in a broad development context, recognizing climate change as additional challenge in the attempt to reduce poverty and environmental degradation.
- 2 - **The Resilience Principle:** Building resilience to ongoing and future climate change calls for adaptation to start now by addressing existing problems in land and water management.
- 3 - **The Governance Principle:** Strengthening institutions for land and water management is crucial to effective adaptation and must build on principles of participation of civil society, gender equality, subsidiarity and decentralisation.
- 4 - **The Information Principle:** Information for local adaptation must be improved, and must be considered as a public good to be shared at all levels.
- 5 - **The Economics and Financing Principle:** The cost of inaction, and the economic and social benefits of adaptation actions calls for increased and innovative financing.

Contributors

ECOLOGICAL, SOCIAL AND ECONOMIC
SUSTAINABILITY

Perspectives for Thailand and ASEAN

Binswanger, Hans Christoph

Prof. Dr. (Emeritus) Hans Christoph Binswanger hails from Zurich, Switzerland. He studied Economics in Zurich and Kiel (Germany). After earning his doctorate degree at the University of Zurich in 1956, he worked as a researcher at the University of St. Gallen (Switzerland) until 1967, in which year he completed his habilitation treatise (postdoctoral lecture qualification). From 1969 to 1994 he stayed at the same university as a full professor, holding the position of Head of the Institute of Economics (Forschungsgemeinschaft für Nationalökonomie) for twelve years and Director of the Institute for Economy and Environment (Institut für Wirtschaft und Ökologie) for three years.

During his prolific career as an academic, Prof. Binswanger received several awards, e.g. the Federal Nature Conservation Award (1980), the Binding-Award for Conservation (1986), the Dr. Brandenberger Award (1994), and the Adam Smith-Award for Market-based Environmental Policy in 2004, among many others. Furthermore, since 1994 Prof. Binswanger is an honorary senator at the University of Economics, Vienna.

Prof. Binswanger's research fields have included money theory, economics of environment and resources, as well as general economics. These academic interests are reflected in his many publications, which include: *Markt und internationale Währungsordnung (Market and International Monetary Order)* Zürich 1969, *Geld und Natur (Money and Nature)*, Stuttgart: Thienemanns 1991, and *Die Glaubensgemeinschaft der Ökonomen (The Economists' Community of Faith)*, München: Gerling Akademie Verlag 1998, among others.

Chatelier, Glen

Currently serving as Director of International Affairs, Mr. Glen Chatelier has lived in Thailand and taught at Assumption University for 25 years. His former position was Chair of the Department of Business English, Faculty of Arts at Assumption University. As a published poet in Thailand, Mr. Glen Chatelier writes in a modified sonnet form and for the past 18 years has written in celebration of special anniversaries and birthdays for Their Majesties the King and Queen of Thailand, and for special occasions and conferences.

Giordano, John T.

John T. Giordano earned his Bachelors degree from the University of Wisconsin at Stevens Point in Wildlife Ecology and subsequently worked as an environmental engineer in the coalmining region of southern West Virginia. His concern for environmental issues led him to return to school to study for his Ph.D. in philosophy at Duquesne University. He has been active teaching and participating in conferences around South East Asia since 1997.

Mayot, Charn

Charn Mayot, Ph.D. is currently director of St. Martin Center for Professional Ethics and Service Learning, Student Affairs and program director of Religious Studies, Graduate School of Philosophy and Religion, Assumption University. He wrote his MA thesis on Business Ethics and his doctoral dissertation in environmental philosophy. He has been in charge of teaching professional ethics, supervising a service-learning program for undergraduate students at Assumption University, and arranging international service-learning in Thailand for overseas students for many years. He is also an ethics trainer for administrators of some corporations. He has written a number of articles and book chapters in the areas of business ethics, environmental philosophy, moral education, moral development,

service-learning and sustainable development. He used to collaborate with the UNESCO to organize projects and promote peace and harmony in six countries in the Mekong River Basin between 2001 and 2005.

Meinhold, Roman

Roman Meinhold (Dr. phil. - University Mainz, Germany) is Asst. Prof. of Philosophy and Director of the Guna Chakra Research Center, Graduate School of Philosophy & Religion, Assumption University, Bangkok. He taught at the National University, Lesotho and at the Weingarten University of Education, Germany. His areas of specialization include Cultural Critique, Philosophy of Art and Culture, and Applied Philosophy/Ethics. His publications deal with critical assessments of everyday phenomena such as consumerism, environmental issues, eudaemonism, pseudo-therapy, otherness, extremism and terrorism. A list of his latest publications can be found at www.roman-meinhold.com.

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Okoroigwe, George

Rev. Dr. George Okoroigwe, C.Ss.R, is a Redemptorist Missionary Priest from Nigeria. He holds a Bachelors Degree in Philosophy, a Masters Degree in Educational Administration from the Assumption University and a Doctorate Degree in Religious Studies from the same university. He has a keen interest in spirituality and active nonviolence. He is involved in spiritual direction, retreat preaching and parish pastoral and social work and has also started and led

various spiritual prayer groups. His vision is to help create as much as possible, a world where economic and social justice, religious tolerance and peace reign.

Puntasen, Apichai

Apichai Puntasen was a Professor at the Faculty of Economics Thammasat University, Bangkok Thailand and later on the Dean of the Faculty of Management Science Ubon Ratchathani University. He is currently the Director of Rural and Social Management Institute, Thailand Rural Reconstruction Movement Foundation Under Royal Patronage. His specialization is Buddhist Economics.

Vorratnchaiphan, Chamniern Paul

Chamniern Paul Vorratnchaiphan, PhD, brings more than twenty five years of experience in social planning, research, teaching, consulting in various previous positions in Thailand and ASEAN Region before joining International Union for Conservation of Nature as Thailand Country Representative. His main interest and engagement are: urban biodiversity, protected areas buffer-zone management and local governance.

Winzer, Michael

Michael Winzer is Resident Representative of the Konrad-Adenauer-Stiftung to Thailand. Formerly, he held various positions in the Konrad-Adenauer-Stiftung headquarters in Berlin and in the foundation's Central Asia/South Caucasus regional office in Tashkent, Uzbekistan. He studied economics and business administration at the University of Hohenheim, Germany, and at Gothenburg University, Sweden.

Ecological, Social & Economic Sustainability

Perspectives for Thailand and ASEAN

Over the past few decades the Thai economy has been developing and gradually integrating with other economies in and beyond the ASEAN region. Due to the ASEAN countries' integration processes, the community is facing political, economic, social, educational and environmental challenges. In order to turn challenges into opportunities that serve Thailand and the ASEAN region in an inter-generational way, it is pertinent to draft, disseminate and discuss perspectives for sustainability and well-being. This anthology aims to extend and deepen our awareness of ecological, social and economic sustainability in Thailand and the ASEAN region and thus to intensify the discourse amongst decision makers, academics, students and the wider public. The objective of the papers in this volume is to give recommendations on how sustainability in economic, social and environmental sectors could be promoted.