

BUDDHIST PERSPECTIVE OF 'RIGHT CONSUMPTION' OF NATURAL RESOURCES FOR SUSTAINABLE DEVELOPMENT

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ABSTRACT

Rapid industrialization, urbanization, and globalization, on one hand, achieved economic growth whereas on the other led to environmental degradation. This economic growth which is highly influenced by greed, hatred, and delusion resulted in indiscriminate exploitation of limited natural resources. This indiscriminate use of natural resources is 'wrong consumption'. Based upon the Buddhist principle of Dependent Origination every cause has an effect(s). This 'wrong consumption' of natural resources—which is a cause—has resulted in effects such as natural resources depletion, environmental degradation, pollution, threat to species, climate change etc. The purpose of this paper is to correlate the 'wrong consumption' of natural resources to lust, hate, and delusion—the three basic cause of sorrow and furthermore 'right consumption' with the Noble Eightfold Path based upon wisdom, morality and mental culture which will lead to sustainable development. The findings of the study highlight the 'wrong consumption' of natural resources are based on lust, hate, and delusion and resulted in the depletion of natural resources and environmental degradation. To overcome these sufferings caused due to 'wrong consumption', 'right consumption' of natural resources virtue has to be developed in an individual. This virtue is based on wisdom, morality and mental culture—the aspects of the

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Noble Eightfold Path. It is concluded, to have sustainable development 'right consumption' of natural resources are required. It is recommended to achieve the objective of sustainable development through 'right consumption' of natural resources, Buddhist aspects of renunciation, generosity, moral responsibility, calm and stillness, kindness and compassion, non-grasping and non-attachment, sharing, non-violence, awareness of the impermanence of the things and pleasure need to be developed. Furthermore, transforming consumption pattern first at an individual level and then extending it towards society will change the human psyche and will pave towards achieving the goal of sustainable development which United Nations has also identified for achieving better and more sustainable future for all by 2030 by incorporating 17 goals of which "Responsible Production and Consumption" is one of them.

1. INTRODUCTION

All means of satisfying human needs, at a given time and place, are resources. The "resources" are means for attaining individual and social welfare. Natural compounds like land, water, minerals, forests, wildlife, energy—or even man himself—are considered as resources as well as resource-creating factors (Santra, 2014). The way in which societies use and care for natural resources fundamentally shapes the well-being of humanity, the environment, and the economy. Natural resources—that is, plants and plant-based materials, metals, minerals, fossil fuels, land, and water—are the basic inputs for the goods, services, and infrastructure of socio-economic systems from the local to the global scale. Research shows that, either directly or indirectly, natural resources and the environment are linked to all of the United Nations Sustainable Development Goals. Restoring and maintaining the health of the natural resource base is a necessary condition for achieving the ambitious level of well-being for current and future generations set out in these goals (IRP, 2017).

If the global population reaches 9.6 billion by 2050, the equivalent of almost three planets will be required to sustain current lifestyles. More people globally are expected to join the middle class over the next two decades. This is good for individual prosperity but it will increase demand for already constrained natural resources. If we don't act to change our consumption and production patterns, we will cause irreversible damage to our environment. Each year

about one-third of all food produced—equivalent to 1.3 billion tonnes worth around US\$ 1 trillion—ends up rotting in the beans of consumers and retailers or spoiling due to poor transportation and harvesting practices. Households consume 29 percent of global energy and contribute to 21 percent of resultant carbon dioxide emissions (Why it Matters, 2018).

Approximately 19 million premature deaths are estimated to occur each year globally due to environmental and infrastructure-related risk factors that arise from the way societies extract and use natural resources in production and consumption systems, including essential infrastructure and food provision. About 6.5 million premature deaths (the vast majority in cities) are caused by air pollution related to energy supply and use in homes and industries, as well as transportation and construction sectors within cities (IRP, 2017).

Material demand has continued to shift from biomass and renewable materials to non-renewable materials, creating new waste flows and contributing to higher emissions and pollution. The global trend of moving from traditional to modern technologies, and from agriculture-based economies to urban and industrial economies (along with their fast-growing new material requirements), further accelerates global material use and creates significant challenges for sustainability policy (Steinberger *et al.*, 2010).

Strong growth in natural resource extraction of biomass, fossil fuels, metal ores, and non-metallic minerals continues to support the global economy, and also adds to global environmental pressures and impacts. During the period 1970 to 2010, the annual global use of materials grew from 26.7 billion tonnes to 75.6 billion tonnes. In other words, the last three decades of the 20th century saw a yearly average growth in global material use of 2.3 percent. Annual growth accelerated to 3.5 percent in the first decade of the 21st century—from 2000 to 2010—and the 2008–2009 global financial crises had a negligible impact on global material use. From 2010 to 2014, global material use grew again by an additional 7.3 billion tonnes, or an average of 2.3 percent per year, to 82.9 billion tonnes. This is significant because, all else being equal, growing material extraction indicates growing environmental pressures and impacts across the globe (IRP, 2017).

We consume the products of the environment and human transformations of natural resources—and in doing this, are increasingly threaten the world’s biosphere (Harvey, 2013). Ven. Payutto holds that consumption should be seen only as “a means to an end, which is the development of human potential” or “well being within the individual, within society, and within the environment (Payutto, 1994).”

2. UNEQUAL CONSUMPTION OF NATURAL RESOURCES

Over the past four decades, a large shift has occurred in material extraction from Europe and North America to Asia and the Pacific and West Asia. This shift has ratcheted up environmental pressures of primary industries as well as resource flows in Asia and Pacific, Latin America and Caribbean and Africa (Schandl and West, 2010; West and Schandl, 2013). While increased material extraction in the South has underpinned poverty alleviation and growing material standards of living in some countries, it is also associated with considerable environmental (Mudd, 2010) and social (Reeson *et al.*, 2012) problems.

Global material resource use may more than double from 2015 to 2050, with high-income countries currently consuming 10 times more per person than low-income countries (IRP, 2017). There are now more than 1.7 billion members of “the consumer class”—nearly half of them in the developing world. While the consumer class thrives, great disparities remain. The 12 percent of the world’s population that lives in North America and Western Europe accounts for 60 percent of private consumption spending, while the one-third living in South Asia and sub-Saharan Africa accounts for only 3.2 percent. As many as 2.8 billion people on the planet struggle to survive on less than US \$2 a day, and more than one billion people lack reasonable access to safe drinking water. The UN reports 825 million people are still undernourished (State of Consumption Today, 2018).

Despite rising consumption in the developing world, industrial countries remain responsible for the bulk of the world’s resource consumption—as well as the associated global environmental degradation. The United States, with less than 5% of the global

population, uses about a quarter of the world's fossil fuel resources—burning up nearly 25% of the coal, 26% of the oil, and 27% of the world's natural gas. As of 2003, the US had more private cars than licensed drivers, and gas-guzzling sport utility vehicles were among the best-selling vehicles. New houses in the US were 38% bigger in 2002 than in 1975, despite having fewer people per household on average (State of Consumption Today, 2018).

WWF's Living Planet Index, which measures the health of forests, oceans, freshwater, and other natural systems, shows a 35 percent decline in Earth's ecological health since 1970. Calculations show that the planet has available 1.9 hectares of biologically productive land per person to supply resources and absorb wastes—yet the average person on Earth already uses 2.3 hectares worth. These “ecological footprints” range from 9.7 hectares claimed by the average American to 0.47 hectares used by the average Mozambican. Individuals often face personal costs associated with heavy levels of consumption: the financial debt; the time and stress associated with working to support high consumption; the time required to clean, upgrade, store, or otherwise maintain possessions; and the ways in which consumption replaces time with family and friends (State of Consumption Today, 2018).

The United Nations Human Development Index report 2018 (UNDP, 2018) divided the Human Development Index of the countries into five categories (Table 1). The Very High Human Development category countries comprise of 31.21% (n=59) followed by High Human Development (28%, n=53), Medium Human Development (20.63%, n=39) and Low Human Development (20%, n=38). Gross National Income (GNI) per capita in these category countries indicated a clear demarcation with highest GNI (40041) in Very High Human Development category and least (2521) in Low Development category countries. Natural resources utilization in the form of fossil fuels among these categories countries was in the order of High Human Development>Very High Human Development>Medium Human Development; whereas in the case of carbon dioxide (CO₂) emissions per capita in tonnes was in the order of Very High Human Development>High Human Development>Medium Human Development>Low Human

Development. Freshwater withdrawal rate was highest in the Very High Human Development category countries (6.1) followed by High Human Development of 4.8. From the data presented in Table 1, it can be pointed out that Very High Human Development and High Human Development categories countries ecological footprint with respect to fossil fuel consumption, freshwater withdrawal and CO₂ emissions per capita was higher as compared with Medium and Low Human Development category countries. On the contrary, use of renewable energy consumption which is the environment and natural resource-friendly had seen the reverse trend and was in the order of Low Human Development>Medium Human Development>High Human Development>Very High Human Development. Forest cover of these category countries was comparable as of 2018.

Table 2 presents the Human Development Index as classified by the UNDP Human Development Index report 2018 into six regions of the world. Arab States is dominated by Islam religion, East-Asia and Pacific with Buddhist and Christianity; Europe and Central Asia; Latin America and Caribbean dominated by Christianity; Sub-Saharan Africa by Christianity and Islam whereas South Asia with mix religions (Buddhist, Christianity, Hindu, and Islam). Gross National Income per capita in Arab States, East Asia and Pacific, Europe and Central Asia and Latin America and Caribbean was comparable; whereas, in Sub-Saharan Africa it was least (3399). Fossil fuel energy consumption was in the order of Arab States>Europe and Central Asia>South Asia>Latin America and Caribbean>Sub-Saharan Africa. Carbon dioxide emissions per capita was in the order of East Asia and Pacific>Europe and Central Asia>Arab States>Latin America and Caribbean>South Asia>Sub-Saharan Africa. Freshwater withdrawal rate was in the order of South Asia>Europe and Central Asia>Latin America and Caribbean. The ecological footprint of the world religions can be placed in the order of Arab States>Europe and Central Asia>South Asia>Latin America and Caribbean>East Asia and Pacific>Sub-Saharan Africa. Use of renewable sources of energy which conserves natural resources had a reverse trend as that of use of fossil fuel energy consumption and it was Sub-Saharan Africa>South-Asia>Latin America and Caribbean>East Asia and

Pacific>Europe and Central Asia>Arab States. Thus it is pointed out, these regions of the world which has a higher gross national income per capita are utilizing more natural resources in form of fossil fuels and emitting higher CO₂ emissions into the atmosphere whereas use of renewable sources of energy is minimum.

Environmental impacts are due to rapidly increasing population numbers, increasing efficient technologies, and consumption rates beyond the planet's capacity. These three have been linked with the equation $I=PAT$, or environmental impact=population size multiplied by affluence (or degree of consumption) multiplied by technology. Reduce any one of these and the impact drops, increase one or all three, and the impact rises, in some situations dramatically (Kaza, 2000).

The nature of the global consumption of natural resources today is classified as 'wrong consumption' or 'unskilful consumption'. This activity has dire consequences on our environment. In this paper, an attempt has been carried out to ascertain the Buddhist 'position' on the consumption of natural resources on the basis of 'skilful' versus 'unskilful' activity and on Four Noble Truths. The appropriate Buddhist 'response' measures is developed with the emphasis on the Noble Eightfold Path and constructive alternatives of Buddhist virtues emphasizing upon renunciation, generosity etc. that can assist in liberation from environmentally and socially oppressive nature of wrong consumption. The transformation of wrong consumption to right consumption and further from the individual level to community level (Society) will lead to their collective actions which result in environmental conservation and sustainable development.

Table 1. Natural resources consumption and Human Development Index groups

Human development groups according to UNDP 2018 HDI report					
Particular		Very high human development (59 countries)	High human development (53 countries)	Medium human development (39 countries)	Low human development (38 countries)
Total population (Million)	2017	1439.3	2378.9	2732.9	926.2
	2030	1503.3	2497.0	3177.5	1291.2
Human Development Index		0.894	0.757	0.645	0.504
Life expectancy at birth		79.5	76.0	69.1	60.8
Gross National Income per capita		40041	14999	6849	2521
Estimated Gross National Income per capita	Female	30276	10945	3673	1915
	Male	50033	18948	9906	3126
Gross domestic product	2011 total	57964.1	35766.3	18684.2	2346.9
	2011 per capita	40078	15280	6836	2609
Standard of living (% satisfaction)		74	73	72	44
Fossil fuel energy consumption		82.6	85.8	71.2	..
Renewable energy consumption		10.4	14.6	35.8	81.0

CO₂ emission per capita (T)	10.7	6.1	1.7	0.3
Freshwater withdrawal (%)	6.1	4.8
Mortality				
Household and ambient air pollution	23.6	86.2	152.2	200.2
Sanitation and hygiene	0.3	0.8	15.6	45.9
Forest cover				
(% of total land)	33.1	31.5	30.5	23.1
Change %, 1990/2015	1.1	-1.7	-9.7	-14.5

Table 2. Natural resources consumption in world regions

Regions categorization according to UNDP Human Development Index 2018 report						
Particular		Arab States (20 countries or territories)	East Asia and Pacific (24 countries)	Europe and Central Asia (17 countries)	Latin America and Caribbean (33 countries)	South Asia (9 countries) Sub-Saharan Africa (46 countries)
Religions		Islam	Buddhism and Christianity	Christianity and Islam	Christianity	Buddhist, Christianity, Hindu, Islam
Total population (Million)	2017	409.5	2091.4	243.9	640.2	1005.8
	2030	513.6	2205.9	259.3	713.1	1394.4
Human Development Index		0.699	0.733	0.771	0.758	0.537
Life expectancy at birth		71.5	74.7	73.4	75.7	69.3
Gross National Income per capita		15837	13688	15331	13671	6473
Estimated Gross National Income per capita	Female	5380	10689	10413	9622	2694
	Male	25533	16568	20529	17809	10035
Gross domestic product	2011 total	6187.6	28026.4	3753.3	9076.7	12127.1
	2011 per capita	16472	13737	15563	14469	6485
Standard of living (% satisfaction)		63	..	60	68	74
						46

Fossil fuel energy consumption	97.2	..	87.2	74.5	76.7	39.2
Renewable energy consumption	4.0	15.9	9.1	27.7	31.1	70.2
CO₂ emission per capita (T)	4.9	5.8	5.1	3.0	1.8	0.8
Freshwater withdrawal (%)	14.3	1.6	23.8	..
Mortality						
Household and ambient air pollution	101.2	114.4	66.5	39.3	173.7	186.4
Sanitation and hygiene	7.0	2.2	0.5	1.7	17.1	47.7
Forest cover						
(% of total land)	3.0	29.8	9.1	46.3	14.7	28.2
Change %, 1990/2015	-23.7	3.8	8.3	-9.3	7.6	-11.7

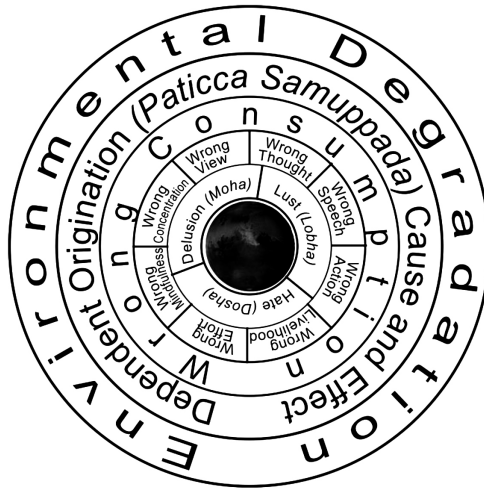


Figure 1. Wrong consumption cause for environmental degradation

4. WRONG CONSUMPTION AND DEPENDENT ORIGINATION

A number of studies on the causes and effects of environmental degradation have been carried out. A number of evidence from the recent environmental crisis are claimed to be caused by the consequences of environmental degradation. The Buddhist principle of Dependent Origination (*Paticca Samuppada*) provides us the way to look at a problem by the way of cause and effect and further, it suggests the way to end the problem from its origin. The doctrine of *Paticca Samuppada* emphasized that:

“When this is, that comes to be;
 With the arising of this, that arises,
 When this is not, that does not come to be;
 With the cessation of this, that ceases.”

This conditionality goes on forever, uninterrupted and uncontrolled by any external agency or power of any sort. The Buddha discovered this eternal truth, solved the riddle of life, unraveled the mystery of being by comprehending, in all its fullness, the *Paticca Samuppada* with its twelve factors, and expounded it, without keeping back anything essential, to those who yet have sufficient intelligence to wish for light. The root cause of wrong consumption can be understood by the teaching of Dependent Origination (*Paticca Samuppada*). The twelve factors of it

includes Ignorance (*Avijja*), Volitional Formations (*Sankhara*), Consciousness (*Vinnana*), Mentality-Materiality (*Nama-Rupa*), The Sixfold Base (*Salayatana*), Contact (*Phassa*), Feeling (*Vedana*), Craving (*Tanha*), Clinging (*Upadana*), Becoming (*Bhava*), Birth (*Jati*) and Aging and Death (*Jaramarana*) (Piyadassi Thera, 1959). The *Paticca Samuppada*, with its twelve links starting with ignorance and ending in aging and death, shows how man, being fettered, wanders in *samsara* birth after birth. But by getting rid of twelve factors man can liberate himself from suffering and rebirth. The Buddha has thought us the way to put an end to this repeated wandering. It is by endeavoring to halt this Wheel of Existence that we find the way out of this tangle. The Buddha word which speaks of this cessation of suffering is stated thus:

“Through the entire cessation of ignorance cease volitional formations;

Through the cessation of volitional formations, consciousness ceases;

Through the cessation of consciousness, mentality-materiality ceases;

Through the cessation of mentality-materiality, the sixfold base ceases;

Through the cessation of sixfold base, contact ceases;

Through the cessation of contact, feeling ceases;

Through the cessation of feeling, craving ceases;

Through the cessation of craving, clinging ceases;

Through the cessation of clinging, becoming ceases;

Through the cessation of becoming, birth ceases;

Through the cessation of birth, ceases aging and death, sorrow, lamentation, pain, grief, and despair.

Thus does this whole mass of suffering ceases.”

(Piyadassi Thera, 1959)

5. SKILLFUL AND UNSKILLFUL ACTIONS

Wrong consumption of natural resources is an unskillful action which results in environmental degradation. This unskillful

action can be replaced with skillful action which will lead to the right consumption of these limited natural resources. This right consumption will pave the way for environmental conservation based upon the principle of Dependent Origination.

The Buddha has stated “Abandon what is unskillful, monks. It is possible to abandon what is unskillful. If it were not possible to abandon what is unskillful, I would not say to you, ‘Abandon what is unskillful.’ But because it is possible to abandon what is unskillful, I say to you, ‘Abandon what is unskillful.’ If this abandoning of what is unskillful were conducive to harm & pain, I would not say to you, ‘Abandon what is unskillful.’ But because this abandoning of what is unskillful is conducive to benefits & happiness, I say to you, ‘Abandon what is unskillful.’

“Develop what is skillful, monks. It is possible to develop what is skillful. If it were not possible to develop what is skillful, I would not say to you, ‘Develop what is skillful.’ But because it is possible to develop what is skillful, I say to you, ‘Develop what is skillful.’ If this development of what is skillful were conducive to harm & pain, I would not say to you, ‘Develop what is skillful.’ But because this development of what is skillful is conducive to benefit & happiness, I say to you, ‘Develop what is skillful.’—AN2:19

“And which is unskillful? Taking life is unskillful, taking what is not given...sexual misconduct...lying...abusive speech...divisive tale-bearing...idle chatter is unskillful. Covetousness...ill will...wrong views are unskillful? These things are called unskillful.

“And which are the roots of what is unskillful? Greed is a root of what is unskillful, aversion is a root of unskillful, delusion is a root of what is unskillful. These are called the roots of what is unskillful.

“And what is skillful? Abstaining from taking life is skillful, abstaining from taking what is not given...from sexual misconduct...from lying...from abusive speech...from divisive tale-bearing...abstaining from idle chatter is skillful. Lack of covetousness...lack of ill will...right views are skillful. These things are called skillful.

“And which are the roots of what is skillful? Lack of greed is a root of what is skillful, lack of aversion...lack of delusion is a root of

what is skillful. These are called the roots of what is skillful.”—MN9 (Thanissaro Bhikkhu, 2010)

6. RIGHT CONSUMPTION OR SUSTAINABLE CONSUMPTION

Right consumption or Sustainable consumption can be defined as: the use of natural services and related products that respond to basic needs and bring a better quality of life while minimizing the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle of the service or products (so as not to jeopardize the needs of future generations). Ensuring sustainable consumption and production patterns has become an explicit goal of the Sustainable Development Goal (Goal number 12), with the specific target of achieving sustainable management and efficient use of natural resources by 2030.

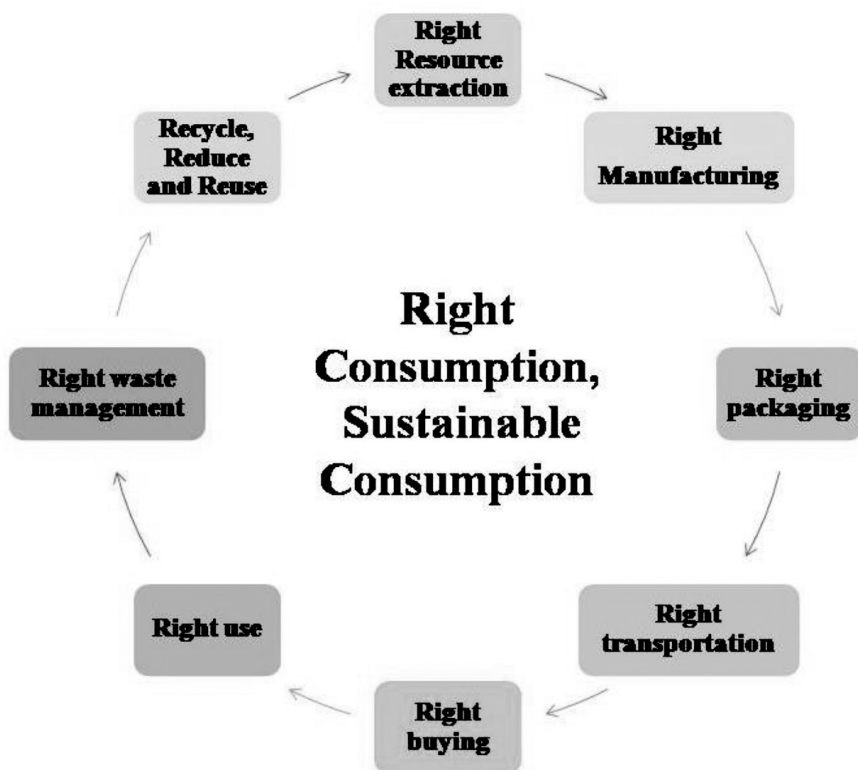


Figure 2. Aspects of Right Consumption/Sustainable Consumption

Right consumption is not exclusive term however it is an inclusive term and includes: Right extraction of natural resources, renewable

and non-renewable; Right manufacturing, Right packaging, Right transportation, Right buying, Right use, Right waste management and Recycle, reuse and reduce (Figure 2).

Right consumption is to use goods and services “to satisfy the desire for true well-being”, and wrong consumption is to use them “to satisfy the desire for pleasing sensations or ego-gratification” (Payutto, 1994). Schumacher (1973) stated that although modern economics “tries to maximize consumption by the optimum pattern of productive effort,” Buddhist economics “tries to maximize human satisfactions by the optimal pattern of consumption.”

7. THE MIDDLE WAY FOR RIGHT CONSUMPTION

The measure that needs to be adopted for Right Consumption of natural resources under the Noble Eightfold Path is depicted in Figure 3. One needs to incorporate various changes in one’s lifestyles on the basis of the Buddhist principle of the Noble Eightfold Path. Some of the measures that can be incorporated which lead us to the Right Consumption goal includes:

7.1. Right Understanding (View)—Rethinking Your Perception of Green

Right Understanding (View), which is the keystone of Buddhism, is explained as the knowledge of Four Noble Truths. To understand rightly means to understand things as they really are and not as they appear to be. In the practice of the Noble Eightfold Path, Right Understanding stands at the beginning as well as its end. A minimum degree of Right Understanding is necessary at the very beginning because it gives the right motivation to the other seven factors of the Path and gives them the correct direction (Narada Thera, 1996). The roots of unwholesome *kamma* are greed (*lobha*), hatred (*dosa*) and delusion (*moha*). Whereas, the roots of wholesome *kamma* include the absence of greed (a-*lobha*=unselfishness), the absence of hatred (a-*dosa*=kindness) and the absence of delusion (a-*moha*=wisdom).

The foundation for the change towards “Sustainable consumption” is to have accurate information. Environmental and sustainability policy requires a solid evidence base that makes it possible to monitor the scale of the physical economy, that is the

amount of material, energy, water and land used and emissions generated in making, using and providing goods, services and infrastructure systems. Data drawn from up-to-date information on the state, trends, and drivers of the physical economy can help to identify leverage points for targeted and effective policy intervention across sectors and geographical scales. This kind of regularly reported data, such as those drawn from a global assessment of natural resources, can inform the setting of long-term orientation goals, incentive frameworks, and systems of engagement and mutual learning that will pave the way for a transformational change. One can develop and articulate visions and models of what life could be like living without degrading the environment. Furthermore, the right understanding the causes of wrong consumption will give an insight into the problem its consequences and will lead to the path for environmental conservation and sustainable development.

7.2. Right Thought—Green is a Choice

Clear understanding leads to clear thinking. Right Thoughts serves the dual purpose of eliminating evil thoughts and developing pure thoughts. Right Thought, in this particular connection is threefold. It consists of *Nekkhamma* (selflessness), *Avyapada* (loving-kindness) and *Avihimsa* (harmlessness) (Narada Thera, 1996). Right Thought includes thought free from lust (*Nekkhamma-sankappa*), thought free from ill-will (*Avyapada-sankappa*) and thought free from cruelty (*Avihimsa-sankappa*). Thoughts free from lust, from ill-will, and from cruelty are called “Mundane Right Thought” (*Lokia samma-sankappa*) which yields worldly fruits and brings good results (Nyanatiloka, 1967).

“Once one ‘knows’ something you can’t ‘un-know’ it” and “When you know better, you do better.” Both speak right volumes about Right Thought and one’s commitment to better choices. One can’t ignore what one has learned about the environment so far, or ignore further the rapid fire of new information from a focused community? With Right Thought, change becomes possible (Roberts, 2010). One can motivate ourselves and others to take action and to turn “I ought to act” into “I can do no other” (Heine, 2014). Right Thoughts will give “ideas” for environmental innovative methods for Right Consumption. Right Thought from

different individuals will lead towards the development of more comprehensive environmental conservation measures. Right Thoughts will eliminate wrong thoughts and this environmental degradation will be controlled at the source itself.

7.3. Right Speech—Voicing the Spirit of Green

Right Thought leads to Right Speech (Advocacy). This includes abstinence from falsehood, slandering, harsh words and frivolous talks (Narada Thera, 1996). This is called ‘Mundane Right Speech’ (*Lokiya-samma-vaca*), which yields worldly fruits and brings good results. But the avoidance of the practice of this fourfold—the mind being holy, being turned away from the world, and conjoined with the path, the holy path being perused—this is called the ‘Supermundane Right Speech’ (*Lokuttara-samma-vaca*), which is not of the world, but is supermundane, and conjoined with the path (Nyanatiloka, 1967).

Speaking out about the need for Right Consumption is the Right Speech. One can spread the word and inspire others to start changing their consumption patterns and choosing to live more sustainably (Heine, 2014). Awareness about Right Consumption needs a base of Right Speech. Through advocacy, awareness in the society about various simple methods of Right Consumption can be achieved.

7.4. Right Action—First Do No Harm

Right Speech must be followed by Right Action which comprises abstinence from killing, stealing and sexual misconduct (Narada Thera, 1996). Abstaining from killing, from stealing, and from unlawful sexual intercourse—this is called the Mundane Right Action (*Lokiya-samma-kammanta*). But the avoidance of the practice of this threefold wrong action is called the ‘Supermundane Right Action’ (*Lokuttara-samma-kammanta*), which is not of the world, but is supermundane, and conjoined with the path (Nyanatiloka, 1967).

Right Action refers to upholding the Five Percepts: not killing, not stealing, not abusing sexuality, not lying, and not using or selling intoxicants. The percepts represent practices of restraint, calling for personal and institutional responsibility for reducing

environmental suffering (Kaza, 2000). Better and more efficient production and use of natural resources can be one of the most cost-efficient and effective ways to reduce impacts on the environment and advance human well-being. Identifying efficiencies across the life cycle of natural resources for improving extraction processes and disposal to achieve the same or greater economic and social gains while minimizing negative environmental impacts (including pollution).

7.5. Right Livelihood—Seeing the Big, Green Picture

The Right Livelihood can be developed by refraining from the five kinds of trade which are forbidden to a lay-disciple by the Buddha. They are trading in arms, human beings, animals for slaughter, intoxicating drinks and drugs, and poisons (Narada Thera, 1996). Avoiding wrong living gets a livelihood by the right way of living-this is called 'Mundane Right Livelihood' (*Lokiya-samma-ajiva*). However, avoidance of wrong livelihood is called the 'Supermundane Right Livelihood' (*Lokuttara samma-ajiva*), which is not of the world, but is super-mundane, and conjoined with the path (Nyanatiloka, 1967).

Livelihood is ones "expressions" of life, the spirit from which one draws and expands upon each and every day. Expressing ones ecological footprint in ways that benefit and support all aspects of one's life (home, work, and play) is Right Livelihood (Roberts, 2010). This element could be about living sustainably as a way of life rather than just actions you do, or it could be about making changes in the workplace (Heine, 2014). Sustainable livelihood is the need of the hour. The natural resources are limited and their use should be in a judicious manner through our right livelihood. At the same time, the use of renewable sources of energy should be encouraged. By reducing the quantity of natural resource use by an individual, the related emissions and impacts can also be reduced. The Buddha advice to share the products of one's work with others, and to use it for generous, karmically fruitful action (Harvey, 2013).

7.6. Right Effort—Going Green One Step at a Time

There are Four Great Efforts; the effort to avoid, the effort to overcome, the effort to develop, and the effort to maintain (Nyanatiloka, 1967). Right Effort is about doing what one can when

one can, and because one can. When one applies effort to thinking about the changes one can make toward green transformation (Right Thinking), then take action to make those changes (Right Action), that's Right Effort. Right Effort is not qualified by the size of the action, but the action itself (Roberts, 2010). This could be about continuing to make changes to your lifestyle even when you have done some of the things that are easier for you (Heine, 2014).

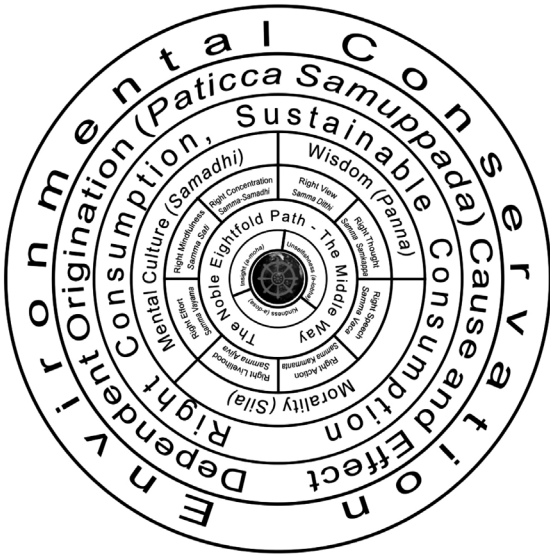


Figure 3. Right Consumption based upon The Noble Eightfold Path for environmental conservation

Right Efforts include that one which will always take towards sustainability. Environmentally conscious efforts by an individual will lead to the conservation of nature and natural resources and ultimately the achievement of the goal of environmental conservation. A systematic approach for linking the way natural resources are used in the economy to the impacts on the environment and people connects the flow of resources –from extraction through the final waste disposal–with their use and impact on the environment, economies, and societies at each stage of the life cycle. The approach can be used to identify key leverage points; develop resource targets; design multi-beneficial policies that take into account trade-offs and synergies; and steer a transition towards sustainable consumption and production and infrastructure systems.

7.7. Right Mindfulness - Green Intention

Right Mindfulness is constant mindfulness with regards to the body, feeling, thoughts, and mind-objects (Narada Thera, 1996). Right Mindfulness is one of the most important factors of the Noble Eightfold Path as the activities carried out by right mind will judge which one will lead to environmental conservation. The activities carried out by the right mind are simple and easy to adopt and has a comprehensive potential for environmental conservation.

One needs to develop Right Mindfulness of how could do better and will be more inclined to “do better” next time. Right Mindfulness isn't about recognizing when you're right, but recognizing what one is doing—right or wrong—and allowing for change where necessary (Roberts, 2010). There are many opportunities for mindfulness such as remembering to turn off heaters when you leave a room or only filling a kettle with as much water as you need and so on (Heine, 2014). Transition to a process of transformation of current systems of unsustainable production and consumption to sustainable ones. Being thoughtful about what one is buying and choosing a sustainable option wherever possible. Carrying a reusable bag, refusing to use plastic straws, and recycling plastic bottles are right initiatives. Making informed purchases about what one is buying also helps.

7.8. Right Concentration - How Big is Your Footprint?

Right Effort and Right Mindfulness leads to Right Concentration. It is the one-pointedness of mind, culminating in the meditative absorptions (Narada Thera, 1996). While most people can take a few minutes and find ways in which they could easily change a few habits to produce a better, greener result, commitment to joining the world community and truly doing your part requires greater effort and planning. It means applying sincere effort to green education, a dedication to change both in the home and workplace, and a compelling honesty about your responsibility as a world participant. Right Concentration may result in the degree of that commitment through learning, doing, and teaching, but it begins in the heart and moves through one's spirit to all that connects you to the world (Roberts, 2010). Meditating on environmental

degradation can be a powerful way to change our views of how we want to apply ourselves in relation to the other seven elements.

8. INTERLINKING ENVIRONMENTAL CONSERVATION-SUSTAINABLE DEVELOPMENT

In Figure 4, an interlinking between environmental conservation-sustainable future-sustainable development is presented. From this figure, it can be observed that the Middle Path which comprises of Wisdom, Morality and Mental Culture if developed in all individuals of the society, the effect of it will (based on the principle of Dependent Origination) lead towards environmental conservation. The right consumption of natural resources measure carried out at an individual level will result in a global level change of sustainable future and sustainable development. In nutshell, changes in the human mindset by incorporating the Noble Eightfold Path will lead to environmental conservation, sustainable future, and sustainable development which will ultimately lead to *Nibbana*. All these things depend on the Noble Eightfold Path.



Figure 4. Interlinking between Environmental Conservation-Sustainable Future-Sustainable Development (Kamble, 2015)

9. ENLIGHTENED WAY FOR RIGHT CONSUMPTION

The Noble Eightfold Path will contribute to Right Consumption or Sustainable Consumption of natural resources which will help in environmental conservation and ultimately lead to sustainable

development. To make this path more effective/impactful additional Buddhist virtues needs to be developed in an individual so as to achieve the objective of sustainable development. Figure 5 depicts the enlightened way for Right Consumption or Sustainable Consumption from the Noble Eightfold Path by incorporating virtues such as renunciation, generosity, frugality, loving-kindness, contentment, non-attachment, compassion and equanimity.

10. ECONOMIC SECURITY AND HAPPINESS

Buddha stated that there are four kinds of happiness. The first happiness is to enjoy economic security or sufficient wealth acquired by just and righteous means; the second is spending that wealth liberally on himself, his family, his friends and relatives, and on meritorious deeds; the third to be free from debts; the fourth happiness is to live a faultless, and a pure life without committing evil in thought, word or deed. The Buddha further stated, economic and material happiness is 'not worth one-sixteenth part' of the spiritual happiness arising out of a faultless and good life (Walpol Rahula, 1978). It could be seen that the Buddha consider economic welfare as requisite for human happiness, but that he did not recognize progress as real and true if it was only material, devoid of a spiritual and moral foundation. While encouraging material progress, Buddhism always lays great stress on the development of the moral and spiritual character for a happy, peaceful and content society.

Renunciation: Renunciation means to transcend all antipodal situations, like gain-loss, praise-blame, happiness-misery, to enjoy the peace born of equanimity and detachment. It is also a means to escape from worldly bondage and thus into freedom. A holy life, based on celibacy, voluntary poverty and dispassion, gives concrete shape to renunciation (Buddharakkhita, 2002). Renunciation is accepting that the things will go away. To see and accept that everything goes away—including ourselves—is necessary in order to live serenely (Harvey, 2013). The sign of renunciation is generosity. True generosity demonstrates not only moral development but insight (Harvey, 2013).

Generosity: What land is to a farmer, *dana* is to Buddhist life. It is the foundation of spiritual practice, the sole purpose of which

is to destroy craving and build inner freedom born of selflessness. Therefore in the Buddhist context, giving means giving up i.e. giving up selfishness, attachment, sensuality, acquisitiveness, egotism, anger, delusion, ignorance and such mind-defiling negative *kamma* producing factors. The Buddha said, “For human beings, *dana* is the path to release” (Buddharakkhita, 2002).

The Bodhisattva practices the perfections of giving in order to remove desires and greed. He gives not for the sake of acquiring merit and without the thought of gaining a reward for his act of generosity. With this attitude of mind, the Bodhisattva is able to give up his wealth, possessions and even his life without clinging to them in the least (Buddhism for Beginners, 2017). Moreover, bringing pleasure to others can bring real happiness. Generosity and sharing are certainly a source of happiness, and a challenge to a society that prioritizes personal consumption (Harvey, 2013).

Frugality: Buddhist monks and lay mediators are encouraged every day to reflect on why they use the four requisites of life: food, clothing, shelter, and medicine. The purpose of this reflection is to see if they’ve been using these things to excess or in ways that will develop unskilful states of mind. They’re also advised to reflect on the fact that each of the requisites has come about through the sacrifices of many people and other living beings. This reflection encouraged them to live simply and to aim ultimately at a truly noble form of happiness that places no burdens on anyone at all. One should aim for wise eating i.e. moderation in eating: having a sense of just right, of exactly how much is needed to keep one healthy and strong enough to stick with the training of the mind. The same principle holds true for the other requisites. Don’t take more from the world than you’re willing to give back. And learn to undo the perceptions—so heavily promoted by the media—that shopping is a form of therapy and that purchase is nothing but a victory or a gain. Every purchase also entails losses such as of money and freedom. Hence, learn to restrict one’s purchases to things that are useful, and use the money one save to help advance the higher qualities of life, both for yourself and for those around you. Look frugality as a gift to yourself and to the world (Thanissaro Bhikkhu, 2012).

Contentment: The Buddha has stated that “This *Dhamma* is for

one who is content, not for one who is discontent.” The virtues of contentment and fewness of wishes are praised, and it is said: “contentment is the greatest wealth” (Dhammapada, 204) (Harvey, 2013). The Buddhist teaching of contentment further states that “not taking more than one’s fair share—using only what is necessary so that the rest is available for other’s use.” It is living according to nature, taking what we really need (Swearer, Me and Mine, 1989).

Non-attachment: To be non-attached is to possess and use material things but not to be possessed or used by them (Harvey, 2013). Non-attachment is a state in which a person overcomes his or her attachment to desire for things, people or concepts of the world and thus attains a heightened perspective. Non-attachment doesn’t mean we don’t own things. It means we don’t allow things to own us.” As the Dalai Lama was once quoted to have said, “Attachment is the origin, the root of suffering; hence it is the cause of suffering.”

Compassion: In Buddhist psychology, compassion is a form of empathy. We sense others’ suffering as like our own and naturally wish them deep freedom from it. A compassionate mind, as opposed to a cruel and angry one, is understood to be much more closely attuned to our actual condition. Thus, compassion is informed by the wisdom that understands our basic situation: the inner causes of our suffering and our potential for freedom and goodness. From a Buddhist perspective, compassion with wisdom is the foundation of emotional healing. Compassion is also characterized as a mental capacity that, when cultivated and strengthened, empowers all positive states of mind as we awaken to our fullest human potential (Makransky, 2012).

Loving-kindness: The perfection of loving-kindness is the wish to provide for the welfare and happiness of the world, accompanied by compassion and skillful means benevolence. The noble virtue of loving-kindness should reflect upon as: One resolved only upon his or her own welfare cannot achieve success in this world or a happy rebirth in the life to come—there must be some concern for the welfare of others.

Equanimity: The function of the equanimity is to see things impartially; its manifestation is the subsiding of attraction and

repulsion. Its proximate cause is a reflection on the fact that beings inherit the results of their own *kamma*. Equanimity perfects the power of renunciation, for by its means one overcomes discontent and delight. Equanimity is accompanied by compassion and compassion by equanimity.

Agenda for Right Consumption

Individual play a crucial role in structural changes by setting an example by doing pioneering groundwork, by teaching others new approaches, by advocating for consumerist accountability. The sum of these individual efforts, however, will not add up to system-level changes, to accomplish this, structural agents must change their operational procedures and expectations (Kaza, 2000). This concluding section of the paper shed light on the few aspects of sustainability engaged by a human being will lead to structural change and includes:

Righteous reduction: Righteous reduction of consumption of natural resources can be carried out by incorporating the activities such as i) Make a list and check it twice: whenever one is going to shop for domestic needs adhering with a list will avoid unnecessary or impulsive purchase ii) Avoid the just-in-case purchase: If at time one is not sure what one needs then assume that one doesn't need anything. An organised person at home will help to know what one has in stock iii) Think about the replacement of new purchase: On purchase of new goods, what it will replace at back home? can old one be donated or recycled? iv) Evaluate want versus need: It is important to give an extra thought to consider it for something one need or want v) Beware of bargainers: Bargains are designed to move merchandise, not necessarily to save one's money (Roberts, 2010).

Active reuse: Numbers of ways are there for reuse of materials by initiating small steps that can be incorporated in daily life, some of them include reuse of totes and bags; waste as a raw material; charitable donation and be creative (Roberts, 2010).

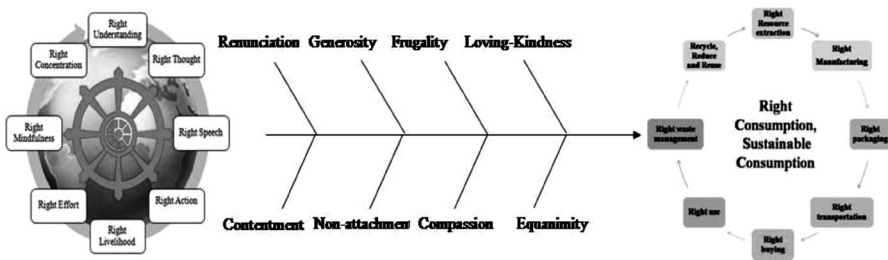


Figure 5. An enlightened way for Right Consumption/ Sustainable Consumption

Reincarnated recyclables: Recycling of waste and discarded material have now become an integral part of the processing stream, replacing virgin materials in manufacturing. Use of recycled materials during manufacturing conserves raw materials and reduces energy consumption. Recycling of plastics, metals, paper and other waste and discarded materials can conserve natural resources to a greater extent (Roberts, 2010).

An alternate path: An alternative to conventional sources of energy needs to be explored. Energy obtained from coal, oil, gas etc. contributes to a greater extent to natural resource depletion and environmental degradation. An alternative path to these energy options needs to be explored and incorporated in our daily life. Use of renewable sources of energy such as solar, wind, geothermal, hydal needs to be explored. In addition, biodiesel, electric cars, battery operated vehicles, solar energy driven vehicles/boats, carpool, rapid public transport system, hybrids, use of bicycles or walking needs to be encouraged (Roberts, 2010).

Reduce attachment, reduce packaging: The packaging of goods consumes to a greater extent natural resources such as paper and contribute to a larger extend waste generated from it. Hence, by adopting some common ways to reduce office waste includes: go paperless; selecting proper printer toners and inks (emphasis should be upon recyclable tonner and biodegradable ink prepared from plant origin) (Roberts, 2010). Furthermore, packaging materials such as paper, cardboard, and plastics can be recycled again which will reduce the pressure on the limited natural resources.

11. CONCLUSION

Natural resources are exhaustible and indispensable for the overall development of human being. Unequal consumption of these resources among different regions, religions and consumer classes of the world is recorded. Indiscriminate exploitation of these resources has dire non-reversible consequences on the environment. Overexploitation of natural resources is 'wrong consumption' and root causes for this is lust, hate, and delusion in an individual. This leads to environmental degradation which is suffering and can be explained on the basis of the first noble truth. Of the various measures suggested for environmental conservation, Buddhist philosophy can play a vital role which needs to be explored furthermore. Transformation to right consumption behaviour from the wrong one is the Buddhist 'response' to this issue. It is required to reshape consumption and production patterns by transforming resource use in a way that reduces pressure on the environment while promoting human and economic development. Buddhism suggested though material satisfaction is important, the real needs of humans are spiritual. The three aspects of the Noble Eightfold Path i.e. wisdom, morality, and mental culture will lead to the development of 'right consumption' of natural resources virtue in an individual. For an effective 'right consumption' in addition to the aspects of the Noble Eightfold Path, Buddhist precepts such as renunciation, generosity etc. need to be engaged upon. This will pave the way for environmental conservation and eventually sustainable development and sustainable society.

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