

JOY: The Journal of Yoga

Fall/Winter 2008, Volume 7, Number 1

Yoga and Sustainability

Shonil A. Bhagwat

shonil.bhagwat@gmail.com

Abstract: The concept of sustainability has gained considerable prominence in the last 20 years since the publication of Brundtland Report in 1987. Social development, environmental protection and economic growth are considered to be the three ‘interdependent and mutually reinforcing’ pillars of sustainable development. Sustainability, in fact, is found ingrained in many traditional societies and is demonstrated through their belief systems and practices. Patanjali’s Ashtanga Yoga, a code of conduct written 2500 years ago, is one such system that is believed to lead to the spiritual progress of the individual. I argue that this code of conduct, consisting of eight aspects (limbs), has not only individual and social but also environmental and economic dimensions; and if observed today, it will lead to a sustainable society. Each of Patanjali’s yamas and niyamas are discussed; and the relevance of the remaining six limbs of his Ashtanga Yoga, namely, asana, pranayama, pratyahara, dharana, dhyana and samadhi to today’s lifestyles is explored. Through a number of examples, I illustrate how this code of conduct can be applicable to individuals as well as institutions in the modern-day context and paint a picture of a sustainable society where this code of conduct is observed.

Key words: Ashtanga Yoga, environment, Patanjali, sustainability, yoga

Introduction

In 1987, the World Commission on Environment and Development proposed a definition of sustainability. It stated, “Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs”. This definition was published in the now-famous Brundland Report, written by Gro Harlem Brundtland, a former Prime Minister of Norway . In the last 20 years since the publication of the Brundtland Report the phrase ‘sustainable development’ has become a buzzword. Today, it will be hard to find a high-school student who has not heard this phrase. Sustainable development encompasses social, environmental and economic concerns. The 2005 World Summit Outcome document , refers to economic development, social development, and environmental protection as the “interdependent and mutually reinforcing pillars” of sustainable development. Whilst social development is one of main underlying objectives, it is considered important that such development goes hand-in-hand with environmental protection and economic growth. Sustainability, therefore, is the ability to sustain a society based on three pillars – social, environmental and economic. In the UK, for example, a number of social, environmental and economic initiatives have started in the last two decades directed towards pursuing a more sustainable future.

Sustainability, in fact, is found ingrained in a number of traditional societies. “Treat the Earth well. It was not given to you by your parents, it was loaned to you by your children; we do not inherit the Earth from our ancestors, we borrow it from our children.” This Native American Proverb succinctly summarizes the principles of what we call sustainable development today. Such concern has commonly been expressed in other traditional societies. The Taittiriya Upanishad (III, 8.1), one of the ancient Indian scriptures, cautions “Waste not food, waste not water, waste not fire” . As Mahatma Gandhi said, “There is a sufficiency in the world for man’s need but not for man’s greed” . Such sentiments have resonated in much of modern western environmental thinking. Aldo Leopold in his influential book, *A Sand County Almanac*, has said, “We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to

use it with love and respect” . The modern environmental movement is based on an ethical code of conduct that respects the Earth, its natural resources and other living beings. It is considered important that the progress of human society goes hand-in-hand with the sustenance of natural processes. It is encouraging that this consideration underlies many of today’s sustainability initiatives.

Patanjali’s Yoga Sutras, the great treatise of yoga, written 2500 years ago proposed a code of conduct in form of Ashtanga Yoga that outlines a way of life which leads to spiritual progress of the individual.

| Limb | Meaning |
|------------------------|---------------------------------|
| Yama | Ethical restraints |
| <i>Ahimsa</i> | <i>Non-violence</i> |
| <i>Satya</i> | <i>Truthfulness</i> |
| <i>Asteya</i> | <i>Non-stealing</i> |
| <i>Brahmacharya</i> | <i>Continence</i> |
| <i>Aparigraha</i> | <i>Non-possessiveness</i> |
| Niyama | Ethical observances |
| <i>Shaucha</i> | <i>Purity</i> |
| <i>Santosha</i> | <i>Contentment</i> |
| <i>Tapas</i> | <i>Austerity</i> |
| <i>Swadhyaya</i> | <i>Self-study</i> |
| <i>Ishwarpranidhan</i> | <i>Devotion</i> |
| Asana | Physical exercises and postures |
| Pranayama | Breath control |
| Pratyahara | Withdrawal of senses |
| Dharana | Concentration |
| Dhyana | Meditation |
| Samadhi | Superconsciousness |

Table 1: Limbs of Patanjali’s Ashtanga Yoga and their meaning

The Sanskrit word ‘Yoga’ comes from verb ‘yuj’ meaning to join, to unite, to yolk – referring to the union of body (physical) and soul (spiritual). The word ‘Ashtanga’ means eight aspects, or limbs. Three of these limbs, asanas (physical postures), pranayama (breathing exercises) and dhyana (meditation) are particularly popular in the West. The remaining limbs of this code of conduct, namely yamas (ethical restraints), niyamas (ethical observances), pratyahara (withdrawal of senses), dharana (concentration) and samadhi (superconsciousness) are not so well known. Here, I demonstrate that all eight limbs of

this code of conduct apply not only to individuals in their day-to-day life but also to today’s institutions – governments, private corporations and voluntary organizations – that are increasingly interested in putting into practice social, environmental and economic principles of sustainability. I interpret the eight limbs of Patanjali’s Ashtanga Yoga in the modern context and demonstrate how they are closely linked to individual and social development, environmental protection and economic well being of our society. I attempt to paint a picture of a sustainable society where Patanjali’s code of conduct guides how humans relate to each other as well as to their environment.

| Yamas | Code of conduct | | |
|---|---|--|--|
| | <i>Social</i> | <i>Environmental</i> | <i>Economic</i> |
| Ahimsa Non-violence | Non-violence of actions as well as words | Reducing environmental costs of meat consumption | Curbing exploitation of and violence to child labour |
| Satya Truthfulness | Being honest and truthful with other fellow citizens | Preventing malpractices in environmental impact assessments | Honest pricing of goods and services |
| Asteya Non-stealing | Not stealing what does not belong to us | Not assuming high CO ₂ emissions quota; cutting emissions | Fair trading |
| Brahmacharya Continence | Not looking at sex as recreation, but as act of love and devotion | Preventing population growth; preventing causes of STDs such as HIV-AIDS | Preventing economic effects of population growth such as poverty, inequality |
| Aparigraha Non-possessiveness | Refraining from ‘status anxiety’ in the society | Not driving gas guzzlers | Not coveting multiple buy-to-let properties |

Table 2: *Yamas*, ethical restraints analysed with reference to the three pillars of sustainability

Ahimsa, non-violence: Non-violence is often interpreted as not hurting physically other fellow human beings or indeed other forms of life. However, non-violence is not just about actions but it is also about words. Words often cause wounds deeper than those caused by sharp objects. In a sustainable society individuals would live amicably, in harmony with each other. This would be impossible without non-violence of actions and words. From an environmental point of view, non-violence has another dimension. For example, producing meat for human consumption not only

involves killing of other forms of life but also causes harmful effects on the environment. It comes with far greater environmental costs than producing food grain and vegetables. It is said that to grow one kilogram of beef requires more than 15 kg of food grain and 200 times the water required to grow one kilogram of potatoes . Put simplistically, this means that if one person gives up meat it will be possible to feed 14 more people from the same amount of earth's resources. With many people in developing countries dying of malnourishment and starvation it would seem irresponsible to deprive 14 other people of their basic nutrition. Furthermore, cattle raised for meat production contribute to more than a third of methane emissions in the UK.



Figure 1: Cattle raised for meat production contribute to more than a third of methane emissions in the UK. Source: <http://sci-toys.com/attention/cow.GIF> (Last seen: September 2007)

The global figures for methane emissions are also comparable. Methane is one of the green house gases known to cause global warming. This means that meat consumption is directly linked to climate change; and that practicing non-violence by turning to vegetarianism is one way of helping to

mitigate global warming. People also often argue for ethical reasons of turning to vegetarianism. The principle of non-violence has many more ethical dimensions – not just to do with non-violence against other forms of life, but also towards fellow human beings. For example, in many developing countries, following the western model of development, economic growth has gained paramount importance. In these countries, child labour is routinely used in production industry often leading to violence towards children through hazardous working conditions. Although laws against abusing children in this way are becoming stricter, exploitation of child labour routinely continues. In many aspiring sustainable societies in the West, such practices have long been condemned. For sustainable development to take place it is imperative that non-violence is practiced not only at social-individual levels but also from environmental point of view and in the society's economic behaviour.

Satya, truthfulness: This ethical restraint encourages the practitioner to be honest and truthful – a quality that certainly helps to form healthy relationships with other human beings in the society. Mahatma Gandhi was a die hard practitioner of truthfulness and wrote about the importance of truth in his famous autobiography, *My Experiments with Truth*. In a sustainable society not only individuals but also institutions need to be honest and truthful. For example, in many land development projects environmental impact assessment (EIA) is a prerequisite to ensure that the project causes minimal harm to the environment and that certain measures are taken to mitigate any harm caused. However, malpractices in EIAs are common in order to push ahead land development projects that are known to be harmful to the environment. These practices can endanger critical ecosystems and natural processes. Such 'cheating' is also commonly observed in economic circles. For example, prices of goods and commodities are often set too high in order to increase profit margins. This is common practice particularly where consumers are 'captive' (for example in tourist resorts) and are obliged to pay the asking price because of the lack of choice. This exploitation is further exacerbated by selling sub-standard goods or commodities. In order for societies to be sustainable truthfulness needs to be practiced at social and individual levels as well as in environmental and economic sectors.

Asteya, non-stealing: Non-stealing also requires honesty. It is about refraining from misappropriation of what does not belong to you. This is of fundamental importance when living with other fellow human beings – an aspect of sustainable society. There is also environmental aspect to non-stealing. For example, it is well known that levels of resource consumption in the West, per capita, are much higher than in developing countries due to what we call ‘higher standards of living’ in the West. While resource consumption is high, per capita carbon-dioxide emissions in the West, naturally, are also much higher than in developing countries because of more sophisticated and technologically advanced infrastructure. At international summits we often find our politicians coercing the leaders of developing countries to curb their emissions. Whilst the lower levels of harmful emissions will benefit all human beings inhabiting this planet, the West fails to recognize that the levels of per capita resource consumption and carbon-dioxide are much lower in the developing countries than in the developed ones. This means that an average western person is ‘guiltier’ than an average person in a developing country. In other words, by unintentionally allowing ourselves a higher ‘quota’ of consumption as well as emissions we are ‘stealing’ the right of an average person in a developing country to afford a standard of living and the level of emissions equal to ours. If the world is one global village then all individuals should be considered equal and the rules should be the same for every resident. We should do everything possible to reduce our consumption and emissions rather than stealing a poor person’s quota (often a person who is struggling to make both ends meet and aspiring to fulfil his or her most basic needs). From the economic point of view, unfair trading between a developed and a developing country is also a form of stealing – the reason why fair-trade products are growing in popularity in consumer markets. If the world is one global village, then producer in a developing country deserves to be paid a fair price for the goods; and the cost of this has to be borne by the consumer in the developed country. In a sustainable society truthfulness should be practiced not only at social-individual level but should also pervade environmental issues and economic activities.

Brahmacharya, continence: Continence is often interpreted as refraining from sexual intercourse. However, Brahmacharya is sexual continence in thought and word as well as deed. Tantra, one of the ancient schools of Indian philosophy, put emphasis on the refinement of sex as an act of love and worship – leading ultimately to superconsciousness – the final limb of yoga that is the manifestation of seven others. The rationale behind management and refinement of sexual desire is that it is a very powerful force. In unrefined form it can cause harm. Unfortunately, in modern-day society sex is looked at as recreation. The use of sexually-explicit material in the media has been on the rise continuously over the last fifty years. The regulations on such use also appear to have been relaxing over the years. This seems to have influenced the way young people look at sex – more as recreational rather than devotional activity. For householders in today's society, Brahmacharya can be interpreted as being faithful to one partner – faithful in thought, word and deed. At social-individual level such approach sustains family institution in the society. From an environmental point of view, one could argue that uncontrolled sexual power has undesirable effect on the environment. For example, in many developing countries rates of population growth are high in certain sections of the community partly because of illiteracy and poverty. This puts even higher demand on available natural resources already under pressure. On the other hand, uncontrolled sexual behaviour leads to diseases such as HIV Aids if appropriate precautions are not observed. The sexually-transmitted diseases can soon spread like wildfire in societies where promiscuous sexual behaviour is common. One could argue that deaths caused by such diseases are a form of self regulation of human population growth, often observed in animal populations . From an economic perspective, undesirable population growth leads to the deprivation of certain sections of the community from basic commodities – leading to poverty and inequality in the society. This further leads to other economic problems such as unemployment, debt and economic instability. One could argue that observing continence can address the root cause of the social, environmental and economic problems described above. Therefore, sustainable societies would

observe continence at individual and social levels as much as from environmental and economic perspectives of sustainable development.

Aparigraha, non-possessiveness: Non-possessiveness refers to not being selfish, greedy and acquisitive. In today’s society, many people are after financial riches and social status. This is because of the popular belief that after all money is everything. Some people are prepared to go to any length to gain social status; to the extent that their aspirations cause them emotional stress. Therefore, today’s society is full of stressed individuals – the reason why many people turn to yogic relaxation techniques. However, the root cause of stress is often overlooked. This is where non-possessiveness comes into picture. A non-possessive individual will have no “status anxiety” and therefore no stress. Non-possessiveness is also an important virtue from environmental point of view. An individual aspiring for more, for example, would want a more expensive car, a gass-guzzler. Running such a car would not only need much more fuel than a car with smaller engine, but will also mean higher levels of emission of harmful pollutant gases. Similarly, flying across the world on frequent business trips or in private jets will further contribute to the carbon-dioxide emissions. Social status, therefore, comes with high environmental costs. There are also economic dimensions to non-possessiveness. In the UK, for example, real-estate property prices have been rising consistently over the last decade, so much so that it is impossible for average-salary earner to afford to buy a house. The problem is exacerbated by high-income earners investing in a second property, in some cases several. This has caused economic crisis of sorts to the first-time property buyers who have to borrow much more money than they can afford to pay off. In a sustainable society, non-possessiveness would be essential at individual level, which, hopefully, will have positive environmental and economic repercussions leading to sustainable development of all sections of the community.

| Niyamas | Code of conduct | | |
|--------------------------|---------------------------------------|---|---|
| | <i>Social</i> | <i>Environmental</i> | <i>Economic</i> |
| Shaucha Purity | Purity of thoughts as well as actions | Cleanliness of the surroundings; preventing pollution | Keeping accounts and financial transactions clean |

| | | | |
|-------------------------------------|---|--|--|
| Santosha Contentment | Being satisfied with what we have; not envying others for what they have | Creating environment conducive to peacefulness around us | Being content with small economy rather than running after perpetual growth |
| Tapas Austerity | Doing our very best | Do our bit for the environment | Working hard rather than depending on state benefits |
| Swadhyaya Self-study | Being aware of our actions on other fellow citizens | Being informed about environmental effects of our actions | Being informed about economic effects of the choices we make |
| Ishwar Pranidhan Devotion | Being modest and recognising that there is a force more powerful than ourselves | Recognising that we can not conquer nature with technology alone; we need to act to avert Climate Change | Donating to charities and good causes; recognising that there are people who need help |

Table 3: *Niyamas*, ethical observances analysed with reference to the three pillars of sustainability

Shaucha, purity: Purity is not just physical cleanliness, but also purity of thoughts as well as actions. As the three monkeys that keep ears, eyes and mouth closed metaphorically suggest: “hear no evil, speak no evil, see no evil”.



Figure 2: The three monkeys that keep ears, eyes and mouth closed metaphorically suggest: “hear no evil, speak no evil, see no evil”. These monkeys are believed to originate from Japan where, for more than 400 years, they have been part of the Koshin folk religion. Source: www.three-monkeys.info (Last seen: September 2007)

These are believed to originate from Japan where, for more than 400 years, they have been part of the Koshin folk religion . In a sustainable society, individuals will be pure in their thoughts and actions. From an environmental perspective, purity is very important because impurity of environmental resources means pollution. Polluted air, soil and water can cause direct harm to people living in such environments, but also affect negatively other forms of life. Many sustainability initiatives today focus on recycling solid waste. Non-biodegradable waste such as plastic can cause environmental disaster – the reason why there has been growing campaign in many countries, firstly to cut the use of plastic but also to recycle it more effectively. The dumping of plastic in landfills pollutes air by releasing harmful gases as the plastic decomposes. It pollutes soil with harmful solids that stay in the soil where plastic is dumped. It also pollutes water because rainwater carries the harmful substances to nearby water bodies through percolation and surface flow. Economic impurity would refer to fraudulent financial behaviour. We hear of large financial corporations engaging in fraudulent practices to increase their profits and to evade taxes. Individuals are also seen to engage in such practices in order to avoid paying taxes. Economic purity is all about keeping the transactions and accounts clean. In a sustainable society, therefore, purity will pervade from individual to social levels as well as in environmental and economic spheres.

Santosha, contentment: Contentment also brings peacefulness; and this niyama refers to both – being content as well as peaceful. This niyama also has an element of being non-possessive, referring to the fifth yama, Aparigraha. In a sustainable society, all individuals will have enough for their need, but as Mahatma Gandhi said, not for their greed . Being content is opposite of being greedy. In a sustainable society, individuals will be satisfied with what they have and not jealous or envious of other people who have more. Greed, if unfulfilled, causes anger and resentment; but contentment brings

happiness and peacefulness. Every human being seeks peaceful surroundings, somewhere close to nature in order to escape today's busy and crowded cities. This is where the environmental dimension of this niyama comes into picture. We seek to create peaceful environments in our busy cities – parks, nature reserves and conservation areas. These surroundings are conducive to the feeling of peacefulness. These are the spaces where one can let go of the stress of living in a busy city. Such surroundings bring a feeling of contentment. For a society to be sustainable, economic contentment is also essential. All economic decisions made today by developed countries are geared towards economic growth. We often hear politicians talking of stronger and bigger economies. It seems that no one is content when it comes to economy – everyone wants economic growth. One problem with this aspiration is the assumption that natural resources are unlimited – unlimited fuel, water, clean air and land. This is not true – there is a limit on the natural resources available to us. History tells us that many powerful empires ultimately collapsed when they reached the peak of their growth, in the process plundering available natural resources. The reason for the collapse, it is often argued, is ecological degradation of limited natural resources. E. F. Schumacher, in his influential book *Small Is Beautiful* published in 1973 argued that perpetual economic growth leading to large global economy may be unsustainable in the long run. Perhaps being content with smaller economy is the way forward. In a sustainable society, whilst individual contentment and peacefulness is of paramount importance, peaceful environment and economic contentment are also key.

Tapas, austerity: This has been variously interpreted as austerity, ascetic discipline or ‘practical spiritual discipline which produces tangible results’. Tapas is about persistence and perseverance. The Indian mythology is full of numerous examples where individuals persistently pursued their desired goal. Some would argue that this niyama appears contradictory to the previous niyama, contentment. Why would a content individual need to be persistent to achieve their desired goal? This is where the subtle difference in interpretation of this niyama arises. Being content does not mean ‘giving up’; it means being satisfied with what you have. At the same time, being persistent to achieve your desired

goal does not mean ‘being greedy’; it means doing your best in whatever you choose to do. In a sustainable society, individuals would do their best in their work, and be conscientious and hard working. From an environmental perspective, individuals can make a lot of difference when it comes to, for example, recycling of household waste. We can not simply give up thinking, ‘what difference is it going to make if I throw a plastic bottle in landfill?’; nor can we expect the institutions – for example, county councils – to solve all our problems of solid waste. It is the individuals who should take initiative and ‘do our bit’ for the environment. Persistence in doing your best also has an economic dimension. Many developed countries with socialist ideals have become ‘welfare states’ in order to bring about social equality. While such initiatives are laudable, they can be misused by individuals in form of ‘benefit fraud’. In the UK, many recent examples of benefit fraud have been exposed, where individuals were found claiming benefits that they are not entitled to. In a sustainable society, individuals would work hard and do their best in anything they choose to do – this will have positive repercussions for environmental and economic sustainability.

Swadhyaya, self-study: This has also been interpreted as introspective self study or spiritual study. In ancient India, studying scriptures was given a lot of importance because the scriptures were one of the few sources of information and knowledge available at the time. The scriptures encouraged their readers to self introspect and critically analyse the connections between mind, body and spirit. This is something that we lack in today’s technologically advanced society. All bodily ailments are considered ‘curable’ by drugs and through surgery. Even mental illnesses are treated with strong drugs. Whilst our knowledge of human anatomy and physiology may be advanced, we are far from knowing the subtleties of how our brain and nervous system works. Modern science simply does not have sufficient knowledge of the link between mind and body. This is where introspective self study, as taught by the ancient scriptures comes into picture. Through self introspection and meditation, it is suggested that we can understand ourselves better. This is particularly important in today’s life styles where external stimuli, such as through audio-visual media, are influential and keep us too busy to

‘look inwards’. In a sustainable society, looking inwards would mean being aware of the effects of our actions on other fellow human beings as well as other forms of life. From an environmental point of view, this would mean learning about the effects of our actions on the environment and striving to reduce what is called our ‘ecological footprint’ on the planet. The same applies for economic effects of our actions on others. How do our economic choices affect people living in developing countries, who are often at the receiving end? How much does perpetual economic growth cost the natural resources of our planet? How do our choices and behaviour as ‘consumers’ affect the demand and supply of goods in the market? In a sustainable society everyone would strive to ask such questions and be aware of the effects that our actions have on other fellow citizens; as well as environmental and economic footprints of our actions.

Ishwar Pranidhan, devotion: Although this niyama appears to bring religious connotations to the practice of yoga, this is only because of the word Ishwar, meaning God. However, it does not refer to a specific God – God here refers to anything that we consider ‘above ourselves’. For some people this may be God, for some it may be Mother Nature, for some others it may be Mother Earth or anything that is a more powerful force than ourselves. What this niyama encourages the practitioner to think is that there is something above and beyond themselves. In today’s technologically advanced society, we have successfully conquered the five natural elements – earth, water, fire, air and space. This can make us feel powerful, above everything else. Translated into the relationships we form with other human beings, there is a danger that we may consider ourselves smarter than everyone else and superior to others. This can imbalance our relationships. Ishwar Pranidhan reminds us to be modest about our abilities no matter how much we may have achieved in our life. When it comes to the environmental issues, Ishwar Pranidhan is also pertinent. Our technocrats would make us believe that there is technological solution to every environmental problem. This may make us feel complacent about the serious effects of our actions on the changing environment, climate and society. However, this niyama tells us that we should be modest about the extent to which the technology can solve our

environmental problems. From an economic perspective, Ishwar Pranidhan means recognizing that there are individuals in the society that are less able than us, less well-off than us. This niyama encourages the practitioner to donate to charities working to help the needy in our society. Donating to charity is equated to devotion to God. In a sustainable society, individuals would be modest about their abilities and recognize the supremacy of a power above them; they would also recognise their role in global change; and help the needy by being charitable.

| Limb | Unsustainable trends | Code of conduct |
|---|---|---|
| Asana Physical exercises and postures | Obesity epidemic in the West, and related diseases cost money to, for example NHS in the UK | Taking regular physical exercise |
| Pranayama Breath control | Stress-related diseases cost lost working hours to, for example, UK economy | Overcoming stress by learning techniques to calm the mind |
| Pratyahara Withdrawal of senses | Perpetual economic growth at any cost, creates a financial divide in the society | Being content and satisfied rather than always going after more material possession |
| Dharana Concentration | Efforts are vested in manipulating the system rather than working hard and keeping focused | Doing our best at work |
| Dhyan Meditation | Work is looked at as a burden, lack of interest for their work among office workers | Enjoying work and developing positive outlook towards it |
| Samadhi Superconsciousness | Society that does not follow the code of conduct suggested can be in disarray | Society will become sustainable by following the code of conduct suggested |

Table 4: The remaining six limbs of Patanjali’s Ashtanga Yoga analysed with reference to sustainability
 Whilst yamas and niyamas form the foundation of sustainable society, incorporation of the remaining limbs of Patanjali’s Ashtanga Yoga into day to day lifestyle can build upon this foundation and lead to harmonious existence of individuals, communities and perhaps the entire human society.

Asanas, physical exercises and postures: It is well known that in order to keep healthy regular exercise is necessary. Asanas present an elaborate system of physical exercise which is proven to have a wide range of health benefits. Many of today’s developed countries are suffering from, what has

come to be known as, ‘obesity epidemic’.



Figure 3: **Figure 3:** Many of today’s developed countries are suffering from, what has come to be known as ‘obesity epidemic’. Source: <http://blogs.nypost.com/40by40/Fat-Guy-in-Chair.jpg> (Last seen: September 2007)

In the UK, obesity is on the rise and treating the obesity-related diseases is costing the National Health Service (NHS) vast amounts of money . This trend is clearly unsustainable. The politicians have shown some concern about addressing the root cause of obesity epidemic. In the national media, the importance of regular exercise is emphasized and currently obese people are encouraged to undertake physical activity. However, it is clear that more needs to be done by the individuals themselves. In a sustainable society, individuals would strive to keep healthy by doing regular physical exercise.

Pranayama, breath control: Breathing is something that just happens without us consciously having to do anything. This also means that breathing is something we never pay careful attention to. Pranayama encourages us to ‘train’ our breath because it is believed that by training the breath we can

train the mind, manage our emotions and overcome stress. Breath awareness is fundamental to many alternative therapies that are known to reduce stress. In today's society, where people live in busy cities and have long working hours, stress is something we have to live with every day. Stress is known to cost the UK economy 13 million lost working days and 3.7 billion pounds per year . Furthermore, stress often leads to physical illnesses costing NHS in the UK, for example, more money to treat those. This trend is clearly unsustainable. Relaxation therapies based on breath awareness and control are rising in popularity. In a sustainable society, individuals will strive to minimize stress in their day to day life; for which individual action as much as institutional change is important.

Pratyahara, withdrawal of senses: Pratyahara is a process by which individuals become more introspective, more aware and in control of their emotions. Pratyahara helps the practitioner to keep at bay six evils – kam (lust), krodh (anger), lobh (greed), mad (pride), moh (obsession) and matsar (hatred) – that lead to negative emotions . In other words, pratyahara leads to positive outlook towards life – towards contentment, satisfaction and happiness. In today's society people are always after more than what they have; material possession is equated with success. This, unfortunately, leads to inequality in the society – the rich become richer and the poor poorer. Such trend is clearly unsustainable. In a sustainable society, people will have positive outlook towards life, they would be content with what material possessions they have; and the society would be more equal.

Dharana, concentration: Dharana is devotion to the work at hand. This requires dedication and concentration. Dharana cannot be achieved without having a positive outlook to work. It is about doing your best in whatever you do. In today's society people are after quick returns. Whether profit or pay rise or promotion, people got for instant results. In this pursuit, the importance of working hard is often overlooked; the effort is spent in manipulating the system to one's own benefit. In a sustainable society, people would be prepared to work hard, they would be prepared to do their work with full dedication and total concentration. In such a society the reward to hard work will be a consequence rather than the goal in itself. As Bhagavad Geeta (2:47) says, "You have the right to work, but never to the fruit of

work. You should never engage in action for the sake of reward, nor should you long for inaction” .

Dhyana, meditation: Dhyana is about continual self introspection, by which a state of unbroken concentration or meditation is achieved. While hard work is important, as the previous limb of yoga suggests, a continual self appraisal is also essential. This encourages the practitioner to examine whether their work is going in the right direction. If it is, then this leads to a state of unbroken concentration where the work at hand itself becomes meditation. This state of meditation is essential in order to enjoy work, to develop positive outlook towards it. In today’s society monitoring of performance at work is considered important – most individuals are subjected to an appraisal of their work. If an individual enjoys their work, it leads to improved performance and positive appraisal. In a sustainable society, every individual would find their work enjoyable; they will find themselves in a state of meditation while doing their work.

Samadhi, superconsciousness: Superconsciousness is a state of harmony with one’s own self. This is the final limb of Patanjali’s Ashtanga Yoga and is the natural consequence of observing the remaining seven limbs. All the yamas, ethical restraints, and niyamas, ethical observances; as well as the practice of asanas and pranayama, pratyahara, dharana and dhyana lead to superconsciousness. Superconsciousness is not something that can be achieved without practicing the first seven limbs of yoga. Similarly, a society will achieve sustainable development when individuals and institutions are able to practice all the principles of sustainability suggested above. This will be a society where individuals, communities, states and countries of the world will live in harmony with each other. Such society will strive to develop while protecting the environment and achieving consistent economic growth. Such society will be able to meet its needs without compromising the needs of the future generations. Such society will be in yoga (union).

Conclusions

In the last twenty years ‘sustainable development’ has become a buzzword. Sustainable society is considered to be based on three interdependent and mutually reinforcing pillars – social

development, environmental protection and economic growth. All three pillars are considered equally important. The eight limbs of Patanjali's Ashtanga Yoga can form the guiding principles of a sustainable society. In this article, I have explained how yamas, ethical restraints, and niyamas, ethical observances, have a bearing on individual behaviour as well as social, environmental and economic implications. Similarly, the practice of the subsequent five limbs of yoga – asana, pranayama, pratyahara, dharana and dhyana – lead to a society where individuals develop a positive outlook towards life attaining a state of samadhi, superconsciousness – the final limb of Patanjali's Ashtanga Yoga. In this article, I have interpreted Patanjali's principles, written 2500 years ago, in the modern context and suggested a code of conduct for individuals and institutions. These time-tested principles, when put into practice, will result in a collective action leading to sustainable development of the society as a whole.

Acknowledgements

I thank A Bhagwat, S Bhagwat, A Economou and S Kodolika for helpful comments.

References

- BBC (2004) Companies told to prevent stress at work URL: <http://news.bbc.co.uk/1/hi/business/3516041.stm> (Last seen: September 2007)
- BBC (2006) Obesity 'could bankrupt the NHS' URL: <http://news.bbc.co.uk/1/hi/health/6180991.stm> (Last seen: September 2007)
- de Botton A. (2004) /Status Anxiety/. Hamish Hamilton.
- DEFRA (2007) Methane emissions by source: 1970-2005 United Kingdom URL: <http://www.defra.gov.uk/environment/statistics/globalatmos/kf/gakf08.htm> (Last seen: September 2007)
- Easwaran E. (2004) /The Upanishads, 11th printing/. Nilgiri Press, Tomales, CA, USA.
- Easwaran E. (2005) /The Bhagvad Geeta 14th printing/. Nilgiri Press, Tomales, CA, USA.
- Elton C.S. (1963) Self-Regulation of Animal Populations. /Nature/, 197, 634
- Eshel G. & Martin P. (2006) Diet, Energy and Global Warming. /Earth Interactions/, 10
- Gandhi M.K. . (1927) /Gandhi: An Autobiography The Story of My Experiments with Truth, Reprint 1993/. Beacon Press.
- Goldsmith E. (1988) /The Great U-Turn: De-industrializing Society/. Green Books.
- Iyengar B.K.S. (2005) /Light on Life: The journey to wholeness, inner peace and ultimate freedom/. Rodale.
- Leopold A. (1948) /A Sand County Almanac, and Sketches Here and There/. Oxford University Press, New York, USA .
- Osho R. (2004) /From Sex to Super Consciousness/. Full Circle Publishing Ltd.
- Schumacher E.F. (1973) /Small Is Beautiful: Economics As If People Mattered/. Hartley & Marks Publishers.
- SDU (2007) sustainable-development.gov.uk URL: <http://www.sustainable-development.gov.uk/> (Last seen: September 2007)
- Three-monkeys.info (2007) The three wise monkeys that hear, see and speak no evil (Last seen: September 2007). In: /URL: <http://www.three-monkeys.info/> /
- UN (1987) Report of the World Commission on Environment and Development
- General Assembly Resolution 42/187, 11 December 1987 United Nations URL: <http://www.un.org/documents/ga/res/42/ares42-187.htm> (Last seen: September 2007)
- UN (2005) 2005 World Summit Outcome 60/1, 24 October 2005 United Nations URL:

<http://daccessdds.un.org/doc/UNDOC/GEN/N05/487/60/PDF/N0548760.pdf?OpenElement> (Last seen: September 2007)