DEVELOPING TIBET INTO A SPECIAL SUSTAINABILITY ZONE OF CHINA?

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ABSTRACT – China has developed many Special Economic Zones (SEZs), such as Shenzhen, Xiamen, Shantou and Zhuhai, and several countries (e.g. Brazil, India, Pakistan, South Korea, North Korea and Russia) have followed its example. China could also take a lead in developing Special Sustainability Zones (SSZs). Sustainability integrates economic, social, cultural and environmental sustainability. China is already experimenting the integration of economic and environmental sustainability in Jilin where a Low Carbon Zone (LCZ) is piloted. Becoming one of the world's superpowers China needs to address also the social and cultural aspects of sustainability in addition to its economic and environmental aspects. What could be a better place to start than Tibet, the focus of global interest and yardstick of China's willingness to cooperate internationally? Turning Tibet into a Special Sustainability Zone would enable meeting China's and Tibetan people's needs simultaneously: (1) physiological needs: water, food and energy; (2) safety needs: sovereignty and peace; (3) social needs: good relations and cooperation with others; (4) esteem needs: respect by/of others; (5) self-actualization needs: morality and creativity; and (6) self-transcendence needs: united consciousness. This paper drafts a plan for developing Tibet into a Special Sustainability Zone, which also attempts to ease the politically charged situation.

1. Introduction

Special Economic Zones

During the 1980s China developed many Special Economic Zones (SEZs): the cities of Shenzhen, Xiamen, Shantou and Zhuhai, and the Hainan Province. The SEZs were established as testing grounds for the development of China's economic system (Park 1997). They have been based on market economy long before China adopted it in the whole country. SEZs offer tax incentives for foreign investments and give independence for international trade (Park 1997). They host both foreign companies and joint ventures between Chinese and foreign companies, which focus on exports. The experiences of SEZs have been so positive that China has gradually implemented their principles in other areas as well. Several countries, such as Brazil, India, Pakistan, South Korea, North Korea and Russia have followed China's example and developed their own SEZs.

China could also take a lead in developing Special Sustainability Zones (SSZs) to test a new, holistic system for the 21st century. The SSZs will integrate environmental, economic, social and cultural sustainability.

Justifications for Special Sustainability Zones

There appears an increasing number of "Special *Un*sustainability Zones", areas where economic development is so rapid and unstable that it causes severe environmental, social and cultural problems. An example of this is the city of Zhongdian in the Tibetan Autonomous Prefecture in the Yunnan Province of China. In 2001 Zhongdian, with its splendid mountain views, was allowed to change its name into Shangri-La, i.e. the name of the utopian lost Garden of Eden at the root of Tibetan mountains described in James Hilton's (1933) book *Lost Horizon*. Tourists are now pouring there: in 2009 over 2 million tourists visited Shangri-La while in 2000 only about 20,000 tourists visited Zhongdian (Poropudas 2010). Shangri-La is growing very rapidly – and unsustainably: it suffers from serious water shortage and irresponsible building; most people in the region have moved or been resettled from countryside to the city, only the old stay; and the traditional Tibetan culture disappears. Near Shangri-La is located one of China's most popular tourist destinations, the Old Town of Lijiang, which represents the traditional architecture, history and culture of the Nahki people. The town nearly lost its UNESCO World Cultural Heritage Site status because of massive new construction activities that threatened to overpower its cultural treasures.

Economic growth and commercial success are threats to traditional cultures and cause conflicts between Han Chinese immigrants and local native minority groups. The Han Chinese as well as the central and regional governments aim at economic growth, which, in their opinion brings development and prosperity to the nomadic and agricultural areas of the indigenous peoples. It seems, however, that most of the economic and social gains go to the Han Chinese and not to the original inhabitants who only wish to maintain their traditional livelihoods and cultures.

China is already experimenting the integration of economic and environmental sustainability in Jilin where a Low Carbon Zone (LCZ) is piloted as a joint research project between Chatham House, Chinese Academy of Social Sciences, Energy Research Institute, Jilin University and E3G (Chatham House 2010). Becoming one of the world's superpowers China needs to address also the social and cultural aspects of sustainability in addition to the economic and environmental aspects.

Obstacles to Special Sustainability Zones

Establishing Special Sustainability Zones (SSZs) in minority regions may face some obstacles. The 1,230 million Han Chinese account for 91.51 % of China's population. While there are 55 minority groups in China – Zhuang (16 million), Manchu (10 million), Hui (9 million), Miao (8 million), Uyghu (7 million), Yi (8 m), Tujia (6 million), Mongols (6 million), Tibetans (6 million), etc. – they account for such a small proportion of the population that their voices are not heard, particularly as China's aim has been a mono-cultural nation. There is only one official language, Mandarin Chinese, which is the language of education and authorities. The Central Government has supported large population transfers of Han Chinese to minority regions. The Han Chinese tend to think that minorities in their traditional costumes

are just a curiosity for festivals and tourists (Poropudas 2010). There is a general view among Han Chinese that minorities are well looked after: the Central Government gives minority areas economic development aid (most do not know that the aid goes mainly to the immigrated Han Chinese), and minorities need fewer points to be accepted to good schools and universities (which has prompted many Chinese to gain a minority status for the duration of studies). Why should the minorities then be given Special Sustainability Zone statues? The SSZs are not only for minority areas but for any area that is interested in it. Unlike most Han Chinese, minority peoples often prioritize the social, cultural and environmental sustainability of their area to rapid economic growth, which makes them willing participants in SSZ projects.

New Idea: Special Sustainability Zones (SSZs)

Rapid economic development has made millions of people wealthier, but also increased polarisation between the rich and the poor, damaged the natural environment on which future material and immaterial wellbeing depends on, caused new health problems while solving old ones, and eradicated traditions that have kept up sustainable living and elevated spirits of people.

There are areas and peoples who do not want rapid economic growth but balanced sustainable development. Many minorities wish balanced environmentally, economically, socially and culturally sustainable development in their regions. It is well China's worth to help them fulfil their wishes because holistic sustainable development maintains natural resources, improves livelihoods, preserves traditions and makes people healthier and happier. Holistic sustainable development restores and upholds peace.

The different dimensions of sustainability can be defined in the following way (Ketola 2010). Environmental sustainability can be achieved by staying within the limits of the carrying capacity of the ecosystems, and by revitalizing the ecosystems through protecting their biodiversity and their life-support systems. Socio-cultural sustainability can be attained by staying within the limits of the carrying capacity of humans and cultures, and by revitalizing human and cultural diversity and their life-support systems. Economic sustainability can be achieved by staying within the limits of the financial resources and global, regional and local legal and ethical norms and revitalize both of them through innovation and collaboration, so that environmentally and socio-culturally good life can be supported both now and in the future. A Special Sustainability Zone (SSZ) aims at environmentally, economically, socially and culturally sustainable development.

2. Developing Tibet into a Special Sustainability Zone (SSZ) of China

Tibet

What could be a better place to start the development of Special Sustainability Zones (SSZs) than Tibet, the focus of global interest and yardstick of China's willingness to take environmental, social and cultural sustainability seriously and to cooperate internationally in achieving them? The SSZ status could also ease the politically charged situation in Tibet. Turning Tibet into a Special Sustainability Zone of China would enable meeting both China's and Tibetan people's needs simultaneously: (1) physiological needs:

water, food and energy; (2) safety needs: sovereignty and peace; (3) social needs: good relations and cooperation with others; (4) esteem needs: respect by/of others; (5) self-actualization needs: morality and creativity; and (6) self-transcendence needs: united consciousness. This paper drafts a plan for developing Tibet into a Special Sustainability Zone, which attempts to ease the politically charged situation.

Tibet is a 2.5-million km² plateau region north of the Himalayas. It is a huge area, 2/3 of the size of India (DIIR 2008). As the highest region on earth it is called the "roof of the world". Tibet lies north of India, Nepal, Bhutan and Burma, and west of China. It emerged as an independent empire in the 7th century, but over the centuries it often fell under Mongolian or Chinese rule. The British have also had political interests in Tibet. Yet in 1914, Britain, China and Tibet signed a peace convention, which recognized Tibet again as an independent country. From 1914 to 1949 Tibet enjoyed its independence. In 1949 China invaded Tibet, but in 1951 China and Tibet, led by the 14th Dalai Lama, signed the Seventeen Point Agreement for the Peaceful Liberation of Tibet, which affirmed Tibet's autonomy under China (China.org.cn 2011, DIIR 2001, Lhasa 2011). However, China did not ratify the agreement, and in 1959 China abolished the Tibetan government led by the Dalai Lama, who fled to India and set up an exile government in Dharamsala. The Dalai Lama's exile government has over the decades tried to negotiate with the Chinese government on the return of autonomy to Tibet. In 1987 the Dalai Lama presented a Five Point Peace Plan (Dalai Lama 1987), which was not accepted by the Chinese government.

Tibet is a traditional homeland of nearly 6 million Tibetans led by the Dalai Lamas since 1391. In 2011 the 14th Dalai Lama decided to retire from his political role and continue only as a spiritual leader. Dr. Lobsang Sanga, a Harvard Law School academic, was elected a new Kalon Tripa (Prime Minister) by the Tibetans in exile. He now leads the Central Tibetan Administration (CTA) in Dharamsala. There are about 150,000–300,000 Tibetans living in exile, mostly in India, but also e.g. in Nepal, Bhutan, the USA and Canada. About 5.4 million Tibetans live on the plateaus of Tibet. China has divided Tibet between different administrative areas: the Tibet Autonomous Region, Qinghai Province, two Tibetan Autonomous Prefectures and one Tibetan Autonomous County in Sichuan Province, one Tibetan Autonomous Prefecture in Yunnan Province. China calls Tibet only the 1.2 million km² Tibet Autonomous Region (TAR) with 2.9 million Tibetans and large numbers of immigrated Han and Hun Chinese. The new Chairman of the TAR since 2010 is Padma Choling, who is ethnic Tibetan, member of the Communist Party of China and former solder of the People's Liberation Army. Hence the political situation is complex with the TAR, Qinghai, Sichuan, Gansu and Yunnan provinces involved in China and the CTA in India.

The CTA under the Dalai Lama negotiated on the possible political solution with the Central Government of China. In order to establish a Special Sustainability Zone (SSZ) in Tibet, negotiations both with the Central Government and with the TAR and Qinghai, Sichuan, Gansu and Yunnan provinces will be needed to form a unified SSZ of Tibet. The Central Government of China has the power to re-integrate Tibet into a SSZ, but regional leaders can contribute to this favourable process and help the CTA in its implementation. All these participants can take pride in playing a major role in this pioneering endeavour.

Environmental sustainability

Environmental sustainability is the foundation for economic, social and cultural sustainability because humans with their economic, social and cultural systems cannot survive without a sustainable natural environment. The most critical environmental sustainability issues in Tibet are (a) climate change, (b) mining impacts, (c) deforestation, (d) decreasing biodiversity, (e) hydroelectric building impacts and (f) nuclear waste.

(a) Global *climate change* has reached also the "roof of the world". The Intergovernmental Panel on Climate Change (IPCC 2007) analyzes Tibet as one entity because the Tibetan plateau covers almost two per cent of the total land area of earth and extends from four to eight kilometres above the sea level. Consequently, the Tibetan plateau has major environmental impacts on Asia and the North Pacific. According to the former head of the China Meteorological Administration: "Temperatures are rising four times faster than elsewhere in China, and the Tibetan glaciers are retreating at a higher speed than in any other part of the world" (Qin 2009).

The anthropogenic (manmade) climate change results from the industrial activities mostly outside Tibet, but local mining and construction are exacerbating the effects. China has overtaken the USA as the world's largest carbon dioxide (CO₂) emitter. Tibet has had very little industry or traffic until recently, but Tibetans, just as well as Chinese and other Asians, suffer from the consequences of climate change.

Tibet with is 105,000 km² of glaciers is most glaciated region on earth but its glaciers are melting fast, which first leads to floods, landslides and glacial lake outbursts, but in the long run results in loss of water flow to the lowlands of Asia and droughts (Qin 2009). Rivers originating in Tibet sustain the lives of 85 percent of Asia's total population, which accounts for 47 per cent of the world's population. Tibet is the source of dozens of major rivers such as the Brahmaputra, Indus, Mekong, Yangtze and Yellow Rivers, running through China, India, Pakistan, Nepal, Bhutan, Bangladesh, Burma, Thailand, Vietnam, Laos and Cambodia. If the rivers stop flowing, these countries will face deforestation, desertification and soil erosion leading to massive water shortage, loss of agricultural land and domestic animals, escalating diseases, famine and starvation of billions of people, and death of billions of wild animals and plants. In Tibet the lakes and wetlands acting as carbon sinks are already drying, thereby turning into carbon emitters, and desiccation and desertification are advancing rapidly (DIIR 2009).

There is little humans can do to stop climate change any more, and international attempts to mitigate it are dwarfed by economic competition between nations and between corporations. The problem is negotiated regularly at the UN climate change conferences. At such a conference in Copenhagen in December 2009 China announced its goal to reduce its CO_2 emissions by 40-45% compared to 2005 level by the year 2020. That is a start, but not a final solution.

(b) *Mining impacts* are a major local and regional environmental problem in Tibet. The opening of the Qinghai-Tibet railway in 2006 opened also large-scale exploitation of Tibet's rich mineral resources for the state-owned Chinese and international, particularly Canadian, corporations. Tibet has 126 different minerals of which gold, chromate, copper, zinc, lead, borax and uranium are currently heavily mined. Also the prospects for the mining of lithium, boron, iron ore and oil are excellent. The mineral reserves have an estimated value of US\$128 billion (Spero News 2007). They are spread over more than 600 sites on the Tibetan plateau and could not be exploited without the railway. Both global and Chinese demand for minerals is great because of the exhausted mines in other parts of the world and the swift

industrial development of China and other fast developing economies. With the Tibetan deposits China has doubled e.g. its copper, zinc, and lead reserves and does not need to import many of the minerals from abroad any more.

The mining corporations have not paid attention to the environmental or social impacts of mining and transportation, thereby causing serious damage to the nature and people of Tibet. Mines destroy natural environment with its flora and fauna. Mining forces some local communities to be relocated, ruins the grazing and agricultural lands of others and kills their livestock with its toxic substances released in the local environment (Fan 2009). Foe example, arsenic released during extraction causes poisoning of groundwater. Humans and animals in many villages have become very ill and died of arsenic poisoning. Contamination of the rivers affects thousands of people and animals locally and hundreds of millions downstream. The toxic substances of mining are a serious health hazard to both the current generation and the future generations as they inflict the human genes. Chinese officials have said that their policy is that they do not approve such mining operations in Tibet that would damage its environment and that mining companies will have to pay for any damage they cause, but it is unclear how this policy is implemented in the current mining boom in Tibet (Bristow 2007).

For the Chinese mining is an economic activity with some environmental impacts to deal with, but for the Tibetans mining integrates economic, environmental social and cultural unsustainability: mining companies conquer ecologically fragile mountain ecosystems that have spiritual meanings in Tibetan culture, and mining obliterates traditional nomadic and agricultural livelihoods, leaving the Tibetans without proper compensation from the huge profits the companies make and deprived of the economic and social welfare mining brings to the Han Chinese.

- (c) *Deforestation* has been rampant in Tibet during the past 50 years. In 1959, Tibet's forests covered 25.2 million hectares; by 1985 half of these ancient forests had been clear-felled and transported to China (CTA 2009). The authorities of China estimate that up to 80 percent of the forests in Tibet have now been destroyed. Deforestation causes erosion, landslides and degradation of the soil, which are exacerbated by the fact that forests in Tibet grow on steep slopes in river valleys. Due to uncontrolled deforestation rivers are very silted, which causes flooding downstream also in other Asian countries. The President of China blamed the uncontrolled deforestation of the Tibetan Plateau for the Yangtze flood in 1998 that caused the deaths of 4,150 people, evacuation of 18.4 million people and economic losses of US\$37 billion (Wang and Guo 2010). This was a partial wake-up call: logging was banned in some areas and some reforestation projects were initiated (Hays 2010). The reason for frequent floods devastating Bangladesh can also be found in the deforestation of Tibet. Moreover, the environment of Tibet affects the monsoon rains of South Asia, Pacific typhoons and El Nino.
- (d) *Hydroelectric building* on the rivers originated in Tibet is in full swing by Chinese companies (Moore 2008). In addition to electricity production, some dams may be built also to divert river waters to vast areas of China that are suffering from water shortage (Buckley 2007). Both these purposes have major malignant environmental impacts on Tibetans as well as on Chinese and other Asians living downstream these rivers. The Tibetans do not have any need for dams: they have minor water and energy needs that they can satisfy by using natural waters and solar energy. Chinese companies produce hydroelectricity in Tibet for the immigrated Chinese and for exports to Chinese cities (Buckley 2007).

Usually dam projects block the course of a river and form a reservoir behind the dam wall, which is drained through turbines to produce electricity. This leads to loss of forests, agricultural land, villages

and towns under the reservoir. However, the environmental impacts of the largest hydroelectric project in Tibet, the Yamdrok Lake hydroelectric station about 100 km southwest of Lhasa, are even worse. This power station drains a natural lake by placing the turbines in tunnels drilled into the mountainsides surrounding the lake. "The fragile balance of the lake's ecology is severely threatened by the unnatural interference with the lake's water flow and with it the livelihood of the local people as well as the wildlife that flourishes around this lake. Migrating waterfowl, which rely on the lake's rich food resources to sustain them on the difficult journey across the Tibetan plateau and the world's highest mountains – the Himalayas – are particularly threatened" (TSG 1996: 1). Due to this power plant construction the Tibetans living in the area lost 16 per cent of their agricultural land. The construction drained the water springs in the area in 1993 and the villagers were forced to drink the lake water, which caused them diarrhoea, loss of hair and skin diseases. The whole lake will dry up within 20 years. If water from the Yarlung River is pumped into the lake to maintain its water balance, "the different limnological properties of the two water bodies are likely to cause environmental problems" (Seibert and Stockman 1997: 25). Up to 15,000 solders of the People's Liberation Army now guard the lake, denying the access of civilians there any more (Moore 2008). What used to be a peaceful, flourishing lake ecosystem with a spiritual meaning to Tibetans is now a military zone destroying the lake for electricity.

Another hydroelectric plant near Lhasa is the Zhikong dam in Lhasa River, which was put into operation in 2007. During 2000-2008 the Central Government of China invested US\$395 million in hydropower construction in Tibet (Moore 2008). Now China is planning to build 750 more hydroelectric power plants across Tibet. For the Longtan hydropower station in the Hongshui River over 80,000 Tibetans were relocated. The Zangmu Dam is under construction on the Yarlung Zangbo/Brahmaputra River in Tibet to be opened for hydropower production in 2015 (Yannan and Haining 2011). It has caused controversy downstream in India, where people wonder if the river's flow to India decreases either because of electricity production or because of China's plans to divert the flow of the river to its own areas. In the Mekong River China is planning eight dams, which will destroy the river and devastate the livelihoods of 60 million people, mostly farmers and fishermen depending on the river, at the Mekong basin in Vietnam, Cambodia, Laos, Thailand and Burma.

- (e) *Nuclear waste* is dumped in Tibet. Because of Tibet's strategic location, China has brought some half a million solders and nearly 25 per cent of its nuclear missiles to Tibet. China is also using the Tibetan plateau as dumping ground for its own and foreign nuclear waste. There are reports of increased deaths, cancer rates and birth defects among Tibetan people and their livestock as well as contamination of waterways near nuclear sites (CTA 2009).
- (f) *Decreasing biodiversity* caused by climate change, mining, deforestation, hydroelectric building, nuclear waste dumping and hunting is a serious concern in Tibet, which is a home of hundreds of thousands of animal and plant species, many of which are rare and endangered. There are over 100,000 species of plants in Tibet, including rhododendron, saffron, bottle-brush tree, high mountain rhubarb, Himalayan alpine serratula, falconer tree and hellebonne (CTA 2009). More than 532 species of birds can be found in Tibet, e.g. black-necked cranes, storks, wild swans, Blyth's kingfishers, grey-sided thrushes, Przewalski's parrotbills and large-billed bush warblers (CTA 2009). A vast range of rare animals threatened with extinction include the snow leopard, Tibetan takin, Himalayan black bear, wild yak, blue sheep, musk deer, golden monkey, wild ass, Tibetan gazelle, Himalayan mouse hare, Tibetan antelope, giant panda and red panda (CTA 2009). Trophy hunting is common in Tibet (People's Daily

2002) and China sells hunting licences to foreign tourists for rare animals: e.g. wild yak US\$40,000, argali US\$10,000, red deer US\$6,000, blue sheep US\$2,500 and wolf US\$200 (Watts 2006). Moreover, rare animals are poached commercially for fur (e.g. snow leopard), Chinese medicine (e.g. deer) and meat (e.g. antelope, gazelle, blue sheep and wild yak) for Chinese and European markets (CTA 2009).

(a–f) Tibet has become a bottomless pit of *natural resource exploitation* for mining, logging, oil, electricity, nuclear waste, and hunting companies. This should be stopped now. Otherwise we all are responsible for wiping out Tibet's unique flora and fauna and obliterating its beautiful nature, the ecosystems of which are still keeping 47 per cent of the world's population alive. This fragile Tibetan plateau is our lungs, our heart and our veins. China has had environmental policies for Tibet for 60 years (Wu 2011), but they have not worked. Saving Tibet requires not only seamless cooperation between the CTA and the central and regional governments of China, but the full efforts of the global community. The problems are caused by us all and we can solve them together.

The most sensible way forward is turning Tibet into a *Special Sustainability Zone* (SSZ). The very first goal of this SSZ should be the *rescue of Tibet from the otherwise inevitable environmental disaster*. There is general agreement on the environmental problems that must be tackled in Tibet. Other issues can be added gradually, as this environmental cooperation increases understanding between the participants. Many of the environmental sustainability issues overlap social sustainability issues, which can be tackled once the participants learn to understand their interconnections and appreciate each other's concerns.

Social sustainability

Subsistence agriculture and animal husbandry are dominant livelihoods on the Tibetan Plateau. China calculates statistics relevant to Tibetans only in the Tibet Autonomous Region (TAR). Of the reported TAR's 2,9 million population 80 per cent are farmers and herders (ShowChina.org 2011). According to China Daily (2011), the net income of farmers and herders in the TAR was 3,176 yuan in 2008 while the urban per capita disposable income was 12,482 yuan. The income gap between Tibetan farmers/herders and Han Chinese population is probably even greater and applies to all provinces on the Tibetan Plateau.

During the past decades the Central Government of China has been resettling traditionally nomadic Tibetan farmers and herders into permanent houses not only in the TAR but also in the other provinces. China has recently stepped up this resettlement: in 2008 alone it moved 300,000 Tibetans (China Xinhua News Agency 2008). By 2010 about 80 per cent of Tibetan farmers and herders had been resettled. The Government says this will help to protect the environment (the grasslands) and boost living standards. But from the nomads' point of view resettling involves slaughter of the animals, relocation to poorly built accommodation and inability to find work due to lack of skills (HRW 2007). Nor does resettling lead to environmental protection, as the genuine nomadic way of life does not consume the environment: nomads live in harmony with nature.

The degradation of grasslands is caused by the agricultural, industrial and settlement policies of Central Government of China, which led to the conversion of Tibetan grassland to cropland in the early 1950s, cultivation of mono-crops like rapeseed, privatization of the traditional communal pastures of nomads to allow commercial development, elimination of predators that balance the ecosystem, uncontrolled mining and harvesting of wild herbs for medicines, infrastructure development (highways,

railways, airports and townships for Han Chinese immigrants and resettlers), fencing and permanent settlement, and mountain closures from Tibetans and their livestock. Restrictions on the flexibility and mobility of nomads have led to the concentration of herds in small areas of pasture, which quickly become overgrazed (DIIR 2008). Naturally, there is also a feedback loop between overgrazing in limited areas and climate change: "degradation of grassland by overgrazing will increase potential evapotranspiration level thereby promoting the climate warming and the degradation process" (Du *et al.* 2004: 241).

The traditional nomadic livestock management system in Tibet was "a time-tested model, sophisticated, and developed enough to ensure viable and sustainable management of marginal pastures" (Goldstein 1990). Now that we have learnt from past mistakes all over the world we can return to the traditional sustainable ways of life. On the Tibetan Plateau this means nomadic, communal herding. China's poverty reduction and safe drinking water projects in Tibet (ShowChina.org 2011) can be integrated into this suggested voluntary re-nomadization project by turning nomadic herding into an esteemed profession that requires both traditional and modern skills and leads to economically sustainable livelihood, and by preventing mining in grazing areas and in otherwise ecologically fragile areas and imposing strict environmental standards on the mining companies to prevent the contamination of the lakes and rivers of the Tibetan Plateau.

The joint implementation of these socially sustainable development projects will also help the central and regional governments of China and the CTA find common ground in respecting the rights of Tibetan people to live the way they wish. China has signed the threefold International Bill of Human Rights: it has signed and ratified the Universal Declaration of Human Rights and the International Covenant on Economic, Social and Cultural Rights, and it has signed but not ratified the International Covenant on Civil and Political Rights. Let's start with the ratified agreements.

Cultural sustainability

Culture is much more than traditional costumes and festivals, culture is a set of distinctive spiritual, material, intellectual and emotional features of society or a social group, and it encompasses lifestyles, ways of living together, value systems, traditions, beliefs, languages, art and literature (Pirnes 2007). Tibetan culture is distinguishable because of the remoteness of the area has preserved it well from international influences. Nomadic, communal way of life has been an essential part of Tibetan culture. Tibetan cuisine reflects the traditional livelihoods of animal husbandry and subsistence farming. Buddhism has always been a strong element of Tibetan culture - and Tibetan Buddhism is a distinct branch of Buddhism with its dogmas, rituals and monasteries. From 1391 until June 2011 the Dalai Lama was both the political and spiritual leader of Tibet; from then on only the spiritual leader, as the political leadership was transferred to the Kalon Tripa (Prime Minister) of the Central Tibetan Administration (CTA). Only time will tell what the separation of political leadership and spiritual leaderships means in practice. Tibetan art and architecture are deeply influenced by the Buddhism. Tibetan music, drama and festivals draw from history and religion. Most Tibetans wear traditional clothes in everyday life. There are several Tibetan languages, but Central Tibetan, based on the speech of the capital, Lhasa, is used most widely. Primary education is usually given in Tibetan, but from secondary school onwards education is in Mandarin Chinese, which makes written Tibetan wither.

Ancient Tibetan literature is abundant for both lay and religious purposes, but modern literature is scant. Illiteracy is common among adults in rural areas. The CTA runs Tibetan schools in Dharamsala, where Tibetan and English are the languages of education. Tibetan culture is best preserved and cherished when traditional Tibetan way of life with postmodern conveniences can be promoted.

Economic sustainability

During the past 60 years the Central Government of China has aimed to develop the Tibetan areas of China through its five-year programmes in the same way as other areas. This kind of economic development has been modelled on the unsustainable path that the European, American and Asian countries have followed. This has meant prioritizing economic growth over environmental protection, social harmony and cultural traditions. Single-track pursuit for maximum profits has led to widespread corruption also in Tibet. Yet it is not necessary to sacrifice environmentally, socially and culturally sustainable development on the shrine of economic prosperity.

Integrating environmental, social, cultural and economic sustainability

Now it is possible for countries and areas to bypass the conventional development model and go straight to the new, emerging models that lead to integrated economically, environmentally, socially and culturally sustainable development. Countries and areas can choose to aim at (1) wellbeing instead of welfare; (2) maximization of gross national happiness instead of gross national product; (3) decentralized renewable energies, such as solar and wind power, instead of centralized energies, such as oil, coal and hydropower; (4) traditional livelihoods like nomadic herding, organic farming and craftsmanship instead of industrial livelihoods like mining, construction and logging; (5) human-powered, animal-powered and solar- or wind-powered vehicles instead of fossil-fuel powered vehicles; (6) modern, light tools like solar-powered laptops & mobile phones and eco-toilets instead of ignorance and water closets; (7) education that sustains indigenous languages and traditional cultures instead of abolishing them; and (8) peaceful, harmonious, spiritual life instead of conflict-ridden, hectic, materialistic living. Special Sustainability Zones (SSZs) can be testing grounds for this new path.

Tibet with its indigenous people's feet firmly on the ground of the Tibetan Plateau and hearts deeply in the beliefs of Tibetan Buddhism is an excellent candidate for a SSZ. Tibetans have always believed in the interdependence of living and non-living elements of the earth and sought to live in harmony with nature. Tibetans are the ones to decide how they use their natural resources. They can set codes of conduct for themselves, companies and visitors. Tibetans are satisfied with moderation: the environment should be used to fulfil one's need and not to fulfil one's greed (DIIR 2008). This is a fertile soil to plant the seed of a Special Sustainability Zone.

3. Conclusions (reduced due to space limitations)

A Special Sustainability Zone (SSZ) integrates economic, environmental, social and cultural sustainability. Turning Tibet into a SSZ would enable meeting China's and Tibetan people's needs simultaneously: (1) physiological needs: water, food and energy; (2) safety needs: sovereignty and peace;

(3) social needs: good relations and cooperation with others; (4) esteem needs: respect by/of others; (5) self-actualization needs: morality and creativity; and (6) self-transcendence needs: united consciousness.

References

- Bristow M 2007. Mines 'will not pollute Tibet'. *BBC News,* Lhasa, 30 July 2007. Available online at: http://news.bbc.co.uk/2/hi/asia-pacific/6921937.stm (visited on 19 May 2011).
- Buckley M. 2007. Tibet. Bradt Travels Guide: Chalfont St Peter.
- Chatham House 2010. Low Carbon Development Roadmap for Jilin City. Chatham House, Chinese Academy of Social Sciences, Energy Research Institute, Jilin University and E3G: London. Available online at: http://www.chathamhouse.org.uk/files/16194_r0310_lowcarbon.pdf (visited on 17 May 2011).
- China Daily 2011. Facts and Figures about Tibet of Old and New. China Daily BBS.
- China.org.cn 2011. Tibet's 50th Anniversary of Peaceful Liberation. *China.org.cn*. Available online at: http://www.china.org.cn/english/12987.htm visited on 19 May 2011).
- China Xinhua News Agency 2008. 300,000 Tibetan farmers, herders move into new houses. *China Xinhua News Agency* 27 December 2008
- CTA 2009. *Tibet's Environment and Development Issues.* Central Tibetan Administration: Dharamshala.
- Dalai Lama 1987. *Five Point Peace Plan*. His Holiness the 14th Dalai Lama of Tibet: Dharamshala. Available online at: http://www.dalailama.com/messages/tibet/five-point-peace-plan (visited on 17 May 2011).
- DIIR 2001. "The 17-Point Agreement" The Full Story as Revealed by the Tibetans and Chinese Who Were Involved. Department of Information and International Relations (DIIR), Central Tibetan Administration: Dharamshala. Available online at: http://www.tibet.net/en/index.php?id =183&rmenuid=11 (visited on 17 May 2011).
- DIIR 2008. Environment and Development in Tibet: A Crucial Issue. Environment and Development Desk, Department of Information and International Relations (DIIR), Central Tibetan Administration: Dharamshala. Available online at: http://www.tibet.net/en/pdf/diirpub/environment/5/crucialIssue2008.pdf (visited on 17 May 2011).
- DIIR 2009. The Impacts of Climate Change on the Tibetan Plateau: A Synthesis of Recent Science and Tibetan Research. Environment and Development Desk, Department of Information and International Relations (DIIR), Central Tibetan Administration: Dharamshala. Available online at: http://www.tibet.net/en/pdf/diirpub/environment/copenhagen/climatechangereport.pdf (visited on 17 May 2011).
- Du MY, Kawashima S, Yonemura S, Zhang XZ, Chen SB. 2004. Mutual influence between human activities and climate change in the Tibetan Plateau during recent years. *Global Planet Change* 41: 241-249.
- Fan M 2009. A focus of Tibetan ire: mining. Washington Post 10 March 2009.
- Goldstein M, Beall C. 1990. *Nomads of Western Tibet: The Survival of a Way of Life.* University of California Press: Berkeley.
- Hays J 2010. *Deforestation and Desertification is China*. Available online at: http://factsanddetails.com/china.php?itemid=389&catid=10&subcatid=66 (visited on 19 May 2011).
- Hilton J 1933. Lost Horizon. Macmillan: London.
- HRW 2007. "No One Has the Liberty to Refuse". Tibetan Herders Forcibly Relocated in Gansu, Qinghai, Sichuan, and the Tibet Autonomous Region. Human Rights Watch, Report 10 June 2007. Available online at: http://www.hrw.org/en/reports/2007/06/10/no-one-has-liberty-refuse-0 (visited on 19 May 2011).
- IPCC 2007. Assessment of observed changes and responses in natural and managed systems. Working Group II Report "Impacts, Adaptation and Vulnerability" *Fourth Assessment Report: Climate Change 2007.* Intergovernmental Panel on Climate Change: Geneva.

- Ketola T. 2010. Five leaps to corporate sustainability through a corporate responsibility portfolio matrix. *Corporate Social Responsibility and Environmental Management* 17: 320–336.
- Lhasa 2011. *The 17 Points Agreement between Tibet and China in 1951.* Available online at: http://www.lhassa.org/en/history-of-tibet/17-points-agreement.php (visited on 17 May 2011).
- Moore M 2008. China plans dams across Tibet. The Telegraph 14 October 2008.
- Park J-D. 1997. *The Special Economic Zones of China and Their Impact on Its Economic Development.* Praeger: Westport, CT and London.
- People's Daily 2002. Highland hunting ground new tourist attraction. *People's Daily* 20 February 2002. Available online at: http://english.peopledaily.com.cn/zhuanti/Zhuanti_32.html (visited on 19 May 2011).
- Pirnes, E. 2008. Significant Culture and Cultural Policy. Broad Concept of Culture as the Justification of Cultural Policy (In Finnish). Jyväskylä Studies in Education, Psychology and Social Research 327. Department of Social Sciences and Philosophy, University of Jyväskylä.
- Poropudas T 2010. "But we do help the Tibetans" (in Finnish). TalousSanomat 10 October 2010.
- Qin D. 2009. Global Warming benefits to Tibet: Chinese official. AFP 17 August 2009.
- Seibert P, Stockman L. 1997. The Yamdrok Tso hydropower plant in Tibet: a multi-facetted and highly controversial project. *Proceedings of the International Conference on Large-Scale Water Resources Development in Developing Countries*, Kathmandu, October 1997, pp. CR25-34. Available online at: http://homepage.boku.ac.at/seibert/yamdrok.htm (visited on 18 May 2011).
- ShowChina.org 2011. Improving people's livelihood. *China's Tibet Facts and Figures 2008*. ShowChina.org: Beijing. Available online at: http://en.showchina.org/Features/08/09/200903/t277462.htm (visited on 19 May 2011).
- Spero News 2007. Chinese rail line exploits Tibetan mineral riches. *Spero News* 24 February 2007. Available online at: http://www.speroforum.com/site/article.asp?idcategory=33&idSub=122&id Article=8123 (visited on 19 May 2011).
- TSG 1996. Death of a Sacred Lake. Tibet Support Group: London.
- Wang Q, Guo R. 2010. Threat of 'worst flood in 12 years'. *China Daily* 15 July 2010. Online: http://www.chinadaily.com.cn/china/2010-07/15/content_10107687.htm (visited 19 May 2011).
- Watts J. 2006. China puts price on head of rare animals. *The Guardian* 19 August 2006. Available online at: http://www.guardian.co.uk/environment/2006/aug/09/china.hunting (visited on 19 May 2011).
- Wu A. 2011. China's eco-protection policies safeguard Tibet's unique environment. *China Tibet Online* 19 May 2011. Available online at: http://en.tibetculture.net/index/lnews/201105/t20110519_1044813.htm (visited on 19 May 2011).
- Yannan J, Haining H. 2011. A new era for Tibet's rivers. *Chinadialogue* 17 January 2011. Available online at: http://www.chinadialogue.net/article/show/single/en/4055 (visited on 18 May 2011).