Roof of the World

A Guide to Understanding the Environmental Challenges facing Chinese-Occupied Tibet by Students for a Free Tibet

Photo: Jim McGill Photography, photo444.com

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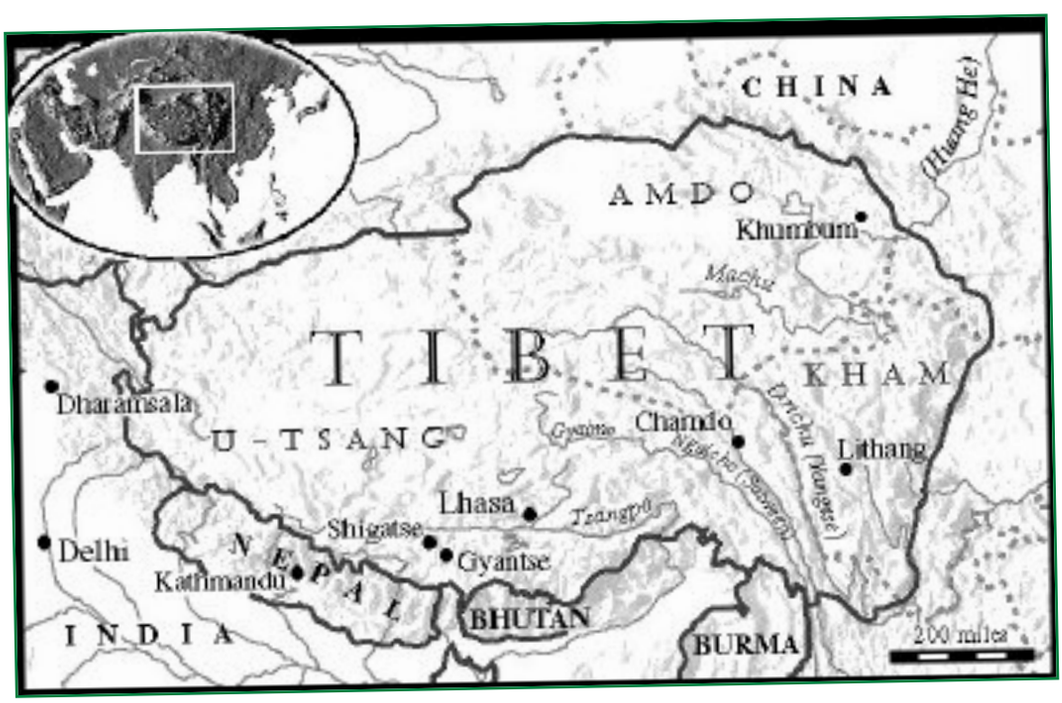
Photos: Tibet's unique environment and culture are under severe threat. (Picture 3 Jim McGill, picture 4 Vincent Van Den Berg, pictures 1,2 & 5 Luke Ward)

Geographical note

Throughout this document when we refer to Tibet, we are referring to all of Tibet including the three provinces of Amdo, Kham and Ü-Tsang. In the 1960s, the Chinese government divided Tibet's territory into the Tibetan Autonomous Region and large parts of Amdo and Kham were annexed into China's Qinghai, Gansu, Sichuan and Yunnan Provinces. When the Chinese government references Tibet, it is referring to just the Tibetan Autonomous Region. Whenever possible, we have described an area is using both the Tibetan and Chinese names.



Introduction

Students for a Free Tibet (SFT) is committed to supporting the Tibetan people's efforts to preserve and protect their fragile environment. This report – prepared by SFT UK – details how China's colonial policies, and in particular economic "development" policies are wrecking havoc on Tibet's vitally important environment, and highlights the political repression faced by Tibetans who are trying to resist such polices and to preserve their traditionally sustainable lifestyles.

People of conscience worldwide have a role to play in stopping the untold damage being inflicted on Tibet's environment. SFT– a global grassroots and youth-driven organization that works in solidarity with the Tibetan people in their struggle for freedom and independence – has been a leading force in campaigning for the Tibetan people's right to control their own land. With the launch of our 'Stop Mining Tibet' campaign in 2006, SFT members worldwide have engaged in activities to stop China's rampant destruction of Tibet's environment through resource extraction. SFT became further involved in campaigning for Tibet's environment and for the right of Tibetans to have a seat at the decision-making table on issues pertaining to climate change during the Global Climate Change Summit (COP 15) in Copenhagen in 2009. A delegation of SFT members from UK, France, and Germany participated in the Summit to raise awareness about the impacts of climate change occurring in Tibet and China's failed environmental policies.

We hope this resource guide will help those interested in educating others about the challenges facing Tibet's environment and campaigning in solidarity with Tibetans trying to stop this destruction. The report summarizes a series of environmental issues and is presented as a set of FAQs (questions were submitted by SFT's organizers and compiled from questions posed by journalists and the general public).

Photos: Tibet's picturesque environment, by anon., a nomad on the plateau by Falsalama

Tibetans and the Environment

Before Tibet became a Buddhist country, most Tibetans followed an animist religion called Bön, believing that spirits dwelled on mountains, in the earth, air and especially in water bodies such as rivers and lakes. As Buddhism spread throughout Tibet, it merged with and consumed elements of the Bön religion. Many of the Bön deities were subsumed as protector deities in the Tibetan Buddhist pantheon, and much importance is still given to these deities. Almost every Tibetan region or important mountain has a protector deity. The spirits of these deities are thought to dwell on mountain summits, so digging on or scarring these mountains is forbidden. Similarly, Tibetans believe that snake-like water spirits, known as Nagas, dwell in rivers and lakes, and therefore the alteration of watercourses should be avoided at all costs.

As a result of the respect for the environment inherent to Tibetan culture and Buddhism, Tibetans have traditionally tried to avoid polluting or harming their environment. Prior to the Chinese invasion, Tibetans' land-use practices were sustainable and natural resources remained untouched and unaltered as people actively tried to conserve the unique environment of the plateau. Tibet was coveted by a succession of Chinese rulers and the exploitation of its natural resources was a driving force behind the Chinese Communist Party's (CCP) invasion of Tibetan areas from 1949 until 1951. Tibetans have received little to no benefit in return for the pillaging of their land with the Chinese state and foreign and Chinese companies reaping the profits. China's colonial policies combined with environmental degradation are now threatening the sustainable livelihoods of 2.5 million Tibetan nomads the ancestral guardians of the Tibetan Plateau.

Why Does Tibet's Environment Matter?

In 1959, the Tibetan people rose up against the Chinese government's illegal invasion and occupation of their country and Chinese troops responded with violent force. The Dalai Lama – Tibet's political and spiritual leader – escaped into exile in India, followed by tens of thousands of Tibetan refugees. Tibetans in Tibet have continued their resistance culminating in a national uprising that swept the Tibetan plateau in 2008. Amidst calls for their political rights, there has been a growing call to stop China's destruction of their environment, which has taken place since the occupation began.

This environmental movement has taken root in Tibet as scientists, policy makers, and activists around the world have become increasingly aware of the importance of Tibet's environment. Tibet is now frequently referred to as 'the Third Pole' due to it having the third largest quantity of ice in the world.[1] Significantly, Tibet is experiencing one of the fastest rates of climate change in the world[2]. The preservation of Tibet's natural environment has consequences far beyond its own borders and is an issue of regional and global importance, with hundreds of millions living around rivers sourced in Tibet. Considering this staggering fact, China's occupation of Tibet is both an issue of basic rights and freedom for 6 million Tibetans, and one that has far-reaching global environmental and economic consequences.

[1[NASA. New Study Turns Up the Heat on Soot's Role in Himalayan Warning - www.nasa.gov/topics/earth/features/himalayan-warming_prt.htm
[2] Reuters. Tibet warming up faster than anywhere in the world - www.reuters.com/article/2007/07/22/environment-china-tibet-dc-idUS-PEK30733220070722

Dams, Rivers and Water

Melt water from Tibet's glaciers feed many of Asia's major rivers including the Yangtze, Brahmaputra, Indus, Mekong, Salween, Ganges and the Yellow River. In 2007, the World Wildlife Fund declared the first five of these rivers to be amongst the 10 most endangered rivers in the world [3], whilst the Yellow River now frequently fails to reach the sea. Hundreds of millions of people live on and depend on these rivers for their livelihoods and basic needs, and the rivers also support the unique ecology of the Tibetan plateau. Since China's invasion, massive damage has been inflicted on Tibet's rivers and lakes. The global community must recognize the importance of Tibet's rivers, and insist that the Chinese governments irresponsible management of them is stopped.

Why does China want control over Tibet's water resources?

In a century where rising populations and the impacts of global warming mean an increased demand for and competition over water resources, China is vying for regional dominance by controlling Tibet's water resources. The Chinese government is also investing millions of dollars in harnessing the hydroelectric power of Tibet's glacier-fed rivers to feed China's power-hungry cities along the eastern seaboard.

How has the Chinese occupation of Tibet impacted on Tibet's water resources?

China's industrialization of the Tibetan plateau, including rampant mining, has resulted in the contamination of Tibet's rivers[4]. Factories, power stations, and an influx of settlers to the Plateau are placing incredible strain on Tibet's limited water resources. The Chinese government is responding to this demand with irresponsible and shortsighted policies that ultimately will put the very populations they are meant to serve at greater risk from environmental disasters. Some of these policies have also led to the direct violation of rivers and lakes that Tibetans hold sacred, including the construction of a hydroelectric plant built on Yamdrok-Tso[5] (Yamdrok Lake), in Ü-Tsang (Chinese: Tibetan Autonomous Region).

Perhaps the biggest impact on Tibet's water resources since the Chinese invasion has been the proliferation of hydroelectric dams on Tibet's rivers. An exact number of dams already built, under construction or proposed on the whole of the Tibetan plateau is difficult to gauge, however, Tsering Tashi, author of the Tibetan Plateau blog has collected data for some of the most important rivers originating in Tibet. Looking at one example, the Yarlung Tsangpo (and its tributaries), the major tributary of the mighty Brahmaputra in May 2010, he found evidence of 13 dams already built, 10 under construction and an additional 16 proposed . Of the 16 proposed dams, one, if built will be the world's biggest hydroelectric dam[7]. Similarly, he has also mapped the dams for several other rivers including the Drichu (Yangtze), Zachu (Mekong) Gyalmo Ngulchu (aka. The Nu or the Salween)[8].

Photo: A Tibetan nomad on one of Tibet's vital waterways, by Jim McGill Photography

[3] WWF. World's Top 10 Rivers at Risk - http://www.unwater.org/downloads/worldstop10riversatriskfinalmarch13_1.pdf
[4] Huang X. et al. http://www.ncbi.nlm.nih.gov/pubmed/19783282
[5]Seibert, P. The Yamdrok Tso Hydropower Plant in Tibet...- http://homepage.boku.ac.at/seibert/yamdrok.htm
[6]Tashi Tsering. Tibetan Plateau Blog. -http://tibetanplateau.blogspot.com/2010/05/damming-tibets-yarlung-tsangpo.html (continued next page)

How do dams impact upon people?

It is well documented that large hydroelectric dams pose devastating consequences both for people living near the dam and for people living downstream. Dam construction in Tibet has resulted in the displacement of people from their ancestral homes. When a hydroelectric dam is constructed, large reservoirs are created, leading to the submersion of tracks of land situated upstream from the dam. People's homes are destroyed and the land farmers depend on for their livelihood is irreversibly destroyed. Displacement is poorly compensated, if at all, meaning that Tibetans receive little, if anything for this major disruption to their lives.

The Tibetan plateau lies on the tectonic fault between the Indian Subcontinent and the vast Eurasian plate. These plates are continuously colliding into one another (a natural process that contributed to the formation of the Himalayas) making the Tibetan plateau a highly earthquake-prone area. Following the major earthquake in Kyegundo (Chinese: Yushu) in April 2010, there were reports of cracks in the structure of a nearby dam and many feared the dam would burst. Authorities managed to repair the cracks, but given the frequency of strong earthquakes in Tibet, it is only a matter of time before a major dam breaks, causing devastating human and environmental consequences. Scientific research suggests that a direct correlation exists between dam construction and earthquakes and the building of a dam on a fault line in Sichuan Province is thought to have triggered the 2008 earthquake which killed over 80,000[9].

Dam constructions and the alteration of Tibet's rivers also poses major environmental consequences for China. The Yellow River, originating in the Bayan Har Mountains in Amdo (Qinghai Province) is the second longest and one of the most important rivers flowing from Tibet into China, with over 300 million living along the riverbed. As a result of climate change and dams built to facilitate irrigation, the Yellow River now fails to reach the sea more than six months of the year[10].

The South-North Water Transfer Project is a hotly contested plan to divert water from Southern rivers to drier Northern areas[11]. The main source of the diverted water is the Yangtze (sourced in eastern Tibet) and there is speculation that the project will also divert water from the Yarlung Tsangpo, the main tributary of the Brahmaputra[12]. The South-North water transfer project, still under construction, has already prompted a major controversy over spiralling costs, pollution, loss of water through evaporation, and the risk that the source rivers may in turn run dry. If the over-extraction of water from Tibet's river continues unchecked, there is a high probability that many areas of Tibet and China will become arid dustbowls within a few decades.

Photos from Woeser's blog: Monks search for survivors of the Yushu earthquake and children are pulled from the wreakage

[7]Watts, J. The Guardian. --http://www.guardian.co.uk/environment/2010/may/24/chinese-hydroengineers-propose-tibet-dam
[8]Tashi Tsering. Tibetan Plateau Blog. - http://tibetanplateau.blogspot.com/2010/02/dams-on-upper-reaches-of-yangtze-mekong.html
[9Telegraph http://www.telegraph.co.uk/news/worldnews/asia/china/4434400/Chinese-earthquake-may-have-been-man-made-say-scientists.html
[10]Wingfield-Hayes, R. Yellow River 'drying up' - http://news.bbc.co.uk/2/hi/europe/3937403.stm
[11]International Rivers. South-North Water Transfer Project http://www.internationalrivers.org/en/china/south-north-water-transfer-project (cont.)

What problems can damming cause to the environment?

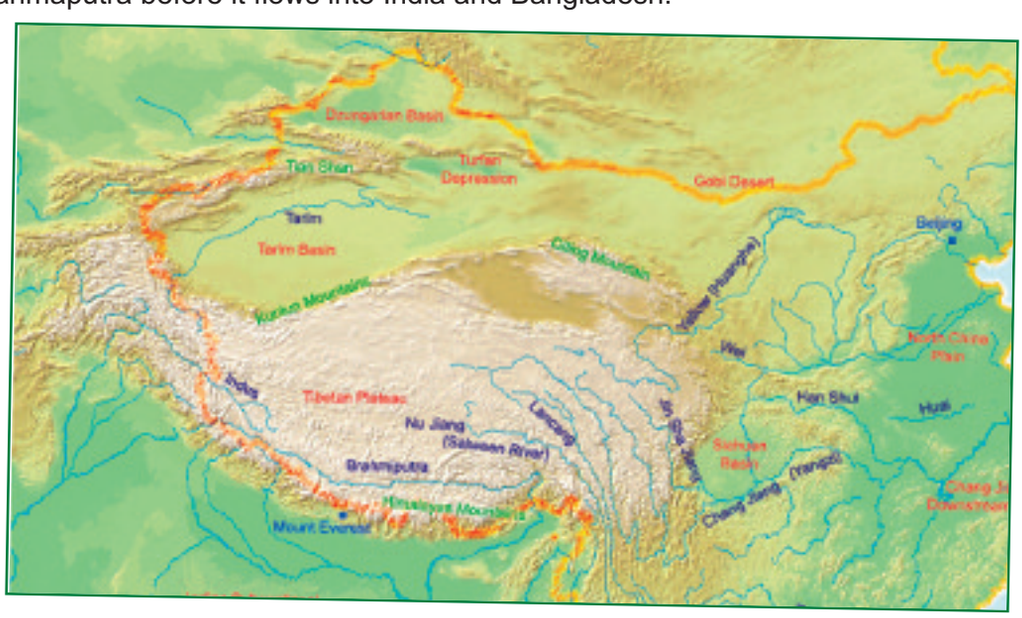
The costs of dam building go beyond the human costs – entire habitats can be destroyed, causing irreversible damage to local ecosystems. Little consideration is given to the animal species threatened by these developments. As trees and other plants submerged by the reservoirs rot, they release vast quantities of both methane and carbon dioxide, which dissolve into the reservoir. As this water passes through the dam's turbines, these harmful greenhouse gasses are released into the atmosphere, contributing to global warming.

Also, water flowing through dam turbines loses sediment, and is likely to travel faster, scouring riverbeds and eroding riverbanks and increasing the likelihood of flooding[13]. This is likely one of the reasons that eastern Tibet suffered from massive flooding in the summer of 2010. Additionally, water flowing from dams contains dissolved oxygen that causes water temperatures to rise, impacting aquatic flora and fauna and preventing natural freezing processes from occurring.

Should other countries be worried?

The Chinese government pays lip-service to the ideals of intra-watershed and cross-boundary co-operation with countries downstream of Tibet, but in reality, it is instead more interested in harnessing the hydroelectric (and therefore economic) potential of Tibet's rivers. Many are predicting that as global warming worsens and the world's population continues to rise, the competition for freshwater resources will intensify. China's dam building is a growing source of tension between India and China – Asia's growing superpowers – along with other downstream nations.

Despite diplomatic protests from the Indian government, the Chinese government continues to unilaterally proceed with dam construction[14]. Also, the Chinese government has a track record of denying it is building dams until the final stages of construction, infuriating foreign governments[15]. Dams on the Tibetan plateau limit the capability of countries downstream to harness a river's hydroelectric potential themselves. The Indian media and government is particularly concerned about China's river transfer scheme that will divert water from the Brahmaputra before it flows into India and Bangladesh.



Map: Showing how many of Asia's major rivers start on the Tibetan plateau

[12] Rahman, M. - http://www.ipcs.org/article/india/dams-on-the-brahmaputra-concerns-in-northeast-india-3245.html
[13] McCully, P. Silenced Rivers: The Ecology and Politics of Large Dams - http://www.internationalrivers.org/en/node/1476
[14] India opposes China building dam on Brahmaputra http://news.rediff.com/report/2009/oct/15/india-opposes-china-building-dam-on-brahmaputra.html
[15] Banyan. The Economist - Dammed Rivers http://www.economist.com/blogs/banyan/2009/10/dammed_rivers

Case Study: The Gyalmo Ngulchu (aka. The Nu or Salween River)

The Nu River is one of the last rivers on the Tibetan plateau to remain dam free. In January 2011 China's powerful National Development and Reform Commission announced that hydropower generation on the Nu River is 'a must'[16]. The original plans for damming the Nu river included a string of 13 hydropower dams which would produce enough energy to total 36 billion Yuan a year. The Nu flows through the Three Parallel Rivers World Heritage Site, renowned for its biodiversity – with over 6,000 plant species and 50% of China's animal species. Additionally, the area is home to over 300,000 people from thirteen distinct ethnic groups. Up to 50,000 people would be displaced, and nine of the thirteen planned dams, will be dangerously close to the World Heritage site[17]. Given the river's ecological importance, campaigners in Tibet and China have protested development on the river since plans were first announced in 2004. This pressure resulted in Chinese Premier Wen Jiabao announcing the suspension of all projects on the Nu River (reiterated in 2009). However, with China's leadership set to change hands in 2012, the suspension is not likely to be renewed without a major pressure campaign, regardless of the environmental cost. The Nu River also flows into Thailand and Burma, and groups in both countries have met the planned dams with grave concern.

Photos: Gori Tsuma lake by anon., Yamdok Tso by Luke Ward and the Salween downstream in Burma from Wikipedia Commons

[16] Si, M. The Guardian - Is hydropower exploitation of the Nu river in China 'a must'? -http://www.guardian.co.uk/environment/blog/2011/feb/10/hydropower-exploitation-china
[17] International Rivers – The Nu (Salween) River http://www.internationalrivers.org/en/china/nu-salween-river

Mining

According to the Tibetan government in exile, there are more than 126 identified minerals in Tibet with significant reserves of the world's deposits of uranium, chromite, boron, lithium, borax and iron, all of which are currently being mined in Tibet. Additionally, arsenic, copper, gold, silver, zinc, oil and gas are being extracted on the Tibetan Plateau[18]. Tibet is one of the most mineral-rich areas worldwide, and mining is one of the major sources of income for the Chinese government and privately owned companies on the Tibetan plateau.

What is wrong with mining?

The environment damage caused to the land, air, and water by mining operations is well documented[19]. Mining can be fatal due to the dangerous conditions and lax safety standards. Although we rely on mining for many of the important objects used in our every day lives, including computers, cars, home appliances, and jewellery, mining must be done safely at minimal risk to the environment, the miners, and the impacted population. This is not possible in Tibet where, under Chinese occupation, Tibetans are denied their internationally recognized right to control the use of their own land and natural resources. Furthermore, there is no effective rule of law or oversight mechanism to hold mining companies accountable both Tibet and China.

Who is mining in Tibet?

The majority of companies mining in Tibet are privately-owned by Chinese businessmen with some connection to the Chinese state. In recent years, Western companies have been involved in the mining industry in Tibet, both directly and through overseas investment. Protests against mining operations in Tibet, along with international pressure from SFT and other pro-Tibetan organizations appear to have deterred the world's large mining firms from operating in Tibet. Therefore, the Western companies mining in Tibet are relatively small, speculative start-up companies with little brand recognition and private funding. These companies are risk-seeking and ethically bankrupt; their executives are willing to mine in occupied territories despite the reputational threats. Many are owned by Chinese businessmen based in foreign countries, most notably in Canada where a lack of legal and ethical accountability exists to hold mining companies operating abroad to social or environmental standards. All foreign companies operating in Tibet have to work in partnership with a Chinese company. In recent years many such foreign companies have encountered difficulties working in China and been bought out by partners or other Chinese companies.

How have Tibetans reacted to these mining projects?

Tibetans have protested vociferously against many mining projects across the Tibetan plateau. Whereas some of these protests have been successful in curtailing mining operations[20], many have been brutally quashed by Chinese authorities. On August 17th, 2010, Chinese police opened fire on a group of Tibetans protesting the expansion of a Chinese-owned gold mining operation in Palyul County, Kardze Prefecture in eastern Tibet (Chinese: Baiyu County, Ganzi Autonomous Prefecture, Sichuan Province). Radio Free Asia reported that four Tibetans were shot dead and thirty more were injured in this violent attack on unarmed protesters[21]. This is one of many examples of the lengths Tibetans will go to prevent the destruction of their environment, and the lengths that Chinese soldiers will go to stop them.

Photo: Mining in action on the Tibetan plateau, from Woeser's blog

[18] EDD DIIR - Environment and Development in Tibet - A Crucial Issue - http://www.tibet.net/en/pdf/diirpub/environment/5/crucialIssue2008.pdf
[19] Huang, X. et al. - Environmental Impact of Mining Activities on the Surface Water Quality in Tibet: Gyama Valley. http://www.ncbi.nlm.nih.gov/pubmed/20542540
[20] Choephel, L. RFA - Mining Dispute Largely Settled http://www.rfa.org/english/news/tibet/minedisputesettled-06092009162824.html
[21] RFA. Police Fire on Mine Protesters. - http://www.rfa.org/english/news/tibet/mine-08262010142756.html

To what extent has mining benefitted the local economy?

Mining requires infrastructure such as piped water and roads for transportation. In a handful of cases a town's infrastructure may be improved in order to meet these needs. Mining operations potentially could create jobs for local people, but mining companies are more likely to employ Chinese migrant workers over Tibetans. Overall, little to no profits from the mined resources are put back into the local economy by the mining company and, inevitably, a substantial portion is paid out to local and national officials. Tibetans receive little or no economic benefit from the mined product. Furthermore, mining pollutes and scars the local environment destroying valuable farm and grazing land.

Are Tibetans being consulted about the proposed mining projects?

Tibetans in Tibet are not consulted about mining projects, and given no choice whatsoever in the matter, even though it is their communities that have to suffer the consequences of mining operations. A World Bank Inspection Panel found in 2000 that the climate of fear in Tibet is so pervasive that it is impossible for Tibetans to give free, prior, and informed consent over the use of their land[22]. A handful of mining firms in the West have tried to win over Tibetans living in exile by promising to carry out their activities responsibly and to the benefit of the local population. However, no mechanisms for holding these company's accountable or for monitoring the impact on local communities is put forward and these 'consultations' are met with condemnation and protest[23].

Case Study: Mining in Gyama[24]

In 2009 the Tibetan writer Woeser blogged about the damage inflicted upon the Gyama village area of Meldro Gungkar County as a result mining for copper and other metals[25]. Many mining companies operate in the area, without supervision or restrictions from local authorities. The Gyama copper mine, which contains polymetallic ore, is currently the mine that generates the largest daily turnover on the Tibetan plateau with 12,000 tons per day. The mining rights belong to the China National Gold Group, which has direct ties with the Chinese State Council.

Gyama village lacks proper sewage and waste treatment systems and chemicals spilling from the mine site have contaminated villagers' drinking water, destroyed farmland and poisoned livestock. Many villagers have become sick from exposure to the chemicals. Locals complained to the officials, but their complaints fell on deaf ears. Subsequent nonviolent protests were brutally suppressed by military police.

In October 2010, China Gold International Resources, the Canadian-based, overseas arm of China National Gold Group successfully took over several mines in Gyama. To learn more about SFT Canada's campaign targeting China Gold International Resources (CGIR) and SFT's wider Stop Mining Tibet campaign, including an up-to-date list of Western Companies mining in Tibet, visit: www.StopMiningTibet.com

Photo: A large processing plant located right near a confluence of two rivers on traditional farming land, from Google Earth

[22] James Madison University. Inspection Panel's Report and Findings on the Qinghai Project. - www.jmu.edu/orgs/tibet/qinghai.html
[23] Thinley, P. Phayul - Mining rage and corporate responsibility in Tibet http://www.phayul.com/news/article.aspx?id=16726&t=1
[24]To see Google Earth Images showing the extent of mining opperations in Gyama, see Tashi Tsering's Tibetan Plateau blogpost: http://tibetan-plateau.blogspot.com/2011/01/using-google-earth-to-monitor-mining-in.html
[25]Woeser, T - Tibet's Water Pollution... http://www.highpeakspureearth.com/2009/12/tibets-water-pollution-and-chinas.html

Nomads and Grasslands

For close to 9,000 years, nomads grazing their livestock on its pastures have been the guardians of the Tibetan plateau[26]. During this time, Tibet's grasslands and the nomadic communities have co-existed sustainably as one interdependent ecosystem and therefore their way of life is intimately connected to the land. However, the Chinese government has for decades been trying to curb this way of life by forcibly resettling Nomadic communities. Nomad resettlement intensified with the launch of China's Western Development Plan in 1998. Swathes of land belonging to Tibetan nomads has been requisitioned by the Chinese authorities and fenced off under the guise of 'conserving' the land. Between 2006 and 2010, the Chinese government resettled 300,000 families with a combined population of 1.43 million, and another 185,500 families are expected be forcibly settled by 2013[27].

Why does China want to resettle Tibet's nomads?

In 1998, Qi Jingfa, then China's Vice-Minister of Agriculture, announced that the Chinese government sought to *"to end the nomadic way of life for all herdsmen entirely"*[28]. The curtailing of this traditional way of live is being justified in the name of 'ecological conservation', and the CCP refers to this policy as *'shengtai yimin*', which translates into English as *'ecological migration'*. The Chinese government is forcing nomads off the grasslands, claiming that the highly degraded land will be converted to zones of 'ecological conservation' and the development of a *"new socialist country side"*[29]. According to the official propaganda, the nomadic way of life has imposed 'over-grazing' and 'over-cultivation' on the land. China's 'conservation' policies also have a political motive as the CCP seeks to control Tibetan nomads who are at the forefront of resistance activities in Tibet. A former nomad told International Campaign for Tibet that China found sedentary people easier to control, saying*"[Nomads'] economic self-sufficiency, mobility and traditional and religious outlook on life make them the most difficult people to integrate into the Chinese state."*[30]

Often, land that the nomads once roamed with their herds is designated as a 'nature reserve'. The Chinese government uses the term *"nature reserves"* as a euphemism for forcibly moving Tibetan nomads and farmers – who have lived in harmony with nature for thousands of years – off their ancestral land. Many of these 'nature reserves' later become sites for mining or dam construction. One example is the Sanjiangyuan National Nature Reserve in Amdo (Qinghai), where not only are dams being constructed, but also the Canadian company Inter-Citic has been permitted to begin mining[31]

Photos: A Tibetan nomad in traditional ceremonial dress by Falsalama, nomads grazing herds by anon.

[26] Miehe, G. et al. How old is pastoralism in Tibet? http://www.case.edu/affil/tibet/tibetanNomads/documents/Miehe_how_old_is_pastoralism.pdf
[27] Xinhua. Figures tell Tibet's development in five years - http://news.xinhuanet.com/english2010/china/2011-01/16/c_13693159.htm
[28] EDD DIIR. Environment and Development Issues. Agriculture. - http://www.tibet.net/en/pdf/diirpub/environment/4/chap-3.pdf
[29] China Daily. Party Chief Brings Tibet New Homes. - http://www.china.org.cn/english/government/203051.htm
[30]ICT. Tracking the Steel Dragon. - http://www.savetibet.org/documents/reports/tracking-steel-dragon (continued)

What about the Chinese government's claims that over-grazing is harmful for Tibet's grasslands and is contributing to desertification?

Tibet has the lowest population density in the whole of China, and given that since 1959 Chinese authorities have already repeatedly forced nomads off the lands and decreased livestock allowance, it seems unlikely that over-grazing could still be a problem. There are international studies that suggest that 'over-grazing' on the Tibetan plateau does not exist[32] and that contrarily traditional grazing patterns promote intact, healthy grasslands[33]. Instead factors ranging from climate change to mining the Chinese government's reckless environmental mismanagement during the 'Great Leap Forward' are understood to have more responsibility to bear for the deterioration of Tibet's grasslands[34]. It is no coincidence that Tibet's grasslands have deteriorated since China's occupation and many view the Chinese government's bogus claims part of the sinister ploy to blame to Tibetan nomads for what is ostensibly a problem of their own making.

What are Tibetan nomads doing now they have been 'resettled'?

Many nomads had no transferable skills and poor access to education in the settlement camps. Those who have been resettled have found it difficult to find new jobs, and within resettled nomadic communities, unemployment is high, leading to an increase in social ills such as alcoholism and depression[35]. Furthermore, many resettled nomads face indebtedness. The compensation offered on average is 3000-9000R Yuan per year for a limited amount of time of maximum 10 years, the equivalent value of 1-4 yaks when nomadic families would herd at least 30[36]. Additionally, there are reports about nomads having to pay for the houses that they are supposed to be resettled in, which cost at around 60,000 Yuan. Moreover, studies about nomad resettlement implemented by the Chinese Government in the 1950's and 1980s reveal that post-relocation, many Tibetans have become impoverished[37].

Does the nomadic way of life belong in the past?

The vast majority of nomads only lived a nomadic lifestyle in the summer months, when they grazed their livestock in various areas and settled in one place for the cold winter months. Nomads were largely self-sufficient, and many nomadic families were very wealthy, even up until their forced resettlement in the past twenty years. Although financial incentives were enough to lure many nomadic families to end their lifestyle, others were forced to by local authorities and given minimal compensation for the loss of their herds and livelihood.

Photos: Nomads in Amdo, Tibet living sustainably in tents and with their livestock: Photos by anon. and Vincent Van Den Berg

[31} Buckley, M. Howlers from the Highlands. - http://www.meltdownintibet.com/f_howlers.htm
[32] Harris, R. Rangeland degradation on the Qinghai-Tibetan plateau - http://www.case.edu/affil/tibet/tibetanNomads/documents/Harris_2010.pdf
[33] Klein, J. et al.Experimental Warming, not Grazing -http://www.case.edu/affil/tibet/documents/JuliaKleinpaper.pdf
[34] Isom, J. Indigenous Affairs. Tibet's Nomadic Pastorialists http://www.iwgia.org/graphics/Synkron-Library/Documents/publications/Downloadpublications/IndigenousAffairs/IA%203-4_2009/IA%203_09%20pastoralism.pdf (continued)

Deforestation, Soil Erosion and Desertification

Following the Chinese invasion, huge swathes of Tibet's forests were cut-down for fuel and building materials. These forests were not replanted, exposing the soil to the elements and causing erosion. This erosion is a major factor causing desertification as new plants struggle to grow on the disappearing soil. Desertification is further exacerbated by and has also contributes to climate change on the Tibetan plateau.

What is wrong with using trees for fuel - aren't trees a renewable source of energy?

The sad fact is that much of Tibet's wooded areas were deforested in the years immediately following China's invasion[38]. Exposed to Tibet's tough weather conditions, the soil became eroded and, six decades later, many of the areas once covered with forest no longer have enough topsoil to support the growth of new trees. Deforestation has also led to habitat loss for many animal species. Finally, on steep slopes like those found on the Tibetan plateau, the removal of trees can loosen the bedrock beneath, increasing the likelihood of landslides, which puts local populations at risk.

What is desertification and can anything be done to stop it?

When soil becomes eroded, it can no longer store water and dries up, leading to desertification and uninhabitable land. Desertification can also be triggered by drought, ineffective irrigation and damming and by urbanization[39]. Human development often accelerates the process of desertification. Desertification can spread in much the same way as a colony of bacteria grows, meaning that more and more areas gradually get swallowed up. This can create large areas of uninhabitable land, destroying habitats and leading to rivers drying up.

Although desertification can be mitigated to an extent, it is extremely difficult to stop, and the warming of the Tibetan plateau will speed up the process of desertification. In an attempt to reverse the trend, Tibetans in Tibet are trying to reclaim land lost to desertification with tree planting schemes[40], and the Chinese government claims it too has embarked on mass tree planting schemes in the past three decades[41].

Case Study: Desertification – is the Pika to blame?

The Chinese government has said that one cause of deforestation in Tibet is increasing numbers of rodents including Gerbils and Pika eating grass roots. Several foreign experts however refute these claims, arguing that the Pika is a keystone species[42]. Keystone species are generally 'middle of the food chain' creatures having a disproportionate influence over the ecology of the natural environment in which they live, and which if removed can have devastating effects for the rest of the biodiversity of the region. These experts counter the CCP's claims by saying that the reason for the increased numbers is that their natural predators, including eagles, hawks and leopards have been over-hunted.

The CCP's solutions to their perceived Pika problem have included poisons and contraceptive rodent pills, both of which can cause further damage to the environment[43]. Poisoning of the Pika has lead to the species almost disappearing from some areas, whilst its predators have also died as a consequence. Following the lack of predators, Pika's have been resurgent in some of these areas to the point of being described as a 'plague' by local authorities. Whether or not excess numbers of Pika cause deforestation or not, the whole scenario is another example of the short sighted environmental actions of the Chinese government, and its reluctance to take responsibility for the damage it inflicts on Tibet's environment.

Photo: The 2009 landslides in Drugchu were made worse by the deforestation which was taking place in the area

[35] Fan, M. The Washington Post - http://www.washingtonpost.com/wp dyn/content/article/2008/09/19/AR2008091904053.html
[36] Qingshui, L. Eco- immigr ation Policy... http://www.case.edu/affil/tibet/tibetanNomads/documents/P020090625754439000577.pdf
[37] Robin, F. China Perspectives 2009/3. The "Socialist New Villages" in the Tibetan Autonomous Region...
[38] Winkler, D. Forests, Forest Economy and Deforestation... - http://www.danielwinkler.com/commonwealth_forestry_review_paper.htm
[39] UNCCD - The Causes of Desertification - http://www.unccd.int/publicinfo/factsheets/showFS.php?number=2 (continued)

Glaciers and Permafrost

Tibet is known as the Third Pole for good reason – the vast majority of the plateau is at such high altitude that mountains and their valleys are covered in glaciers. Beneath the surface layer of Tibet's soil lies a frozen layer of sub-soil known as permafrost. However, due to global warming, Tibet's glaciers and permafrost are melting faster than in previous decades, which will cause catastrophic changes to the geography and climate of Tibet and surrounding countries.

How fast are glaciers melting in the Himalayas?

Glaciers melt at different rates depending on their exposure to the sun, their size, and other factors. Some glaciers are melting extremely quickly, while others are still largely intact. Most have been observed to have retreated significantly in recent years, and the melting appears to be accelerating. However, a debate rages on the speed of glacier melting on the Tibetan plateau, which is extremely difficult to measure, model and predict. For example, once a critical threshold is reached, glaciers can melt extremely quickly as water in filtrates cracks in the glaciers. Qin Dahe, the former head of the China Meteorological Administration was quoted by China's state-owned newspaper, the China Daily[44] as saying: *'Temperatures are rising four times faster than elsewhere...and the Tibetan glaciers are retreating at a higher speed than in any other part of the world'*

Is the glacier melting a natural trend or is it caused by human development?

It is partly cyclical as a result of gradual global (natural) warming from the last ice age. However it is becoming increasingly obvious that human development is contributing to and accelerating global warming. Amongst scientists and policy makers, there is a general consensus that as a result of the burning of fossil fuels and over-farming of livestock, there are far more greenhouse gases present in the Earth's atmosphere that contribute to global warming[45]. As such, glacial melting can be attributed to man-made global warming.

Photos: Tibetans living by icy glaciers by Luke Ward and Mount Ami Draker by anon.

[40] Trees for Tibet - www.treesfortibet.com
[41] Xinhua - Tibet's Environment Well Preserved... http://news.xinhuanet.com/english/2009-03/31/content_11105562.htm
[42] Lai, C. & Smith, T. Keystone status of plateau pikas (Ochotonacurzoniae)- www.cspo.org/_old_ourlibrary/documents/PlateauPika&Birds.pdf
[43] Watts, J.Chinese try to curb 'plague of desert rats' in Tibet - www.guardian.co.uk/environment/2009/mar/25/china-gerbils-deserts
[44] Agence France-Presse - http://www.google.com/hostednews/afp/article/ALeqM5g1eE4Xw3njaW1MKpJRYOch4hOdLQ (continued)

What is the effect of climate change on Tibet and the wider region?

In addition to affecting the local ecosystem, the melting of Tibet's glaciers and the Himalayan mountains will initially see a gradual and large increase in the rate of water flow (discharge). For as long as a large amount of glacial ice continues to melt, the rivers rate of discharge will be high. However, once these glaciers have retreated to the point of non-existence, the melt-water, which feeds many of Asia's major rivers will cease to exist, and these rivers will dry up. This will have a huge impact on the millions of people who depend on these rivers, which will increase the overall strain on other rivers and water sources throughout Asia, including China. The complete melting of glaciers and permafrost in the Himalayas and on the Tibetan plateau would turn the majority of Tibet, Nepal and Northern China, India and Pakistan into barren wastelands.

Does the melting of glaciers have a wider, global impact?

The melting of these glaciers and permafrost on the Tibetan plateau will contribute to rising sea levels, which poses a major threat to countries such as Bangladesh and low-lying islands such as the Maldives. As large swathes of South Asia lose their main freshwater sources as a result of glacier melting, causing environmental refugee crisis which will have a huge effect on the areas that they move to especially increasing strain the water and food resources of that area .[46]

Photos: Jensa Thang and prayer flags atop mountains in Khirka County by anon.

[45] IPCC - Climate Change 2007: Synthesis Report - http://www.ipcc.ch/publications_and_data/ar4/syr/en/spms2.html
[46] UNEP. Climate Change And Environmentally Induced Migration - http://www.unep.org/conflictsanddisasters/Policy/DisasterRiskReduction/ClimateChangeAndMigration/tabid/282/language/en-US/Default.aspx

Biodiversity

Tibet's distinctive environment plays host to a unique ecology, containing many plants and animals that exist nowhere else on Earth. The Tibetan plateau contains four distinct ecosystems: forest, scrub, steppe desert and aquatic formations[47]. Since 1959, deforestation and the destruction of habitats have severely damaged Tibet's unique ecology.

How has China's occupation affected Tibet's biodiversity?

The Chinese occupation of Tibet has precipitated with many drastic changes to Tibet's biodiversity. The 'development' of the Tibetan plateau: mining, urbanisation, pollution and damming of rivers has resulted in the destruction of animals' habitats. Immigration and means that animals and humans are now in far closer proximity, and poaching has also increased dramatically. The subsequent changes to Tibet's biodiversity can have further effects on Tibet's environment, putting ecosystems out of balance, which in turn can have a direct impact on the environment.

What efforts are being made to stop poaching and ensure nature conservation on the Tibetan plateau?

Nature reserves do exist in Tibet, however as these areas are often very large and sparsely populated, poaching is extremely difficult to prevent. The establishment of 'nature reserves' is also a political move to forcibly resettle nomads, and to 'develop' the land in partnership with private companies for profit. As Chinese authorities curb traditional, sustainable nomadic way of life, there has also been an increase of mineral resources extraction on these[48] 'nature reserves'. If the Chinese government truly intends to conserve Tibet's natural environment, it is essential that these nature reserves cannot be compromised, and mining etc. cannot occur within them.

In recent years, one of the most notable initiatives to conserve Tibet's biodiversity has come from outside of Tibet. In 2006, the Dalai Lama issued a statement urging Tibetans both inside Tibet and in exile to abandon the traditional Tibetan practice of showing their wealth and status by wearing the furs of wild animals. The wearing of furs by Tibetans in Tibet has dramatically declined and Tibetans in Tibet and abroad held huge bonfires to burn their furs in a show of support for the exiled Tibetan leader, and for his policy of animal conservation[49]. In response to the Dalai Lama's call for an end to wearing furs, the Chinese government ordered the anchors of the Tibetan news to wear fur-trimmed clothes during TV broadcasts[50].

Which species are being threatened by changes to Tibet's ecosystem?

Many species of animals, particularly mammals on the Tibetan plateau are classified as either threatened, vulnerable or endangered, including the Tibetan Bear, Giant Panda, Tibetan Red Deer, Chiru (aka. Tibetan Antelope), Wild Yak, Snow Leopard and Black Necked Crane. In total there are about 40 known species of endangered plants and 141 known species of endangered animals[51].

Photo: A Tibetan Antelope or Chiru, from Wikipedia Commons

[47] Tibet Environmental Watch. Wildlife - http://www.tew.org/wildlife/wildlife.biodiversity.html
[48] International Crane Foundation - http://www.savingcranes.org/black-necked-crane-ecology-study-in-tibet.html
[49] ICT - Tibetans burn wild animal skins in Tibet to encourage wildlife preservation
http://www.phayul.com/news/article.aspx?article=Tibetans+burn+wild+animal+skins+in+Tibet+to+encourage+wildlife+preservation&id=11801
[50] RFA. Tibetan Broadcasters Ordered To Wear Fur -http://www.rfa.org/english/news/tibet_fur-20060428.html (continued)

Why are so many animals under threat?

Poaching remains a big problem on the Tibetan plateau, as illustrated by the film Kekexili: Mountain Patrol [52] --the story of a group of Tibetan volunteers determined to protect Chiru from poachers. Whereas before the Chinese invasion, hunting was condoned only for subsistence, poaching is now commonplace across the Tibetan plateau. The Chinese government sanctions game hunting and permits are sold for hunting specific animals[53].

Many animals, such as the Chiru and Snow Leopard are hunted for their furs, which can fetch high prices in Chinese and foreign markets. Various types of deer, sheep and goats are also hunted for their horns and antlers, which are viewed as 'trophies' by game hunters. Other animals, such as the four species of Musk Deer and Argali found in Tibet are hunted for their use in Chinese medicine[54], perfumes and cosmetics.

Furthermore population growth, increased agriculture, industrialisation and mining and huge numbers of dams being built, there is a huge impact on animals living on and around Tibet's rivers and lakes. The Black Necked Crane is an example of a species being directly threatened by the modification of its habitat - increasing agriculture, drying of lakes and collisions with power lines have all contributed to a declining population, which is now estimated to be only 8,800 to 11,000 cranes[55]. Climate change will undoubtedly trigger further drastic and unexpected changes in Tibet's ecosystem.

Who is poaching in Tibet?

The majority of poachers in Tibet are Han Chinese settlers, however, in recent times some Tibetans have been driven to poaching due to economic marginalisation However, this trend has been curbed since the Dalai Lama called for Tibetans to stop buying and wearing furs of endangered animals such as snow leopards and tigers.

Case Study: The Chiru (aka. Tibetan Antelope)

The Chiru can be found across Tibet, as well as parts of Xinjiang and Ladakh. The Chiru is actually more closely related to wild sheep and goats of the Caprinae family than antelopes, and is the sole species within the Pantholops genus[56], The Chiru has evolved several distinct characteristics to withstand the high altitude and cold climate of the Tibetan Plateau, one of these being a downy undercoat called the 'Shahtoosh'. Shahtoosh is Persian for the King of wools, and the Chiru's Shahtoosh fetches high prices in Chinese and foreign black-markets, with demand being so high that the animal has been hunted relentlessly. Now, approximately only 75,000 remain, down from around 1 million in 1900 . Whilst major international campaigns have been run to try and raise awareness about the real cost of wearing the luxurious Shahtoosh shawl[58], poaching has continued unabated, and the shawls are still sold across India[59] at a high price. Presently, the Chinese and Indian governments are both making efforts to curtail the poaching of Chiru and the smuggling of Shahtoosh fur and shawls. However, corruption, relatively lenient punishments, the continuing market for the shawls mean these efforts have has limited success. Instead the illegal trade in Shahtoosh hair has gone further underground, lowering supply and raising prices, giving poachers even more incentive to hunt the Chiru.

[51] WWF China. Tibet Overview - http://www.wwfchina.org/english/loca.php?loca=79
[52] IMDB. Mountain Patrol http://www.imdb.com/title/tt0386651/
[53] BBC. China's 'Green Eyes' focus on protection - http://news.bbc.co.uk/2/hi/asia-pacific/6157451.stm
[54] Encyclopaedia Briannica - http://advocacy.britannica.com/blog/advocacy/2007/10/traditional-chinese-medicine-and-endangered-animals/
[55] The IUCN Red List of Threatened Speciesä - Grus Nigricollis http://www.iucnredlist.org/apps/redlist/details/143783/0 (continued)

Railways

The 'Qingzang' Railway is the world's highest-altitude railway and connects the Tibet Autonomous Region with Xining and Golmud neighbouring Qinghai (most of which is the Tibetan region of Amdo). The railway is 1956 km long, with over 550km built on permafrost, and was opened on July 1st 2006 by President Hu Jintao. Although undoubtedly a feat of extraordinary engineering, critics claim that railway is little more than a tool of Chinese occupation and will contribute further to Tibet's environmental degradation.

Does the railway have a direct impact on Tibet's environment?

The railway allows both people and goods to be transported into and out of Tibet far quicker and cheaper than before. The Chinese government uses this fact to trumpet that industrial products from other parts of China can be transported into Tibet more easily, which will benefit Tibet's economy. The reality is that the Chinese government is actually far more interested in shipping Tibet's natural resources out of Tibet and into mainland China than "developing" the local Tibetan economy. Additionally, the drastic increase in Chinese settlers and visitors into Tibet puts more strain upon Tibet's fragile environment; more people equals more damage to the environment.

Questions have also been raised about the impact of the railway is having on the migratory habits of animals living on the Tibetan plateau[60]. The Chinese government has taken some steps to try to avoid affecting migratory habits by building passes under the railway tracks allowing animals to pass under the railway. However, whether these passes are being used, or the extent to which animals' migratory habits have been impacted are both largely unknown and no independent research and assessment has been allowed as of yet.

The exact extent of the impacts of the railway upon Tibet's environment are hard to gauge, but it is fair to say that it acts as a catalyst to environmental degradation in that it enables more minerals etc. to be extracted from Tibet, accelerating mining and industrialisation as well as immigration. However, the long-term stability of the railway itself faces challenges from the impacts of climate change on the Tibetan Plateau. The Chinese Meteorological Administration has raised concerns that the railway could be severely damaged by the melting of the permafrost on which it is built, as the railways foundations are laid deep in the permafrost[61].

Photo: Work being done in a tunnel on the Golmud railway

[56] The IUCN Red List of Threatened Speciesä - Pantholops hodgsonii http://www.iucnredlist.org/apps/redlist/details/15967/0
[57] IFAW. Tibetan Antelope - http://www.ifaw.org/ifaw_united_states/save_animals/other/tibetan_antelope.php
[58] WWF. Wildlife Trade - Tibetan Antelope (Chiru) - http://www.worldwildlife.org/what/globalmarkets/wildlifetrade/buyersbeware-antelope.html
[59] Endangered Species Handbook - Tibetan Antelope. http://www.endangeredspecieshandbook.org/trade_tibetan.php
[60] CTA DIIR. China's Railway Project: Where will it take Tibet? - www.tibet.net/en/pdf/diirpub/environment/2/rail_report.pdf (continued)

Does the railway not benefit the local Tibetan population?

The railway was widely trumpeted by the Chinese government for assisting Tibet's economic development. Whilst it has undoubtedly made travel across the Tibetan plateau accessible for a large number of people, including Tibetans, the truth is that the main beneficiaries of the railway are the Chinese government. For the Chinese government the railway is the ultimate tool to solidify their control over Tibet- they can profit from increased tourism, steal Tibet's mineral resources and fossil fuels more easily and inundate Lhasa (Tibet's capital) with soldiers at the slightest hint of an uprising. Finally, the railway facilitates the flood the area of Chinese settlers to Tibet, providing further economic competition to Tibetans. Settlers could potentially outnumber Tibetans in Tibet within fifty years, further diluting Tibet's culture and language.

Are there plans to extend the railway?

In 2008, the Chinese government confirmed they were extending the Qingzang railway with six new rail-lines. The first of these is an extension of the railway from Lhasa to Zhangmu on the Nepalese border at the request of the Nepalese government, and the Chinese government aims to have it completed by 2013[62]. In recent years, Nepal has become increasingly dependent on Chinese exports and conditional financial aid. The Nepalese government in return has harshly cracked down on the activities of Nepal's large Tibetan exiled community, and has in recent years frequently handed over refugees fleeing from Tibet to Chinese authorities[63], in direct violation of the Geneva Convention. In 2010 and 2011, Nepal even prevented Tibetans from voting in elections for the Tibetan Government in Exile[64].

Additional lines are being constructed from Lhasa to Nyingchi and Shigatse (both in Ü-Tsang / Chinese: Tibet Autonomous Region), from Golmud (in Amdo / Chinese: Qinghai) to Chengdu (Gansu), Dunhuang (Gansu) and Kuerle (Xinjiang or East Turkestan)[65]. The Chinese government aims to have all of these lines in operation by 2020. Many in India are also worried that the railway will one day be extended in the direction of the Indian border, allowing the CCP to rapidly bring troops, weapons and supplies to the border in the event of war.

Photos: The railway has brought in heavy Chinese influence (photo: Jim McGill) and allows the Chinese state to swamp the streets with troops

[61] Reuters- www.reuters.com/article/2009/05/06/us-china-climate-tibet-idUSTRE5451IM20090506?feedType=RSS&feedName=environmentNews
[62] Zee News. China to link Nepal with Tibet railway line - http://www.zeenews.com/news438911.html
[63] Times of India - http://articles.timesofindia.indiatimes.com/2010-12-19/south-asia/28223663_1_tibetan-refugees-tibetan-way-nepal-and-tibet
[64] Sharma, http://articles.timesofindia.indiatimes.com/2011-03-22/india/29174445_1_tethong-and-tashi-wangdi-tibetan-parliament-jampal-choesang
[65] Dingding, X. China Daily. Qinghai-Tibet railway to get six new lines - http://www.chinadaily.com.cn/china/2008-08/17/content_6943311.htm

Development, Immigration and Human Rights

As the Chinese government proudly proclaims[66], Tibet is undoubtedly undergoing rapid economic development, and Chinese settlers are flooding into Tibet to take advantage of the opportunities arising there. However, this influx is taking a serious toll on Tibet's environment, and the economic development benefits the Chinese government and companies at the expense of the Tibetan people. Tibetans who have spoken out about Tibet's environment have been swiftly and harshly punished as China seeks to silence any dissent. Meanwhile, Chinese authorities are aggressively portraying Tibet as a pristine tourist destination.

Surely economic development and modernisation in Tibet is a good thing?

Tibetans want economic development but only if they have a say over this development, which they have been denied under Chinese rule. The majority of Tibetans are seeing little to no benefits from China's 'development' in Tibet. Furthermore, state-controlled development is no compensation for the loss of Tibetans freedoms and basic human rights. The influx of migrants from across China, and the enforced predominance of Mandarin as the language of commerce mean that Tibetans are increasingly marginalised.

This inequality is underscored by the Chinese government's attempts to undermine the importance and usage of the Tibetan language in schools and universities, triggering mass protests in Eastern Tibet in 2010.[67] As Tibetans' fight for the very survival of their language, culture and identity, they are also fighting for the survival of the environment that their ancestors conserved for centuries, and that is under threat by China's 'economic development'.

The Tibetan Plateau is massive; surely it can support any number of Chinese immigrants who move there?

Due to Tibet's unique geography and elevation, its environment is actually far more fragile than its rugged terrain would suggest. The harsh weather conditions and limited rainfall combined mean that many crops cannot be grown on the Tibetan plateau. This is why the Tibetan diet has consisted largely of resilient crops such as barley, which when roasted is called Tsampa, a staple food for Tibetans. Following the Chinese invasion, the additional food required for the large occupying army put great strain on the population of Lhasa and the surrounding countryside[68].

Even today, there is competition for use of land, water and resources as exemplified by the government's displacement of nomads. Much of Tibet's food has to be imported from China and abroad demonstrating that as far as humans are concerned, the carrying capacity of the Tibetan plateau has probably already been exceeded. This issue is further compounded by the additional strain of tourism, which despite political unrest in recent years has been growing steadily over the past two decades. The majority of these tourists are from within China, and local authorities are hoping rising numbers of tourists continue, aiming to attract 15 million tourists by 2015[69]. Ultimately, unmitigated 'development' is already causing widespread damage to Tibet's environment. As the Chinese government seeks to further develop Tibet's resources, industrialisation and tourist industry, serious concerns must be raised about the damage inflicted by the increased number of people living on and visiting the plateau.

Photo: A stand-off between troops and Tibetans protesting against mining in Markham in 2009

[66] Xinhua. Report on Economic and Social Development of Tibet - http://news.xinhuanet.com/english/2009-03/30/content_11098888.htm
[67] Wong, E. The New York Times - Tibetans in China Protest Proposed Curbs on Their Language
http://www.nytimes.com/2010/10/23/world/asia/23china.html
[68] Shakya, T. Dragon in the Land of Snows
[69] Xinhua. Tibet look to attract 15 million tourists in 2015. -http://news.xinhuanet.com/english2010/travel/2011-01/14/c_13690712.htm

Why shouldn't Western companies become involved in Tibet?

Tibet is an occupied country, and the occupying Chinese authorities have inflicted unimaginable suffering on the Tibetan people. Hundreds of thousands have been killed, and many more have been imprisoned and tortured. The Chinese government is trying to eradicate Tibet's religion and culture, and destroy Tibetans ethnic identity. The Chinese government is trying to make political and economic gains by exploiting Tibet's environment and rich natural resources. Western companies who become involved in Tibet are risking their own investments due to the Chinese government being notoriously difficult to work with and they are also risking their company's reputation. More importantly, they are disregarding their ethical obligations in the pursuit of financial gain and are directly assisting in the oppression and exploitation of the Tibetan people.

How are human rights connected to the environment?

Chinese and Tibetan activists have been increasingly vocal about environmental issues in both Tibet and China in recent years. The Chinese government has come down harshly on environmental activists, in cluding both Chinese dissidents such as Hu Jia and the Tibetan writer Dolma Gyab, arrested for writing books critical of Chinese rule in Tibet and the environmental impacts of China's occupation. The Chinese government will not tolerate criticism in any form, even from those who are solely campaigning for a cleaner, safer environment. The violent suppression of Tibetans campaigning against mining in their areas in recent years, particularly with the murder of four Tibetan protesters in Kardze in 2010 shows how the Chinese government prioritises profit over both human rights and the environment.

Case Study: Karma Samdrup, Rinchen Samdrup and Chime Namgyal

In 2010 the imprisonment of brothers Karma Samdrup, Rinchen Samdrup and Chime Namgyal received worldwide press coverage. Karma Samdrup was sentenced to years imprisonment, Rinchen Samdrup five years, and Chime Namgyal is currently serving 21 months in a labour camp. Karma Samdrup is a prominent, widely respected businessman and philanthropist, renowned for his conservationist work. In 2006, he was named state philanthropist of the year by the state broadcaster CCTV (China Central Television), and has been repeatedly recognised for his environmental work, having founded the Three Rivers Environmental Protection Group with his two brothers, Rinchen Samdrup and Chime Namgyal[70].

Rinchen Samdrup and Chime Namgyal were arrested in August 2009 after they accused officials in Eastern Tibet of poaching. Karma Samdrup, whose business interests included antiques, was arrested in January 2010 on trumped up charges of 'grave robbing' - charges that had previously been dropped in 1998. It is widely accepted that imprisonment resulted from angering local authorities for his work relating to environmental issues and campaigning for his brothers' release. Similarly, the crimes Chime Namgyal and Rinchen Samdrup were imprisoned for made no reference to their accusations, and the two were instead charged with 'endangering state security' and 'splittism' respectively. Three of their cousins have since been arrested after campaigning for their release[71].

Photos: Karma Samdrup, Rinchen Samdrup and Chime Namgyal

[70] Ramzy, A. TIME. China Tightens Grip on Tibet's Business Class - http://www.time.com/time/world/article/0,8599,2011548,00.html
[71] Free Tibet. Karma and Rinchen Samdrup and Chime Namgyal - http://www.freetibet.org/campaigns/political-prisoners-0

Where Do We Go From Here?

How can I help?

1) Petition companies involved in Tibet to immediately halt their operations. Learn more at: http://www.StopMiningTibet.com.
2) Lobby your local Members of Parliament/Congressional Representatives/Senators etc. to raise concerns about the destruction of Tibet's environment with the Chinese government.
3) Reach out to other groups and individuals in your community to raise awareness and support for SFT's environmental campaigns. Organize a joint talk/film related to Tibet's environment with local environmental groups. Highlighting the importance of Tibet's environment is a great way to get people interested in the wider Tibet movement.

What should the Chinese government do?

1) The Chinese government must immediately commit to meaningful negotiations to bring about a just and lasting resolution for Tibet, including the transfer of decision-making power over decisions relating to Tibet's environment.
2) In the short-term, the Chinese government must ensure that the Tibetan people are key decision-makers in any future developments in such as mining and dam building,
3) All those who have been displaced or otherwise suffered as a result of mining and construction of dams and China should be properly compensated and if applicable (and in the case of Tibetan nomads) allowed to return to their ancestral lands.
4) China must consult with nations' downstream from Tibet before building any more dams, and should provide aid and assistance to downstream communities whose lives have been affected by existing dams.
5) Above all else, the Chinese government must put Tibet's environment before short term profit, otherwise the long term damage will be felt by Tibetans, and Tibet's neighbouring countries, especially China.

What can the global community do?

1) Global pressure is required to ensure that the Chinese government is held accountable for the damage inflicted on Tibet's environment and the Tibetan people.
2) Governments and organizations such as the United Nations must support the Dalai Lama and the Tibetan Government-in-Exile's calls for conservation and sustainable development on the Tibetan plateau.
3) Tibet's environment must be raised at every forum dealing with transnational environmental issues, and the Tibetan people must be recognized as the stewards of the Tibetan plateau.

Photos: Tibet supporters can help by opposing Chinese government policies

‘Roof of the World’
A report by Students for a Free Tibet