



INTERNATIONAL CAMPAIGN FOR TIBET

BRIEFING PAPER

Tibet-Informed Recommendations for the Post-2020 Global Biodiversity Framework

Read online: <https://savetibet.org/ict-briefing-recommendations-for-next-global-biodiversity-framework>

March 13, 2020

Summary

The Tibetan plateau is increasingly threatened by the impacts of climate change and needs a rights-based approach to environmental management so that the plateau may continue as a unique ecosystem supporting biodiversity and providing valuable ecosystem services for the at least 1.3 billion living in the Himalayan river basins.

As home to over 45,000 glaciers, the source of Asia's eleven great rivers and key component of the Asian monsoon system, the Tibetan plateau is of regional importance. The Tibetan plateau is also rich in biodiversity, encompassing three biodiversity hotspots – defined as the earth's most biologically rich, but threatened terrestrial regions. The conservation of the Tibetan plateau's biodiversity ensures ecosystems are more stable, productive and resilient to environmental stress. Biodiverse ecosystems also ensure the healthy provision of the ecosystems services and natural resources that we rely on.

The Tibetan plateau is, however, threatened by climate warming, lack of scientific data, blind infrastructure development, and a lack of locally defined responses. The creation of protected areas, such as nature reserves, is questionable, as their top-down approach ignores key areas of biodiversity and excludes local knowledge and people at the cost of the wellbeing of both residents and the environment.

With these elements in mind, and in view of the zero-draft of the Post-2020 Global Biodiversity Framework, we set out general and specific recommendations. We specifically recommend more attention be given to: addressing the drivers of biodiversity loss, fostering diverse visions of good quality of life, streamlining the rights-based approach, developing more detailed responsibility and transparency mechanisms, and the strengthening of the draft monitoring framework.

The International Campaign for Tibet (ICT) advocates for a rights-based and environmentally conscious approach to human development and governance on the Tibetan plateau. As argued by the former Special Rapporteur on human rights and the environment, John Knox, we also believe: “Environmental harm interferes with the enjoyment of human rights, and the exercise of human rights helps to protect the environment and promote sustainable development”.¹

Through our work on Tibet, we have observed the concerning impacts of climate change on the Tibetan plateau, from glacial melt, loss of permafrost, grassland degradation and biodiversity loss to extreme weather conditions. We recognize a need to advocate for a rights-based approach to the environment on the Tibetan plateau, so that the plateau may continue as a unique ecosystem supporting biodiversity, the monsoon system, soil nutrient flows to downstream agricultural plains, and the eleven major rivers of South and East Asia.

The Tibetan Plateau

The Tibetan Plateau is a distinct geographical region located at least 4,000m above sea level, spanning 2.5 million square kilometers and constituting one quarter of the People’s Republic of China (PRC).² The boundaries of the plateau roughly aligns with the borders of historical Tibet, which have, under Chinese occupation, been split into the Tibet Autonomous Region (TAR) and various Tibetan Autonomous prefectures and counties within the Chinese provinces of Qinghai, Gansu, Sichuan and Yunnan. Under these new boundaries, at least half the Tibetan population and land is now located outside the Tibet Autonomous Region, the region which China calls ‘Tibet’.³ This briefing, however, defines Tibet as historical Tibet.

Since the occupation of Tibet by the PRC in 1949/50, China has re-engineered the Tibetan landscape through infrastructure construction, resource extraction, nomad relocation and enclosed parks. This has expanded the human footprint and significantly altered the ecosystem.

The Tibetan plateau is home to over 45,000 glaciers.⁴ The plateau is of regional importance, because it is the source of Asia’s eleven great rivers and plays a prominent role in generating the Asian monsoon system. At varying degrees and times, about 1.3 billion people living in the Himalayan river basins rely on both meltwater and monsoon waters to sustain their livelihoods.⁵ Environmental inaction in Tibet will impact both Tibetans and the wider region, which relies on Tibet’s role as a source and channel distributing water, nutrition and temperature flows.

The Tibetan plateau faces four major challenges: climate change, lack of scientific data, blind infrastructure development, and a lack of locally defined responses. The Plateau is at the frontline of

¹ Normal United Nations Human Rights Council, 24 January 2018, ‘Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment’ (A/HRC/37/59), <https://documents-dds-ny.un.org/doc/UNDOC/GEN/G18/017/42/PDF/G1801742.pdf?OpenElement>, page 7.

² Josephine Ma, 11 March 2009, ‘The double-edged sword of ‘Greater Tibet’, South China Morning Post, <https://www.scmp.com/article/672872/double-edged-sword-greater-tibet>.

³ According to the 2010 census, about half of the Tibetan population lives outside the TAR. See Voice of America, 20 June 2014, ‘Beijing: Tibetan Population Actually over 7 Million’, <https://www.voatibetanenglish.com/a/1940971.html> and Xinhua, 4 May 2011, ‘Tibet’s population tops 3 million’ 90% are Tibetans’, http://www.gov.cn/english/2011-05/04/content_1857538.htm.

⁴ Reuters, 16 January 2009: ‘Tibetan glacial shrink to cut water supply by 2050’, <http://www.reuters.com/article/us-glaciers/tibetan-glacial-shrink-to-cut-water-supply-by-2050-idUSTRE50F76420090116>.

⁵ Ibid., Reuters, 2009.

climate change with temperatures rising at least twice as fast as the global average.⁶ This is expected to increase the frequency and intensity of extreme weather conditions such as snowstorms and floods.⁷ Despite these serious environmental risks, very little is known about the plateau's unique ecosystem, its dynamics, and the processes affecting it. Due to geographic and political barriers to access, the region is known as a "white spot" – an area for which there are "little to no data".⁸ The lack of scientific data and knowledge poses serious risks for future generations, as it limits the development of predictions and policies to adapt to anticipated changes in the Himalayan region.⁹

Large infrastructure projects such as rail lines, roads, power grids, dams and mining sites are further expanding the human footprint with little awareness of the impact on the local environment and neighboring countries.

In such conditions, Tibetans' local knowledge, practices (such as nomadic, seasonal and communal grazing) and traditional beliefs (rooted in animist Bon and Buddhist belief) that espouse non-violence and mountain and lake worship make them ideal stewards for navigating new challenges to the ecosystem. They are however dismissed as political dissidents and not consulted when designing responses.

Biodiversity in Tibet

Biodiversity is the variability among living organisms at the ecosystem, species, and genetic level.¹⁰ More biodiverse ecosystems are more stable, productive and resilient to environmental stress. Therefore, in conserving biodiversity, we ensure the healthy functioning of ecosystems, and thereby, the provision of the ecosystem services (e.g. water retention, soil retention, sand storm prevention, and carbon sequestration)¹¹ and natural resources that we rely on. Biodiversity is globally threatened by rising human populations, deforestation, urbanization, the spread of invasive species, and climate change.¹²

The Himalayan region and Tibetan plateau is rich in biodiversity, sitting at the intersection of three biodiversity hotspots – defined as the Earth's most biologically rich, but threatened terrestrial regions.¹³ The three biodiversity hotspots are the Himalaya, mountains of southwest China, and Indo-Burma (see image 1). Each region has at least 1,500 endemic vascular plants – not found elsewhere on the planet – and has 30% or less of its original natural vegetation.¹⁴

⁶ The Tibetan plateau is warming up at an average of 0.4 degrees Celsius a decade. See The Huffington Post, 13 December 2016: 'Climate change is melting 'The roof of the world'', http://www.huffingtonpost.com/entry/tibet-melting-glaciers-avalanches_us_584e552de4b04c8e2bb061ee.

⁷ The Hindu: Business Line, March 23, 2014, 'Global warming reaches Tibet; extreme weather on plateau', <https://www.thehindubusinessline.com/news/world/Global-warming-reaches-Tibet-extreme-weather-on-plateau/article20740057.ece>.

⁸ USAID (2010). Malone, E.L. Changing glaciers and hydrology in Asia addressing vulnerabilities to glacier melt impacts, http://pdf.usaid.gov/pdf_docs/PNADU628.pdf.

⁹ United Nations Environment Programme: Environmental Change Hotspots, September 2012: 'Measuring glacier change in the Himalayas', https://na.unep.net/geas/getUNEPPageWithArticleIDScript.php?article_id=91.

¹⁰ Ibid., United Nations Environment Programme, 2012.

¹¹ Xu et al, 14 February 2017, 'Strengthening protected areas for biodiversity and ecosystem services in China', Proceedings of the National Academy of Sciences of the United States of America, Vol. 114, No. 7, pages 1601-1606, page 1602 and 1604.

¹² Subodh K. Sharma and Amir Bashir Bazaz, 18 October 2012, 'Sustainable Management of Biodiversity in the Context of Climate Change-issues, Challenges and Response', Proceedings of the National Academy of Sciences, India Section B: Biological Sciences, Vol. 92, pages 251-260.

¹³ Critical Ecosystem Partnership Fund, 2019, 'What is a biodiversity hotspot?,' <https://www.cepf.net/our-work/biodiversity-hotspots/hotspots-defined>.

¹⁴ Ibid., Critical Ecosystem Partnership Fund, 2019.

Image 1: Three Biodiversity Hotspots of Tibet



Source: Critical Ecosystem Fund, 2020, <https://www.cepf.net/node/1996>.

Tibet has both ecosystem and species diversity. The Tibetan plateau is characterized by four large ecosystems: montane forest, alpine shrub/meadow, alpine steppe, and alpine desert.¹⁵ The diverse ecosystems and their interfaces provide favorable conditions for species conservation, young species differentiation, as well as for mixing.¹⁶ The region has over 12,000 species of vascular plants, 5,000 species of epiphytes (organisms that grow on plants), 210 species of mammals, 532 species of birds, and 115 species of fish.¹⁷

The plateau's isolation and distinct ecosystems also result in many endemic and also endangered species. At least 23 plants are endemic to the Tibetan Plateau.¹⁸ Most of the gymnosperm (seed-producing plants) of the plateau are rare and endangered species growing only in the middle reaches of the Yarlung Tsangpo River valley.¹⁹ The plateau also has diversity in its gene pool. For example, there are a total of 5 cultivated subspecies and 260 varieties of barley in Tibet, as well as three subspecies and 83 varieties of wild wheat.

The region is also unique for its animal life, which includes the giant panda, Tibetan blue bear, Tibetan antelope, wild yak, Tibetan wild ass, Tibetan rabbit, Himalayan marmot, dark-lip pika, and birds such as the Tibetan eared pheasant and the Tibetan partridge.²⁰ While it is difficult to source an authoritative figure on the number of endangered animals in the Tibetan plateau, early 2002 figures suggest at least 30 mammal species, 38 avian species, 1 reptile and 4 amphibian species were endangered.²¹ Table 1 provides a list of at least 16 near threatened, vulnerable or endangered species on the plateau as defined by the International Union of Conservation of Nature (IUCN). We note, this is not an exhaustive list.

¹⁵ Zhang Bai-ping, Chen Xiao-dong, Li Bao-lin, and Yao Yong-hui, 2002, 'Biodiversity and conservation in the Tibetan Plateau', *Journal of Geographical Sciences*, Vol. 12, No.2, pages 135-143, page 136.

¹⁶ *Ibid.*, Zhang et al, 2002 page 138.

¹⁷ Wu and Feng in *Ibid.* Zhang et al, 2002, page 138.

¹⁸ Wang Jinting, 2000, in *Ibid.*, Zhang et al, 2002, page 139.

¹⁹ *Ibid.*, Zhang et al, 2002, page 139.

²⁰ *Ibid.*, Zhang et al, 2002, page 139.

²¹ Li Bosheng, 1994 in *Ibid.*, Zhang et al, 2002, page 140.

Table 1: IUCN Red List of Threatened Species in The Tibetan Plateau²²

	Status on the IUCN red list	Last assessed
Birds		
Black-necked crane	Vulnerable	2016
Giant Babax	Near threatened	2016
Tibetan Eared-pheasant	Near threatened	2016
Tibetan Bunting	Near threatened	2016
Tibetan eared pheasant	Near threatened	2016
White eared pheasant	Near threatened	2016
Mammals		
Alpine musk deer	Endangered	2014
Black snub-nosed monkey	Endangered	2008
Snow leopard	Vulnerable	2016
Giant Panda	Vulnerable	2016
Wild Yak	Vulnerable	2016
Tibetan antelope (chiru)	Near threatened	2016
Milne-edwards' Macaque	near threatened	2008
Tibetan gazelle	Near threatened	2016
Tibetan red deer	data deficient	2003
Amphibians		
Tibetan frog	Near threatened	2004
Asiatic black bear	Vulnerable	2016
Alpine stream salamander	Vulnerable	2014

To conserve the environment and address biodiversity loss, the Chinese government has established a system of nature reserves, which covers 15.1% of China's land surface; the Qinghai-Tibetan region accounts for 61.2% of the reserve area (See image 2). The 47 nature reserves in Tibet have largely focused on the Changtang plains, which make up 25% of the total plateau area and only 10% of the species. In contrast, the Himalayan and Hengduan mountain regions account for 20% of the total area and contain over 80% of the species.²³ There is, therefore, a mismatch in the nature reserve network and biodiversity representation. In addition, according to research by Xu et al, China's system of

²² International Union of Conservation of Nature (IUCN) Red List of Threatened Species, 2019, <https://www.iucnredlist.org/>.

²³ Ibid. Zhang et al, 2002, page 138. As of 2015, there were 47 nature reserves in Tibet, which accounted for 34.35% of the Tibet Autonomous Region.

natural reserves primarily focuses on mammal and bird protection but lack adequate attention to plants, amphibians, and reptiles.²⁴

The nature reserve network also fails to capture the areas for ecosystem services, such as regions that are critical for water retention, soil retention, sandstorm prevention, carbon sequestration and integrated ecosystem services.²⁵ It is questionable how effective nature reserves have been in conserving biodiversity, especially in nature reserves (such as the Chomolangma [Ch: Qomolangma], Kongpo [Ch: Gongbu], and Markham [Ch: Mangkang] Nature Reserve for Yunnan Golden Monkey) which have major roads passing through them.²⁶ Further research on biodiversity and ecosystem services are needed as well as policies to remove human activities such as mining, infrastructure projects such as roadways, villages and towns.²⁷

Notably, the PRC's regulations on nature reserves ban such activities as grazing or gathering medicinal herbs in relevant areas,²⁸ thereby prohibiting traditional economic activity by Tibetan nomads and herders. As a result, the economic status of Tibetan herders and nomads is severely undermined. Since the 1980s²⁹, state policies have sought to move pastoral nomads from their grasslands under the guise of grassland preservation and human development. Based on available data, at least 1.8 million nomads have been resettled into sedentary houses under various Chinese policies.³⁰ Many of these resettled nomads have been moved to create new nature reserves. Loss of livelihoods, and importantly, loss of local communities' knowledge in protecting wildlife and nature, and of cultural diversity are direct consequences.

²⁴ Op. Cit., Xu et al, 2017, pages 1602 and 1604.

²⁵ Ibid., Xu et al, 2017, page 1603.

²⁶ Shicheng Li, Jianshuang Wu, Jian Gong, and Shaowei Li, 20 November 2017, 'Human footprint in Tibet: Assessing the spatial layout and effectiveness of nature reserves', *Science of the Total Environment*, Vol. 621, April 2018, Pages 18-29.

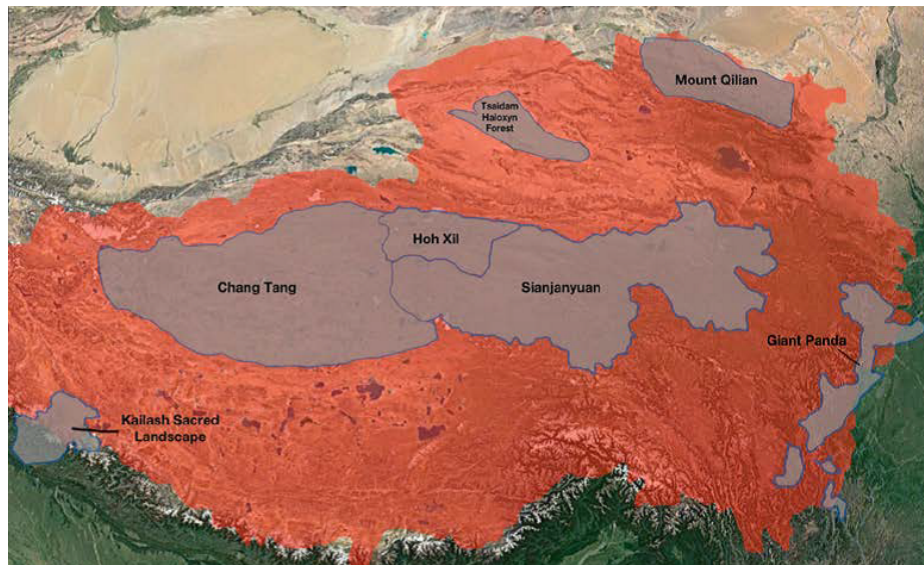
²⁷ Ibid., Li et al, 2017, page 25.

²⁸ See Art. 26 of the State Council of the People's Republic of China, 1994, 'Regulations of the People's Republic of China on nature reserves', http://en.chinaculture.org/library/2008-01/07/content_21464_4.htm.

²⁹ Emily T. Yeh, *Environmental Issues and conflict in Tibet*, Hillman and Tuttle (eds.), 2016, 'Ethnic Conflict and Protest in Tibet and Xinjiang: Unrest in China's West', Columbia University Press, Page 154.

³⁰ China Daily, 6 July 2012: 'Over 1 million Tibetan nomads choose settlement', http://www.chinadaily.com.cn/china/2012-07/06/content_15555645.html; Xinhua, 1 December 2012: 'Massive nomad settlement to protect "mother river"', <http://en.people.cn/90882/8041990.html>; The China Daily states over 270,000 nomadic herders have been settled between 2009 and 2012. See China Daily, 6 July 2012: 'Over 1 million Tibetan nomads choose settlement', http://www.chinadaily.com.cn/china/2012-07/06/content_15555645.htm; and Central People's Government of the People's Republic of China, 5 December 2009, '青海3万多户农牧民迁新居：“小财政”托起“大民生”[Ch. 'Qinghai san wan duo hu nong mu min qian xinju: "xiao caizheng "tuoqi" da minsheng', 'More than 30,000 farmers and herders in Qinghai moved to their new homes: microfinance support the people's livelihood], http://www.gov.cn/jrzq/2009-12/05/content_1481036.htm; Li Yang, 7 August 2015, 'Families moving into the modern era', China Daily, http://www.chinadaily.com.cn/china/tibet50years/2015-08/07/content_21525294.htm.

Image 2: Map of Protected Areas in Historical Tibet



Source: Australia Tibet Council, June 2019, 'An iron fist in a green glove: emptying pastoral Tibet with China's national parks', https://www.atc.org.au/wp-content/uploads/2019/06/An-Iron-Fist-in-a-Green-Glove_online.pdf.

Request for Action: Post-2020 Global Biodiversity Framework

We believe the biodiversity challenges facing the Tibetan plateau offer insights into what is needed to shape a practical, inclusive, and accountable Post-2020 Global Biodiversity Framework (GBF). In particular, we believe the new global framework offers an opportunity to shape a binding vision with, for the first time, a compliance mechanism in global environmental management. In particular, we see the GBF as a new mechanism that can institutionalize and operationalize the rule of law, participatory development, transparent government, and compliance and accountability.

As a civil society organization supporting the 2050 vision to achieve a world living in harmony with nature, we believe the GBF should include:

1. clear and binding targets set out in national biodiversity strategies and action plans,
2. full, effective and equitable inclusion of civil society, including indigenous peoples and local communities in recognition of their rights in the implementation of the framework,
3. biodiversity values and targets clearly streamlined across all national and local development policies,
4. adoption of the 2030 Agenda for Sustainable Development to help create enabling conditions for the implementation of the GBF,
5. transparency and accountability mechanisms that ensure public access to information, and periodic reporting on progress and challenges identified by governments, indigenous peoples and local communities, civil society groups, and multilateral environmental agreements.

More specifically, and in view of the zero-draft, we believe more emphasis needs to be added in areas of:

- Addressing the drivers of biodiversity loss:³¹ One key experience from the Aichi Biodiversity targets and the Strategic Plan for Biodiversity 2011-2020 was to increase the efforts to address the drivers of biodiversity loss. The GBF does not sufficiently address the drivers of the biodiversity loss, such as national investments in urbanization, mining, dam building, and other development projects that expand human footprints in fragile regions. While the 2030 action targets do include provisions to “reduce by 2030 pollution from excess nutrients, biocides, plastic waste and other sources by at least 50%”³², and “eliminate subsidies that are most harmful for biodiversity”, in economic and regulatory incentives, more explicit activities should be outlined.³³
- Fostering diverse visions of good quality life: We commend the inclusion of this action target number 20.³⁴ We however believe more emphasis should be added to the recognition of diverse visions of maintaining ecosystems diversity. For example, it is important to recognize that ecosystem diversity is inclusive of cultural diversity, as ecological process are related to the local cultural practices. We therefore encourage more language that promotes locally adapted responses to biodiversity risks, rather than top-down blanket policies such as protected areas which exclude local residents like that outlined in action target 4.
- Adopting a rights-based approach: In the introduction to the GBF, paragraph 7 states that the Framework “will be implemented taking a rights-based approach and recognizing the principle of intergenerational equity”.³⁵ This language needs to be more streamlined throughout the framework, so that the methodology facilitates the adoption the Sustainable Development Goals Agenda (which is primarily rights-based).
- Responsibility and transparency mechanisms: We believe that the mechanisms for transparency and accountability need to be further articulated with respect to frequency of reporting, obligations and right of non-government bodies to request clarification on reporting. We, therefore, encourage you to cautiously await guidance on additional mechanisms to be provided by the Subsidiary Body on Implementation at its third meeting.³⁶
- Draft monitoring framework for the 2030 Action targets: The suggested elements for monitoring action target 20 to “promote of the full and effective participation of indigenous peoples and local communities” in decision making related to the conservation and sustainable use of biodiversity should include a measure for the change in number of countries who provide evidence of national laws that protect and have been successfully invoked by marginalized civil society groups seeking equitable participation and rights.³⁷

³¹ See section I, paragraph 8(b) of the ‘Zero Draft of the Post-2020 Global Biodiversity Framework’, 6 January 2020, (CBD/WG2020/2/3), <https://www.cbd.int/doc/c/efb0/1f84/a892b98d2982a829962b6371/wg2020-02-03-en.pdf>, page 3.

³² See Annex 1: The post-2020 Global Biodiversity Framework, paragraph 12, a(2) and a(4).

³³ Ibid., Annex 1: The post-2020 Global Biodiversity Framework, paragraph 12, c (12).

³⁴ Ibid., Annex 1: The post-2020 Global Biodiversity Framework, Section II, D) 2030 action targets.

³⁵ See Annex 1: The post-2020 Global Biodiversity Framework, Section I, paragraph 7.

³⁶ See Annex 1: The post-2020 Global Biodiversity Framework, Section G.

³⁷ See Appendix 2 of the ‘Zero Draft of the post-2020 Global Biodiversity Framework’, 6 January 2020, (CBD/WG2020/2/2/Add.1), <https://www.cbd.int/doc/c/2c69/df5a/01ee87752c3612d3ba7ec341/wg2020-02-03-add1-en.pdf>, page 16.

Additional Issues for Debate

At the first open-ended Working Group in August 19, 2019, the potential conflict between biodiversity and the right to development was raised by several countries. China explicitly emphasized the importance of the right to development and implied that development could be preferred over biodiversity concerns in some cases. While development and human progress are important for all countries, progress is not positive if it ignores the limitations of one's environmental resources and the long-term needs of the people who live off the land.

In addition, many developing countries noted the negative relationship between poverty and biodiversity. While this can be true, it is equally important to note that poverty does not always result in a loss of biodiversity. In addition, how one defines poverty matters (whether according to cash or asset wealth). For example, many nomadic Tibetans before so-called 'development' lived in harmony with the land because they depended on the health of the land to survive. The nomads who have been 'developed' by being settled into concrete houses and forced to give up their animals have been on average financially worse off, in poorer health and less happy, and with questionable environmental benefits.



International Campaign for Tibet (ICT) | 1825 Jefferson Place NW | Washington, DC 20036 | United States of America
Phone: (202) 785-1515 | Fax: (202) 785-4343 | info@savetibet.org

ICT Europe
Funenpark 1D | 1018 AK
Amsterdam, The Netherlands
Phone: +31 (0)20 3308265
Fax: +31 (0)20 3308266
icteurope@savetibet.nl

ICT Deutschland e.V.
Schönhauser Allee 163 | 10435
Berlin, Germany
Phone: +49 (0)30 27879086
Fax: +49 (0)30 27879087
info@savetibet.de

ICT Brussels
11, rue de la linière | 1060
Brussels, Belgium
Phone: +32 (0)2 609 44 10
Fax: +32 (0)2 609 44 32
info@save-tibet.eu