ONE HUNDRED AND EIGHT THINGS YOU CAN DO TO HELP THE ENVIRONMENT

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for Kagyu Monasteries and Centers

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TEN THINGS YOU CAN DO TO MAKE A DIFFERENCE...

- 1. **Make aspiration prayers.** We make aspiration prayers for all sentient beings. This should also include the Earth, which sustains us and gives us life. We can pray for a more harmonious world where humans recognize how their actions have harmed the Earth and change their behavior.
- 2. Read, discuss, and develop an understanding of environmental issues and how they affect you and your community.
- 3. Go vegetarian. Not only will you practice compassion for all sentient beings, but you will decrease the resources you use up. It takes about 100,000 liters of water to produce 1 kilogram of beef but only 750 liters of water to produce 1 kilogram of wheat.
- 4. Live simply. Practice your vinaya vow and live as simply as possible, without unnecessary possessions.
- 5. **Educate people on environmental values.** Whenever possible, teach stories and Buddhist traditions that illustrate harmony between people and nature.
- 6. Don't litter. Collect your own waste and dispose of it properly.
- 7. **Use less paper.** A lot of trees are cut down simply to produce paper. Even a small choice such as printing on both sides of the paper makes a big difference.
- 8. Use less plastic. We use plastic bags for a few hours, sometimes for only a few minutes. However, it takes over 500 years for plastic to completely degrade in a landfill.
- 9. When making offerings, make healthy choices. Buy fruit rather than sweets, or plants rather than cut flowers.
- 10. Turn the switch off. If you see that a light or an electrical device is switched on but no one is using it, turn it off.

ACTIVITIES YOUR MONASTERY OR NUNNERY CAN LEAD WITHIN YOUR COMMUNITY...

PROTECT FORESTS

- 11. When a new monk or nun joins the monastery or nunnery, have them plant a tree sapling as part of their commitment to serve the world. Their commitment should extend to taking care of the sapling until it becomes a tree.
- 12. Monasteries that need timber for building materials should oversee the planting of at least twice the number of trees that are used.

- 13. Encourage people who put up many prayer flags (such as gyathar) to string the prayer flags up instead of using one bamboo pole per flag.
- 14. **Designate a sacred space on the monastery grounds, which can bring you closer to nature.** Put prayer flags around a spring source, or a grove of trees, or a large wilderness area with a beautiful view, and encourage the monastic community to use it as a meditation ground.
- 15. **Plant trees in severely degraded areas.** Set up the practice of planting trees in areas where there are many landslides and above the slippage area.
- 16. Work with the local forestry department or an environmental organization to select the right kinds of trees for planting. Select varied species of trees that are indigenous to the area. This means that the trees will be more likely to survive.
- 17. After selecting the area, plant the tree saplings mixed with half-grown and fully grown trees. This will provide a more natural habitat and encourage wildlife species to thrive there as well.
- 18. Keep the area protected from livestock and minimize the extraction of resources (fodder, thatch, medicine, etc.) for a few years.
- 19. Monitor the forested area over the long term and experiment with different combinations of tree saplings. It is not enough just to plant a sapling; you must take care of it as it grows into a tree.
- 20. Use sacred occasions to carry out environmental activities such as tree planting. As monasteries do this more often, the connection between Buddhism and environmental protection will become clearer to the general public.
- 21. Encourage community management of forests. If there are common property lands nearby that are degraded, work with local communities and environmental NGOs to establish sustainable community forestry that benefits everyone.
- 22. **Speak out against illegal timber cutting and trade.** Forests belong to the entire community, not the people who cut them down.
- 23. Use recycled paper whenever possible. Pechas and other books regularly used by monasteries can be printed on recycled paper.
- 24. Use biogas as an alternative to fuel wood. In areas where people still depend on wood as their primary source of fuel, they should examine biogas as an alternative. Simple biogas plants can also address the issue of human waste and animal waste disposal.

PROTECT WILDLIFE

- 25. Learn about the wildlife that exists in your area. Include these animals in your aspiration prayers and in your teachings.
- 26. Teach local communities to feel reverence for all life.
- 27. If you are in a heavily forested area, protect existing wildlife.
- 28. If you know of people who hunt or participate in illegal wildlife trade in your surrounding communities, advise them against killing endangered species. Some animal species are on the verge of disappearing from the face of the Earth forever due to human activity. It is our duty to prevent this.
- 29. Don't buy fur, ivory, or other endangered-animal products. By buying these things, you are personally contributing to the extinction of an entire species.
- 30. If you can influence local communities to give up wearing the fur of tigers, leopards, and otters, do so. There are fewer than 1,500 tigers left in India now. Soon there might be none.

- 31. Think twice before using traditional medicines. Although we are vegetarian, we often consume meat products when we take traditional medicines. Even worse, many of these medicines are made from endangered-animal products. Look for alternatives before taking these medicines.
- 32. **Don't buy coral.** Coral is a living organism found in the world's oceans; it provides a home for other living things such as fish and crabs. Due to global warming, coral species are already under great threat, and if they disappear, much of the biodiversity in the oceans will be lost.

CONSERVE RIVERS, LAKES, AND WETLANDS

- 33. **Don't throw garbage into rivers!** Remember that the river continues thousands of miles further and may be the only source of drinking water for millions of people.
- 34. In areas near a water source, designate a boundary and keep the area clean of waste products.
- 35. **Keep cattle and other livestock away from the actual water source.** Livestock feces are often the reason for bacteria in water that lead to waterborne diseases (e.coli, giardia, cholera).
- 36. Plant vegetation on the banks of rivers and lakes to protect them and to improve the quality of the water. Lakes and rivers covered with a layer of green algae are usually suffering from too many nitrates, which are found in fertilizers and pesticides. Protect them by planting river reeds and plants that are native to the area.
- 37. If monastic grounds are used for farming, encourage organic farming using few pesticides and fertilizers. Instead, promote the use of manure and compost products. Most pesticides and fertilizers are washed away into nearby water areas when it rains.
- 38. **Protect nearby wetlands from agricultural expansion.** More than half the world's wetlands are already lost. One way to tell if wetlands are healthy is by counting how many different types of birds exist there.
- 39. **Recreate wetlands.** Wetlands are nature's filtering system for polluted water; it naturally purifies contaminated water. If you used to have marshes in surrounding areas, allow for some water diversion and plant locally found wetland plant species.
- 40. If building a connecting road, do not place it over a river. Most of the sediment will end up in the water, making it too cloudy for fish species to survive.

CONSERVE WATER IN YOUR MONASTERY

- 41. Turn off the tap while brushing your teeth. You will save up to 10 liters of water every day.
- 42. Fill up a bottle of water and put it in your toilet cistern. This automatically saves water when the toilet is flushed.
- 43. Fix dripping taps, and repair broken or leaking pipes.
- 44. Using a bucket to bathe rather than taking showers will save a lot of water. Similarly, use a bucket to wash clothes instead of a running tap.
- 45. Use water filters rather than bottled water. Instead of using plastic bottles in meetings, use jugs of filtered water.
- 46. Install a solar-run water filter to provide water continuously.
- 47. Fill the kettle only with the amount of water you need. This will also use less energy.
- 48. In dry areas, harvest rainwater. Capture some of the rain that falls on your roof by connecting a water barrel to a downpipe. This water can be used in the garden. If properly designed and filtered, you can also use rain-harvesting tanks for drinking water.

- 49. In dry areas, water gardens in the early morning or late evening. This will allow most of the water to be absorbed by the soil rather than evaporating in the midday heat.
- 50. **Reuse the water that is offered daily on all monastery altars.** Monasteries can conserve a lot of water by using the water from offering bowls for watering gardens and plants.

ADOPT GREEN DESIGN

- 51. In cold climates, design new buildings to face south so that rooms most used by monastic bodies during the evening have the most light and heat during the winter. Create large windows to maximize light and heat.
- 52. In hot climates, use shading to cool down buildings. Plant trees on the south side of the monastery to provide more shade.
- 53. In hot climates, use climbing plants (such as bougainvilleas) on trellises/frames on the hottest side of buildings at least 15 centimeters from the wall. This will create a layer of cool air between the sunlight and the wall.
- 54. **Plant a "green roof."** Place corrugated tin sheets over the cement so that soil is not directly on the cement. If they are placed at an angle, the rainwater can slope down toward the roof drains. On top of the sheets, you can plant a garden. A green roof will cool down the building because the plants will absorb the sun's rays.
- 55. Using light colors on roofs can make a big difference. In the sun, a black or dark roof surface can be 40 degrees Celsius hotter than a silver or white surface.
- 56. Design classrooms and workrooms to face east so they will benefit from early morning light.
- 57. Landscape around new buildings. Plant deciduous trees (trees that have leaves in the summer and none in the winter) on the south side to provide summer shade and winter sun.
- 58. Maximize the use of natural light. Paint walls in light colors to brighten rooms. Keep window curtains open during the day to let in sunlight and air.
- 59. Plant trees or hedges around monasteries and between them and the road. The vegetation will capture most of the dust from the road before it reaches the building.
- 60. Line the roads that lead to monasteries with trees to purify the atmosphere and create serenity in the surrounding environment.
- 61. **Create your own vegetable gardens.** It is important from both a health and an environmental standpoint to eat more leafy green foods. Growing your own vegetables will also help young monks and nuns better understand interdependence between ourselves and nature.
- 62. **Plant fruit trees.** This will bring many benefits to you and the environment. Plant fruits that are naturally found in that area and were grown by our ancestors.

SAVE ENERGY AND BECOME CARBON NEUTRAL

- 63. **Personally plant a tree.** A single tree can absorb more than one ton of carbon dioxide in its lifespan and produces enough oxygen for a family of four.
- 64. **Plant bamboo trees.** Bamboo stores more carbon dioxide and generates more oxygen than other tree species.
- 65. **Carpool!** If a number of people are going to a nearby destination, share one vehicle instead of taking several.

- 66. Use energy-efficient lighting. Use low-energy compact fluorescent bulbs, which use only 1/4 the energy of incandescent bulbs. How can you tell whether a bulb is inefficient? If you feel heat when you place your hand near it, most of the energy it produces is in heat rather than in light.
- 67. Use lighting efficiently in main shrine rooms. Usually all the lights in the main shrine room are turned on during teachings, but often this is unnecessary if the central area is well lighted.
- 68. Place floor and ceiling lighting in the corners of the room. They will reflect more light than if they are positioned centrally or along a wall.
- 69. If available, use power strips (with several electrical outlets) instead of plugging in electronic appliances to many outlets. Using one outlet instead of several will save a lot of energy.
- 70. **Use rechargeable batteries.** Since batteries contain toxic substances, it is better from a health and environment perspective to use rechargeable batteries.
- 71. Shut down your computer at night. It takes a lot more energy to keep your computer running than to turn it on.
- 72. Unplug chargers and other electronic devices when not in use. A charger continues to use energy even when it is not connected to an electronic device.
- 73. Give your old phone to someone else or recycle it. Mobile phones contain toxic substances. It is better to find a new use for them than to throw it away or even recycle them.
- 74. When buying a computer for the monastery, consider a laptop. A laptop consumes 90 percent less energy than a desktop computer.
- 75. For dark rooms on the top floor or in shrine rooms, set up sun pipes. Sun pipes are like sheltered chimneys with reflective interior surfaces that direct light from the outside into dimly lit areas in a building.
- 76. Use solar energy in areas where sunlight is plentiful and consistent. Solar energy is used all over the Tibetan Plateau and Himalayas for heating water, producing light, and producing heat. Simple technology such as solar kettles and solar panels can be adapted easily. (Make sure that light is unobstructed and consistent from a wide-angled direction.)
- 77. **Explore the possibility of wind energy.** Wind energy is clean technology that does not have negative environmental effects. The wind propels rotors or blades to move, which then produces energy through a small generator turbine. You can use this type of energy for pumping water, grinding grain, or producing electricity. (Wind energy requires a wind speed of at least 5 meters per second. The system should be placed on top of a mountain or clearing where wind movement is consistent.)

ADAPT TO CLIMATE CHANGE

- 78. Learn more about how climate change will affect your environment. Many areas in the high Himalayan Mountains are in danger of glacial lake outbursts. You must find out if your community will be affected by this threat. In order to do so, reach out to local NGOs and government offices.
- 79. Learn disaster management strategies. If a community is subject to disasters such as landslides or flash floods, monasteries and nunneries should lead the discussion on how to prepare for such disasters. Strategies should include evacuation and medical treatment plans.
- 80. **Become self-sufficient.** Using solar and wind energy, harvesting rainwater for drinking, and setting up medical care systems are crucial in case of natural disasters. Becoming self-sufficient in this way will mean that you can help make your communities resilient to climate change impacts.
- 81. **Prepare for emergency health care facilities.** You should have a plan for how emergency health care can be provided. Since many monasteries and nunneries provide some medical care already, you can help coordinate such activities.

REDUCE, REUSE, RECYCLE

- 82. Minimize the use of plastics. The United Nations Environment Program estimates that globally people go through 16,000 plastic bags per second!
- 83. Use natural materials such as earthen cups and leaf plates for large public events.
- 84. Do not use plastic, paper, or Styrofoam cups or plates. They take hundreds of years to degrade.
- 85. Carry a shopping bag instead of relying on the shop to give you plastic or paper bags.
- 86. **Recycle silk khatas.** Instead of selling brand-new silk khatas, charge devotees a small amount of money to offer a clean recycled khata to Rinpoches instead. Since the production of silk involves killing silkworms, this is also beneficial from a Dharma perspective.
- 87. Set up a compost project for the monastery kitchen. Create bins or establish an area that is covered with old carpet or plastic sheeting to retain moisture and heat. Add equal amounts of green matter like plants and vegetables and brown matter like paper and twigs. Turn the compost every few weeks to make sure it decomposes properly and does not produce methane. Compost can be used in the monastery's gardens instead of fertilizer and can be sold to local farmers.
- 88. **Sort garbage!** The simplest way to do this is to set out three bins instead of one and label them for paper, plastics and metal, and waste. That way people have a chance to conserve, reuse or sell the material they are throwing away.
- 89. Create a compost pile and recycling area in your monastery or nunnery. Train all the monks and nuns to bring their personal garbage there.
- 90. Teach basic hygiene and waste management guidelines within the monastery and in the larger community.
- 91. Have community cleanup days and invite people from surrounding areas to attend. You can carry out such activities during Earth Day or World Environment Day.
- 92. If monasteries and nunneries have extra monastic robes or other such materials, share these with communities that lack them. Our lineage comes from Tibet, where many monasteries and nunneries are materially poor and live in great hardship. Sharing your resources with them will bring good fortune.

ACTIVITIES IN WHICH THE ENTIRE KARMA KAMTSANG CAN PARTICIPATE...

GIVE HOPE, FIND SOLUTIONS, BUILD HARMONY

- 93. Invest in training and educating the younger generation. They are the inheritors of our legacy and they will live longer with the consequences.
- 94. Create a class in your shedra on environmental protection. You can invite local NGOs or environmental experts to give lectures or to lead practical activities that young monks and nuns can get involved.
- 95. Use the Environmental Guidelines booklet to teach English in your monastery or nunnery. This will inspire environmental awareness to monks and nuns at a young age.
- 96. Reach out to people inside and outside your community who have the capacity to address the environmental problems you face. This includes local NGOs, government bodies, the media, and so on.
- 97. Don't waste food. Cooks should assess how much food is needed and prepare food accordingly. Similarly, individuals should assess how much they can eat and serve themselves appropriately. Wasting food goes against both the vinaya vow and environmental values.

- 98. **Release fish or bird species.** This is a beneficial activity. However, make sure that the species you release are native and not a foreign species.
- 99. Join forces globally on climate change issues. The Tibetan Plateau has experienced a 1 degree Celsius temperature rise in the past decade alone. We must minimize the use of coal-powered plants and fossil fuels such as petrol especially in countries such as the United States, China and India. In order to do this, we have to become part of the global movement that is trying to bring about large scale change.
- 100. Set up model projects on waste recycling. Monasteries can pioneer the use of recycled materials such as school bags or grocery bags made of recycled plastics. By setting up a model project on this or other strategies laid out here, you will contribute to a much larger change in your community.

HIS HOLINESS, THE KARMAPA EMPHASIZES IN PARTICULAR THE FOLLOWING EIGHT STRATEGIES:

- 1. Create a mandala of nature. It should be a special place in your monastic lands that is an offering of all the wonderful things in nature; flowers, trees, water; recognizing that the earth itself is an offering. This will be in keeping with our own Kagyu tradition since Tsurphu monastery is known as the celestial palace and even as Chakrasamvara's mandala. If you do not own enough land for such a project, please consider a rooftop garden.
- 2. Monasteries and nunneries should create a vegetable garden. Another option is to build it with your local community on common lands. The result should be a healthy and environmentally friendly lifestyle.
- 3. Don't buy many vehicles. There is a trend right now that senior lamas should have a car but this is not necessary. Keep in mind how harmful vehicles are for the environment; they emit carbon and contribute to global warming greatly. Therefore, you should think twice about buying one.
- 4. Reduce the use of plastic; whether it is bottled water or plastic wrapped fruit and sweets. In all cases, please make the effort to buy the option that has less packaging.
- 5. Do not waste food in kitchens and in dining halls.
- 6. Vegetarians should differentiate between the different types of eggs that are available; fertilized, nonfertilized and cage-free. Even though we may not eat their meat, the hens that are used for laying eggs are mistreated and shoved in coops.
- 7. Monasteries and nunneries should do their best to use solar and wind power and thus, reduce their dependence on harmful types of energy. There are many options in the Himalayas for solar and wind energy installations. Please take a closer look into the possibility.
- 8. It is clear that forests are very important for all life on earth. All of you gathered here in this environmental conference have committed to planting 25 trees each this year. However, please don't limit your efforts to this only and continue to protect and restore forests.