

**Bhoomi Festival: Listening to the Mountains**  
**India International Centre:**  
**Main Auditorium**  
**Sunday, 1<sup>st</sup> October 2017**

Closing Address by HCM  
(as an Ambassador of Organic Himalaya & Organic World)

Respected Madam Dr. Vandana Shivaji, respected Shri Shyam Saranji, respected Madam Maya Goburdhunji, Mr. Andre Leu President of International Federation of Organic Agriculture Movement, esteemed guest Speakers, ladies and gentlemen.

It is an honour and privilege to attend this function and to listen to the insightful presentations by scientists and experts on the critical issue of sustainability and our mountain ecology today. The conservation and promotion of our mountain biodiversity is crucial. It is critical to understand that although with just over 4% of India's population, we the people from mountain states, have a grave responsibility to protect our environment, and address the vital issue of safeguarding the livelihood of the people living in the Himalayan region. For the Himalayas are the source of water for millions of people and is a critical region defining the well-being of the world. Therefore, it is a timely and urgent moment to listen to our mountains and to listen to them carefully.

Occupying over 20% of India's total landmass, the mountain states of our country influence the nature of the Himalayan eco-system and determine weather patterns in the subcontinent. This means that directly or indirectly, the policies and programs by governments of the mountain states and the lifestyle of people will have far-reaching impact on the overall health of the mountain region as well as beyond. This explains how critical the Himalayan states and the people living there are to the health of our environment; for the critical resources sustained by the Himalayas feeds millions of people in India and the world.

Today, humanity is facing its biggest challenge - climate change. Leaders from wide spectrums have turned their spotlight on this manmade disaster which has exposed a great risk to human survival. Facing these conditions, we cannot be silent - especially our mountain states.

In our State of Sikkim too, there have been increasing signs of global warming. It is worrisome that we have had warm winters, very short springs and long spells of the rainy season. We are witnessing ecological imbalance in the form

of increasing de-glaciation and irregular climatic behavior. This year, we have particularly witnessed harsh rains and landslides. Climate Change is a global problem but Himalayan States like ours have a particularly important role in this equation – the steps we take will have a major impact on climate change and if we don't, we will also be its gravest victims. Although we have comparatively minimal contribution towards greenhouse gas emissions, the effect of climate change on the mountain regions will be devastating. We are beginning to see this in erratic monsoons, flooding and landslides and unusually warm winters which have started to upset the cycle of the mountain ecology, and in turn the local economy as well.

Unfortunately, our mountain regions are already under stress from various human activities. Moreover, the shrinking of snow on peaks or glaciers may modify the water-holding capacities of mountains, thus affecting downstream ecosystems. Therefore, the health of the mountain ecosystem processes is crucial since their impact extends beyond geographic boundaries and affect continents.

Seasonal snow cover is one of the most important natural resources of the Himalayas. This is an important parameter in assessing the availability of water in the Himalayan rivers and forecasting avalanches for instance. We constituted the Glacier and Climate Change Commission in January, 2008, in order to carry out a detailed study on the state of glaciers and its impact on water systems. Sikkim may also be the first Himalayan State to carry out basin-wise glacier inventory way back in 1999. According to this study, Sikkim has 84 glaciers covering an area of 440 sq km. In the Himalayas in totality, there are 9575 glaciers. This is considered to be the largest concentration of glaciers outside the polar regions. Snow and melt water from glaciers are not only the source of water in the Himalayan states, they feed and replenish large river systems, including the Indus and Ganges. The fast retreating glaciers and their fragmentation will have adverse impact on the future sustainability of Himalayan glaciers, and therefore on water availability in the country.

Keeping the critical importance of the Himalayas in mind, the people living in the Himalayan States are faced with a common problem of balancing development with sustainability and we tread a thin line between economic prosperity and ecological well-being. Therefore, our development model has to necessarily take into account our fragile but important position.

Our vision of organic farming in Sikkim has been one of our core initiatives that maintains balance between well-being and development. In organic farming,

agricultural practices are in complete harmony with nature and in complement to the eco-system. There is an urgent necessity to get rid of harmful chemicals from our environment and most importantly from our food. For this, organic farming is the only sustainable way of doing agriculture without interfering with nature. It maintains the originality of traditional farming and at the same time, improves the economic condition of our farmers through competitive pricing. It generates a feeling of social responsibility among the people and complements our drive for the promotion of eco-tourism, while conserving and promoting our rich biodiversity.

The basic need for the survival of mankind is clean air, clean water and healthy food and clean environment. Only organic farming among modern agricultural systems ensures these things to the people. Through organic farming, people will undoubtedly become healthy and happy and will enjoy a long life. One of our speakers adequately shared that the actual progress of a nation is better measured in terms of Gross National Happiness, that what we achieve through our development must reflect in the wellbeing of people, and this is an idea that organic farming furthers.

Unfortunately, across the globe, our forest resources and water bodies are being polluted. In a way, the underlying reason for human suffering, pain and diseases is an environment that is out of balance. Human interference in nature, our behaviour, thinking and lifestyles that take advantage of the environment are at the core of many of our modern ailments. Thus, our efforts in Sikkim have been to make people and their life style, their thinking and behaviour more nature friendly. Over the last twenty-three years we have been pursuing our development goals while making it the greatest priority to protect the environment along the way. Today, I would like to share with you some of our initiatives in Sikkim:

1. Soon after being elected into the government in 1994, we declared the year 1995-96 as HaritKrantiVarsha, the Green Revolution Year, for undertaking large-scale conservation measures. Similarly, the years 2000-2010 was observed as HaritKrantiDashak or the Green Revolution Decade, and we declared the Green Mission in 2006 to implement environment friendly policies and programs in Sikkim.
2. The Government was able to abandon the Firing Range "G" in North Sikkim, reclaiming a total of 27,000 hectares as forest area. In the year 1995-96, the state Government also closed down hydroelectric projects in Rathang, Lethang, Ting-Ting along with the Teesta Stage – II to protect the environment.

3. We have banned the use of plastic and polybags since 1997 under the Sikkim Biodegradable Garbage (Control) Act, 1997.
4. We have prohibited smoking in public places under the Sikkim Prohibition of Smoking & Non-smokers' Health Protection Act since 1997.
5. Grazing and rearing in reserved forest areas have been outlawed since 1998.
6. We introduced Compulsory Environment Education in Schools in 2000. This was to generate a scientific temperament towards environment protection among school children from a young age. The formation of Eco Clubs in Schools has also been undertaken since 2002.
7. We also banned the killing of wild animals in the state in 2001.
8. Green felling in reserve forest areas is also prohibited. If any household cuts trees from their private holdings for bonafide reasons, it is mandatory to plant 10 tree saplings for every tree that is cut.
9. We started an innovative green initiative called "10 Minutes to Earth" in 2009 during which each citizen plants saplings for 10 minutes on the 25<sup>th</sup> of June of each year.
10. We have also outlawed the burning of agricultural wastes.
11. A number of trees under forest land have been identified as "Sikkim State Heritage Trees" with protection and upkeep of these forest resources.
12. A ban on bursting of all types of Fire Crackers has been imposed in Sikkim.
13. We have imposed a ban on the use of Diclofenac, a chemical responsible for the death and slow extinction of Vultures from our landscape. By banning this drug, we are contributing towards arresting the cases of death of various bird species.

These are some of the initiatives we have implemented in Sikkim and taking these steps, we have been able to achieve a few milestones. Making it our priority to protect the environment and implement green initiatives, our forest cover has increased from 43.95 % in 1993 to 47.80 % today. Due to our programs protecting wild animals, the wildlife in our forests have also flourished. Even our natural sources of water have been protected from depletion. Most recently, in 2015, we were able to transform Sikkim into the first organic state of India after 12 years of hard work, learning and perseverance. From the learnings through our experiences in Sikkim, I would like to share some suggestions with this distinguished gathering that may serve as steps ahead to protect our mountains.

1. Every Government in the world must play a leadership role to transform themselves into fully organic nations and undertake legislations and provide special incentives to support and mobilize farming communities to take this critical step. Governments must free themselves from corporate trappings and stop treating our soil with harmful chemicals.
2. We should pursue that the Himalayan States be offered incentives for retaining high forest cover, rich biodiversity, protecting water resources and providing environmental security to the country.
3. The Himalayas are very prone to landslides and the problem is being aggravated due to climate change, frequent torrential rains and an extended monsoon season as experienced this year. There is a need for a special focus on landslide rehabilitation in all Himalayan states.
4. A river bank/river front protection and development programme should be taken up and a special emphasis should be given for tackling the problem of Glacial Lake Outburst Floods (GLOF) and Land slide dammed lake outburst floods. Monitoring mechanisms for prevention and early warning systems to detect Glacial Lake Outburst Floods should also be set up.
5. We should set up empowered State River Conservation Authorities to scientifically manage the Himalayan sources of water. We must also identify ground water recharging zones and augment water supply in natural springs which are a major source for drinking water in rural areas.
6. The mountain states have a unique ecology and face challenges that are particular to our ecosystem. Thus, a dialogue to bring to fore solutions for our particular problems is essential. Regular consultations and sharing of best practices among the Himalayan States on the issue of environmental conservation and climate change adaptation is essential.
7. Climate change also threatens several biodiversity “hotspots” and the loss of species and wildlife is a loss for our future. Therefore, the protection of biodiversity through community and government efforts are required to retain the bio-richness in these areas.
8. The mode of tackling droughts and floods must be more effective. This calls for the preparation of drought, flood, and good weather codes designed to reduce the adverse impact of unfavourable weather. Such anticipatory measures should include the building of seed stocks for implementing contingency plans, and water and energy security systems.
9. For the promotion of solar water heating systems in temperate and alpine areas of the Himalayas, appropriate subsidy may also be introduced.
10. Felling of trees must be completely stopped for if our forests grow, then the Himalayas will grow stronger and healthier. Free

distribution of LPG connections to rural households, as we are practising in Sikkim, may also be considered to prevent the depletion of forests.

11. A feasibility study regarding metro rail as a mass transport system in all Himalayan states may also be considered. The installation of ropeways and cable cars may also prevent the potential disasters that are posed due to road construction in mountainous terrain.
12. Regional Institutes on Glacier and Climate Change studies should be set up in each of the Himalayan states. Well-equipped geoinformatics centres for the extensive use of remote sensing and GIS for the preparation of scientific database on issues related to natural resources and climate change should be supported.
13. We need to make an integrated disaster management strategy in relation to climate change led disasters. There is an urgent need to link traditional knowledge and climate science with policy.
14. Regular awareness building should be organized for people living in the Himalayan region about the mountains, glaciers and other natural resources in the region. Subjects specific to mountain physiology, glacier formation and their importance should be incorporated in the school curriculum.
15. And very importantly, we must invest in education and make it a high priority. Building a citizenry that is knowledgeable and mindful of the challenges of a fast paced consumerist world and its effect on our mountains is crucial. We must invest in education to ensure that people are well equipped to overcome the challenges that we will face in our mountains. In Sikkim we have provided free education from school to the college level and if we implement this in other mountain states too, we would've taken an important step in ensuring that our citizens are informed and aware about our unique challenges, and empowered to do something about it.

Considering the fragile times we live in due to climate change, there is a great challenge for the mountain states and the mountainous countries in the Himalayan region. Because of the immensity of the task before us, we must work hand in hand to build solutions for the problems faced by the mountain communities today. It has been a great honour to be a part of this gathering to deliberate upon the issues of sustainability and protection of our mountains. Since the challenges faced by the Himalayan region is unique to its particular

ecosystem, we can only find solutions to our problems from the Himalayas itself. Thus, it is a critical time for us as caretakers of our mountains to work together.

We must also pursue balanced development in the mountains so that they continue to stand as guardians of the subcontinent and provide the people with nourishment and protection. I am sure this interaction has provided us all with ideas to ensure that this happens. Madam Vandana Shiva and I also met recently in Legau in Germany for the ceremony of the One World Award celebrating individuals and institutions furthering the organic movement globally. During the programme, she suggested that we must aim for a 100 percent organic world. I am a firm believer in this possibility through our experience in turning Sikkim into the first organic state of India and the world and I shall feel fortunate to play my part in this mission.

I am immensely grateful to Navdanya for the opportunity to be a part of this gathering today and to learn from the various speakers who spoke to us about issues such as the importance of organic farming, the rights of mother earth, to measuring progress through happiness. I have learned immensely from each of the experts and I take back learnings and great hope that a community like this, through collaborative learning and effort, can build solutions for the global problems of climate change that we face today. We must build a partnership in this effort and what better than to begin from our mountains! With these words, I thank the gathering for your patient hearing and for listening to our story from the mountain state of Sikkim.

Thank you!  
Jai Hind!