RICHARD ST. BARBE BAKER MAN OF THE TREES

(A CENTENARY TRIBUTE)

PRAYER FOR THE TREES

We thank Thee God! for thy Trees,

Thou comest very near to us through thy Trees.

From them we have beauty, wisdom, love,

The air we breathe, the water we drink,

the food we eat and the strength.

Help us, Oh God!

to give our best to life

and leave the world

a little more beautiful and worthy

of having lived in it.

Prosper thou our planting

and establish thy kingdom of love

and understanding on the Earth.

Richard St. Barbe Baker

On train to Betul, India. 1.12.77

PREFACE

For those of us who have a stake in the survival of our planet, the year 1989 has a special significance. It marks the centenary of the birth of a man who gave to the world a simple, workable message that would ensure that survival: "Plant more trees". Richard St. Barbe Baker was by any account a remarkable man. Conservator, forester, founder of "Men of the Trees", a conservation group in Kenya, he was perhaps far ahead of his time. In his long, full life he single-mindedly dedicated himself to saving the living planet through the restoration of the earth's ecological equilibrium, at a time when hardly any one was talking about ecology.

He was called to his life-long mission very early in life when at the age of five he found himself lost in the forests near his home. The mysterious journey through the luxuriant canopy of bright green over his head enthralled and exhilarated him. He wrote, "I had entered the temple of the woods. I sank to the ground in a state of ecstasy". It was a woodland rebirth, an experience never again repeated in his life. St. Barbe's travels took him all over the world. Wherever he went, he urged people to look upon the earth, our home, as a sentient being, capable of being hurt when mistreated. Mankind, he said, had been despoiling the earth for thousands of years, and had turned nearly half of the world's land surface into vast deserts such as the Sahara, Gobi and Thar. Man needed trees as much as he needed oxygen and water. Trees not only protected the "skin" of the earth, but passed the forces of life through it. Great forests must survive if we are to survive.

It is only in the last two decades that we have been able to comprehend the truth of St. Barbe's teachings. We have degraded our planetary home almost beyond recall. But, he would have been gratified to know that his struggle against people's apathy, indifference and plain greed were not entirely in vain. In the last few years there has been a phenomenal growth of environmental awareness and many new initiatives have sprung up. As the movement to save the earth gathers momentum, St. Barbe Baker's faith in human nature, as sturdy as his faith in God, must, it seems, be justified. His plea to treat reforestation as seriously as we do national defence so that procurement of food will in future worry us as little as the air we breathe, still seems a distant dream. But from small beginnings spring great movements. No one knew this better than the

"Man of the Trees", St. Barbe Baker.

At the moment when forests all over the world are threatened with extinction, St. Barbe's message comes as a reminder to the human community to draw together for the greatest cause of all, to pull our planet back from the brink of disaster.

We in India have a special place in our hearts for this ebullient, indefatigable saint-seer, who died on 9 June 1982 in Canada.

In 1977 at the age of 88, he went to the Himalaya to bless the *Chipko* Movement and gave his scientific support to *Chipko's* demand for a moratorium on green felling in the hills. In 1980, hearing about the destruction of the Silent Valley in Kerala he declared his intention to go on a fast unto death to save one of India's last priceless tropical rain forests. The beginning of his centenary year was marked with raising a memorial forest in Tara near Bombay on 9 October 1988 and dedication of a symposium on trees by the Indian Society of Tree Scientists. This volume is our tribute to the "Man of the Trees".

Indira Ramesh and N.D. Jayal (INTACH)

A TRIBUTE TO ST. BARBE

Man of the Trees

By Sunderlal Bahuguna

Address to the International Conference of 'The Men of The Trees, Trees are Life' Reading University, England, July 1989.

Men of the Trees, friends and admirers of St. Barbe Today is the happiest day of my life, as my long cherished dream to be here on a pilgrimage is fulfilled. I believe St. Barbe is with us in spirit and it is he who has brought us together. He was a saint and the days he lived with us in this world in flesh and blood was his last birth. He has now become one with the Supreme Power. We can see him everywhere in trees, mountains, rivers and all living beings in all creation. I met him first in 1977. He was in New Delhi to participate in the International Vegetarian Congress. As soon as he heard about the *Chipko* Movement in the Himalaya he left the conference hall and decided to go there. In those, days I was regarded as an undesirable person, because we were fighting against the so-called scientific felling of trees. The important people in Delhi did not want him to go to the Himalaya. To persuade him they said. "You are an old man and in view of your failing health you should not take the risk of travelling through the rugged mountains". He replied, "At the most it will mean my death. I am already living on bonus. I live only for a day and if I die for the cause of the Himalaya, that will be the most glorious event of my life. I will go straight to heaven." When they saw his determination, they asked, "Since when do you know this man with whom you are going?" He instantly replied "What do you mean, since when have we been knowing each other-for many lives!" We were together for eleven days. I took him to Vinoba Bhave, the walking saint of India, the disciple of Mahatma Gandhi. When the moment of our departure came, I was very sad. I asked, "When shall we meet again?" He cheered me up by saying, "We shall be meeting each other during our prayers and while working to save trees."

Friends, I meet him always in my prayers and I hope you all have a similar experience. In India and wherever I have been during the last one year, I have been requesting friends to popularize his prayer for the trees. It has been translated into many languages and put on big hoardings on the highways. This is the easiest and the most practical way to spread his message and create a feeling of Divinity for the Trees in the hearts of the human beings. The appeal of the prayer is to the hearts of the people. If we want to save the remaining forests on re-green the Earth, it is only possible by moving the hearts of the people. Gandhi said, "Human beings will act according to the dictates of their hearts".

St. Barbe brought about a revolution in ideas about trees, not merely because he was a tree-scientist or trained forester. There are millions of scientists and intellectuals. As a matter of fact, we live in a world of intellectual prophets-the cruel scientists, who rule over our destinies. Half a million scientists over the world are busy devising the most efficient killing machines; others are engaged in research to speed up the pace of plunder of the accumulated treasures of Mother Earth. They are working to satisfy the greed of material man. This biased science has equipped greedy man, whose religion is economics, with the most fatal weapons to butcher Nature. Mother Earth is seriously wounded. She is bleeding. Her children are in distress. Some of these have already become extinct and the others are on the verge of extinction. They are groaning under the triple threat of War, Pollution and Hunger.

St. Barbe was a humanitarian scientist and this quality of humanitarianism, which we are lacking today, comes from our hearts. Material man has a big head, feeble hands and no heart. During the course of history, there have been saintly persons who had big hearts from which flowed the spring of love for all life. This feeling of love makes such men uneasy when they see any creation of God in distress. One of the ancient Indian saints in his devotional songs sang:

The heart of the saint is like the butter Nay more sensitive than the butter The butter melts with its own heat But the heart of the saint melts seeing the miseries of others.

The young forester in Kenya saw Mother Earth being skinned. He could not withstand the sight and so he immediately decided to heal her wounds by planting trees. This was how our organization-Men of The Trees-- this big tree under whose shade we have assembled here--was born. Its origin is in compassion. Friends! I have come here to remind you that we should always remember our origin. Sometimes, in a mad race to leap forward, we forget to look behind and the result is we are lost. We meet the fate of the river. The river never looks behind towards her origin and ultimately she is lost into the sea.

St. Barbe had the head of a scientist, and science unfolds the truths of the physical world. Science is one of the three great powers, as Vinoba Bhave observed, which will revive our dying planet. The other two are Vedanta, the philosophy which sees life in all creation and believes in the extension of love to all forms of life as worship, and *Vishwas*--mutual trust. We should have full faith in our neighbour. To make science meaningful for the suffering planet, it needs direction from the heart. This is why St. Barbe over and over again repeated:

From our Hearts

With our Hands,

To the Earth

All the world together.

Humankind for the revival of our dying planet needs millions of Healers of the Earth like him to reconstruct our shattered society. Material civilization today has created a perverted society--*Vikriti*--in which we have fear of war, pollution and hunger. The human soul is striving to get rid of it and achieve peace, happiness and fulfilment. This can be achieved if, instead of behaving like butchers towards Nature to satisfy human greed, we use the two unique gifts we have been endowed

with--a creative mind and hands that can work--for the sublimation of Nature. Sublimation of Nature to bring peace, happiness and fulfilment to all beings is culture--*Sanskriti*.

Even a small creative minority can achieve this objective. This minority should consist of humanitarian scientists, social activists impatient to bring social change by adopting non-violent means, and compassionate men, artists and journalists. The scientists represent knowledge-*Gyan*, the activists-action and the literary men compassion. St. Barbe combined all the three qualities in his personality. Achievement of these has been regarded the highest objective of life in Eastern philosophy. That is why in India he was known as the tree saint--*Vriksha sant*. We need the blending of the scientific attitude of the West and the mysticism of the East, of course with wisdom, for our survival.

I am sure that the formation of the International Federation of the Men of the Trees will prove a practical step towards this goal. We should feel proud of the rich legacy we have inherited from our founder. An able heir always adds to the legacy he inherits. I feel some of us should devote at least the remaining three months of the centenary year and if possible the next year to visit as many countries as possible and specially the remote forest areas of the world with St. Barbe's message, and bring an awakening among the people about trees and Nature. As far as I am concerned, I am always on the move in the remote villages of Himalaya and India, the capital cities and the small towns, preaching and persuading the people and the governments to protect and plant trees for survival. In November last, I availed the opportunity of meeting foresters from 15 South-East Asian countries in a F.A.O. workshop in Bangkok. In April, I visited Geneva to make a personal appeal to the participants of an international conference on deforestation td celebrate St. Barbe's centenary in African and Latin American countries. Besides visiting many states in India and participating in a symposium by the Society of Tree Scientists of India dedicated to the memory of St. Barbe, we took the message to the remote areas of Thailand. Thailand is the first country in the world, where tree-felling has been banned since January 1989. Though there are several means of communication in the modern world, the appeal of these is limited to the head. You can touch the hearts of the people, when you personally meet them. All the great servants of Humankind--Buddha, Jesus, Hazarat Mohammed, St. Francis, Baha-Ullah, Mahatma Gandhi, had no modern means of communication. They reached the hearts of the people and they still live.

The theme of this conference--Trees for Life--is of great relevance to our times. More than anything else we need trees for oxygen, sinks of carbon-dioxide, and for water, which is becoming scarce specially in Africa and Asia, for food, shelter and clothing. These are the basic needs of all living beings. Earth is the mother of all living beings and they have the birthright to get sustenance from her. In industrial societies we have created a techno- sphere, and the Russian scientists say that the oxygen requirements of the techno-sphere are fifteen times more than for all living beings. So we need more trees.

A tree is God's compassion personified and St. Barbe prayed, "Oh God! Thou comest very near to us through thy trees." In

our plantation programmes we should stop the blind race for planting all sorts of foolish trees simply because they grow fast and supply raw materials to industry. Some such trees like eucalyptus are being up rooted on a large scale by farmers in India, Thailand and Portugal, because by experience they have found that these are high water demanding and soil depleting. Conservation of water and manufacture of soil should be the primary objective behind the planting of trees. When the tree showers the compassion of God in the shape of edible seeds, nuts, oil-seeds, honey, sap and fruit upon the hungry. The increasing population, decreasing cropland along with accelerated soil-erosion, salinisation and the adverse effects of chemical fertilizers and pesticides, has made it impossible to sustain agriculture. The only viable alternative is tree-farming. Trees for food, fodder, fuel, fertilizer and fibre. The era for trees for timber alone is over. Timber is the dead product of the tree. We need multi-purpose trees. Trees, whose products can be harvested while the tree remains standing to perform its ecological functions. One of the areas of our activity should be the pioneering work in the field of the establishment of tree crop institutes for different ecological zones all over the world to do research on the propagation of suitable multi-purpose indigenous trees to replace agriculture and stop the use of plough-shares.

I feel that even for shelter the use of stones, bricks, cement and iron, specially in the tropics, where the population explosion has crossed all limits, will not be possible in future as all these are non renewable resources and will be exhausted some day. The only alternative is bamboo houses. Some techniques to make these fireproof should be developed. Bamboos grow fast and are strong. Other useful trees, like soap-nut trees, trees whose leaves can be used for plates, medicines, etc, need to be popularised.

With the concentration of population in big cities there is no peace and happiness. Trees have a soothing effect on the disturbed mind. The great teachers had their Ashrams- service centres-in the woods. They meditated under the trees and acquired self-knowledge, the knowledge of the inner world. Buddha and Mahavira, the two great social revolutionaries and the great teachers of humankind addressed congregations under the trees. Rabindranath Tagore, the Nobel laureate of India and one of the great men whom St. Barbe regarded as his Guru, established his *Vishwa Bharati* University at *Shantiniketan* in the forest. The classes are held under the trees. We should revive this tradition by holding our meetings under the trees. I end with a suggestion that we should plan at least one St. Barbe park in each country, where the people may enjoy both the spiritual and the material fruits of the trees. The platform of the forthcoming Tenth World Forestry Congress should be utilized to popularise this concept.

I have no words to express my gratitude to you for giving me an opportunity to pay homage to my Guru, St. Barbe. For me this is a pilgrimage. This has been possible only with the help of my friend Teddy Goldsmith, editor of the Ecologist. He knew my relationship with St. Barbe and realized the need for bringing me here. St. Barbe taught us to raise funds by publishing small pamphlets with his message and we continue to act accordingly. I have brought with me a few small

booklets containing his article. This enables us to reach many people and receive their support.

I have come here with a bottle of holy Ganga water, from Gangotri near the source of Ganga. St. Barbe had great reverence for the Ganga and all the great rivers of the world. We regard the Ganga as our mother and her water as the symbol of compassion of the Almighty. This is to be sprinkled over the tiny plants, which we will plant here~. These plants need the blessings of the Almighty and our love. But rivers all over the world are in distress due to pollution and damming. St. Barbe had given his moral support to us to oppose the construction of a big dam over the Ganga at Tehri. I have brought this to remind you that we have to save both the trees and the rivers. Their destruction is the road to death and their protection the road ~o survival. This is why the slogan of those, who are struggling for the survival of all life is: 'Yes to life, No to death'. *TWAHAMWE*.

ST. BARBE AND SUNDERLAL

by Ron Rabin

Condensed from "What Do the Forests Bear?" written in 1981

In the spring of 1980 I travelled from my home in Oregon to the coastal redwoods of northern California where I met the Man of the Trees, Dr. Richard St. Barbe Baker. I had read and heard about his accomplishments, yet I was not prepared for the power and magical presence of this 92 year old pied piper. We were in the Grove of Understanding to celebrate the fiftieth anniversary of St. Barbe's first meeting with the redwoods, the trees that represent to him "the supreme achievement of tree growth in the world today." Standing in the coastal rains, the small group gave prayers and thanks to the forest for its many gifts. St. Barbe turned to me and said, "What do the forests bear? Soil, water and pure air-soil, water and pure air are the basis of life; this is the slogan of the *Chipko* (Hug to the Trees) women in India--those who work with Sunderlal Bahuguna to save the forests of the Himalayas. Sunderlal is my Guru.

We talked about how the question in this slogan forms the bottom line for all ecological considerations. Little did I know that this meeting with St. Barbe was the first step of a long journey that would take me take me to the Himalaya and Sunderlal Bahuguna; the first step that would open my eyes to the severity of the global forestry picture; and, the first step in helping to create with St. Barbe an international tree planting network with children. All of us that day in the redwood grove were moving with the vision of an Earth made green again, and that by working in our respective regions with children planting

trees, we would be helping to form a most valuable resource: future generations with the awareness that there is a unity to all life and who see themselves as stewards of the Earth.

By November I was travelling from Chandigarh to Silyara, Sunderlal's home in Uttar Pradesh, the road eventually following the Ganga watershed deep into the hill country of the Himalaya. As the bus made its way through camels, cauliflower vendors, turbaned shepherds, and early morning cold winds, I witnessed the glory of the snow-covered peaks and the horrors of deforestation. The village called Silvara, like my Umpqua, Oregon, is described by a post office and a general store, with homesteads and farms in the valleys and on the hills. I followed a local ploughman up the mountain path to the Navjeevan Ashram, and was greeted by Sunderlal's wife Vimla. She said, "He may be gone three days or three weeks; would you like to go with a doctor friend of mine to some remote mountain villages?" With that I met Indu Tikekar, usually called Indu Behan ("Moon Sister") whose doctorate was on the philosophy of Oneness. Her mission takes her throughout India six months of each year, giving Bhagavata or prayer meetings; but rather than simply focussing on the popular version of the prayer she would always include information on the local environment, ecological principles, and how spiritual life is impossible to separate from a deep awareness of the workings of nature. Her audiences are always large, predominantly women, members of Chipko, for their burden grows worse each day as their environment deteriorates. Indu Tikekar, Sunderlal Bahuguna, and many others have taken on this grassroots mission of travelling throughout India, asking that each village awaken to the cries of their environment. It is a slow process, for almost all communication is by word of mouth, and much of the travelling is done on foot, using the mountain paths that link the remote village. Their message is early understood by the hill people whose lives are so immediately affected by each forest that is destroyed. They say, "Chop me, not the tree", and chant "Himalaya has awakened today; the cruel axe will be chased away.

Sunderlal Bahuguna has written about the situation that they face: "As long as man has existed, the forests have provided food, shelter, fuel, and cattle feed. This created the respect for the dependency of man on Nature. In man~ societies you can find the tree as a symbol of life. The old Indian culture flourished under the trees. This care and balance was destroyed by the so-called modern industrialized culture, in India first represented by British rule. Under the British, our forests were regarded as a source of trade and profit. The traditional rights of the villagers to make use of the forests were taken away from them and the government took over the commercial exploitation of the forests, disregarding both the needs of local people and the balance of nature. The village economy was destroyed. Commercial felling is not the only problem, nor is it the predominant reason that parts of the Himalayas are beginning to wear "the look of unplanned deserts". Scouring and felling the forests for fuel and fodder, overgrazing, cultivation of marginal lands and steep slopes, the construction of roads along steep alignments, the tunnelling and blasting that accompanies mining, quarrying, dam construction, and river valley development, and the logrolling of felled timber down hillsides all contribute to a situation that is reaching the turning point. The hill women directly feel the consequences of these practices. The drying up of water springs, the retreat of available fuel and fodder, and the

migration of their husbands to the plains in search of work, has caused their burden to increase in direct relation to deforestation. In some areas of the Himalaya it is now necessary to devote the entire day to collecting adequate fuel and fodder for the evening's needs. Consequently their social and political consciousness has been raised to such a degree that they have become the primary voice behind the *Chipko Andolan*, with their slogan:

What do the forests bear?

Soil, water and pure air.

Soil, water and pure air

Are the basis of life.

This increase in their burden and responsibility has opened their minds to an awareness of mountain ecology, and their hearts to the benefits of Satyagraha, or non-violent direct action, discovering that the expression of love for the trees, as well as for those who come to cut them, is the basis for their success.

The weather in the mountains had been clear and hot, but one morning was quiet and grey. The only sounds through the valley were the calls of the ploughmen to their bullocks. The energy was different in the ashram and the village-the air seemed receptive to Sunderlal's return. While the sky darkened, Vimla and I scrambled to the rooftops to gather up all the pieces of 'dahl' that had been drying in the sun. And, as the rains came, so did Sunderlal. He simply looked at me with a smile and said, "I am Sunderlal Bahuguna" and shook my hand. He put two weeks worth of mail on the floor and we began going through it. His tape recorder, camera and some important papers had just been stolen on the train from Bombay, but he couldn't be bothered now--there was mail to go through and answer; in fact, he seemed obsessed with the importance of filling every minute with work. Halfway through the stack was a letter from St. Barbe, and by candlelight we read it aloud with great pleasure. A film was being produced in New Zealand of St. Barbe's life and work! "This is good," said Sunderlal, "Baker is my Guru".

By watching Sunderlal I could see what Indu Behan meant when she said, 'To describe Bahugunaji as 'dedicated' is a great understatement." Later that evening he told me, "My health is not so good, but I cannot rest as long as the felling of trees continues". My brief meeting with Sunderlal, lasting only several days, gave me an intense lesson in commitment. It surely came from Bahuguna's realization that the work is imperative, that there is no time to lose.

When St. Barbe Baker first met Sunderlal Bahuguna and the *Chipko* activists he was deeply moved by their devotion and commitment to the trees. As he visited the various hill communities, he witnessed the deep involvement of the children and saw the potential for an international network of young people healing the planet through tree planting. He said, "I have the dream of the earth made green again, an earth healed and made whole by the efforts of children; children of all nations planting trees to express their special understanding of the earth as their home; children of all races holding hands circling the earth expressing and celebrating their special understanding of all children as their brothers and sisters. From this vision grew Children of the Green Earth.

St. Barbe helped introduce me to the spirit of trees and Sunderlal led me to discover that an approach to the healing of our Earth is incomplete without the awareness that trees bind its very fabric. Also, my stay in India showed me the extremes to which our civilization has fallen out of harmony with the pattern of life. Children of the Green Earth combines spirit with commitment, wherever the programme exists. From Indu Behan giving Bhagavata and Sunderlal walking hundreds of miles to bind the threads of Chipko; to the planting of thousands of trees with school children in Oregon; from Chipko women and children hugging the trees in answer to the approaching loggers; to St. Barbe at 92 years of age travelling around the world celebrating the spirit and importance of trees; the spirit and commitment grows.

THE VISION OF ST. BARBE BAKER

By Edward Goldsmith

Richard St. Barbe Baker will always be known as "the Man of the Trees". In Kenya where he was assistant conservator of forests for many years, he was known as Baba Wya Miti, the affectionate father of the trees, also as Bwana Wya Miti, the Master of the trees. In Australia he was referred to as the King of the Trees, sometimes as the Saint of the Trees, in California he has been called the Redwood Saint.

I like to think of St. Barbe as a prophet, in the Old Testament sense of the term, that is to say, as a wise man, a teacher and an inspirer. Alan Grainger writes of St. Barbe's unique capacity to pass on his enthusiasm to others". Many foresters all over the world, Grainger writes, "found their vocations as a result of hearing 'the Man of the Trees' speak. I certainly did, but his impact has been much wider than that. Through his global lecture tours, St. Barbe has made millions of people aware of the

importance of trees and forests to our planet."

He has also done so of course via the "Men of the Trees", the association he founded in 1922 and that now has branches throughout' the world.

St. Barbe besides being a wise man, a teacher and an inspirer, was a tireless fighter for the values and ideas that he held to be so important and on whose acceptance by the world at large, he felt sure, must ultimately hinge, the fate of our planet and of all those who inhabit it. Those who have looked seriously at the problems that we and the future generations must face, realise that St. Barbe's values and ideas are quite as important as he made them out to be.

The Global 2000 report to the last president of the United States, for instance specifically concludes, that, of all the problems we are faced with today deforestation is probably the most serious, particularly in the developing countries.

St. Barbe realised this decades ago. In 1954, in *Land of Tane* he writes, "when the trees go, the rain goes, the climate deteriorates, the water table sinks, the land erodes and desert conditions soon appear." What is more, this cannot go on forever. As St. Barbe always told us "if a man loses one-third of his skin he dies; if a tree loses one third of its bark, it too dies. If the Earth is a 'sentient being', would it not be reasonable to expect that if it loses one third of its trees and vegetable covering, it will also die?"

Government scientists in India, Bangladesh and Nepal have now admitted that the only way to stop the terrible floods that engulf tens of thousands of villages, drown large numbers of people and their cattle and destroy crops over an even wider area, is to re-afforest the denuded mountains of the Himalaya.

St. Barbe knew decades ago that global reforestation was essential. He played a key role in persuading the American government during the great depression, to set up its Conservation Corps with its tens of thousands of otherwise unemployed youths going out into the countryside to plant trees and perform other essential tasks. Today, it is a new world-wide conservation corps that is required. In his book Green Glory, Forests of the World, he proposes "that all standing armies everywhere be used for the work of essential reforestation." He repeated this proposal in *My Life, My Trees*, "If the armies of the world now numbering 22 million" he wrote "could be redeployed in planting in the desert, in eight years a 100 million people could be rehabilitated and supplied with protein rich food, grown from virgin sand."

But such action, he realised could not be successful unless we first obtained the full cooperation of local people everywhere. More so, it is they, rather than governments and international institutions, who should take the lead. In the New Earth Charter he writes "We believe in the innate intelligence of the villagers, the country men and the workers, that they should be allowed to manage their own affairs. We believe they will put into their work not merely their hands and their feet, but their brains and their hearts. Each can experience the transcendental joy of creation, and can earn immortality and bestow immortality."

It is for this reason that he was so impressed by the Chipko movement in the Himalaya. At the age of 91 he went there and took part in the struggle of the villagers to protect their forests. In a booklet he helped us to write for the movement, he recounts how government foresters were sent to persuade the villagers to give up their struggle. The confrontation was recorded in one of the many folk songs of the Chipko movement.

In this particular song the forester asks:

What does the forest bear?

and answers

Resin, Timber and foreign exchange.

To this the village women reply in chorus:

What does the forest bear? Soil, water and pure air. Soil, water and pure air Are the basis of our life.

We have here a confrontation between two conflicting world views:

The former sees nature as but a source of commodities to be sold on the world market.

The latter sees nature as St. Barbe's 'vast sentient being', and as the Chipko villagers put it, "the basis of our life".

The former reflects the ingenuity of science and technology. The latter-the wisdom that is only embodied, as Eugene Odum,

the father of modern ecology admits, in the culture of traditional peoples, the wisdom that itself reflects, as St. Barbe would have put it, "The Divine Law and the Laws of Nature" whose violation can only lead to destruction and annihilation.

"Almost everywhere in the world" St. Barbe wrote, "man has been disregarding the Divine Law and the Laws of Nature, to his own undoing. In his pride he has rampaged over the stage of the earth, forgetting that he is only one of the players put there to play his part in harmony and oneness with all living things.

St. Barbe realized that to stop the destruction we must abandon our present goals and move our society on to a very different course.

"Man has lost his way in the jungle of chemistry and engineering" he writes in *Land of Tone*, "and will have to retrace his steps, however painful this may be." He will have to discover where he went wrong and make his peace with nature. "In doing so, perhaps he may be able to recapture the rhythm of life and the love of the simple things of life, which will be an ever-unfolding joy to him."

He realised too that if we did not do this soon it would be too late. In the New Earth Charter he warned "that this generation may either be the last to exist in any semblance of a civilized world or that it will be the first to have the vision, the bearing and the greatness to say 'I will have nothing to do with this destruction of life, I will play no part in this devastation of the land, I am determined to live and work for peaceful construction for I am morally responsible for the world of today and the generations of tomorrow."

What is required is nothing short of a spiritual renewal, a new religious world view and one very much closer to that of our forest dwelling ancestors. To begin with we must learn once again to regard Nature as 'holy', as a vast 'sentient being'-a phrase that occurs again and again in St. Barbe's writings. St. Barbe undoubtedly saw nature in this way. "It is with a spirit of reverence that I approach God's creation-this beautiful Earth", he wrote. "We may climb mountains or wander through field and forest, intoxicated by loveliness through the changing hours and seasons recorded by the length of shadows cast by the trees-and as we watch the pink, opalescent fingers of the dawn reaching up from beneath the dark horizon, so we wait for the sunrise of our awakening to the realisation of our kinship with the earth and all living things."

To view nature as a vast 'sentient being' is to see it alive and imbued with a spirit or a soul just as did our ancestors for hundreds of thousands of years. Today we tend to dismiss this view as archaic, crude or rudimentary, but why as Theodore Rozsack wonders, "should it be thought crude or rudimentary to find divinity brightly present in the world where others find only dead matter or an inferior order of being?"

Once we cease to see nature in this way, once we de-sanctify it- it is in effect condemned. As Rozsack puts it, "the desacralized world is doomed to become an obstacle inviting conquest, a mere object. Like the animal or the slave who is understood to have no soul, it becomes a thing of subhuman status to be worked, used up, exploited."

What was previously our home, our temple, the abode of gods, and a source of poetic inspiration becomes but a source of "resin, timber and foreign exchange."

Sadly, we must concede that such an attitude is fully consistent with the ethos of the Great Monotheistic Religions of today.

The abstract deity that we worship is indifferent to the fate of the natural world and offers it no protection against our depredations.

St. Barbe was unquestionably an animist, though we all know of his attachment to the Bahai faith and to the Christianity of his youth. I actually posed the question to him on one of the three afternoons I spent with him in Auckland just before his departure on his final world tour. "Do you agree" I asked him, "that we, in the ecological movement, must all be animists?" He answered "yes that is why I so much admire the work of the people at Findhorn."

He also recited to me those lines by Stanton Coblentz on the spirits of the redwoods which those who knew him well must have heard many times.

I think that could the weary world but know

Communion with these spirits breathing peace Strangely a veil would lift, a light would glow And the dark tumult of our lives would cease.

If the world is eventually moved by St. Barbe's inspiration and is converted by his teachings, if it adopts its strategies and eventually becomes imbued too with that animistic world view that he had preached, to what sort of world would this lead? St. Barbe described his utopia very clearly. "I picture village communities of the future," he wrote, "living in valleys protected by sheltering trees on the high ground. They will have fruit and nut orchards and live free from disease and enjoy leisure, liberty and justice for all, living with a sense of their one-ness with the earth and with all living things.

This is a beautiful vision. Some may think it widely unrealistic. I do not think so. I think, on the contrary, that it is a more realistic goal than that towards which present policies are supposed to be taking us. The vision of St. Barbe may or may not be realised-but it could be. The only obstacles to its realization are man-made ones. They are comparatively trivial.

The vision of Milton Friedmann and Herman Kahn, that which is implicit to the World view of Science, Technology and Industry on the other hand, can only conceivably be realized if, as Paul Ehrlich put it, we start off by repealing the very laws of Biology and Ecology", the laws of God as opposed to those of industrial man.

Ben Sira, author of the apocryphal book of *Ecclesiasticus* praised great teachers. "Their fame", he wrote "shall eclipse the immediate triumph of kings and conquerors", their bodily death "counts for nothing-indeed it should be celebrated since great ideas must live forever."

Of course it is difficult to agree that the death of St. Barbe counts for nothing. He was a unique figure whom we shall never replace. Nevertheless I feel sure that in death, as in life, he will continue to teach and to inspire us. It is up to us his disciples and his friends to celebrate the life and work of Richard St. Barbe Baker. It is up to us to carry on the fight as tirelessly as he did in the past; to assure that his vision be realized and his ideas live forever.

BARBE BAKER, CRUSADER AND WORLD CITIZEN

by Kisan Mehta

A speech made in honour of St. Barbe Baker at a public reception in Bombay on 20 August 1980

Richard St. Barbe Baker, a forester turned ecologist, now in his 91st year, needs no introduction to the public in general and to conservationists in particular. His efforts to arrest the advancing Sahara Desert and to reclaim it for mankind are too well known. It was as a leader of the Sahara Expedition in the year 1952 that he came face to face with the desert expanding at alarming proportions. He could visualise the role the Sahara could play in solving the food problem for the teeming millions, and in providing a basis for better cooperation and amity between the countries of Africa abutting the Sahara. His role was set. He realised that if only 5-million sq. km. out of 12- million sq. km that is Sahara, could be reclaimed, feeding mankind will no more remain a problem. Countries of the Sahara collaborating for a common cause will provide a model for better understanding between man and man, nation and nation. Reclamation of the Sahara became his obsession. In 1964 as the Leader of a "Round the Sahara Expedition", he could see his dream of providing a 500-km deep tree belt around the Sahara

coming true. His has been a role of catalyst, which would activise the state, administration, and the people for a cause.

Barbe Baker is not new to India. Since 1931, he has been coming to India off and on and has met Mahatma Gandhi, Pandit Jawaharlal Nehru and many others to draw their attention to the declining tree cover and the advancing great deserts in India. It was during his sojourn to Bombay in the year 1968, that he advised the Municipal Corporation to develop a 5 km. deep green belt on the northern boundary of Bombay. With a natural water boundary in three directions and a green belt on the remaining north, Bombay could be developed systematically, he opined.

Trees, conservation of nature, protection of environment, ecology are Dr. Barbe Baker's life mission. Somebody has said about him: "Never has ecology had a more objective and articulate spokesman than in Richard St. Barbe Baker, who also more than any other westerner, loves Africa and her people." I would consider this an understatement. St. Barbe Baker is a world citizen fighting for the wellbeing of the whole mankind, a crusader for peace between man and man and a protagonist for correct appreciation of Mother Earth. The destruction of the Amazon Forest pains him as much as the poaching of the whale and the denudation of tree cover in Himalayas. But his sensitivity does not end like crocodile's tears with armchair criticism as is the case with the majority of our people who have an elitist interest in trees and ecology. In 1979 he went to Uttarakhand to be with the illiterate village women who were offering their lives to the tree cutters. With Sunderlal Bahuguna, the Chipko activist he toured at the age of 88, calling upon the young men and women to fight for the trees, the greatest oxygen producers of the earth. His first words on arrival in Bombay on 10th August 1980 should inspire us: "Sunderlal Bahuguna is to my knowledge the only man in the world who went on a fast unto death for saving trees. I want, like him, to go on fast to save the Himalaya. I want to lead a demonstration against the government project."

Dr. Barbe Baker is a living example of what a man motivated by high ideals can do for the well being of mankind. He is as sensitive as Mother Earth. His vision is as transparent as the morning dew. His love for the living is as encompassing and as vibrant as the love of Mother Earth for her children who are busy now destroying all the good that the universe has endowed. It is the lifelong dedication to an objective backed by scientific study and the sensitivity fine enough to understand the pangs of pain of his fellow beings that makes St. Barbe Baker a great personality whom the world can hardly ignore except at its own peril. His personality is a rare combination of a saint and scientist. Let us hope that our people, government and administration emulate from his life the love for nature.

THE MAN WHO DEDICATED HIS LIFE TO FORESTS

by Sunderlal Bahuguna

This article was written in 1979.

Numbered though my days are, I care little for my health for the sake of your work. I shall accompany you to the Himalaya". This was what the nonagenarian Dr. Richard St. Barbe Baker said to me at my first meeting with him on 20 November 1977 in Delhi. He was in India to attend the International Vegetarian Union Congress. Two months earlier I had written a letter to him at his Sussex address through the Ecologist, offering my services for his mission, while giving a brief account of the 'Chipko movement' which we had launched to save trees in the Himalaya. I had made a request to him to devote some time for the Himalaya on his arrival in India.

He never received my letter, but as what I had read about him inspired in me a profound veneration for him, I had come all the way from the hills to Delhi as if on a pilgrimage to have his 'darshan'. When I touched his feet, he kept his hand on my head and gave me an affectionate pat. He does not shake hands but acknowledges greetings with folded hands. I felt as if I was in the presence of a heavenly soul. Frail is his body but it abounds in bound- less love. He has been showering love in abundance on human beings, birds, creatures and the life-giving plants and trees equally.

He has had many close brushes with death. About two and a half years ago he was in Sheffield to attend a meeting sponsored by the Bahais. The Secretary was one of those drivers who insisted on his passengers using the safety belt. St. Barbe managed to fasten it but being too tight it burst his appendix. The surgeon on his arrival at the hospital advised an emergency operation. He was given a 50-50 chance of survival. "Go ahead doctor", said St. Barbe Baker. I am a kidney donor, have signed the chit. I am also an eye donor-long distance. Help yourself. I have made over my body to the hospital in my will." The operation took place on a Sunday evening.

For three and a half days he was in heavenly places having the time of his life enjoying every minute, all the colours of the rainbow with a nine pointed star, and at the top of the mountain revolving slowly, symbols of the World Faiths. There were nine rows of fruit trees laden with fruit on both sides. When he regained consciousness he was surrounded by students from different countries with bouquets in their hands, praying for his well-being. He was given a one-year lease of life by the doctor. That year ended on 15 April 1976.

Earlier on a war front in France he was seriously injured in a German attack. He was about to be cremated when a sergeant

noticed him bleeding and sent him to the hospital instead. When he was injured the second time he was left extremely weak both in body and spirit.

While convalescing in England, he met Gurudev Rabindranath Tagore. The poet, sensing the mental state of St. Barbe, put his hand on his forehead and recited a poem, which he jotted down on a piece of paper and left with him. In that hour of despondency, he derived spiritual strength from it. After an operation to save his wounded leg, the indefatigable Barbe Baker fell into a swoon in which he dreamt that he was campaigning to save the redwood trees!

Baker says, "Love for the trees is inherent in my blood. I have inherited it from my forefathers. It cost my grand- father \$12000 to plant trees." The trees were cut after a century to meet the requirements of the Second World War. So this intellectual who looks upon trees as his body and soul, was imprinted very early in life with a love for trees. In his infancy he worked with his father in the garden and nursery. There was a gigantic chestnut tree in his father's garden under whose cool shade he played in the summer. He would use the branches as his tables and chairs while he ate fruit and gazed at the world beneath him. His love for the chestnut tree had a deep impact on his mind. At the tender age of 10 he wrote his first essay on trees.

However, an opportunity to study forestry in Cambridge arose only after the war. Fortunately, a scholar of forestry, William Downs was his professor. After completing his studies Baker was appointed as an assistant forester. From now on he was able to study nature closely and developed a love for plants while working in the hill and coastal forests. He realised that the importance of trees was not merely based on their apparent economic value but that their presence was equally beneficial for climate, agriculture, and for the very existence of human life.

The annihilation of forests had resulted in lands growing desolate and barren in Africa. When once large areas are bereft of trees that are cut, it is very difficult to replace them, though not impossible. The Sahara had turned into a desert on account of the destruction of forests and indiscriminate grazing. Densely populated areas had turned into graveyards.

There is only one measure to arrest the spread of deserts and it is to plant trees. St. Barbe Baker established an organisation by the name, "Men of the Trees" in 1922 in Kenya. Its foundation was celebrated with community dances. The concept further developed into a movement. Today, in most of the countries of the world, the lovers of forests are doing service to Mother Earth through this organisation. Barbe Baker has covered 49,000 miles, leading a number of campaigns, and trekking the Sahara desert during 1963-64. He surveyed the ecological problems of that area. He inspired the newly emancipated countries of Africa to fight against the deserts collectively instead of indulging in rivalry after ridding themselves of the white rulers. The result manifested itself in lush green crops round the Sahara desert. If the entire armed forces of the world take up

the task of reclamation of 20,00,000 square miles of land, then, in the words of Barbe Baker, the entire food requirements of the world can be met by this region alone. His formula is as follows:

$(20,00,000 \ge 640) / (320,000,000) = 4$

Each family may be allotted four acres of land there.

For journalists who came to meet St. Barbe Baker in the capital, this wonderful man of desert and trees, it was a surprise to find that Mr. Baker's interest lay in extending his cooperation in solving the food problems of India. He told the State Minister for Agriculture that he had visited India in 1931 and had inspired the farmers of the hills to plant trees in the midst of their farms. When he returned to India in 1957 to attend the XVth World Vegetarian Congress, Rukmani Arundale arranged a meeting with the Prime Minister, Nehru. Mr. Nehru said, "Baker, thrice I have gone through your book Sahara Desert, do you have any plan to arrest the growing deserts in India"? Prompt came the reply from Barbe Baker, "Trees around your fields.

To the State Minister of Agriculture, he said "India can never starve provided that people raise a defence line of trees on 22% of their agricultural land. Some of the trees could be fruit trees with broad leaves and some foliage trees. This will double the yield of the farm crops. The English word 'field' is derived from the word 'felled' which means clearing in the forest. The trees around a field help to control the velocity of wind which takes away with it the particles of soil. Evaporation is reduced by 75%. The fallen leaves enrich the organic matter in the soil and thus what nutrition plants take from the land is returned to it. Chemical fertilizers not only bring a disaster to the organic system but also pollute the river and tanks. The United States of America is suffering from its consequences.

"There are about 200 varieties of mangoes in India. Why are the mangoes trees not planted to beautify the city. Similarly, in villages waste lands could be utilised by having trees of mangoes, tamarind and other fruit planted.

The then Petroleum and Chemical minister was told by this old lover of nature: "In future, petrol and fertilizer need not be imported, because what we are doing in the field of solar energy will enable the New Zealand scientists to provide energy to industries within next 5 years. India should also work in this direction and I wish you to be the minister of solar energy. Atomic energy has now become obsolete because people cannot decide yet as to how the residuals could be disposed off. Similarly, coal which is presently used for energy could also be used to prepare animal feed. Besides, Delhi will also be ridding itself from the smoke cast over the sky.

The Forest Research Institute of India occupies a unique place, not only in Asia, but is one of the best in the world. This

institute is the symbol of the ingenuity and concept of a German forester, Brandis. Students from far-off countries also come here for study. Champion, the renowned forester, who had held the post of a professor here, was Barbe Baker's class-mate. In 1957 on Nehru's request, Barbe Baker addressed the students and teachers of this institute. During his stay, he was very keen to meet the students and teachers.

For Shri Jagdish Chandra Verma, the President of this Institute, it was a pleasant occasion, to receive his teacher's classmate there.

To the young foresters Dr. Baker said, "Forest' is an old word. It was derived from a word which meant the forest reserved for the royal games. The work of the forest department was to preserve and look after them. The context has totally changed. The importance of the forest is now for the whole society. The first product of the forest is its life-giving oxygen, followed by water and food. The fifth place is that of balancing the climates and arresting erosion. Raw material of industrial importance and wood are provided by the forest which, though they rank sixth in the list, are unfortunately being accorded the highest priority at present. Therefore the management of the forest should receive priorities according to the actual importance of the commodity. You have been given the dignified name of the Conservators of Forests. You are not timber merchants. The name of the Forest Research Institute should be changed to 'Institute for the Service of Land and Soil Conservation'. This should also be the name of the Department. To meet the requirements of the two World Wars, throughout the world forests were mercilessly devastated and the wounds have not yet been healed. The Government is destroying the forests to meet the demands of industries for short term gains. A new problem is being posed in the case of developing countries. The developed countries are exploiting the raw materials of the developing countries, investing money there, and are raising big industries. The poor under- developed countries consider it to be their development, but the factual position is that their natural resources are being fast exhausted and air and water are being polluted on account of the smoke being emitted by the mills and the residuals. The United Nations Organisations and Food and Agriculture Organisation also want to augment produce of timber, they attach no importance to oxygen." When the Mussoorie Express reached Hardwar it was dawn. Mr. Baker could see the hills. He heaved a sigh of distress seeing the dry 'nullahs' (streams). Said he, "What shall I do by going to the Himalayas? I can very well guess from these dry 'nullahs' what is happening in the Himalaya. They are telling the sad story of the destruction of forests in the catchments areas and their source." I told him that during my trek of 4,200 km in the Himalayan region I saw large tracts of such 'nullahs' between Paonta (Himachal Pradesh) and Tanakpur (Uttar Pradesh).

In Dehradun about 2000 acres of land which once produced the famous basmati rice has been destroyed. This was a rude shock to him. He was even more upset to see Mussoorie, the Queen of Hills, which has lost its natural beauty. The hills around are denuded and the queen has become a beggar. He saw the hills near Sahastradhara being exploited for limestone. In a talk to the press at Dehradun he said, "These dry 'nullahs' and the limestone quarry have inflicted deep wounds on the earth

and they have, in turn, moved me terribly. This will take quite some time to recoup.

He was surprised to see eucalyptus trees on both sides of the road adjoining the fields of wheat and sugarcane and a big plantation of eucalyptus near Bhaniawala. When I told him that throughout Terai-Bhabar thousands of hectares of natural forest were being clear felled to plant eucalyptus, he said, "It is foolish. It is a conspiracy to exploit the earth. Eucalyptus is all right for the useless arid zones and marshy lands, but in India you have very good trees that give you fruits and wood. You have guava, mango, tamarind, bamboo and teak. When you have got these trees, why this exotic eucalyptus? If at all a tree has to be cut, it is this one. Not just cut, let it be rooted out so that it may not sprout again. Failing which it will extract the potential of the earth and would denude it in a matter of a few years." He further said, "I am expressing my views based on the experiments conducted by Sahara University. This tree is neither good for wildlife nor is it useful as the broad-leaved trees that are beneficial to the soil and the animals." With a vehement assertion "Stop it", he concluded.

The area where the waste materials of the roads is deposited becomes bereft of vegetation. Every year there is soil erosion during the rainy season and this area goes on expanding. OR the other hand the forests are being denuded for fuel and timber. There are three great causes, digging, soil erosion and the axe, three sins which may be compared to Shani, Rahu and Ketu-the three evil stars. Mr. Baker suggested that tunnels and ropeways be used in the hills instead of roads.

At Srinagar he was told that 22 km away, at an altitude of 4000 ft there was a scheme to pump water from the Alaknanda river for the town of Pauri, headquarters of the district of Garhwal. In 1966, drinking water was piped to Pauri from a 'nullah' 55 km away. At that time the flow of water at the source was 360 litres per minute. It is now only 108 litres. The population of the town is gradually increasing and this has made such a costly drinking water project imperative. The growth of population and the drying of water sources are the main problems being confronted by the villages of the Himalaya. Every year the government plans drinking water projects for crores of rupees, borrowing from the World Bank. But everywhere the sources continue to dry up resulting in the failure of these projects.

Keeping this in view, Dr. Barbe Baker, while addressing the students and teachers of the Garhwal University, said: 'These mountains are a challenge to you. What little is left of the forests is to be preserved and it is a question of your survival which you should tackle by planting trees on a war footing." He spoke of the large scale plantation campaign in China. As many as 32 million people are engaged in that gigantic task. During the plantation period, white collar people put on their old clothes and join hands in this work. It was only because of this huge plantation that they could afford to tame their 'river of sorrow', arrest soil erosion and save the forests. For the first time, he saw pine forests between Srinagar and Tehri. These pine trees are heavily tapped to extract resin. He exclaimed, "It is cruelty." To express his identification with the Chipko movement, he hugged a tree.

At the confluence of the Bhagirathi and the Bhilangana lies the historic town of Tehri. Here he talked mostly of the proposed 853 ft. high Tehri dam. In the last century, he said, there was a craze for laying railway lines but now the emphasis has shifted to the construction of darns. The Tennessee Valley Project, which started the trend, in fact, was to prepare for the atomic explosion at Hiroshima. In his opinion the water preserved in dams gets sick and gives rise to diseases. For irrigation, the best way is to help construct the natural dams by planting broad-leaved trees on a large scale. The denuded hills around Tehri pose a problem of soil erosion and silting which would affect the working of the dam.

From a distance he caught a glimpse of the catchment area between Tehri and Rishikesh which is now a desolate region of the denuded forests of Gotars and Bharari. To save these forests, the villagers had launched the Chipko movement in the rainy season. Now, only one forest of Advani is left which is still lush with sal and pine trees. This forest also has been auctioned and felled in the name of scientific exploitation. This was heart rendering news to him. He spoke of this in his speeches and interviews and has extended his heartiest support for the Chipko movement.

St. Barbe Baker had heard of Acharya Vinoba and his rural *Swaraj* movement from an American economist, Hoffman. He had written an introduction to Hoffman's book, India 's Social Miracle, in which the author advised the people of America to lead a calm and peaceful life which they could do only by going back to the villages. He was very anxious to see Acharya Bhave, despite suffering from acute pain from a surgical wound. The historic meeting of the two servants of mother earth was extremely touching; Baker placed his head at the feet of Vinoba and the latter was moved.

Overwhelmed with emotion, the lover of trees said, "I wish Vinoba pray to God to save the forests of the Himalaya. The people there are launching a movement to save the little vegetation left on the hill tops. "I want to observe one day's fast on the occasion of the International Vegetarian Conference at Madras to invite the attention of the people towards the destruction of forests in the Himalaya. It is not merely a local question or a national one, but it is an international issue. The whole world must know about

"I have just celebrated my 88th birthday. All of you should pray to God for the success of these Men of the Trees movement.

I pray to God that I remain to be just to the earth under my feet, to my neighbour, and my inner conscience".

Vinoba replied, "Stand erect like a tree. Don't weep even if somebody cuts you. When somebody cuts a tree, the trees do not complain."

Normally Vinoba does not write anything these days, but for St. Barbe Baker he wrote on the book Talks on Geeta "Ram

Hari" and "Truth, Love and Compassion".

To the sisters of Brahma Vidya Mandir and other inmates of the Ashram, St. Barbe said, "Women should take up the work of plantation for raising the trees. God has gifted them with green fingers.

He planted a 'bael' tree, which will keep his memory fresh. With his frail body and quivering hands, he was unable to bend down, much to his regret, as in his youth he used to plant 1000-1500 trees. He was overwhelmed with emotion. He recited a few lines of a verse of Henry Van Dyke.

Before his departure Barbe Baker had a meeting with Vinoba. I still remember the sight, and his words still resound in my ears. Bowing down, he said to Vinoba, "Yesterday was the happiest day of my life. Every new day that follows the previous day is happier and what better than this I can wish for my friend.

"I wish you health and strength of an oak, the long life of a redwood." A redwood's life is 2000 years!

"Men of the Trees" has branches over 108 countries. This institute is engaged in reclaiming the 2-million sq. miles of the vast Sahara desert into arable land so that the present population of the world can become self reliant. The aim is to achieve the goal of one-world, and a scientific solution for the present crisis. The other solution is self-realisation (faith).

A staunch vegetarian and a lover of nature, Barbe Baker lives only on fruit. He even does not take milk because he considers it to be an injustice to cattle. Vinoba thinks that meat-eating has to be given up for the survival of the human race.

After 11 days the time to depart had come. I was to ascend the Himalaya and he had to go across the seas. What a paradox-the directions were divergent but the goal was the same! With my head bowed down I said, "It was a godly experience to be in your company." To which he retorted, "So was it with me! " The distances of countries and differences of age faded away as in one voice we said, "We will always be meeting each other during our prayers and while working to save the trees.

Speech delivered by St. Barbe Baker at a public reception in Bombay on 20 August 1980.

Kind people have been expressing superlatives on my work. But I can assure you that anything which I have been able to achieve has been team work. We have a motto in the Men of the Trees. *TWAHAMWE*. It is an African word meaning 'pull together' and I pass this on to all those concerned with conservation in this country. I would like to call you to silence for a moment with the words of Mathew Arnold:

"Calm soul of all things, make it mine,

To feel amidst the City 's jar

That there abides a peace of thine

Men did not make and cannot mar.

In silent contemplation, I would ask you to think for a moment of the lives that have been sacrificed over the past few days and weeks on account of floods, which are the direct outcome of stripping the forests of India. I have been thinking a lot about this and I feel that extra demands were made on your forests of the Himalayas during the Second World War. Great Britain and the Allies made special demand on these forests and as a result the erosion started. Since then, instead of allowing the forests a chance to recover, the felling has continued. I would like you all to rise with me and stand in silence for one minute in memory of those people whose lives have been sacrificed to meet the war needs and the needs of the industry since the war. I am told many lost their lives due to floods during the last few years. Particularly this year over 600 people have perished.

I feel that in meeting all of you this afternoon, I am talking to the converted. There is no need for me to underscore the problem which you know so well. Sometimes when one gets to my time of life you are allowed to go on talking and for your sake I will try to restrict myself to prepared notes.

I believe in oneness of mankind and of all living things and in the interdependence of each and all. I believe that unless we play fair to the Earth, we cannot exist physically on this planet. Unless we play fair to our neighbour, we cannot exist socially or internationally. Unless we play fair to better self, there is no individuality and no leadership.

I believe in the development of a fuller understanding, of the true relationship between all forms of life, in an endeavour to maintain a natural balance between minerals, vegetation, animals and mankind, man being primarily dependent on the

vegetation of the earth for his food and clothing. In order to get food, clothes and shelter, to enable us to live our bodily life on this earth, we must take care of the earth and especially not meddle with the natural circulation of water, which meddling has been the cause of great loss of soil all over the globe. We must rightly return to earth the waste of whatever we take from earth. We should never put into the sea the sewage from a great city like Bombay. This should be recycled and put back on the farms.

I believe that water must be the basic consideration in all our national and earth-wide forest programmes. Streams and rivers must be returned to their natural motion. What is a natural motion? A river flowing in its natural course comes to a bend. This gives it a spiral motion. It comes to a marrow, this provides tension. It broadens out, here is relaxation. This is how blood circulates in our veins and the sap circulates in a tree. This is the natural motion. When you destroy this natural motion, the water goes on its way sick or cancerous. When water comes up against a dam, the natural motion is destroyed and the water becomes sick. This sickness spreads up to the tributary rivers and to the fields through which these rivers have come and the sickness will go to the fields bordering these rivers and will affect the grazing animals. They say that cancer is a disease of civilization. You will accept that, won't you? It was unknown till we called ourselves civilized.

What is the symbol of civilization? Running water piped water. You heard the story of the landlady who was apologizing to the fisherman who had taken her apartment for the season. She said, "I apologize, there is no running water in the bedroom." He said, "What do you think I am, a trout?" When water is piped, the trace elements are left as fur inside the pipe. If water is boiled the trace elements are left in the kettle. When once water comes under light, heat or pressure, the electric magnetism, which keeps the trace elements in motion in the molecule, is given off and the trace elements drop out and the water becomes deprived and sick.

I believe, therefore, that water must be a basic consideration in all our national and earth wide forest programmes. Streams and rivers must be restored to their natural motion and thus floods and droughts must be eliminated. Forests and woodlands are intimately linked with biological, social and spiritual well-being. I believe that the minimum tree cover for safety is 1/3rd of the total land area of every country. Every catchment area should have at least this proportion of tree cover made of mixed species including the broad leaved trees-monoculture in any form is injurious to the land, especially mono-cultivated coniferous woods, because the roots compete underground, of course. If you study the profile of a soil, the first roots may go down together and compete with each other. The hair roots of every tree are changed with acid sheath and this acid sheath is there to help the tree melt the rock, so that the root can go through the rock. You have seen a root go right down through the rock and continue growing at the other end, the bottom of the rock. Nature has provided this acid so that the roots can melt rock and get a hold and cling and split the rock. It is amazing that the power of a small root when it starts to grow, it can crack a rock, and just imagine, all these conifers planted at equidistance of the same age with roots competing at the same

level and this acid exudes. An acid pan is formed in the soil and the next crop fights shy of that acid pan. If you are foolish enough to have a third crop, roots only go a few inches and the trees blow over in the first storm. This is happening in my country, in New Zealand, where they have been foolish enough to sometimes plant a third generation of conifers.

I believe in the traditional ideal that our fields should be fields of the wood, by which is meant landscape farming of every valley and plains with woodlands in high places, shelter belts not in fruit orchards but mixed species and hedge root trees everywhere. It is being found by farmers in Alberta today, that if they plant 22 per cent of a quarter section of a 160 acre with trees, they can double their crops, although they sacrifice 22 per cent of land to growing shelter belts, growing trees strategically. In spite of the fact that 22 per cent has to be written off for trees, they can double their crops. This is good news for the farmers of the world that they can double their crops with the help of trees.

This is good news to the world when the last best oxygen bank of the world in the Amazon Forests is being invaded and cleared by the Japanese to grow buffalo farms now replacing forests. This buffalo beef is being put on high flying planes and by the time it gets to Tokyo it is frozen. Very clever. But what are the Americans going to do for oxygen? Where are the other people of the world who are dependent on this last best Oxygen Bank of the world going to get their oxygen?

These are questions that arise and are very significant at this moment, when we are thinking of the threat to the Silent Valley. This is one of the last few oxygen banks of India if not the last oxygen bank of any value. If this be my last word, my last visit to India, I would beg of you, friends of India to see to it that this forest, this evergreen forest of Silent Valley is saved for all times to maintain this oxygen bank. You need it and your children need it.

Oxygen, is the first call on the forests. Because we can live less than five minutes without air. The second call on the forests is water. We can live less than five days without water. And the third call on the forests is food. We can live less than five weeks without food. And so these I regard as the first three of the forests.

The next thing of importance is the preservation of accelerated erosion. If you remove tree cover you have accelerated erosion. I say "accelerated" erosion because erosion is going on all the time to some extent. Now what would come next? The balance of nature is very fragile, a forest is fragile. What is a forest! Would you like my definition of forest? A forest is a society of living things, the greatest of which is the Tree. Would you accept that?

The eco-system of a forest is very fragile. It is very easily upset. This would be a fifth reason why tree cover should be maintained. Timber comes a way down the list. Then you would only use the mature trees. No heavy machinery should go into the forests. Mature timber can be carried out by oxen. Canada is destroying her forests at a colossal pace. She is being

skinned alive to supply news print for the United States. The USA with only 6% of the world's population is using or destroying half of the raw materials of the world every year and is naturally causing tension between the East and the West. One metropolitan edition of an American newspaper takes 333 acres of Canadian forest every time it is printed. The Chicago Tribune boasts that they are employing people living in 200 villages to get the paper pulp used for their newspaper, Newsprint takes only 13 per cent of the paper pulp used while 30 per cent goes for wrapping because people no longer trust each other! When they go to shop they have every thing wrapped. In the olden days, you used to go with a shopping bag and nothing was wrapped up and now it has got to be wrapped. You think of all these trees, which are sacrificed by the shopkeepers because they are not trusted. Now if you could restore confidence each person could save a big tree every year.

It is not enough for a mayor to put on his chain and plant a tree but he must plant forest trees for our lives, I suggested to His Worship the Mayor this afternoon that he develops a green belt around Bombay to increase the Oxygen supply. It takes 16 acres of trees to supply the oxygen for one person. That means Bombay cannot supply its oxygen from its trees.

It has to come from the Silent Valley and from other tropical evergreen forests of the world including the Amazon. If you do not have enough oxygen, if you deprive people of oxygen, you deprive them of their tempers. You know what is happening in the Ulster today. Don't you? Did you know that the Ulster has only two per cent tree cover-when the minimum for healthy life is 33.3 per cent? The poor people in the Ulster do not have enough air to breathe. They are falling out in fighting each other.

My answer to this is: enlist the whole population to restore tree cover until they have a 33.3 per cent tree Cover. They would thus be fighting shoulder to shoulder on the green front as they are doing in the Sahara desert today to grow food for their people. We have heard this evening about the Sahara and I would like to say one word about this. These countries had fought for their freedom from colonialism and sometimes amongst themselves. They are coming together to reclaim 2 million sq. miles of this world's most famous desert. This is a wonderful thing that is happening. You see them coming together as the United States of Sahara. They could not have a United States of Africa, where South Africa does not play, and the American vested interests somewhere and the USSR means something different. The USS is US. That is, twenty four countries in and around Sahara, and the USS is virtually adding a new continent to the world. This should be making headlines. But unfortunately only horror stories make the headlines today.

I believe in the inherent intelligence and understanding of the villagers and I must say one word for these brave *Chipko* women who have been fighting to save forests. I am assured that this is not a new thing. About 250 years ago when their forests were invaded, a brave woman of Jodhpur in Rajasthan hugged the trees to save them. Over 300 people were hacked to death as their only crime was their love for the trees. This tradition is reborn in the Himalaya. I had the pleasure of going up there in 1977 with our friend Sunderlal Bahuguna to congratulate him on his winning his battle for stopping the felling

through fast and imprisonment. We should do all that we can to save the Silent Valley. I foresee that we all may have to go on fast to save the Silent Valley.

I believe in the inherent intelligence of the villagers. These simple village folk should be allowed to manage their own affairs. Why should they be invaded and be required to supply timber for industry? They have their village life to live, I believe that they will put into work not merely their hands and feet, but their brains and their hearts. Each can experience the transcendental joy of creation and can earn immortality and bestow immortality. They will not deny help to those in darkness, who reach out for the light they can give.

I believe in extension of love by all the white races to other races and for that matter by each race to every other race and to all races.

I believe that one catalyst, which can control and effect such cosmic unification, is the woman. There would be no threat of war as there is today, if women have their proper place in the government.

I believe that the blossoming of deserts foretold by the prophets of the past is now being fulfilled by the steady reclamation of the Sahara by tree planting. This could be the scientific answer to the world's dilemma and with God's blessings, provide ONE WORLD purpose uniting the East and the West. I believe that the Lord's prayer has been answered and that it is in the process of being fulfilled and that we are entering a new cycle of human power with all the horizons becoming luminous. As the Persian Seer of the Bahai said:

'This is the hour for the coming together, the Sons of Men.

That the Earth will become indeed a Garden of Paradise."

I believe that this generation will either be the last to exist in any semblance of a civilized world or it will be the first to have a vision, a daring and a greatness to say:

"I will have nothing to do with this destruction of life. I will play no part in this devastation of this land. I am destined to live and work for peaceful construction for I am morally responsible for the world of today and of the generations of tomorrow.

Let TAWAMHWE-pull together-be our motto and I pray that we may give our active support to all efforts of desert reclamation by tree planting and I pray that I may be just to the Earth below my feet, to my neighbour by my side and to the light which comes from above and within, and this wonderful world of ours may be a little more beautiful and happy for my

THE LIGHT THAT COMES FROM ABOVE AND WITHIN

A message from Richard St. Barbe Baker for the people of India, 6 September 1980.

India has a heritage-a tradition of sacrifice for the protection of her trees. 250 years ago, 363 brave men and women led by Amrita Devi gave their lives by hugging the trees around their village. On 20 September the whole of India will be celebrating the 250th anniversary of this valiant effort made by the women of India to save their trees. No doubt from then onwards you will regard this as a holy day because these people were well in advance of their time. They knew what the trees meant to the environment. Many years later sprang the Chipko movement-hug to the tree movement-which, with the Friends of the Trees, is carrying on a valiant effort to save what is left of India's forests. But I believe that the situation in India is very serious with only 12 per cent tree cover, when the minimum for safety is 33.3 per cent, i.e., 1/3 of the tree cover for the whole of India and for the Himalaya. I would say that 66 per cent would be fair proportion, which should be restored to tree cover and that all tree green felling should be banned on steep hill sides. You must plant food, fodder, and fibre trees. I would go even as far as saying that 75 per cent should be the tree cover in the hills.

The Silent Valley, which is now threatened, should of course be left as the last best oxygen bank in India. The first call upon the forest is oxygen, the second water, and the third is food. The fourth is preventing accelerated erosion. The fifth may be the protection of wild life, and the sixth, the climate-balance of nature. What is a forest? The forest is a society of living things the greatest of which is a tree and if you destroy the original eco-system of the forest you undermine the basis of life. The Silent Valley should remain untouched on ecological and environmental grounds. My appeal to India is not to ape the materialistic world. We do not need big dams and power stations. We need oxygen. Oxygen is much more important than having electric lights. We can do without our electric power stations.

Gandhi and Vinoba's message of decentralisation of village republics is the only hope not only for India but for the whole of mankind. My friend D. Hoffman has written a book called India 's Social Miracle and he advocates that the great cities of America should be decentralised and the majority of people should live village life on the lines of Vinoba's villages. I regret that I will not be able to go on a pilgrimage this time, but he is always in our thoughts and in our prayers. This is my last visit to India, and I do want to say 'thank you' for your love and hospitality, specially your Prime Minister for arranging the meetings that I had with top officials, scientists and so many outstanding foresters. My last word to India is to take care of the

earth. Unless we play fair to the earth, we cannot exist physically on this planet. Unless we play fair to our neighbour we cannot exist socially or internationally. Unless we play fair to our better selves, there is no individuality or no leader- ship. I pray that I may be just to the earth beneath my feet, my neighbour by my side, and the light that comes from above and within.

RABINDRANATH TAGORE

Extract from an unpublished draft for *Tall Timber* by Richard St. Barbe Baker, 27 November 1977

The sovereigns of the Earth have been and are the Manifestations of the power, the grandeur and Majesty of God. Abdul-Bahai

Rabindranath Tagore was one of the great ones it has been my privilege to know. We met in London after World War I in a friend's studio. She was painting his portrait. I had returned shattered by the war having been dragged back to life by the skills of surgeons and doctors and devoted nursing followed by the generous hospitality of Daniel Dunlop who was like a father to me and had introduced me to his artist friends.

Rabindranath Tagore came into my life at a time when I needed spiritual help. It was a revelation to me to meet such a profound teacher who would feel the need to give the inspiration I needed in my search. Before we parted he wrote these lines for me as if writing a prescription:

Speak to me my friend of Him

And say that He has whispered to thee,

In the central hush of the storm

Where Life puts on her armour in silence.

Say that He never seeketh thy straying footsteps

In the tangle of the paths

Speak to me my friend of Him

And say that He has whispered to thee.

Through the years that have followed those lines have continued to be an inspiration to me and I have shared them with close friends who have been drawn closer to me through the sharing of the blessing of that great Indian Poet. When passing, Tagore's artist friend left me with his portrait signed by himself in Sanskrit.

Through Tagore I learnt to live a day at a time and treasured these lines from the Sanskrit that hang over my bed in my den at Mt. Cook Station:

Look to this Day; For it is Life, the very Life of Life In its brief course lie all the verities and Realities of your existence: The Bliss of Growth, The Glory of Action, The Splendour of Beauty, For Yesterday is but a dream, And to-morrow is only a Vision; But TODAY well-lived makes every Yesterday a Dream of Happiness,

And every Tomorrow a Vision of Hope.

Look well to this Day.

REVERENCE FOR LIFE-

REVERENCE FOR TREES

By Richard St. Barbe Baker, 1981

In the wealth of the woods since the world began The trees have offered their gifts to man. - Henry van Dyke

The greatest gift of all is life. For millions of years the trees were paving the way for life on this planet, absorbing impurities, clearing up the foetid atmosphere and the swamp breath, absorbing carbon dioxide and giving off the life giving oxygen that we breathe. Primitive man trod softly when he entered the shrine of the forest. He experienced a sense of wonderment among the trees. Trees were his first temples. They were his elder brethren. He lived by the fruit of trees which dropped into his hand thousands of years before he became a herdsman and a slave to animals.

Many believe that the 'fall of man' was when he left his garden paradise and started eating the flesh of animals, and accumulating wealth in his flock and herds. By raising more than he needed for food, his traveller's cheques were on four legs and had to be fed; in time, over-grazing became the order of the day. The possession of flocks was a symbol of status. If a man had no flocks (pecuns) he was said to be impecunious-without flocks. This accumulation of wealth on four legs, and over-grazing, made the early deserts of the world, and shortage of grazing lands created war between herdsman and countries.

When tree cover is destroyed it is a threat to both man and the creatures. The protection of world wildlife was in the vanguard of the conservation movement and it was very soon recognised that it was not possible to protect the wild animals and the threatened species without protecting their tree-cover habitat because they, like ourselves, need an adequate supply of oxygen, the very breath of life. The main source of oxygen is the evergreen tropical forests.

It has been discovered by the Max Plank Foundation that the Amazon forest supplies 50 per cent of the oxygen of the world.

The forest is now threatened, and the indigenous peoples who for centuries have reverenced and protected their forests are rapidly being exterminated, and with them their forests. The forest folk of Malaya are meeting a similar fate-and their virgin forests with them.

The old hunting grounds of American Indians have been invaded to provide for newsprint for the great American papers. One metropolitan weekly requires 330 acres of Canadian paper pulp for each edition. I remember the time when 33 acres sufficed, but that was from virgin forest and the newspaper had fewer supplements. The last time I picked up a copy of the Sunday New York Times it weighed 8.25 lbs!

The Chicago Tribune boasts that they keep 300 villages employed in Canada producing the newsprint they require each week. Canada is literally being skinned alive to keep the USA supplied with its newsprint, and is eating up each year 3.5 times their wood increment, while the USA is using up 4.5 times as much as is being grown each year.

The story of the desertification of the USA is told in my book, Green Glory-Forests of the World, and what must be done by each country to restore tree cover to the minimum for safety, which has been shown to be 33.3 per cent, or 1/3 of the total land area, for continental countries.

Before man arrived on the scene, our planet must have looked like a green sphere spinning in space, but man, who owes his existence to trees, has been cutting and burning, greedily and recklessly, until he is now threatened not only with a timber famine, but with a shortage of food, water and pure air; and the Earth itself, lacking its essential mantle of trees, is eroding away and threatening the basis of life.

Of earth's 30 billion acres, nine billion acres has already become desert. Ancient wisdom has taught that earth itself is a sentient being and feels the behaviour of man upon it I look at it in this way: If man loses 1/3 of his skin he dies; the plastic surgeons Say he has "had it". It a tree loses 1/3. Of its bark, it dies. Ask a botanist or dendrologist, and he will confirm that, and I Submit that it the earth loses 1/3 of its natural tree cover it will die. When its green mantle of trees has been removed the spring water table sinks. Once the rhythm of the natural forest has been broken it is a difficult-and a lengthy operation-to restore it. Much as you may want to restore the indigenous tree cover immediately it may require a rotation of exotics as nurse trees.

In Northern parts of the South Island of New Zealand it is encouraging to see that the indigenous trees are steadily forcing their way through the radiata pine plantations, exotics and suppressing them, and in time will take over from the

The Maori of yore revered his natural tree cover, the giant Kauris, pines and Totaras. When a great Maori Chieftain fell in battle, or died, they would say: "Surely a great Totara tree has fallen."

Before the European invasion Of New Zealand the Maoris managed their woodlands on a sustained yield basis. Growing trees regarded as potential canoes would be marked by one or more stones placed at the foot of the tree, and religiously guarded until it had attained the size to produce the type of canoe for which it was intended. When managed their woodlands its time had come the tree would be placated before the axe was laid in. Among the Maoris of New Zealand there is a well known story of Rata, meaning the 'witless one', who having felled a tree for a canoe, went to sleep, and when he woke up he found the tree standing up on its stump. The thousands of chips had gone back into their place and his hard work had been wasted. He could not understand why this should have happened to him. In this distress he went to consult a Tahunga, or a high priestess, who asked Rata whether he had first asked the tree's permission before felling it.

Rata confessed that he had not. So he explained that the hakuturis, the 'little people' of the forest, had played a trick on him He must first ask the tree's permission before felling it, and then cover up the stump with some of its own foliage to protect the inlaying spirit of the tree. Rata did as he was told by the high priestess, and slept. He dreamed that the 'little people' were working on his tree and in the morning when he woke he found that his tree had been hollowed out in the form of a canoe. He had been forgiven by the hakuturia, who were sorry for him. Now, no Maori will think of felling a tree without first asking its permission.

I found that in the forest region of Ceylon they have a similar service of placation before attempting to fell a tree. The indigenous peoples of mountainous countries such as the Himalaya or the Highlands of Kenya or the mountains of Alberta, are sensitive to the 'devas' of the trees and the landscape, and it is regarded as a religious duty to protect their trees; they are ready if necessary to sacrifice their own lives to save their trees.

The story of Amrita Devi, the leader of the first *Chipko* movement, is well-known. She lived in the desert area of Rajasthan in the domain of the Maharaja of Jodhpur, when it was covered with trees. As a child Amrita had been taught to love and protect their trees. Tree care was one of the most important tenets of the Vishnoi faith of her family. When the Maharaja wanted to build a new palace he sent his men to fell timber for lime burning. When they came to Amrita's village they found the villagers hugging the trees, and had to return with only one part of the wood they were sent to fetch, and reported to the Maharaja that to get that amount they had to cut through the bodies of 363 people.

The Maharaja was so stunned that he stopped the lime burning and set out to visit the villages where his men had felled the trees. As he approached the Vishnoi village runners were sent out with herbs and spices to welcome him and the people were

rejoicing rather than mourning, as they were proud of the sacrifice that had been made by their young people to save their trees.

Among the Vishnoi villagers of those parts trees are regarded as the very breath of life. They know that the most important thing they get from trees is the air that they breathe, next the water they drink, thirdly the food they eat, and without the protection afforded from the trees on the mountain sides their village could soon be buried by falling rock and accelerated erosion.

When the Forestry Department sold felling rights to concessionaires their men, who were sent to fell, found the women of the villages hugging the trees. They told the men they would have to cut through their bodies first before they would fell a tree. After attempting in vain to get a tree for two days, they gave up further attempts, and returned to report to the contractors. The contractors reported to the Forestry Department, who in turn reported to the Minister of Forests, who decided to go and see for himself what was happening.

When the Minister arrived in the Himalaya the villagers were not in evidence, and he returned to report to the Director of the Forestry Department. He asked if the Concessionaries had paid them royalties, and finding they had done so, instructed that they should get on with the felling. When the felling gangs returned to the villages they found not only the women, but the men, hugging the trees, and they were not allowed to get near.

On my visit to New Delhi in 1977, I was sent for by the Minister of Chemicals and Petroleum, who himself was a highlander, and asked if-I could report on the situation. I had gone to India to help the Chipko people, after attending the First Conference to Combat Desertification, when I had acted as a Senior Advisor to the African Bahai's Delegates. After visiting the fine forestry school at Dehradun I spent a day at the University near the Chipko country, and gave three lectures; in the evening I was invited by 200 students to answer questions. It was close on midnight before I was able to satisfy them. Early the next morning I went on my way to inspect the villages of the 'Chipko-Hug to the Tree People'. On my return I heard that there had been yet another auction held by the Forestry Department to timber concessions

Five hundred police were on duty to protect the auctioneer and bidders. 200 students from the nearby university went down to stop the auction. The only way they could achieve this was by setting fire to the building. It stopped the auction. The 200 students were arrested and locked up. I got back to Delhi and kept a lecture appointment at the Mahatma Gandhi Museum. The Minister who had sent me to the Chipko Country to report on the situation and make recommendations came from parliament to preside, and accepted my recommendation that a moratorium on all felling should be called for ten years, to give the forests a chance of recovering from the severe felling that it had undergone through the war years, and from which it

had not been allowed to recover.

The Minister returned to the Lok Sabha to put this through the first reading. The students were released the next morning. Unfortunately the states, who were making the revenue from felling refused to accept the Federal Government's decision and continued felling. St. Barbe Baker with Sunderlal Bahuguna and Harindranath Chattopadhyay

The Chipko people went on hugging their trees and Sunderlal Bahuguna went on a prayerful fast unto death, starting on 9 January 1979 and continuing after his arrest in a forest lot on the 13th day. He continued his fast in Tehri and Dehra Dun jails up to the 1st February. On the 24th day of his fast the Government relented and an immediate stay order was issued by them. This was in effect for some time but they again started felling trees and the Chipko fight to save their trees continues. There can be no more dedicated protectors of their forests than the villagers of the Himalaya except perhaps the Indian of the Amazon Forests, who are sacrificing their lives in thousands to protect their native habitat of the tropical evergreen forests. They themselves are being felled with bullets when they attempt to protect their environment.

We spoilt children of Western Civilization have fallen far from the reverence afforded to trees by our primitive forebears, and in consequence Man himself has become the most endangered species of all. We are becoming increasingly aware of the problems of growing population and diminishing food sources as the deserts of the world are on the march. The Sahara, the world's most famous desert, is travelling faster than ever before, burying the few remaining food-bearing lands of Equatorial Africa, and plant as they may, the Saharan countries are unable to cope with their common enemy. The task is so vast that it will need the concerted action of the other countries of the world. If only the 22 million soldiers that are now being trained to destroy each other were enlisted in the Green Front against the desert, in eight years enough food could be grown to rehabilitate 100 million people, and in due course the Sahara could once more a food producing area for the world. The answer to Sahara reclamation is trees. 'Trees against the desert' is the answer.

The first exercise is to contain it from the perimeter and then to push it back and make it fruitful again. This could become a one-world purpose, and unite East and West.

Our much vaunted civilization has grown out of exploitation of the indigenous peoples-the forest protectors, the tree worshippers. Protestants and Catholic missionaries compete with each other to pervert the former folk from their simple faith in N'gai, God of the Forests. The story of colonialism from the days of Moses and Joshua has been the natural conquest of the indigenous peoples, and exploitation of their natural resources. The story of so-called civilization' has been that of the exploitation of tree cover. When the peak of the production of timber has been reached, the civilization built upon it has declined and in time has been covered by the sands of the desert. For example, the Creeks, having made a near desert of their

country, moved on and exploited the tree cover of the Italian Peninsula. The Roman Empire came into being by further colonialism and exploitation.

The peasants of USSR, the peoples of China, the Aborigines of Australia, the Maoris of New Zealand, the Indians of Canada and USA, the villagers of the Himalayas, the villagers of the European countries-all have an inherent reverence for trees. Children of every country love trees. Children of the Green Earth especially children between the ages of 9 and 12, who are proud of their planting projects with their slogan:

From Our Hearts

With Our Hands

For The Earth

All The World Together

It was a heart-warming experience to initiate a contingent of Chinese children into this movement while planting a fine specimen of *metasequoia glyptostroboides* in front of the Chinese Academy of Forestry last May.

The Peoples Republic of China with a population of 1,000 million people employs 45 million people permanently in reforestation, and has set an example to the world by making tree-planting a compulsory subject in the schools. Throughout China the children are taught how to plant trees in schools; the little ones start with grasses and flowers, and the older ones poplars and willows. My New Year Greeting card for 1982, the first year in the Decade of the Tree from the China had made it possible for every Chinese citizen above the age of 11 years to plant from three to five trees a year. China has instilled into its citizens the idea that tree planting is a privilege and honourable prerogative. Apart from the people directly employed in reforestation, is the voluntary planting of trees by 50 per cent of the white collar brigade of the cities who spend their weekends helping the peasants plant trees in their villages, to arrest erosion.

It would seem that the West is heading for a precipice. When a blind man is walking towards a precipice, a friend will seize him and turn him around and set him walking in the opposite direction. The other country apart from China which has the capacity by experience and practice - to save the blind march to destruction is Australia, where cover and with the help of the United Nations Association of Australia have instituted 1982 as the "Year of the Tree", encouraging the Government of Australia and other member countries of the UN to make 1982 the first year in the Decade of the Tree.

It is significant that 1982 happens to be the Diamond Jubilee of the Men of the Trees, who are striving to create a universal tree sense and encourage all to plant, protect and love trees everywhere. It was alerted into being in the Highlands of Kenya to prevent the encroachment of the desert, when, on the fringe of the Sahara, Chiefs had forbidden marriage and women had refused to bear children because the end of the forest was in sight and they did not wish to raise children for certain starvation.

During the past fifty years we have been eating deeper into the tropical evergreen forests and faster than ever before. The indigenous forest peoples and rare species have been deprived of their essential forest habitat. The destruction must be halted and reversed. As we have felled so we must plant, and protect, what is left of the indigenous forests. If we are to enter the New Century with new forests we must start planting now for our very lives.

EXTRACTS FROM 'MY LIFE, MY TREES'

An autobiography published by Findhorn Press, 1979.

"From water and earth we came, and the future of mankind on this planet will be determined by respectful or disrespectful treatment of these basic elements.

Water must be a basic consideration in everything: forestry, agriculture and industry. The forest is the mother of the rivers. First we must restore the tree cover to fix the soil, prevent too quick run-off, and steady springs, streams and rivers. We must restore the natural motion of our rivers and, in so doing, we shall restore their vitalizing functions. A river flowing naturally, with its bends, broads and narrows, has the motion of the blood in our arteries, with its inward rotation, tension and relaxation. Picture a river which has risen from a mountain spring in a well, treed water shed: trees of mixed species and different shaped roots-fixing the soil at different levels and reducing competition for food and water. The leaf-fall and humus on the floor of the forest will act as a sponge to retard quick run-off after a storm. Water will sink through to porous soil and form myriad's of springs, which will feed the land and rivers during the drier months of the year. Mountains and high-ground should be covered with protective forests up to the snow-line; in high country, fields should be kept small and carved out of the forest and always be tree-surrounded.

How strange it is that communities fail to realize the importance of preserving tree cover on tree slopes. Man has a bad record as a forest destroyer, cutting and burning greedily and recklessly destroying the built-up fertility that has accumulated through

the centuries.

I picture village communities of the future living in valleys protected by sheltering trees on the high ground. They will have fruit and nut orchards and live free from disease and enjoy leisure, liberty and justice for all, living with a sense of their oneness with the earth and with all living things. "Of the earth's thirty billion acres already more than nine billion acres are desert. Land is being lost to agriculture and forestry much faster than it is being reclaimed. At the same time the world population is exploding. Already half the human family is on the verge of starvation, for man breeds and lives beyond the limits of the land. Yet if armies of the world, now numbering twenty two million, could be re-deployed in planting the desert, in eight years a hundred million people could be rehabilitated and supplied with protein rich food grown from virgin sand.

The present is full of opportunity. Never before in the history of the planet has mankind been given the privileges and opportunities that are at his disposal today. A great light has been raised and is penetrating the darkness of the world, but alas, too many with dust blinded eyes have yet to catch the vision. Some of us have. That is our privilege and our responsibility.

The fate of an individual or a nation will always be determined by the degree of his or its harmony with the forces and laws of Nature and the universe. Man is not alone in the universe but is surrounded by sources of power, harmony and knowledge. The fullness of life depends upon man's harmony with the totality of the natural cosmic laws. Our individual evolution is a job that has to be carried on day by day by each individual himself. It is a lifelong task."

"A forest is a perfect example of the law of return in action. Trees give back to the earth more then they take, while building up humus, and enriching the soil by the minerals that have been carried up to the leaves in the rising sap. By nature man is a forest dweller. He was cradled in the tropics. His food was the fruit of the trees. He possessed the secret of adaptation to his environment, so that health, gentleness, beauty and strength were enjoyed to the full. In his forest setting man was conscious of his relationship to God and of his unity with all living things.

He that planteth a tree is a Servant of God

He provideth a Kindness, for many generations

and faces he hath not seen shall bless him.

Who so walketh in solitude, And inhabiteth the wood,

Choosing light, wave, rock and bird,

Before the money-loving herd,

Unto that forester shall pass,

From these companions, power and grace.

Woodnotes, Emerson

"I learned early to regard the forest as a society of living things, the greatest of which is the tree. Its value depends upon its permanence, its capacity to renew itself, to store water, its many biological functions including that of providing Nature's most valuable ground cover, and building up to a great height stores of one of the most adaptable of raw materials: wood.

We stand in awe and wonder at the beauty of a single tree. Tall and graceful it stands, yet robust and sinewy with spreading arms decked with foliage that changes through the seasons, hour by hour, moment by moment as shadows pass or sunshine dapples the leaves. How much more deeply are we moved as we begin to appreciate the combined operations of the assembly of trees we call a forest.

As long as a soil is covered with forest, its humus is maintained. The basic forest problem lies in its composition and regeneration. In the forest the process of decay and growth always balance one another. The vegetable wastes together with the by-products of the animal population form a mixture on the forest floor. As we examine this mixture from time to time we find it remains practically constant in depth, in spite of annual additions from leaf-fall that take place. This mixture is drawn upon at an even rate by earthworms, fungi and bacteria, and the resulting humus in turn is absorbed by the soil and provides the trees and under growth with the food materials they require. Thus the forest manures itself and with the help of the earthworms and other animal distributes this manure through the upper layers of the soil. Everything is done by Nature quietly and efficiently. No artificial fertilizers, no selective weed killers, no pesticides and no machinery are needed in the household of the natural forest.

In that vast evergreen forest Nature works in perfect rhythm; roots digging deep or exploring nearer the surface for food and moisture. Imperceptibly Nature builds those mighty pillars with aisles innumerable, arches multiplex, in the cathedral of the forest.

A teeming life goes on in the forest without any of the problems that confront mankind in similar circumstances. There are no dustbins, no water-borne sewage, no town clerks or city councilors or armies of officials, with more and more rates to pay, no

ever-growing burden of debt.

The forest solves its own sanitary problems by direct action while man evades them. The forest has been described as the perfect sanitarian, the supreme chemist. In its economy it perfectly combines Capitalism, Communism and Social Credit and instead of building up a burden of debt it stores up real wealth of the woods. As Henry van Dyke so aptly put it:

In the wealth of the woods since the world began

The trees have offered their gifts to man.

In the mahogany forests I saw to it that the soil was never exposed to direct sun, rain or wind. The rain was broken up by the canopy into fine spray; the ground was permeable; the soil below readily drank in the rainfall. I carefully avoided anything in the nature of weeding or unnecessary cultivation. Vast quantities of water from the rain-storm and the river are held up in transit by the thick carpet of permeable humus. In this way my forest acted as a huge reservoir only gradually releasing the water in the form of springs into the clear, deep, slow-flowing Jamieson River."

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End of book