



Active Remedy Concept Paper

Active Remedy Ltd is primarily a Research Company, established to find a viable solution to the environmental problems, related to the imbalances of Earths' Fresh Water and Cooling Systems. Our purpose is gain a greater understanding of these problems and to offer a potential solution for resolving them. This potential solution is intended as a Global Remedy, to help mitigate the effects of 'Climate Change' and to safeguard, a Long-Term Sustainable Future for all life on Earth. Our proposed solution lies in the fast regeneration of indigenous mountain forests world wide.

It is our intention to establish a Feasibility Study to demonstrate how this might be achieved. This Pioneer Project is intended as a model for fast mountain forest regeneration globally

Environmental Situation: Every day the hazards and disasters caused by Climate Change, (Global Warming), ranging from droughts, flooding and extreme monsoons, to the melting of glaciers and the Poles, is becoming more apparent. The global hydrological (fresh water) cycle is one of the primary systems that is most detrimentally affected by these changes and one, which has become seriously imbalanced. This threatens the future of all of Earth's Ecological Systems along with all Humanity. Fresh water is vital for all of life on Earth and is therefore, a fundamental issue needing serious consideration. The connection between the hydrological cycle, mountain regions and Earth's climates is of crucial importance. High altitude indigenous forests play a huge part in the maintenance of this cycle.

Mountains: As a major ecosystem representing the complex and interrelated ecology of our planet, mountain systems are essential to the survival of the entire global ecosystem. Mountain regions cover approximately 25% of the Earths' land surface and are the 'Water Towers' of Earth. They source most of the Earths' fresh water repositories, as all rivers originate in them and flow to the oceans. This sustains the life of all beings and all ways of life. They are critically important for the balance of Earths' Climates. It has finally been proven that the plants and snows in the high Himalayas affect the Climate of the entire N. Hemisphere.

Indigenous Mountain Forests: In mountain regions cloud forests are particularly valuable for their capture of water that is combed from mists and moving clouds. They are also of immense importance in maintaining a steady supply of fresh water to all the lowlands and downstream areas. Because of their complex root systems, they channel the fresh waters, into the underground aquifers and underground rivers which then feed into all of Earth's water tables. When these forests are extensively cut, massive problems occur and the water tables diminish. In relation to precipitation and ice nucleating, these indigenous forests play a major role in the making of mountain snows. Related to the removal of around 70% of indigenous mountain forest globally, we are seeing enormous reductions in mountain snow and ice, along with the melting of glaciers. This is detrimentally affecting all watersheds and river sources. These snows also normally act like a mirror reflecting the sun's rays. As they melt, the heat of the sun is increased on Earth. Also, when this ice melts it increases the quantity of water vapor in the atmosphere. Water vapor (H₂O) is a very effective greenhouse gas and when there is too much of it at high altitudes, it increases the problems of global warming. High altitude mountain forests would normally capture this water vapor through precipitation.

In consideration of all of this, the prompt reforestation of mountain areas is of critical and paramount importance.

Introduction of Method: Recognizing that mixed indigenous mountain forests and biodiversity are fundamental components for stabilizing the Global Climate and Fresh Water Systems, we hereby outline a potential restoration method that could be used throughout mountain regions globally. We believe that if Earth's mountain regions can be reforested by 25% globally within 30 years and that the natural balance of these systems can be restored. Due to rapidly deteriorating environmental conditions on Earth, and due to the fragility of mountain regions, it is urgent that an interconnected method is applied as soon as possible for there to be any possibility of effectiveness and success. Therefore a Feasibility Study, showing the effectiveness of this method, needs to be conducted imminently.

The Object: The object of this Feasibility Study is to show that it is still possible to restore indigenous forests and biodiversity fast, throughout degraded mountain regions (above 2,500ft). This will be done by integrating modern and traditional methods of conservation. Because the Himalayas and the Andes are the two major mountain chains on Earth, it is logical that this Feasibility Study should be conducted in the Himalayas or/and the Andes.

Collaboration with Mountain Communities: It is important that it is recognized that collaboration with mountain communities is essential for the effectiveness of any environmental mountain restoration program. It is only by involving and supporting them that an endeavour of this magnitude can be achieved and prove to be long-term sustainable. It is also important to note that generally it has not been the grass-root communities that have caused the majority of the environmental degradation that has taken place in these areas. It has always been in the interest of these communities to protect the natural resources which supported their livelihoods. However now that these natural resources are becoming so scarce, the daily necessities of the grass-root communities also threatens them. Therefore, the method that we are proposing is created specifically so that it can fit with the requirements and traditions of the different social groups throughout mountain regions world wide. The supporting of rural mountain communities is a fundamental part of the method that we are proposing. One important reason for this is that, it is the mountain communities that are stewards of the water sources and many natural resources, for all of the lowlands. Therefore they should be supported for their services in protecting the environment. Otherwise they will be forced by poverty to degrade these resources even further. There are certain traditional knowledge systems that could be very useful in helping to regenerate global mountain regions, which the local communities have a natural affinity with. One of these is the ancient tradition of Sacred Groves. This method has been effective throughout global history in environmental conservation. Another very effective method of spreading biodiversity over large areas that has been successful in recent years is that of creating green corridors/green belts. These help the fast spread of biodiversity. We have integrated these methods along with Permaculture, forest gardening, companion planting and cottage industry scale cultivation of medicinal plants to create a model that could have the potential to cover all the requirements for the difficult task of Global mountain reforestation. We have termed this method 'The Sacred Grove and Green Corridor Method'.

Specifications of Feasibility Study: In order for this Feasibility Study to demonstrate fast growth of indigenous forest over mixed and varied terrain, it needs to take place over a substantially large area (approximately 100 kilometers) Because it would be virtually impossible to make one single plantation in such a large area, the 'Sacred Grove and Green Corridor Method,' involves creating many small plantations (Groves) over a large area and linking them with green corridors.

Sacred Groves: These are small forested areas, which are conserved by the local people and which are intertwined with their traditional, cultural and religious practices. Well preserved Groves prove to be storehouses of valuable medicinal and other plants which have many land and water preserving properties. These Groves enhance local environmental and cultural wealth and are also ideal for practical environmental educational activities. They are akin to temples but with the main emphasis being on the biodiversity in the Grove and not on a building. They do not necessarily need to be of a religious nature, they can be designated as community 'Peace Gardens'.

Green Corridors/ Belts: These are corridors of biodiversity that stretch across open land. (Similar to the British hedge system) It is a very effective way of spreading and linking biodiversity over large areas of land while focusing on relatively small areas. Corridors of medicinal and fruit plants that are cultivated by local communities for cottage industry, is one way that will motivate the protection of these corridors and also bring more immediate employment and wealth to these communities.

Scale of Feasibility Study: Across a given 100 Kilometres area of mountain region there will be approximately 20 small mountain communities. A Sacred Grove (approximately 5 acres) can be created in close proximity to each of these communities. These Sacred Groves will be areas of mixed forest, consisting of local indigenous species, selected for their medicinal and environmentally beneficial properties. Some of these communities may already have a Sacred Groves connected to them, which can be further supported and protected through this endeavour. By linking new Groves with existing Groves (the latter being already significantly important for local communities), these communities would feel more devoted and protective towards the new ones.

The Terrain: This study should take place in mountain regions starting from approximately 2,500ft altitude, in an area that is already suffering from degrading soil cover, due to shortage of biodiversity. Because this will be quite difficult terrain to reforest there will need to be a cohesive order by which the species of plants are introduced. This will entail using Permaculture methods and utilizing the properties of particular plants in order to create the right conditions to grow mixed forest. One would have to consider plants which quickly create a strong root system, that hold the soil in place, retains moisture and enables young plants to link their roots into an existing strong and sturdy system. Also ones which create biomass and a leaf canopy to protect saplings from extreme weather conditions, common in mountain regions.

Predicted Time Duration: We predict that it will take between five and ten years, for the Feasibility Study to give a clear demonstration of the restorative impact that this method has on the local ecology and water tables.

However we hope that throughout this duration, others will be motivated to copy our example and contribute their knowledge and expertise for a successful outcome.

Overall Aim of Feasibility Study: To encourage governments, environmental groups and the general public, to take part in the regeneration of indigenous mountain forests world wide by 25% within the next 30 years. This could be a way of repairing and rebalancing the natural mechanisms which regulate Earths' Fresh Water and Cooling Systems; fast enough to mitigate many of the negative affects of 'Global Warming' and potentially save much of life on Earth for many millennia.

About Us: Active Remedy Ltd. is a small Not for Profit Company, registered in the U.K (5474724). It is directed by Tara and Stella Joy.

www.activeremedy.org.uk

enquiries@activeremedy.org.uk