

A Strategic Approach to

‘Transforming Our World: the 2030 Agenda for Sustainable Development’



Framework for Implementing the
Diverse Goals and Targets





“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”



When considering the new 2030 Agenda for Sustainable Development, with its immensely wide range of equally important commitments and limited time in which to achieve any of them, it is rather overwhelming. Any one of the Goals with its multiple Targets would be difficult to achieve within fifteen years, given the best will in the world of all governments and concerned parties, along with open handed generous financial support. However working together in the spirit of good will and generosity, with the aim of ensuring that all human beings have the chance of fulfilling their potential in dignity and equality in a healthy environment while leaving no one behind, we might just succeed.

This document sets out to provide a framework for putting this wide range of goals and targets into relation with each other and also proposes an innovative procedure that could aid considerably in implementing them. It has been formulated in such a way, as to respect the realization of all human rights for all and aims to uphold the original meaning and essential foundations of sustainable development.

It is intended to aid in implementation processes by putting the goals and targets into perspective, highlighting the common links between them all and giving recommendations for a cohesive order of application.



A way to approach this complex task of achieving the goals and targets could be to consider the entire paper, as the overall architectural plan/ blueprint for the creation of a building.

One could then envision the goals and targets as various components of the building and fit them together in a similar way as one might go about constructing a house. This way, although all targets could be seen as equal and indivisible there would be a natural order in which to implement them in an integrated manner, i.e. the foundations would naturally be put into place before the walls, windows or roof.

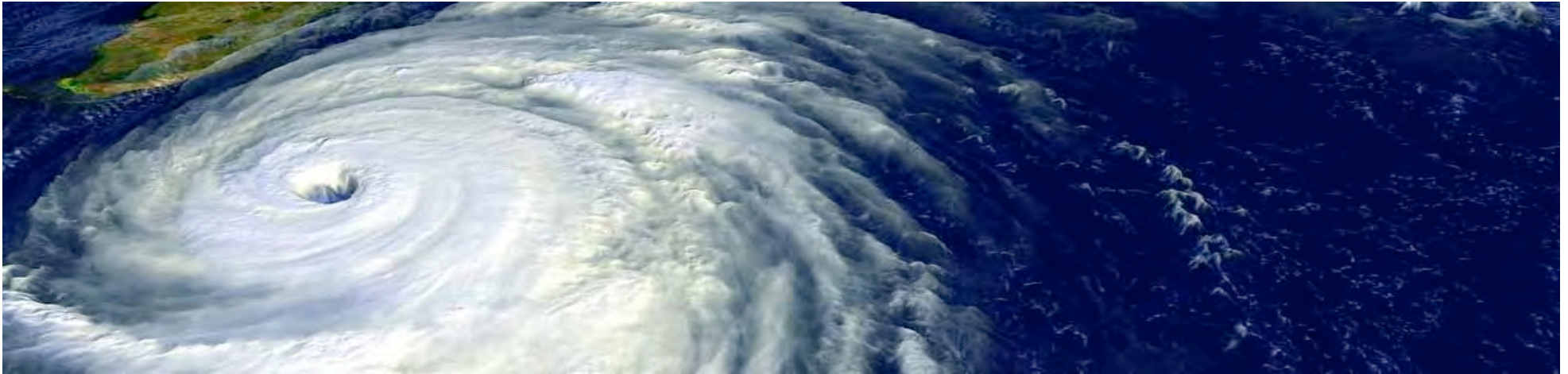
To gain an idea of the nature of the building and its purpose, we have to study the blueprint. This is in order to understand the overall objectives and requirements laid out within it. Through doing so we see a stated purpose of bringing about universal peace through the promotion of harmony with nature, so that the Earth can support the needs of the present and future generations. We can also see that a number of requirements are reiterated numerous times. These could conceivably be considered as the main building blocks, with which to construct this building and achieve its objectives. These are:

- 1. End poverty**
- 2. End hunger**
- 3. Ensure healthy lives**
- 4. Ensure quality education for all**
- 5. Ensure Gender Equality and the empowerment of women and girls**

- 6. Ensure availability of freshwater for all**
- 10. Reduce Inequality**
- 11. Make sustainable human settlements**
- 13. Combat climate change and its impacts**
- 14. Conserve the oceans**
- 15. Protect and restore terrestrial ecosystems**
- 16. Promote peaceful and inclusive societies**

There are other components, which are equally essential for making this building functional but they come into their own and are of far greater importance once the building has been created. These are:

- 7. Reliable and modern energy services**
- 8. Sustainable economic growth**
- 9. Build resilient infrastructure**
- 12. Sustainable consumption and production**



Before preceding any further, it is necessary to identify a major obstacle, which may hinder the achievement of this grand undertaking. One statement from the Agenda that stands out strongly, concerns climate change and the threats that it poses to achieving Sustainable Development:

“Understanding that climate change is one of the greatest challenges of our time and its adverse impacts undermine the ability of all countries to achieve sustainable development”

This statement indicates that addressing the causes of human induced climate change is critical for the realization of sustainable development. It is essential to include this when identifying the basic foundations upon, which all the other components rest and which integrates them into an indivisible whole.

There is a key component that unifies all the goals. This is water and it has been duly recognised by world governments and the UN, to be central to and absolutely essential for sustainable development.

In 2012 at the Rio+20 Summit, the central role of water for sustainable development was confirmed.

“We recognize that water is at the core of sustainable development as it is closely linked to a number of key global challenges. We therefore reiterate the importance of integrating water in sustainable development and underline the critical importance of water and sanitation within the three dimensions of sustainable development.” (The Future We Want RES/A/66/288 para.119)



Looking at each goal and target individually, it is clear that without water, no one of them can be achieved. Having thus identified water as our potential foundations we need to look deeper into the matter. This way it will be possible to establish strong, long lasting sturdy foundations based on international law and human rights, that can stand the test of time. Our success and the well being of both present and future generations will be dependent upon these foundations.

However considering that human induced climate change potentially jeopardizes the entire 2030 Agenda, along with all sustainable development goals enunciated since 1992, it needs to be dealt with as a matter of urgency.

Here again, looking at the situation in relation to water, gives a much more complete and cohesive understanding of the problems and potentials solutions. This is because the water cycle and climate cycle are not two separate systems. Climate and water are parts of dynamic global cycle. Therefore recognising this interdependent relationship between them and prioritising safeguarding the water/ climate cycle is key to achieving all sustainable development goals and removing one of the major obstacles to this process.

“A characteristic of the Earth’s climate that distinguishes it from all other known planets is the coexistence of water in three physical states (solid, liquid, and gas). The cycling of water among the three phases is important not only for driving the atmospheric general circulation but for the very existence of life as we know it.” (A Plan for a new science initiative on the global water cycle, Executive summary, The Water Cycle Study Group 2001)

Now we can look at the core points within the goals and targets and see how they depend upon the global water cycle and the availability of freshwater.

1. End Poverty

Lack of freshwater and its knock on effects is one of the greatest causes of poverty worldwide. The numbers of people that are already suffering from water scarcity are over one billion. These figures are still increasing and it is predicted that half of humanity will be directly experiencing it within the next fifteen years. This issue has been highlighted on numerous occasions but often seems to be overlooked or dismissed.

“By 2030 nearly half the global population could be facing water scarcity, with demand outstripping supply by 40 per cent.” (UN Secretary General 22/3/13)

Although freshwater has been recognised as a human right and central to the realisation of all human rights for more than thirteen years, the implementation of this right has been largely ignored. This has led to and is leading to far greater poverty, suffering and mortality than is necessary. With the global water cycle in a destabilized state, it is not able to distribute water nearly as efficiently and this has a negative feedback effect on many other Earth systems.



This again greatly increases world poverty. To truly end poverty the global water will need to be restabilised and the human right to freshwater implemented by all UN governments.

“The right to drinking water entitles everyone to safe, sufficient, affordable and accessible drinking water that is adequate for daily individual requirements (drinking, household sanitation, food preparation, and hygiene). The adequacy of drinking water should be interpreted in a manner consistent with human dignity, and not in a narrow way, by mere reference to volumetric quantities and technologies, or by viewing water primarily as an economic good.” (OHCHR,

2002, 'Human Rights, Poverty Reduction and Sustainable Development: Health, Food and Water')



2. End Hunger

“The International Covenant on Economic, Social and Cultural Rights, which is part of the International Bill of Human Rights, recognizes the right to adequate food as an essential part of the right to an adequate standard of living (art. 11 (1)). It also explicitly recognizes “the fundamental right of everyone to be free from hunger” (art. 11 (2)).” (OHCHR, The Right to Adequate Food)



Relieving hunger and all the health problems and mortality which accompany it, is dependent upon there being adequate amounts of nutritional food. This is utterly dependent upon there being adequate quantities of water. Both crops and livestock depend upon this and also depend upon the constant and regular season changes that occur in relation to natural variations in the global water cycle.



“For future food security, land and water management needs to preserve ecosystem functions and ensure the future of the resource. Sustainable management of ecosystems, and an ecosystem’s approach to water management from local to continental levels is key to ensuring quantity and quality of water for food security and nutrition in the future.” (FAO/HLPE, Water for Food Security and Nutrition, 201

3. Ensure Healthy Lives

“Health is a prerequisite for sustainable human development, with direct implications for poverty reduction, social welfare, political stability and economic growth. As the Secretary General has noted the links between the environment and human health are powerful. Health is also a fundamental human right, and a right whose realisation is necessary for the exercise of other human rights and freedoms. In short, health and human rights are complementary and interconnected approaches towards sustainable human development and the advancement of human well-being.” (OHCHR, 2002, ‘Human Rights, Poverty Reduction and Sustainable Development: Health, Food and Water’)

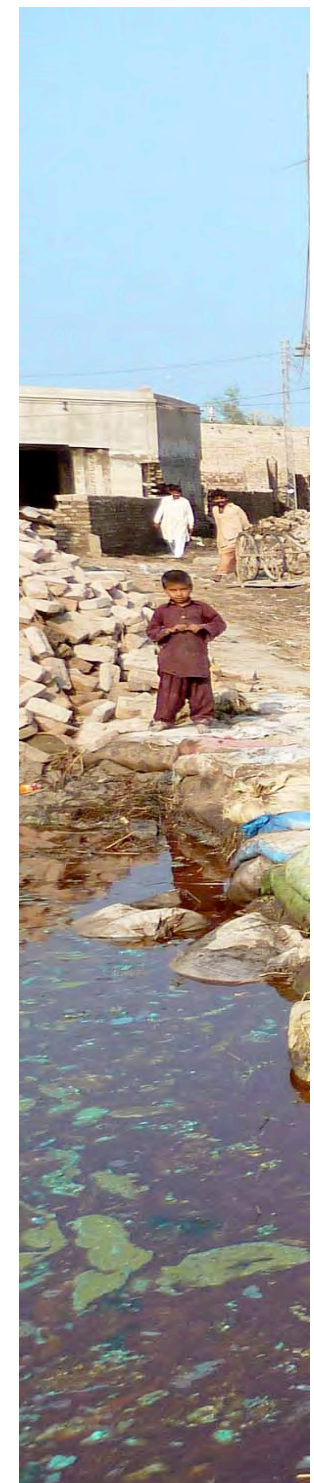


Adequate quantities of freshwater are necessary for human health. Water scarcity leads to declining water quality and pollution, which has an especially adverse impact upon the poor and is responsible for creating greater poverty. Lack of clean water means that proper hygiene and sanitation is not possible, which in turn increases sickness, disease and mortality. The poor more often find themselves unable to get an adequate supply of clean fresh water or have to drink water that is unfit for human consumption. This leads to a wide range of health problems and mortality.



“An estimated 80 per cent of all diseases and over one third of deaths in developing countries are caused by the consumption of contaminated water...” (UNCED 1992, Agenda 21, paragraph 18.47)

Initially the impacts of this are most severely felt by the poor but eventually it affects everyone regardless of wealth. Water scarcity also leads to a wide range of social and environmental problems that have negative and often disastrous effects upon health. Examples of this range from water related conflicts and migration to the loss of essential ecosystems and habitats and the extinction of species.





4. Ensure Quality Education for All

Many children and young people are not able to receive adequate education because a large proportion of their time is taken up ensuring that the basic needs for survival, for themselves and their families, are met. Because of water shortages they may have to travel for great distances to collect water. The health problems associated with these water shortages also impacts greatly upon attendance levels. Being able to gain an education and benefit from it is dependent upon the pupil being healthy enough to attend the place of education on a regular basis and being able to concentrate. This is dependent upon them having sufficient nutritious food and sufficient fresh water.



To bring about a healthier, more conscientious society, future education will need to incorporate far greater understanding of the basic principles of sustainable development and humanity's reliance upon natural Earth systems and ecology. It is no longer acceptable or sustainable that new generations can graduate with such a lacking in their education that they do not see the fundamental connection between factors such as cities and urban environments and forests, biodiversity and water sources. Because these connections may not always be obvious for children who grow up in towns and cities, far greater emphasis on this matter is needed.

The fact that all around the world freshwater sources and water resourcing ecosystems have been polluted, depleted and disrupted, displays a basic lacking in modern education. Learning about these important matters in exciting and practical ways is important so that the next generations will be able to apply the knowledge learnt into their every day lives. They will be able to understand the practical and health supporting benefits gained from living in a way that is in harmony with nature and have greater understanding of the interdependence that exists between themselves, all living organisms and Earth's ecosystems. The results gained from this will be that when they are the adults making the decisions that decide the future of the world about important matters such as water and climate, they will not repeat the same disastrous mistakes made by previous generations.

“Climate change would be a less immediate threat, if we had kept pace with commitments to sustainable development enunciated again and again over the years.” (UN Millennium Development Goals Report New York 2008)



5. Ensure Gender Equality and the Empowerment of Women and Girls

Women's rights to food, water and sanitation are intrinsically linked to the right to life and health and the attainment of an adequate standard of living. Because of the traditional role of women and girls in many societies involving water collection and sanitation management, water shortages have a particularly negative impact upon them. It has been recognized that inadequate quantities of fresh clean water and sanitation disproportionately affects them and reduces their chances of education and equality. The Convention on the Elimination of All Forms of Discrimination against Women stipulates in (art. 14.2) that State parties should ensure women's adequate living conditions, in relation to an adequate water supply.



Within the 2030 Agenda for sustainable Development all UN governments have committed to dealing with this important issue. Target 5.c states:

“Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels”

“The Committee on the Elimination of Discrimination against Women has explained that, to achieve actual equality, the underlying causes of women's inequality must be addressed; it is not enough to guarantee identical treatment with men. In the Committee's view, the Convention requires that women should be given an equal start and also that the State should create an enabling environment for the empowerment of women in order to achieve equality of results (also referred to as equality of outcome)” (OHCHR, Womens Rights are Human rights)





Recognising the vital importance of this for global water security and all that entails, it has been included in Goal 6 under Target 6.6

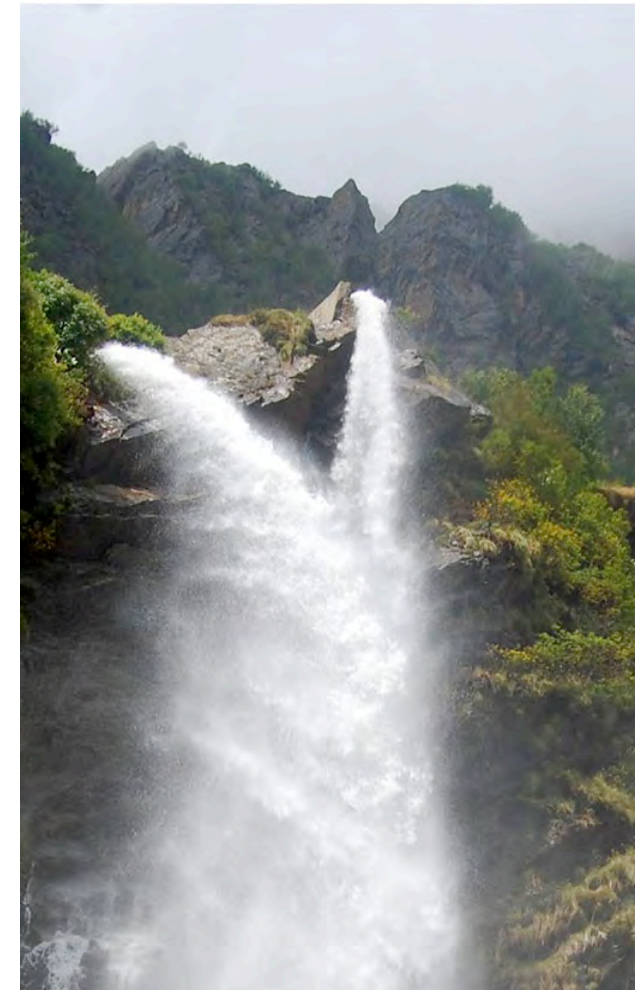
“By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes”

6.Ensure Availability of Freshwater and Sanitation For All

Because all human rights are interdependent, interrelated and indivisible, violating the right of water impairs the enjoyment of all other human rights, including the right to life, health, food, education etc.

Therefore, it is clear that water is necessary in order to uphold all human rights. Ensuring availability of freshwater is dependent upon a functioning global water cycle. This is a three phase cycle and is dependent upon healthy ecosystems in order to function correctly and so cycle and distribute adequate quantities of freshwater around the world.

“Ensuring that ecosystems are protected and conserved is central to achieving water security – both for people and for nature. Ecosystems are vital to sustaining the quantity and quality of water available within a watershed, on which both nature and people rely. Maintaining the integrity of ecosystems is essential for supporting the diverse needs of humans, and for the sustainability of ecosystems, including protecting the water- provisioning services they provide.” (UN Water, Analytical Brief, 2013)



10. Reduce Inequality

According to the 2030 Agenda governments have committed to ending poverty and hunger and ensuring that all human beings regardless of gender, race or religion can fulfill their potential in dignity and equality in a healthy environment. This concept is not as new or innovative as it initially appears, as very similar principles were agreed upon at the UN Conference of the Human Environment, in Stockholm 1972. Within Principle two it states that:

“Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations.” (Report of the UN Conference on the Human Environment, 1972)
<http://www.un-documents.net/aconf48-14r1.pdf>



In the last forty three years, several generations have been born and many amongst them are suffering the consequences or have already died related to the lack of protection of essential ecological environments and their resources. Since 1972 deaths brought about by freshwater scarcity, water related disease and imbalances in the hydrological/climate system have risen enormously. Rather than protecting and safeguarding the natural resources and other species, hundreds of millions of hectares of forest worldwide have been decimated, species have become extinct and water resourcing ecosystems, including oceans, rivers and aquifers have been polluted and depleted. This has mainly been for the profit of a few and led to far greater inequality and extremes between the richest and poorest people on Earth.

“The natural resources of the earth, including the air, water, land, flora and fauna and especially representative samples of natural ecosystems, must be safeguarded for the benefit of present and future generations” (Report of the UN Conference on the Human Environment, 1972)

Surely it is time to stop and see the stark realities and inequalities brought about by ignoring and going against these principles. With the explicit commitment of leaving no one behind, it's time to be guided by them for the next fifteen years and beyond.

11. Make sustainable human settlements

Historically humans settled and prospered in areas that had an accessible supply of clean freshwater and if this supply dried up, the settlements were forced to re-locate. It didn't matter how much infrastructure and development had gone into creating these settlements, they were useless without a supply of clean fresh water. This demonstrates that a constant source of clean freshwater is central to achieving sustainable human settlements.

Nowadays there is great emphasis put upon conserving water and attention is being given towards decreasing the amount of water that is wasted within the household or in industrial production processes.



However there is a significant oversight concerning safeguarding the continuum of freshwater flow. The freshwater present in the water tables, of any given area, are replenished as part of a constantly moving global water cycle. They are therefore dependent upon the natural ecological components of this cycle. These components may be a few miles up stream or they may be thousands of miles away but they are critical in ensuring that freshwater continues to replenish the local water tables. Therefore in order to make human settlements sustainable, greater emphasis needs to be given to preserving the water resourcing ecosystems, which ensure that freshwater continues to reach these settlements.



It is important that we do not consider settlements in isolation from global environmental changes. No area, despite how pristine it may appear is isolated from the huge environmental and climatic changes that humanity is bringing about on Earth. If we can recognise the interconnection that exists between all species, ecosystems, Earth systems and ourselves, then we will be able to make much more considered decisions and will be able to apply this to planning and creating sustainable settlements.





13. Combat Climate Change and its Impacts

In Rio+20 in 2012 world governments renewed their commitments to sustainable development and reaffirmed that they would continue to be guided by international law and its principles. In this they affirmed their commitments to [The International Covenant on Civil and Political Rights 1966](#), Article 6. 1. , in which it states:

“Every human being has the inherent right to life. This right shall be protected by law.”

(The International Covenant on Civil and Political Rights 1966, Article 6. 1.)

They also recognised that human induced climate change threatens all life and so requires urgent action.

“We acknowledge that climate change is a cross-cutting and persistent crisis and express our concern that the scale and gravity of the negative impacts of climate change affect all countries and undermine the ability of all countries, in particular, developing countries, to achieve sustainable development and the Millennium Development Goals and threaten the viability and survival of nations. Therefore we underscore that combating climate change requires urgent and ambitious action, in accordance with the principles and provisions of the United Nations Framework Convention on Climate Change.” (The Future We Want RES/A/66/288 para.25)

13. Combat climate change and its impacts

If are truly committed to reducing the devastating impacts of human induced climate change, then the effects of the hydrological cycle upon climate needs to once again be included into strategies and actions for dealing with it. Only then will we be able to address the major causes, results and feedback effects of climate change.

“The climate system is a complex, interactive system consisting of the atmosphere, land surface, snow and ice, oceans and other bodies of water, and living things.” (IPPC. Historical Overview of Climate Change Science, 2001a)

If we continue to keep water and the water cycle in a separate equation to climate change, then we will be looking at an incomplete picture and will thus continue making ineffective policies concerning it. This leaves the survival of many societies, and the biological support systems of the planet at risk.

“Water is at the heart of both the causes and the effects of climate change ((NRC, 1998)” (USGCRP. A plan for a new science initiative on the global water cycle, chapter 1, 2001)

Dealing ineffectively with the human induced climate change issue violates Article 23. 1. of The International Covenant on Civil and Political Rights 1966, which states:

“The family is the natural and fundamental group unit of society and is entitled to protection by society and the State.”

(The International Covenant on Civil and Political Rights 1966)

Bearing this in mind appropriate action cannot be delayed any longer. To do so could be considered deliberate starvation of humanity and hence a crime against humanity.



14. Conserve the oceans



As a vital component of the global water cycle, the world's oceans need to be restored to health, protected and conserved for the continuum of all life on Earth. However oceans also depend upon the global water cycle as it circulates the water, redistributes essential minerals and regulates climate changes, which in turn regulates currents. Oceans and all oceanic ecosystems rely on being replenished by a regular flow of freshwater.



“The ocean plays a key role in this vital cycle of water. The ocean holds 97% of the total water on the planet; 78% of global precipitation occurs over the ocean, and it is the source of 86% of global evaporation. Besides affecting the amount of atmospheric water vapor and hence rainfall, evaporation from the sea surface is important in the movement of heat in the climate system. A characteristic of the Earth’s climate that distinguishes it from all other known planets is the coexistence of water in three physical states (solid, liquid, and gas). The cycling of water among the three phases is important not only for driving the atmospheric general circulation but for the very existence of life as we know it. The Earth’s water cycle can be viewed simplistically in five steps. Under suitable conditions, (1) liquid and solid water evaporate from the ocean and land into the atmosphere; (2) water vapor is transported through the atmosphere by winds; (3) water vapor condenses into cloud droplets and crystals; (4) cloud particles aggregate by coalescence and accretion processes into larger liquid and solid drops that fall as precipitation to the surface; (5) continental rivers, aquifers, and ocean currents transport the water through the land and ocean reservoirs. On average, as much water precipitates to Earth’s surface as evaporates. On average, as much atmospheric water is transported to continental regions as is discharged by continental rivers and ground-water aquifers back to the oceans.” (USGCRP. A Plan for a new science

initiative on the global water cycle, Executive summary, The Water Cycle Study Group 2001)

15. Protect and restore terrestrial ecosystems



Considering the vital roles that forests and all terrestrial ecosystems play in supporting our lives, along with regulating the hydrological cycle and our climate; it is essential that we protect that which is left and do all we can to restore them. They like us are dependent upon freshwater but unlike us they play a vital role in its recycling. In this respect their health and ours is interrelated and it important that we understand our dependency upon them and nature once again.

“In Earth System science, climate is not the long term average of weather statistics, but involves the non linear interactions between the atmosphere, oceans, continental ice, and land surface processes, including vegetation, on all time scales.” (R.A. Pielke Sr, et al. Non

Linearities in the Earth System, 2003)



Our survival and that of our families and future generations are dependent upon nature and upon us changing our attitudes towards the other species, which we share Earth with. Our chances of survival are much greater if we can learn to appreciate and cherish them. Target 15.1 commits us to making sure that we begin this process imminently as there is a great deal to be done within the coming six years.

“By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements” (UN, Transforming our world: the 2030 Agenda for Sustainable Development, 2015)



16. Promote peaceful and inclusive societies

There is already a great deal of tension and conflict fought over water. If water shortages increase these conflicts can only increase too. Freshwater is an absolute necessity and therefore if people don't have it, they become desperate and will go to great extremes to try to get it. These acts of desperation are not made with consideration of others and the good of the whole; they are simply about the survival of the individual and fulfilling immediate needs. If this is the attitude of the general populous, all aims to achieve peaceful societies are thwarted. Therefore safeguarding the global water cycle is a means of enabling peaceful relations between nations and peaceful and inclusive societies.

It is also important to recognise the important role of indigenous people in this, because while many people in the modern societies have lost their respect for water, they have preserved a deep respect for the sources of water and Earth's environments. They have generally been the ones who have respected Mother Earth and upheld traditional knowledge as a way of preserving Nature. Therefore they have a lot to contribute to achieving the sustainable development goals. At present all our lives are in danger so we need to work together with a common vision to protect and restore the water provisioning natural ecosystems, which we all depend upon for life. Working together, respecting our differences and listening to each other will be essential and play a large part in the creation of peaceful and inclusive societies in which all are equal and no one is left behind.

“We recognize that the traditional knowledge, innovations and practices of indigenous peoples and local communities make an important contribution to the conservation and sustainable use of biodiversity, and their wider application can support social well-being and sustainable livelihoods.” (The Future We Want RES/A/66/288 para.197)

Therefore in order to realise this goal, it will be essential to respect and honor the rights of all human beings, which naturally includes all indigenous peoples and minorities. It will depend upon developing an attitude of care and the recognition of the inherent interdependence and equality of all human beings.

“Indigenous peoples are recognized as being among the world's most vulnerable, disadvantaged and marginalized peoples. Spread across the world from the Arctic to the South Pacific, they number, at a rough estimate, more than 370 million in some 90 countries. While they constitute approximately five per cent of the world's population, indigenous peoples make up 15 per cent of the world's poor and one-third of the world's extremely poor.” (The United Nations Declaration on the Rights of



Having established the interdependence and indivisibility between water and all the other Goals, we can see that water is the one for us to use for our foundations. However we are not purely talking about fresh liquid water as this is but one phase of a three phase process; known as the hydrological cycle. If we are to have adequate quantities of fresh water for all humanity, along with addressing the extreme climate issues, it is vital that the entire cycle is included.

“The cycling of water among the three phases is overwhelmingly important for Earth, driving not just the atmospheric general circulation but also the very existence of life as we know it.” (USGCRP. A

plan for a new science initiative on the global water cycle, chapter 1, 2001) http://www.hydro.washington.edu/pub/CE/HYDRO/WaterStudyGroup/CH1_0201.PDF

Bearing all of this in mind our next question is how to proceed? Looking at Goal 6 on water we find a potential directive and way to lay our foundations in an integrated manner. Target 6.6 states:

“By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes” (Target 6.6)

Working with this Target as our cornerstone, there is a chance of laying our foundations in an integrated manner and thereby fulfilling our commitments to ensure that future generations will at least have a chance of fulfilling their potential in dignity in a healthy environment. If we take collective concerted action now, we may yet be the generation who help save the day. Governments have already committed to achieving substantial results regarding this Target by 2020. Hence it has already been designated as one of the Targets to lead the way in January 2016. Recognising the importance of this, let us consider how we can conceivably achieve this target?



Splitting the task into two major parts, may be an easier way to approach achieving goal 6.6. This two-part process involves both making laws and policy changes for the protection of water related ecosystems along with taking steps to restore and conserve them.

Protect all water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.



All UN governments having committed to this and it is within their power to honour their commitments by passing and enforcing national and international laws that:

1. Stop the deforestation of tropical forests, rain forests, mountain forests, virgin forests, primeval forests, late seral forests, ancient woodland, boreal forests and mangrove forests.
2. Stop all actions that pollute or deplete lakes, aquifers, groundwater and watersheds.
3. Stop all actions that pollute rivers or prevent them from following their ancient, natural flow and reaching the seas and oceans.
4. Stop all actions that destroy or deplete wetlands.
5. Stop all actions that destroy or deplete mountain glaciers, snow and permafrost.

Restore Water Related Ecosystems, Including Mountains, Forests, Wetlands, Rivers, Aquifers and Lakes

This is where a great deal of consideration and cooperation will be needed. To achieve long lasting success, it will be essential to do this in a mutually supportive, integrated manner.

“The water-related problems facing society today are too complex for any handful of individual scientists or agencies to manage alone. An unsystematic approach to these problems, carried out with the vague hope that somebody somewhere will fit all the puzzle pieces together, will not be effective.” (USGCRP. A plan for a new science initiative on the global water cycle, chapter 2, 2001)



This is also not the time to postpone action for further research, debate and argument. Now it is time for concerted action, using the wide range of capacities that we presently have. Through the integration of traditional and modern understanding, we have a vast wealth of knowledge with which to proceed and there is a lot of motivation for us to succeed. Let us begin with focusing on mountains, as they source all the worlds great rivers and according to the FAO source of 60-80 percent of the worlds fresh water resources.

According to the US Global Change Research program, initiated by President Clinton, mountains are also a fundamental part of the hydrological cycle and hence also an important factor in the climate cycle.

“Seasonal snow cover and glaciers store large amounts of freshwater and are therefore critical components of the land surface hydrologic cycle.” (USGCRP. A plan for a new science initiative on the



In 2013 after extensive research UNESCO released a report concerning mountains in which they focused upon the extensive retreat of glaciers worldwide and the related changes in river and stream flows. They acknowledged that the restoration of mountain forests would be an essential element in regulating fresh water supplies for the world.

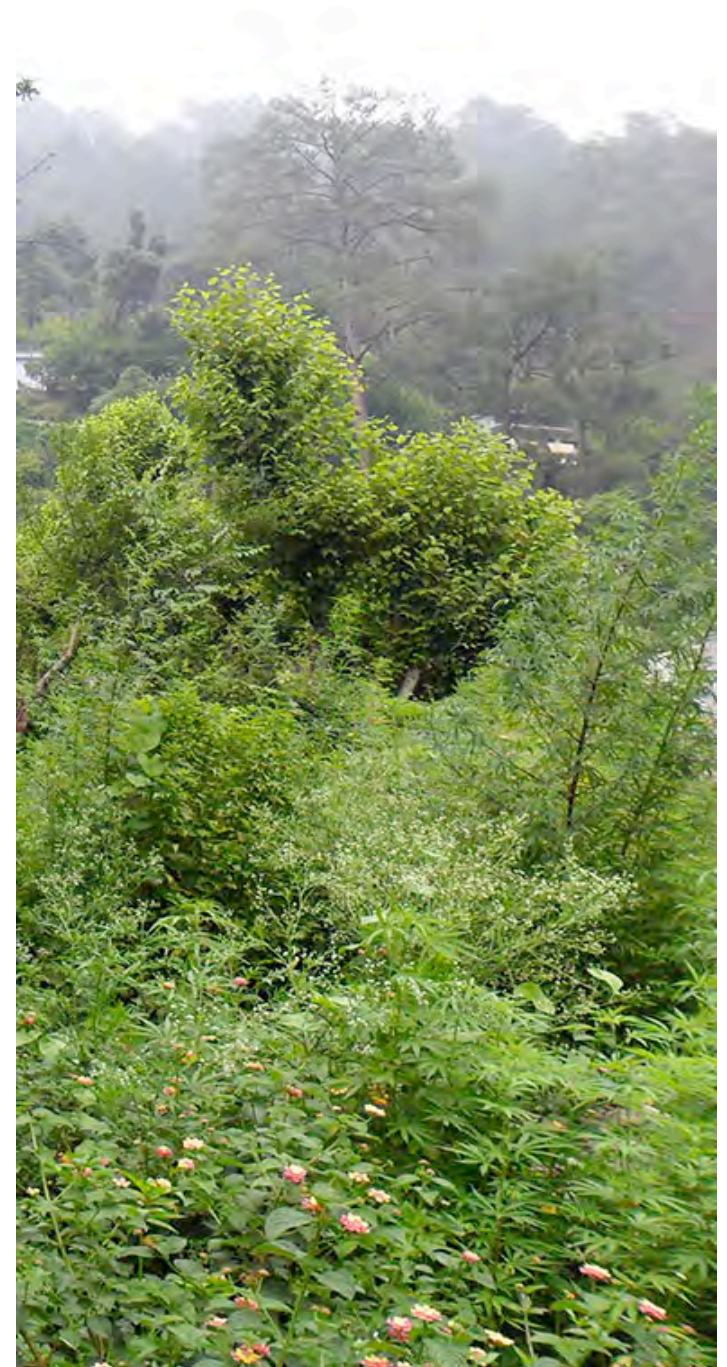
“Given their important role in water supply and regulation, the protection, sustainable management and restoration of mountain ecosystems will be essential.” (UNESCO, Climate Change Impacts on Mountainous Regions of the World, 2013)

With all of this in mind we might consider the restoration of the worlds mountain forests as our initial step forward and beginning in January 2016 initiate programs for worldwide implementation. However the immensity of denuded and degraded landscapes in mountain regions globally poses a great challenge. Hence we will have to be very determined and make immense effort. Remembering all the good reasons for doing this and working together collectively around the world will support our resolve.

We at Active Remedy Ltd. have spent more than ten years researching and looking into plausible ways of dealing with this task. We have designed a model that can potentially be used for achieving Target 6.6 and thus support sustainable development. **Please Read More...**



For further information about this method please visit our Website: www.activeremedy.org





"Treat the earth well: it was not given to you by your parents, it was loaned to you by your children. We do not inherit the Earth from our Ancestors, we borrow it from our Children." (Ancient North American Indian Proverb)