

MOUNTAINS Towers of Life

A VISION FOR A GLOBAL MOUNTAIN AGENDA IN A POST-RIO+20 WORLD

A CHANGE IN CLIMATE MOUNTAIN SERVICES BETWEEN RIO AND RIO

Covering 24 percent of the Earth's surface, mountains are home to 720 million people – or 12 percent of the world's population – in 120 countries. For centuries, mountain ecosystems and communities have played a critical role in maintaining a sustainable flow of resources to the plains below.

The 1992 Earth Summit in Rio de Janeiro was a milestone for the political recognition of the unique services mountains provide to global sustainability. With the adoption of Chapter 13 on Sustainable Mountain Development (SMD), Agenda 21 demanded better stewardship of mountains and mountain regions for global well-being. Since then, an uncounted number of highly rewarding international and regional initiatives emerged, all contributing with success to enhancing knowledge and understanding of the issues and approaches of SMD.

Now, 20 years on, the “call for action” to enhance the stewardship of mountains is more relevant and pressing than ever before. While Mountain Services are vital to achieving Green Growth, there are growing threats to their sustainable supply. The effects of climate change are observed to be highest in mountains, jeopardizing the sustainability of mountain ecosystems and the socio-ecological stability of these landscapes. Consequently, policy makers looking to deliver on their promises for human well-being and natural prosperity (“the future we want”), need to make Mountain Services a key priority for action in a post Rio+20 world.

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ELEVATING EXPERIENCES LIVING SOLUTIONS FOR ENERGY, WATER, AND FOOD SECURITY

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Veritable Towers
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Mountains are inevitably connected to water – and water is life! Water is our planet’s most precious resource and mountains are of strategic importance to supply it. All of the major rivers rise in mountain regions, providing about 50 percent of all freshwater to downstream users. Without water, there is no food to feed growing populations. Without water and mountains, there are no solutions to meet the growing demand for clean energy. Without water, biodiversity and ecosystem integrity cannot be sustained. Without clean and reliable water, human and global well-being is at severe risk.

But increasingly, the reliability of supply is changing with either too much or too little water being available. Many rivers run dry before they reach the deltas. Others increasingly flood land and people with devastating effects on lives and assets. Therefore, the sustainable management of water is the single most important priority for all mountain regions. This defines the mountain dimension in every human being. Water is a true Mountain Service and all other services depend on it. That is why mountains are rightly called water towers. But they are more – they are Towers of Life!

THE GLOBAL WATER CHALLENGE:

- ➔ 783 million people still lack access to clean water
- ➔ 40 percent of the food is irrigated, half of that uses groundwater





Photo © Mountain Partnership

- Most of the water we ‘drink’ is embedded in the food we eat
- Lack of access challenges poverty reduction goals (especially health, education, and food production) and is a growing reason for local and regional conflict

MOUNTAINS AS WITNESSES OF GLOBAL CHANGE

Despite the ‘picture postcard’ appeal of mountains, harsh climates make life hard for populations who from circumstances or tradition live at high altitudes, while isolation hampers their ability to deal with rapid change or new problems. Traditional land-use systems have considered this variability and the socio-economic and socio-cultural organization of mountain peoples has been shaped significantly by their natural environment.

With global change, variability of challenges may change beyond the limits of past experience and traditional knowledge alone may not suffice to cope with new developments. For example, extreme climate events are likely to become more common and more intense in mountain areas, threatening the livelihoods of both mountain people and those who depend on mountain areas for their water, food and other resources. Given the tight highland-lowland linkage, these changes may have serious impacts far beyond the mountain boundaries.

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MOUNTAIN SERVICES AND RIO+20 HIGH SOLUTIONS FOR DEVELOPMENT & GREEN GROWTH

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Rapid global change requires feasible response strategies. Mountains present many solutions for crafting these responses and the global community is increasingly dependent on them, especially for achieving the ambitious objectives under a Green Growth development trajectory.

Without water coming from mountains there is no sustainably grown food to feed a hungry labour force and no renewable energy to power economic development. Harboured critically endangered flora and fauna makes mountains a hotspot for biodiversity conservation, while the demand for extractive resources such as minerals and timber from mountains is also increasing. And economically advanced societies will increasingly turn to the mountains for leisure and recreation.

But a Green Economy may need more than the sustainable supply of physical inputs. In a world dominated by rapid global changes, innovation often stems from a combination of modern, science-based and traditional knowledge. Societies could build adaptation strategies on socio-cultural diversity, a diversity that can particularly thrive in cultural mountain landscapes. With the extremely high cultural diversity present in mountains, mountains represent a heritage to humanity that is unmatched by any other landscape.



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SUMMITING WITH SUCCESS: MAKE GREEN GROWTH AND DEVELOPMENT SUCCEED!

Mountains and Mountain Services are fundamental for solving the Water-Energy-Food nexus. Even non-mountain countries ultimately depend on healthy mountain ecosystems for their economic prosperity and socio-cultural integrity. At Rio+20, the global community needs to unite behind mountains for a strong and extended “Mountain Mandate” to seize the opportunities and address the challenges of “the future we want”.

Healthy mountain landscapes are economic assets. Investing in them generates direct fiscal benefits boosting economic wealth. Investments needed to replace naturally generated Mountain Services with technological solutions for safe water, healthy food, and renewable energy would greatly exceed investing in Sustainable Mountain Development. Likewise, the loss of assets through natural disasters emerging from a neglect of mountain environments shadows the necessary investments for sustainably managing these landscapes.

Consequently, recognizing the importance of Mountain Services for Green Growth and human well-being has to extend beyond the Rio+20 summit. Mountain landscapes require a mandate and commitment that assure their prioritization as precious indicators of any water-energy-food related Sustainable Development Goals. As mountaineers rely on teams, mountains will have to rely on the collaborative support offered by the global community as the custodian of these towers of life. The High-level

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Panel on Global Sustainability is one out of many suitable mechanisms to take on such a responsibility.

Mountains are in our water, mountains are in our food, and mountains provide the solutions for clean and renewable energy. Being towers of life, mountains are in all of us and they provide the solutions for a Green Growth development path.

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