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A Study on the Significance of the Impact of Atmospheric and Water Management on Sustainable Development Strategies

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Abstract. The United Nations Sustainable Development Goals (SDGs), of which the availability of safe, sustainable and clean water and air is central to multiple goals, are achieved as a nation and a humanity together. The planned timing and pathways to achieve the SDGs are usually long-term and therefore likely to be mostly unaffected. In these newer times, it is important to understand the real priorities for clean water and air supplies, which have been highlighted globally and in India due to a variety of natural and human-influenced triggers. It is a rare opportunity for scientists to demonstrate to decision makers, through real-time examples, the effectiveness of potential climate change mitigation, water and air pollution strategies, and the importance of sustained investment in environmental causes and resulting benefits to ensure the health and development of our future generations. Based on the qulititive and quantitive method, we develop and use economic, legal, investigative, planning, informational, and institutional tools to promote socio-economic change and bring us closer to a world where sustainable development and ecological justice prevail.

Keywords: atmospheric management, water management, sustainable development strategies, nature.

1. Introduction

Currently, about half of the global population experiences severe water shortages for at least some of the year, a situation that is expected to worsen as climate change alters precipitation patterns and impacts the overall water cycle. The effects of hydrologic changes triggered by retreating glaciers and melting permafrost are approaching the point of no return.

Only 0.5% of the Earth's water is available as fresh water. But over the past 20 years, land water storage (the sum of land surface and groundwater, including soil moisture, snow, and ice) has declined faster than total annual human water use [1]. Considering population growth and environmental degradation, this could have dramatic implications for future water security.

The inclusion of poverty eradication as a fundamental human goal and the acceptance of climate change, which refocuses our attention on forgotten but never lost uncertainties, will bring knowledge back to the heart of human experience. Securing and sustaining the flow of water during drought, climate change, population growth and "scarcity management" under water threats, water quality degradation, transboundary waters, the water situation is always critical [2]. However, sound, strict laws and bylaws. This paper analyzes the current status of atmospheric and water resource

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management issues and proposes strategies to optimize them, with the hope of contributing to sustainable development issues.

It is a matter of human survival, economic development, and social progress. Due to the natural endowment of water resources and the scale and stage of economic and social development, China is faced with outstanding water resource problems, and water resources, together with energy and the environment, are the three major constraints affecting sustainable economic and social development.

With the popularization of the concept of sustainable development, especially since the release of the Rio Declaration on Environment and Development (rio declaration), the Chinese government has closely integrated the concept and principles of sustainable development with the development, utilization, and management of water resources, and has established a new concept of resources and has carried out a series of water management practices with remarkable results. It supports 22% of the world's population and meets the water needs of nearly 10% of economic growth, providing strong support for sustainable economic and social development [3].

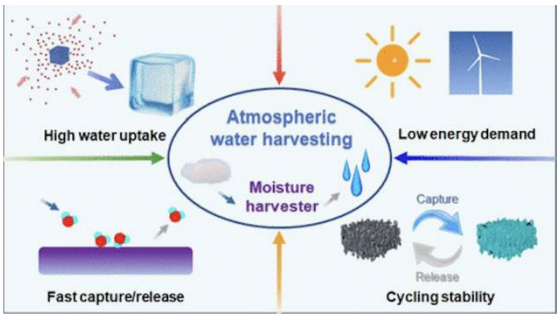

Figure 1. Atmospheric water harvesting.

Water resources refer to the freshwater part of the earth's hydrosphere, including the water vapor in the atmosphere, which itself is divided into three categories: atmospheric water, surface water and groundwater, which constitute a terrestrial freshwater system (Figure 1).

Water is the source of life on earth, has the ability to nourish all things, and is also the source of human life. Together with land, it constitutes the mother resource of the ten major natural resources on the earth. Water is the carrier of aquatic species, tourism and other resources; it is also the guarantee resource of soil, forest, grassland and other resources. Water resources affect climate resources, and water itself is energy. There is a famous saying in the world: "The competition for coal in the 19th century, the competition for oil in the 20th century, and the competition for water in the 21st century", "International investment and economic development in the 21st century", look at people and water", indicating that water may become the biggest constraint on sustainable development. factor [4]. At the same time, water is one of the few harmful resources, and deep groundwater is also a quasi-non-renewable resource, these are the characteristics of water resources that cannot be ignored.

The task of water resources management is not only to ensure sustainable economic and social development, but also to ensure that every citizen has the basic human right to have a certain amount of water.

2. Impact of atmospheric and water management on sustainable development strategies

2.1. Adhere to the sustainable use of water resources

Firmly establish the idea that "without sufficient water resources, there is no basis for sustainable development; without sufficient water resources, there is no basis for sustainable development; without sufficient water resources, it is impossible to achieve the improvement of the quality of life of the people". To take out the economic work to grasp the strength of water resources protection, economic development and water resources protection on an equal footing [4]. To be responsible for future generations [5].

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2.2. Adhere to a balanced approach

Co-ordination and balance, both the symptoms and the root cause, water bodies and waters to take into account, open source, conservation and protection, construction and management reform together, engineering measures and non-engineering measures combined to achieve coordinated and sustainable development of water resources. In the development of economy and society, the first thing to consider is that the use of water resources, so that it can support the development of economy and society by its own water resources, and can maintain a good ecosystem, so that water can be measured, water can be used to determine industry and development [5]. At the same time, the order of water consumption should be people-oriented, with life first and production later. Through scientific and reasonable allocation of water resources, we can guarantee water for industrial and agricultural production and life, and realize the organic unity of economic benefits, social benefits and ecological benefits.

To continue to work on water conservation as a strategic, revolutionary measures to deepen the promotion, to be based on the results, the system the pilot exploration to standardized construction [1]. On the basis of the nationwide pilot construction of a water-saving society, break through the pilot situation as soon as possible and upgrade the construction of a water-saving society to a norm that must be implemented in all parts of the country and in all industries, so as to support the transformation of the mode of economic development with the transformation of the way the whole society uses water [2]. Promote from administrative to conscious construction. In China, mainly promoted administratively through a series of measures such as the construction of a system, detailed implementation measures, and economic reward and punishment policies, which restrain and regulate people's water-use behavior according to the law; in the next stage, we should promote the public to form good water-use and water-conservation habits, conserve water and protect water resources [3]. From qualitative management to quantitative construction. Build a quantitative index system to form the grasp of a water-saving society; build a quantitative process control to form the ability to monitor the whole process of the natural-social water cycle; build a quantitative statistical system to form a unified index account and statistical reporting system for the construction of a water-saving society; build a quantitative assessment and management to form the supervision, assessment and accountability management for the construction of a water-saving society [6].

The construction of a quantitative assessment and management, the formation of a water-saving society supervision, assessment and accountability management.

2.3. Atmospheric water resources have a large potential for development

Land-based freshwater resources consist of atmospheric water, surface water and groundwater. Atmospheric water resources are relatively abundant compared to surface water resources and groundwater resources, and have greater potential for development and utilization. Atmospheric precipitation is the ultimate source of surface water and groundwater recharge, and plays a pivotal role in the evolution of terrestrial water cycle and freshwater resources [7].

Water in the ocean, atmosphere and land is exchanged with each other at all times through phase changes and movements. There are two types of water cycles in nature: one is the water cycle between sea and land called the general or external cycle, and the other is the local water cycle in the ocean or on land called the minor or internal cycle. In the earth's water cycle, the atmospheric water has the fastest renewal cycle, with a cycle period of about 8 days, i.e., it can be renewed 45 times a year.

Like surface water and groundwater, atmospheric water is an indispensable and important part of terrestrial water resources [7]. With the rapid development of national economy and the change of climate itself, the lack of surface water and the decline of groundwater level in a considerable part of China, the contradiction between population growth and economic development and water shortage is increasing.

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3. Strategies for atmospheric and water management on sustainable development strategies

Efforts must be made to achieve observation. When selecting new observation points, it is necessary to conduct a comprehensive instead of selecting new observation points based on the new opportunities.

The large-scale coordinated efforts and commitments of multiple partners, including the National Meteorological Administration of a country's long-term commitment [8].

3.1. improving the atmospheric water resources management system

In the current process of economic and social development, many industries in China have achieved extremely rapid development and progress, and people's living standards have been greatly improved. Under this background, people's life and production are consuming more and more water, while the level of water resources repetition and recycling is still very low. In order to better improve the utilization efficiency of water resources, the urban water resources management system must be included in the urban construction system and plan. Only in this way can higher quality and higher level water resources management be realized and water resources can be saved and efficiently used [9].

To improve the allocation system of water resources management, relevant departments should strictly control the water use system, abide by the principles of coordinated development and comprehensive utilization, and reasonably control the water consumption to ensure the rational utilization of water resources in the basin. Relevant departments should establish a practical water use supervision mechanism to ensure that users can use water in a planned way under strict water use standards.

3.2. Improve the awareness of atmospheric water resources protection

The rational development, utilization, and protection of water resources are the important premise and foundation for truly achieving sustainable development, and the efficient utilization of water resources is the most important management goal in China's water resources management. Of course, the realization of this work goal requires the active participation and joint efforts of relevant departments and the public. In order to further enhance and improve people's understanding of the circulation, repetition, and economical use of water resources, relevant departments need to carry out colorful, interesting, and vivid publicity on water resource protection through TV, the Internet, and other channels. Under this atmosphere, people will consciously and actively strengthen the awareness of water resource conservation and protection, work together to build a water resource conservation and protection society, and change the wrong behaviors of water resource waste and pollution in the past.

3.3. Integrated Water Resources Management Policy

The environment optimizes water use resources and related issues use efficiency and maximizes the resulting economic benefits. Obtain social benefits to achieve sustainable goals for water and sanitation services. That will require the creation of a water-resilient environment climate. Integrated water resources management incorporates a provision for an institutional and regulatory framework that enhances the integrity of human economic, social and political challenges. The Ministry of Water and Irrigation is responsible for strategic direction and planning in coordination with the Water Authority; the two sub-organizations of the Ministry. The Ministry has full responsibility for water and public wastewater and all related projects in the Kingdom. The Ministry's objective is: "to upgrade, develop and manage the water sector and improve the quality of water services"[10].

4. Conclusion

To sum up, it is necessary to develop the management system and mechanism, implement the integrated and unified management of water resources, manage according to the law, scientific management, open-source and throttle, save water and prevent pollution, establish and improve the responsibility target system of water use and water conservation and protection, and implement

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responsibilities at all levels. To continue to break the various obstacles that restrict the sustainable development of water resources cycle of the track.

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