



Integrated Watershed Management and Harvesting Process

Geurts Allais*

Department of Biomolecular Health Sciences, University of Utrecht, Utrecht, Netherlands

DESCRIPTION

The process of organizing and guiding land, water, and other natural resources used in a watershed to provide the appropriate goods and services while mitigating the impact on soil and watershed resources. A watershed programme is effective and carries out relatively intensive effort in a limited area, which therefore it has to be very carefully identified and selected.

The watershed resources are characterized by high exclusion costs and sub-tractability contains two main attributes of common pool resources. The important catchments of a country will typically be mountain areas with high rainfall and their priority rating will depend upon the related downstream interests, city water supply, hydroelectric power generation, irrigation schemes, floodplain protection, etc. The harvesting of water in turn benefits further down the slope by providing irrigation, either in surface water or by recharging groundwater.

The integrated farmer participatory watershed management process involves: agro-ecological zoning, farming systems research, systems analysis to select best-bet options, up scaling research results, identification of products with competitive advantage for local and regional markets, and the design and implementation of a science-based action. The global attention to watershed management is increasing and will continue to increase as water becomes scarcer.

It is usually considered as social, economic and institutional factors operating within and outside the watershed area. It evolved from water resource management and the hydrological cycle to current integrated approach of managing biological, physical, and social elements in a landscape. The selecting watershed size also depends upon the objectives of development and terrain slope.

Nature-based solutions expansion is sensitive to the initial land use and future drivers. The treatment cost reduction was greatest feature in some scenarios, confirming it as a strategy for addressing water quality issues of degraded watersheds.

The involvement of too many elements in planning and decision-making can lead to inefficiency and unsatisfactory end results. Participation should be limited to representatives from key government institutions and local communities which will be directly affected. The increased reservoir sedimentation which reduces the storage capacity which may in turn render water projects uneconomic and changing patterns of stream flow.

The accounting of water scarcity cost introduced into a tradeoff expansion of nature-based solutions is well-preserved and may not worth the investment. The loss of value over time, which includes the productive potential of land and water, accompanied by marked changes in hydrological behavior of a river system which results in inferior quality, quantity and timing of water flow. The development treatment includes essential activities such as rainwater production, soil management, and water management to estimate natural protection measures.

The integrated watershed management approach exemplifies the importance of multiple uses of rather than hydrology. The erosion reduces silt in runoff water and in water harvesting ponds, thus lengthening their lifespan. The integrated watershed management approaches a process for solving watershed management problems; and it also presents formidable challenges in terms of implementation.

CONCLUSION

The problems of mobility, clarity of boundaries, and traceability apply regardless of the scale but are mitigated somewhat in smaller watersheds. The integrated watershed management situations consist of multiple criteria and alternatives. Quantitative and qualitative evaluation methods, which traditionally have been used for social complexities of watershed projects.

Correspondence to: Geurts Allais, Department of Biomolecular Health Sciences, University of Utrecht, Utrecht, Netherlands, Email: allais@gen.ut.com

Received: 12-Jul-2022, Manuscript No. IJWR-22-18156; **Editor assigned:** 15-Jul-2022, PreQC No. IJWR-22-18156 (PQ); **Reviewed:** 05-Aug-2022, QC No. IJWR-22-18156; **Revised:** 12-Aug-2022, Manuscript No. IJWR-22-18156 (R); **Published:** 19-Aug-2022, DOI: 10.35248/2252-5211.22.12.485.

Citation: Allais G (2022) Integrated Watershed Management and Harvesting Process. Int J Waste Resour. 12:485.

Copyright: © 2022 Allais G. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.