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Vulnerability of People' s Livelihoods to Water Resources Availability in Semi Arid Areas of Tanzania

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ABSTRACT

In semi-arid areas of Tanzania vulnerability context is depicted as the starting component for policy process analysis through the sustainable livelihood approach. Giving vulnerability a high prominence in this analysis allowed the research to consider all kinds of vulnerabilities as central issues to the ways in which livelihoods are shaped. Hence the Sustainable Livelihood framework was used in this research as the comprehensive framework for assessing the contributing factors to limited water resources availability to sustain people' s livelihoods. The study revealed that, changes in the quantity, timing, intensity and duration of rainfall as a result of climate change contributes to greater water stress and making people more vulnerable. Due to over-abstraction upstream of the Great Ruaha River, it implies that, people depending on the water resources downstream of the Great Ruaha River catchment are vulnerable. Their livelihoods are at risks as they don' t have water for irrigation and other economic activities. The study also revealed that, both vulnerability and livelihood strategies are derived through natural water availability which features droughts, climate change and the link between water availability, agricultural production, and outcomes.

KEYWORDS

Vulnerability, Livelihood, Water Resources, Great Ruaha Catchement

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References

- [1] J. Keeley, " Influencing Policy Processes for Sustainable Livelihoods," Strategies for Change, 2001.
- [2] United Republic of Tanzania, " Water Policy," 2002.
- [3] L. Tennyson and P. C. Zingari, " Preparing for the Next Generation of Watershed Management Programmes and Projects," Watershed Management and Sustainable Development Working Paper No. 9, Food and Agriculture Organisation, Rome, 2006.
- [4] S. S. Mwakalila, " Socio-Economic Impacts of Irrigated Agriculture in Mbarali District of South-West Tanzania," *Journal of Physics and Chemistry of the Earth*, Vol. 31. pp. 876-884.
- [5] B. Holling, J. Walker, F. Bengtsson, J. Berkes, K. Colding, M. Danell, L. Falkenmark, R. E. Gordon, N. Kasperson, A. Kautsky, S. Kinzig, S. K. G. Levin, F. M?ler, P. Moberg, L. Ohlsson, E. Olsson, W. Ostrom, J. Reid, S. Rockstr&?m, S. Savenije and U. Svedin, " Resilience and Sustainable Development: Building Adaptive Capacity in a World of Transformations," *AMBIO: A Journal of the Human Environment*, Vol. 31, No. 5, 2002, pp. 437-440.
- [6] F. Berkes, J. Colding and C. Folke, " Navigating Social- Ecological Systems: Building Resilience for Complexity and Change," Cambridge University Press, Cambridge, UK, 2003.
- [7] F. Cleave and T. Franks, " How Institution Elude Design: River Basin Management and Sustainable Livelihoods," BCID Research Paper No. 12, Bradford Centre for International Development,

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- [8] F. Ellis and H. Freeman, " Conceptual Framework and Overview of Themes," In: F. Ellis and H. Freeman, Eds., Rural Livelihoods and Poverty Reduction Policies, Routledge, London and New York, 2005.
- [9] B. Lankford, " Irrigation, Livelihoods and River Basins," In: F. Ellis and H. Freeman, Eds., Rural Livelihoods and Poverty Reduction Policies, Routledge, London and New York, 2005, pp. 274-293.
- [10] Nicol, " Adopting a Sustainable Livelihoods Approach to Water Projects," Implications for Policy and Practice, Working Paper, No. 133, Overseas Development Institute (ODI), London, 2000.
- [11] F. Ellis, " Livelihoods, Diversification and Agrarian Change, Rural Livelihoods and Diversity in Development Countries," Oxford University Press, New York, 2000.
- [12] P. Moriarty, J. Butterworth, B. van Koppen and J. Soussan, " Water, Poverty and Productive Uses of Water at the Household Level," In: P. Moriarty, J. Butterworth and B. van Koppen, Eds., Beyond Domestic. Case Studies on Poverty and Productive Uses of Water at the Household Level, International Water and Sanitation Centre, The Netherlands, 2004.