Sustainability Appraisal of Panch-Tatwa in Delhi

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Abstract: The World Commission on Environment and Development defined sustainable development as 'development which meets the needs of the present generation without compromising the ability of future generations to meet their own needs'. Sustainable development has to be achieved through finding a convergence between the pillars of economic development, social equity and environmental protection. 'Economic development' is a resources intensive process and is largely driven by the principles of demand and supply. The prevalence of clearly defined stratification in the form of less-developed, developing and developed countries makes economic development even more challenging. While the principles of environmental economics are now being developed, the global environment is degrading at a pace much more rapid than changes in our understanding of economic development. For example, the carbon dioxide concentration in the global atmosphere has been consistently rising since the industrial revolution. The carbon dioxide concentration crossed the 400 parts per million mark in May this year, for the first time since measurements began in 1958. Achieving 'social equity' in an unequal world is a challenge in itself, and requires independent analyses and assessments for it to be achieved. Consequently, sustainable development has largely been compartmentalized as an environmental issues focusing on 'environmental protection'. At the same time, even as the fate of natural resources remains in imminent peril thereby threatening 'our common environment', the principles of sustainable development are being remoulded by some to continue working in a business-as-usual mode. This research contribution argues that contemporary environmental management practices and modern ecology (since 1866) has oversimplified the relationship between man and environment. Traditional knowledge and understanding of man's relationship with his environment focused on the amalgamation of the panch-tatwa (five elements) as earth, water, air, fire and sky. The panch-tatwa understanding, a concept found in almost all traditional systems across the world, advocates that man not only requires these five elements for his survival but is also composed of the same. In doing so, a sub-conscious need for protecting the very elements which make us was invoked and man's harmony with nature was maintained. However, in the present day, the aforementioned harmony has been imbalanced and man's delusional control over nature is leading to a very rapid degradation of nature and natural resources. This disharmonious relationship between man and nature, a result of the advent of modern ecological principles, is illustrated using the National Capital Territory of Delhi as a case study. The sustainability appraisal of panch-tatwa in Delhi reveals that the capital city is noting unsustainable growth. The interrelationship of each of the five elements with the other is also identified to establish the interdependence inherent in the panch-tatwa understanding. However, proponents of sustainable development and urban political ecology stakeholders continue to promote urban growth by invoking measures provided in the principles of 'sustainable development'. We show how the integration of the panch-tatwa understanding in the modern principles of sustainable development could lead to the identification of a more accurate analysis of Delhi's urban growth while also improving the city's environmental performance.

Keywords: sustainable development, *panch-tatwa*, natural resource management, urbanisation, Delhi.