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Paper: Sustainability

An interesting application of statistics in the area of environmental sustainability

Environmental Sustainability is a major component of sustainable development. Except a few industrial giants, a majority of others in Asia relatively lags behind in economic performance. On the other hand, socio-political instability is also a common grievance in Asia.

However, all Asian countries or groups of them tend to have common attitudes towards the environment, due to the wide range of cultural practices in Asia and as a result they are relatively richer in environment sustainability.

In this study, 7 environment indicators for 33 Asian countries are analyzed using a factor analysis with varimax rotation and the countries are grouped according to simple factor scores obtained from the three main factors explaining 78% of the total variation. Possible reasons for the three clusters are explored with the help of records of history and culture. Common attitudes driven by cultural heritage are thought to be the key for similar behavior with respect to environment sustainability.

Keywords: Sustainable development, Environment indicators, Factor analysis, Cultural practices