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Contribution of Space Activities to Solving Global Societal Issues (2)

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GREATER EARTH SOLUTIONS TO TERRESTRIAL PROBLEMS

**Abstract**

Most people intuitively assume and fundamentally believe that terrestrial problems must have terrestrial solutions. This is likely due to a lack of understanding about our interconnectedness and interdependence with the rest of the cosmos. As a terrestrially evolved organism, it is in humanity's genes to adapt to its immediate environment. As it has done so, its perception of its home planet has also evolved.

Greater Earth extends the perception of the home planet to one which is based on Earth's true cosmic dimensions as defined by the laws of physics. This is where the influence of Earth's gravity meets the influence of the Sun's gravity. Here, at a distance of 1.5 million km., we find Lagrange points 1 and 2 in the Earth-Sun system. This defines the effective boundary of Greater Earth which creates of sphere with a diameter of 3 million km.

This spherical region has 13 million times the volume of the physical Earth and through it, passes more than 50,000 times the amount of solar energy which reaches the surface of the planet. In addition to to energy, within the region of Greater Earth there are enormous amounts of other natural resources, including those on the Moon and occasional passing asteroids which could be harnessed for human purposes both on and off the home planet.

Already, human civilization has become increasingly dependent on space assets located in this region, specifically those in geosynchronous orbit and lower. However, it needs to be noted that within the expansive boundaries of Greater Earth our species will also find the necessary room, resources, opportunities and inspiration that it will need to continue to survive and prosper in the current millennium as well as solutions to many of the problems it currently faces on terrestrial Earth. Harnessing these resources and embracing these opportunities will require substantial international cooperation and collaboration which may positively redirect current geopolitical strategies away from confrontation, competition and conflict which burdens today's society.

This paper categorizes nine areas of human activity, each with specific issues that currently confront human civilization and itemizes corresponding solutions that can be found through the utilization of resources and opportunities found in the region of Greater Earth. These areas are: 1.) Social and Psychological Aspects 2.) War and Geopolitical Conflict 3.) Energy Needs 4.) Climate Change 5.) Environmental Considerations 6.) Resource Depletion 7.) Economic Growth 8.) Planetary Protection 9.) Society and Culture.