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Japan's Tenchijin COMPASS data utilization platform to revolutionize agriculture

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Tenchijin, a JAXA-accredited space enterprise, is expanding the application of its Tenchijin COMPASS data utilization platform to revolutionize agriculture. With a bold vision of growing asparagus on the moon in the future, Tenchijin successfully harvested "moon asparagus".

Tenchijin Farm: Addressing Agriculture Challenges with Spatial Big Data and Knowledge Aggregation

Given the booming lunar economy, growing vegetables on the Moon is justified. However, the environment is difficult for the survival of a culture. Tenchijin recognizes the range of challenges and environmental severity that jeopardize global food production and sees this as an opportunity to develop advanced agricultural techniques. Therefore, Tenchijin launched "Tenchijin Farm", a pioneering agricultural initiative, which harnesses the power of big data, to explore innovative and efficient farming methods to identify the most suitable land for sustainable agricultural production. Tenchijin also thinks the move will be useful for growing plants in harsh environments â?? in space. Asparagus, a powerful antioxidant, should keep the inhabitants of the Moon healthy. Following its â??Space Big Data Rice projectâ?, Tenchijin Farm cultivates â??Moon Asparagusâ?• (lunar asparagus), intended for cultivation on the Moon. In this first phase, Tenchijin aims to grow delicious asparagus in a field with the help of Big Data and AI.

Connecting the Dots: Intersection of Technology, Cultures and Environment

Tenchijin Farm uses satellite data to identify optimal land for growing asparagus. As the project progresses, the farm will transition to a harsh environment and become a formidable test bed to study the impact of climate change on crop growth and stimulate the development of agricultural techniques that allow the crop development under difficult conditions. Through

meticulous research and development, Tenchijin aims to gain the essential knowledge needed for cultures to thrive in harsh environments, including on the Moon. This mine of information will be centralized within Tenchijin COMPASS,