**Resolved: The appropriation of outer space by private entities is unjust.**

**NEG**

**Standard- Life**

**“The experience of being alive”** (Merriam-Webster)

**C1- We need to become a multiplanetary species.**

[**https://www.weforum.org/agenda/2021/12/humans-multiplanetary-species/**](https://www.weforum.org/agenda/2021/12/humans-multiplanetary-species/)

**Reuter 2021 (Dec. 09)**

**A: Risk Factoring**

**Humans have a one in six chance of going extinct this century according to Oxford Philosopher Toby Ord. In his book, The Precipice: Existential Risk and the Future of Humanity, Dr Ord lays out a variety of long-tail risks that are both existential and very difficult to mitigate. These include nature-based risks like asteroids, large-scale volcanic eruptions and stellar explosions. Although we can track many of these phenomena, we do not have the technology (nor are we likely to develop it anytime soon) to prevent large eruptions or redirect large asteroids. Initial efforts to nudge space objects are just beginning. This is to say nothing of the human-created risks of nuclear war or bioweapons intentionally or unintentionally released on the public, a scenario made easier to imagine by the current pandemic. As long as humanity is grouped together on a single planet there will always be a possibility that all of us can be killed at once. It is equivalent to having everyone in a single building: there is always a risk greater than zero of a collapse or fire that kills everyone. By establishing, at first, small outposts and eventually larger scale settlements on other planets, the risk of our species being destroyed is significantly curtailed.**

**B: Positives**

**On a more positive note, human habitation in a greater variety of settings will radically expedite science and commerce. While we currently have small-scale experimentation with manufacturing items in micro and zero gravity on the International Space Station, the potential for us to set up large-scale industry in different physics requires us to have a presence on other celestial locations.**

**Large-scale settlements of people are hubs of innovation and human flourishing. Just think of how many more discoveries and marvels could be created by 80 billion people in the future instead of today’s 8 billion. Our current planet has a limited carrying capacity but our solar system can accommodate many more people than any single planet can.**

**Just as cultural and geographic variety contributes to the richness of our current society, further expanding the diversity of human settings would continue to expand the creativity of our species. Space travel itself has already been an incredible inspiration to numerous scientists, engineers and artists with many people citing seeing the moon landing as one of the most formative events of their lives.**

**The technologies we develop on our way to becoming a multiplanetary species will also benefit us here on earth. Today, satellites are used to monitor carbon and other greenhouse gas emissions to give us a better picture of the causes of global warming and promote accountability. In her first speech devoted to space, US Vice-President Kamala Harris said: “I truly believe space activity is climate action.” In a recent report, the World Economic Forum's Global Future Council on Space laid out the many ways satellite data is being used to address climate change and suggests feeding data from space-based assets into an “Earth Operations Centre” to provide a real-time picture of activities and phenomena that contribute to warming.**

**Less well known are the many other technologies developed on our way to space but used in our daily lives. The CMOS sensor was first invented at NASA’s Jet Propulsion Laboratory in the 1990s. No one could have predicted that this technology would eventually be part of all our phones, enabling high-quality digital images and affecting everything from how we document human rights abuses to how we present ourselves to potential mates on dating apps.**

**In Summary, Humans shouldn’t put all our eggs into one basket because even with one bad thing, we go extinct. On top of that, there's numerous pros about becoming multi-planetary. Technology and culture boons, humans could grow into bigger numbers not limited by 1 planet, space could help push climate change into a better direction, the further we would travel, the more the diversity would grow. Prefer this framework as the only way humans can reliably not perish is to Negate.**