# Article information:

Tempo-spatial changes and main anthropogenic influence factors of vegetation fractional coverage in a large-scale opencast coal mine area from 1992 to 2015 - ScienceDirect
<https://www-sciencedirect-com.proxy.lib.uwaterloo.ca/science/article/pii/S0959652619318700>

# Article summary:

1. Opencast coal mining leads to a decrease in vegetation fractional coverage, causing damage to the environment and ecosystems.

2. Land reclamation is an important part of mine production and construction to improve vegetation fractional coverage and restore local ecological balance.

3. Remote sensing technology is an important approach for dynamic monitoring of vegetation characteristics in opencast coal mine areas.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

The article titled "Tempo-spatial changes and main anthropogenic influence factors of vegetation fractional coverage in a large-scale opencast coal mine area from 1992 to 2015" provides an analysis of the changes in vegetation coverage in an opencast coal mine area in China. The study uses remote sensing images to calculate the vegetation fractional coverage (VFC) and vegetation index (VI) of the Pingshuo opencast coal mine area, and analyzes the effects of anthropogenic activities on vegetation using Moran's Index.

The article highlights the importance of land reclamation in mining areas to minimize damage to the environment and restore ecological balance. It also emphasizes the significance of studying changes in ecological environments at different time and space scales, monitoring vegetation growth, and evaluating the effectiveness of land reclamation.

However, there are some potential biases and missing points of consideration in this article. Firstly, it does not provide a comprehensive overview of the negative impacts of opencast mining on ecosystems beyond vegetation coverage. Opencast mining can cause soil erosion, water pollution, air pollution, noise pollution, habitat destruction for wildlife, and displacement of local communities. These impacts should be considered when evaluating the effectiveness of land reclamation.

Secondly, while the article acknowledges that mining activities can affect vegetation through direct damage and indirect environmental stress, it does not explore counterarguments or alternative perspectives on this issue. For example, some studies suggest that mining activities can have positive effects on plant diversity by creating new habitats for certain species.

Thirdly, there is no discussion about potential risks associated with land reclamation projects. Land reclamation can involve significant financial costs and may not always be successful in restoring ecosystems to their original state. There is also a risk that reclaimed land may not be able to support native plant species or may become vulnerable to invasive species.

Overall, while this article provides valuable insights into changes in vegetation coverage in a large-scale opencast coal mine area, it could benefit from a more balanced and comprehensive analysis of the environmental impacts of mining activities and land reclamation projects.

# Topics for further research:

* Negative impacts of opencast mining on ecosystems
* Soil erosion in mining areas
* Water pollution caused by mining activities
* Habitat destruction for wildlife in mining areas
* Risks associated with land reclamation projects
* Success rate of land reclamation in restoring ecosystems

# Report location:

<https://www.fullpicture.app/item/f40f4b55770eb012c6ce49284a3331a2>