# Article information:

A Effectiveness-and Efficiency-Based Improved Approach for Measuring Ecological Well-Being Performance in China - PMC
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9915347/>

# Article summary:

1. China's rapid urbanization has led to significant ecological and environmental challenges, making it crucial to evaluate the country's ecological well-being performance (EWP).

2. Previous studies have focused on EWP efficiency without considering effectiveness, leading to a biased perception of EWP improvement.

3. This study proposes a bi-dimensional approach that considers both effectiveness and efficiency in evaluating EWP, using indicators such as the Ecological Consumption Index and Human Development Index, and applies it to a case study of 30 provinces in China from 1997 to 2019. The results show that while ECI and HDI increased during this period, the average value of EWP efficiency decreased with fluctuation, and developed regions did not necessarily have the best EWPs.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article titled "An Effectiveness-and Efficiency-Based Improved Approach for Measuring Ecological Well-Being Performance in China" presents a novel approach to evaluating the ecological well-being performance (EWP) in China. The authors argue that previous studies have focused on the efficiency of EWP without considering its effectiveness, which may mislead efforts to improve it. Therefore, they propose a bi-dimensional evaluation framework that considers both effectiveness and efficiency.

The article provides a comprehensive review of the challenges posed by urbanization in China and the importance of striking a balance between economic growth and environmental protection. It also highlights the limitations of traditional GDP benefits and emphasizes the need for evaluating human well-being as an essential component of sustainable development.

The proposed evaluation framework includes two indicators: the Ecological Consumption Index (ECI) as an input factor and the Human Development Index (HDI) as an output factor. The authors use various methods such as entropy method, line-weighted method, four-quadrant evaluation framework, Super SBM model, and DEA moving split-windows analysis method to calculate EWP effectiveness and efficiency.

The case study conducted using data from 30 provinces in China for the period 1997-2019 reveals that while ECI and HDI increased during this period, EWP efficiency decreased with fluctuations. Provinces in southern China and Chongqing demonstrated good performance in HDI but had low levels of ECI. Most developed regions such as Beijing, Shanghai, and Guangdong did not present the best EWPs.

While the article presents a comprehensive approach to evaluating EWP in China, it has some potential biases. Firstly, it focuses only on China's urbanization process without considering rural areas' impact on ecological well-being performance. Secondly, it assumes that residential welfare is an appropriate output factor for measuring EWP without considering other factors such as biodiversity conservation or ecosystem services provision. Thirdly, it does not explore counterarguments against its proposed approach or consider alternative evaluation frameworks.

Moreover, while the article acknowledges that ecological and environmental performance in China is poor according to previous studies such as World's Environmental Performance Index (EPI), it does not provide evidence to support its claim that improving EWP can break through these limitations or promote residential happiness and ecological protection.

In conclusion, while the article presents a novel approach to evaluating EWP in China from both effectiveness and efficiency perspectives, it has some potential biases and lacks evidence to support some claims made. Further research is needed to explore alternative evaluation frameworks that consider other factors besides residential welfare output or include rural areas' impact on ecological well-being performance.

# Topics for further research:

* Rural impact on ecological well-being performance in China
* Alternative evaluation frameworks for measuring ecological well-being performance
* Biodiversity conservation and ecosystem services provision in China
* Counterarguments against effectiveness and efficiency-based evaluation frameworks
* Relationship between ecological well-being performance and World's Environmental Performance Index (EPI)
* Factors influencing residential happiness and ecological protection in China

# Report location:

<https://www.fullpicture.app/item/5e9f03905b4556824e5cdab0ba6858fd>