

# Visual Analysis of the Current Situation and Frontier of International Tourism Poverty Alleviation Research Based on VOSviewer and Citespace

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**Abstract:** The article comprehensively uses VOSviewer and Citespace to visually analyze the current situation and frontier of international tourism poverty alleviation research. The findings are as follows: (1) The research on international tourism poverty alleviation mainly comes from western countries and reaches its peak in 2019. (2) Scheyvens, Hall are the author representatives of international tourism poverty alleviation research and have formed a cooperative network mainly composed of university research institutions such as the Univ Otago, Univ Johannesburg, Univ Cape Town. (3) International tourism poverty alleviation is mainly studied from the aspects of ecotourism, residents' lives, national policies and so on. The research objects are mainly in the economically underdeveloped areas such as China, Africa, India, etc. (4) Ashley's article "Tourism and Poverty Reduction: The Road to Prosperity" has the highest citation rate and the strongest link strength. (5) Before 2015, coastal tourism and cultural tourism have become research hotspots in relevant international research, while after 2015, there were no obvious prominent words in the research on international tourism poverty alleviation, and the research tends to be diversified.

**Keywords:** tourism poverty alleviation, VOSviewer, Citespace, visualization

## 1 Introduction

The problem of poverty has always been a worldwide problem and has always been related to the survival and development of mankind. Among the many poverty alleviation measures, tourism poverty alleviation aims to develop tourism resources in poor areas, set up tourism economic entities, make tourism become a pillar industry, and achieve local finance. The academic community has conducted a lot of research and exploration around the theme of tourism poverty alleviation. Based on this, it is necessary to sort out and count the research

results of international tourism poverty alleviation. This paper combined with VOSviewer and Citespace to make a visual analysis of the international published articles on tourism poverty alleviation, which will help readers to have an overall grasp of the research on tourism poverty alleviation and quickly understand the current situation and hotspots as well as find the core key literature in this field for reference, which is of great significance for the next research.

## 2 Data sources and methods

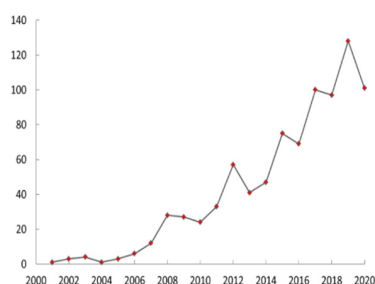
The research data came from the core collection of Web of Science (WOS). In the WOS database, "tourism and poverty" was used as the main topic to search, covering a total of 857 literature.

Song et al. proposed that VOSviewer has higher accuracy in analyzing results in terms of author, institution, literature co-citation, etc., while Citespace is more conducive to displaying the evolution process of panorama and the research frontier<sup>[1]</sup>. This paper synthesized the advantages of the two software, using VOSviewer for research on keywords, authors, and countries, and Citespace for analysis on research on time evolution and emergent words.

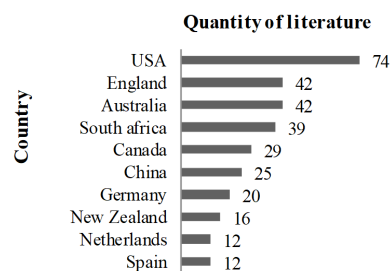
## 3 Research status of international tourism poverty alleviation

### 3.1 Number of literature and countries

As shown in Fig.1 and Fig.2, international tourism poverty alleviation research has experienced a development stage of slow rise (before 2006)-relatively stable growth (2007-2012)-substantial fluctuation (2013-present). The British International Development Agency (DFID) first proposed Pro-Poor Tourism (PPT) in 1999, which is tourism that benefits the poor and combines tourism with poverty alleviation; Since then, relevant topics have become hot topics and research on poverty alleviation through tourism has gradually expanded. It can be seen from the statistics of the top ten posts (Fig. 2), the top ten countries with the largest number of literature are mainly from western countries, with the USA taking the lead. The concept of tourism poverty alleviation was first proposed by western countries. However, South Africa with developed tourism and a large gap between the rich and the poor, pays more attention to the academic research on tourism poverty alleviation.



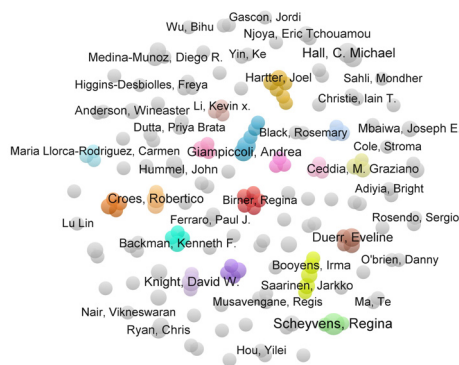
**Fig.1:** Number of documents on tourism poverty alleviation research



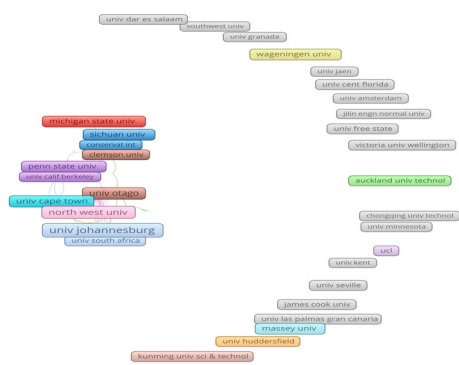
**Fig.2:** Top 10 countries with tourism poverty alleviation literature

### 3.2 Authors and institutions

From the structure of the researcher cooperation network in Fig.3, it can be seen that Scheyvens has published the most papers, with 6 related research literatures, and has a wealth of research results. Hall, C. Michael published the second most papers, but also made outstanding achievements, and published five relevant literatures. According to the research institution cooperation network diagram in Fig.4, the academic community has formed a relationship network including Univ Otago, Univ Johannesburg, Univ Cape Town, etc. Transnational cooperation between universities and institutions is the main way to achieve international research exchange, and increasing the rate of studying abroad and visiting students is conducive to strengthening international research cooperation.



**Fig.3:** Cooperation network of authors of tourism poverty alleviation research



**Fig.4:** Cooperation network of tourism poverty alleviation research institutions

### 3.3 Research hotspots

Key words are the refinement of the main research content of a document, which can effectively grasp relevant research hotspots. This study used VOSviewer software to visualize the occurrence density of tourism poverty alleviation research keywords, and obtained a keyword density map (Fig.5). The most frequent occurrence is tourism (Tourism92 times) and poverty (Poverty81 times).

In addition to these two words, through the comprehensive analysis of keywords, it can be roughly divided into four categories: ecotourism, resident life, policy management, and country or region. It can be seen that relevant studies have involved issues such as residents' quality of life and rural development, and pay high attention to the impact of tourism on the environment. Studies have been carried out from the perspective of policies and management methods, and most of them focus on areas with relatively backward economic development. The large gap between the rich and the poor makes the strategy of tourism poverty alleviation have a particularly important impact on their economic development.



### 3.5 Frontier analysis of international tourism poverty alleviation

Emergence can be used to reflect the growth of literature cited in a specific period of time to determine the research frontier. Citespace's unique analysis function of emergent words is used to analyze key words in tourism poverty alleviation research, and to obtain emergent keywords in different periods of time (Table 2) to analyze the forefront of tourism poverty alleviation research.

According to Table 2, the international research on poverty alleviation through tourism is roughly divided into three stages: (1) 2001-2005: an emergent word “wildlife” appeared, representing the concern for environmental protection and original ecology. (2) 2006-2011: “economic development”, “developing country” and “coastal tourism” became the forefront of the research, and scholars began to pay attention to the economic development of developing countries and coastal villages. (3) 2012-2015: “slum tourism”, “pro-poor tourism”, “South Africa”, etc., became the research frontier. Since 2015, the degree of keyword emergence is not obvious, indicating that international tourism poverty alleviation research tends to be diversified and diversified.

**Table 2:** Keywords Emerged in tourism poverty alleviation research

Keyword	Emergence intensity	Start year	End year
wildlife	2.24	2001	2007
economic development	1.55	2006	2009
developing country	1.68	2009	2011
coastal tourism	1.61	2010	2011
slum tourism	2.88	2012	2013
authenticity	2.05	2012	2013
world	2.05	2012	2013
pro poor tourism	1.84	2012	2014
South Africa	2.11	2013	2014
cultural tourism	1.79	2014	2015

## 4 Conclusion and discussion

(1) International research on tourism poverty alleviation has gradually increased since 2001, showing a significant fluctuating growth in 2013, reaching a peak in 2019, and with Western countries as the main research force.

(2) Scheyvens, Hall are representatives of international tourism poverty alleviation research. There are also cooperative relationships between research institutions, forming a large network of university-based cooperation, including the Univ Otago, Univ Johannesburg, Univ Cape Town.

(3) Regarding the selection of tourism poverty alleviation themes, relevant international articles mainly focus on ecotourism, residents' lives, national policies, and other aspects, with the majority of research objects being China, Africa, India, and so on.

(4) In terms of literature citation rate, Ashley's article "Tourism and Poverty Reduction: The Road to Prosperity" published in 2010 has the highest citation rate and the strongest link strength, making it an important core document in this field. In addition, articles such as Harrison and John have also received widespread attention.

(5) Before 2015, wildlife, coastal tourism, cultural tourism, etc. became prominent words in the international community, becoming a hot topic for scholars to study. However, since 2015, there have been no obvious prominent words, indicating that international tourism poverty alleviation research has tended to be diversified.

Poverty is the primary goal of the 2030 Agenda for Sustainable Development and has received wide attention in the international community. As a new industrial poverty alleviation method, tourism poverty alleviation has a broad application prospect in the future. This article comprehensively used VOSviewer and Citespace software to conduct visual analysis of international tourism poverty alleviation research, with a view to providing readers with a quick understanding of the survey of tourism poverty alleviation research.

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