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

Xia Zou[1,a], Fengtai Zhang[1,b], Caixia Jiang[1*c], Guochuan Peng[2,3,d], Hongmei Tan[1,e]

EMAIL: [a]zouxia@cqut.edu.cn; [b]zhfthero@cqut.edu.cn; [c]jiangcaixia@stu.cqut.edu.cn; [d]pengpgcm@163.com; [e]Tanhongmei@stu.cqut.edu.cn;

[1]Chongqing University of Technology, Management School, Chongqing 400054, China

[2]Institute for Ecology and Environmental Resources, Chongqing Academy of Social Sciences, Chongqing 400020, China

[3]Research Center for Ecological Security and Green Development, Chongqing Academy of Social Sciences, Chongqing 400020, China

Corresponding author: Caixia Jiang jiangcaixia@stu.cqut.edu.cn School of Management, Chongqing University of Technology, Chongqing 400054, China.

Abstract: The article comprehensively uses VOSviewer and Citespace to visually analyze the research situation of Chinese tourism poverty alleviation, and the results show that: (1) Chinese tourism poverty alleviation research has increased sharply since 2014. (2) Deng Xiaohai and Zeng Liang are representatives of the authors of the research on tourism poverty alleviation in China and have made outstanding contributions. (3) Domestic research on tourism poverty alleviation is mainly explored from the perspectives of rural revitalization, poverty alleviation measures, tourism environmental protection, etc., with rural areas and poor areas as research objects. (4)"Concerning for the Basic Elements in 'Tourism-based Poverty Elimination'" has been cited the most frequently. (5) Before 2015, externality and tourism development were the research hotspots; after 2015, targeted poverty alleviation and rural revitalization became the research frontiers.

Keywords: Tourism poverty alleviation, VOSviewer, Citespace, Visualization

1 Introduction

Poverty has always been a worldwide problem. The comprehensive victory of China's anti-poverty campaign in 2020 is of great significance to all countries to solve the problem of poverty, which aroused the attention of the academic community to the research related to China's poverty alleviation. Tourism poverty alleviation, as an emerging way of industrial poverty alleviation, has played a key role in the campaign. In recent years, academic circles have carried out many studies from different perspectives and different subjects around the theme of tourism poverty alleviation. Based on this, this paper combined with VOSviewer and Citespace software to carry out a visual analysis of the tourism poverty alleviation articles published in China. It is helpful for readers to quickly understand the current situation, hotspots

and frontier of tourism poverty alleviation research, so as to accurately find the core content of this field, which is of great significance for the next research and practice.

2 Data sources and methods

The data is sourced from CNKI database and used the theme "tourism + poverty alleviation" to search, and a total of 720 documents are obtained. Considering that VOSviewer and Citespace have good mapping effect, large amount of information and provide multiple perspective analysis[1], this paper integrated the two software. The study analyzed keyword, author, country through VOSviewer, and used Citespace to analyze time evolution and emergent words.

3 Research status of Chinese tourism poverty alleviation

3.1. The number of literature

According to the number of annual publications shown in Figure 1, the research is roughly divided into two stages: one is the long stable stage (1994-2014), and the other is the rapid growth stage (2015-2020). In 2014, the Several Opinions of the State Council on Promoting the Reform and Development of Tourism Industry pointed out that the targeted poverty alleviation in rural tourism should be strengthened, which attracted people's attention to tourism poverty alleviation. Subsequently, a series of policies have been issued, and tourism poverty alleviation has become a hot topic in a short time.
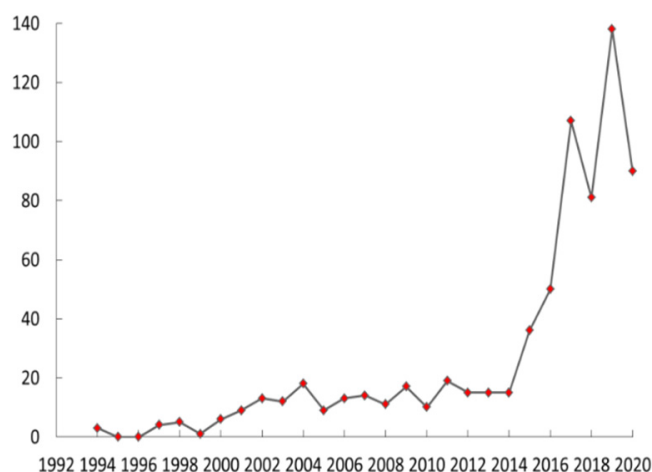

Figure 1: Number of documents on tourism poverty alleviation research

3.2. Authors and institutions

From the analysis of the researchers (Figure 2), it can be seen that Deng Xiaohai has published the most papers, and formed a strong research team with Zeng Liang, Xiao Honglei, etc., with fruitful results. As can be seen from the cooperation map of research institutions (Figure 3),

relevant researches mainly focus on the cooperation model of universities, and the most outstanding research results are in the form of research teams with few individual studies.
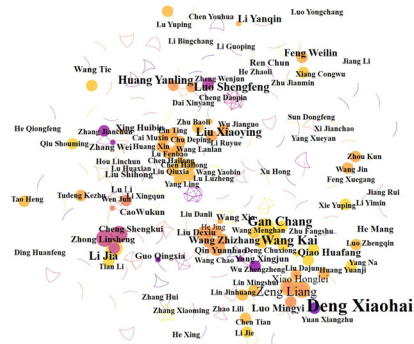

Figure 2: Cooperation network of authors of tourism poverty alleviation research
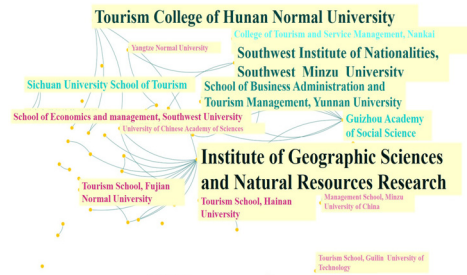

Figure 3: Cooperation network of tourism poverty alleviation research institutions

3.3. Research hotspots

Figure 4 is the density map of keywords in domestic tourism poverty alleviation research. The most obvious high-density area is tourism poverty alleviation. In addition, keywords can be roughly classified into four categories: rural revitalization, poverty alleviation measures, tourism environmental protection, and regional. Poverty alleviation through tourism is an effective measure under the background of rural revitalization. It is necessary to explore effective measures to maintain the balance between economy and environment, and help key areas to explore ways out of poverty through tourism.
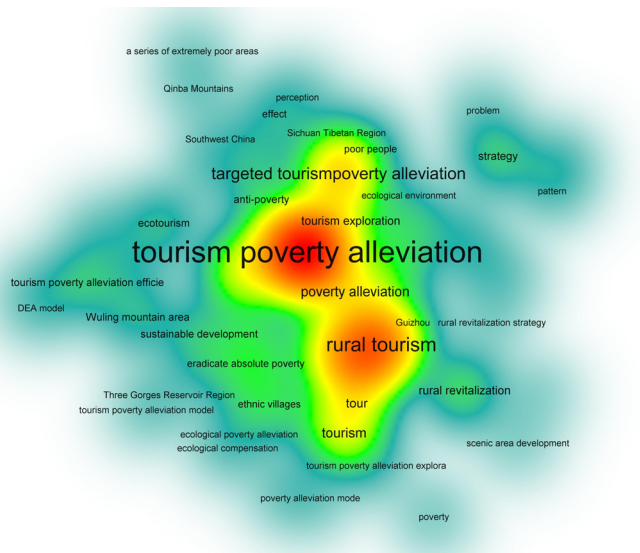

Figure 4: Key words density map of tourism poverty alleviation research

3.4. Research knowledge base

Research knowledge base is the premise and support for a series of subsequent research evolution and innovation. Zhou's "Concerning for the Basic Elements in 'Tourism-based Poverty Elimination'" [2]is the most frequently cited article in the field of tourism poverty alleviation.

Deng et al.[3] conducted research on precise identification of tourism poverty alleviation and proposed a mechanism for identifying target populations, a "willingness ability" identification model, and a "RHB" framework for identifying tourism poverty alleviation projects.

Ding[4] summarized the academic research on tourism poverty alleviation before 2004. The paper pointed out that the combination of local industry and tourism poverty alleviation strategy is the future research trend.

Chen et al.[5] respectively studied the implementation path of targeted poverty alleviation in rural tourism from the perspectives of "three industries" integration, precise assistance, "five modernizations" concept, policies, manpower, and marketing platforms.

Liu et al.[6] proposed several reflections on the understanding of "poverty", the effectiveness of tourism poverty alleviation, the relationship between tourism poverty alleviation and the government, sustainable development, and innovation.

Guo et al.[7]、Zhang et al.[8]、Mao[9]、Zeng[10] et al. have also exerted an important influence on subsequent relevant studies.

Table 1 Statistical table of key literature on tourism poverty alleviation research

Literature	Author	Time	Contact strength
Concerning for the Basic Elements in 'Tourism-based Poverty Elimination'	Zhou Xinhong	2002	460
Study on the Accurate Identification of Tourism Poverty Alleviation under the Background of Accurate Poverty Alleviation	Deng Xiaohai	2015	389
A Summary of the Researches on China's Poverty Elimination by Tourism	Ding Huanfeng	2004	316
Research on the Implementation Path of Rural Tourism Targeted Poverty Alleviation	Chen Qiuhua	2016	247
Some Reflections on Chinese "The Aid－The Poor Program By Tourism"	Liu Xiangming	2002	231
Problems and Countermeasures on the Pro-Poor Tourism Development	Qingxia Guo	2003	212
Effect Evaluation of Tourism-Based Poverty Elimination Based on the Poor's Benefit-An Example of Tongluozhai Resorts in Anhui Province	Wei Zhang	2005	180
Innovation and Strategy of Rural Tourism Poverty Alleviation	Feng Mao	2016	188
Literature review on the Research of Tourism Eliminating Poverty in China	Benxiang Zeng	2006	213

3.5. Frontier analysis of Chinese tourism poverty alleviation

The keywords emerging in different periods of research on tourism poverty alleviation in China are shown in Table 2, which can be roughly divided into two stages: (1) 1994-2014: construction mode and externality became the research frontier, and researchers have been devoted to the exploration of operation, planning, development and other modes of tourism poverty alleviation. (2) 2015-2020: related concepts such as tourism targeted poverty alleviation and rural revitalization have become research frontiers. With the introduction of a series of policies, researchers begin to study tourism poverty alleviation in the context of rural revitalization. As a major national strategy, it will always be a research focus in the following studies.

Table 2 Keywords Emerged in tourism poverty alleviation research

Keyword	Emergence intensity	Start year	End year
Construction mode	6.24	1994	2012
Externality	5.92	1994	2014
Development strategy	5.08	1994	2014
Yunnan	4.1	1994	2008
Tourism	6.42	1997	2003
Tourism exploitation	4.59	1997	2009
Tourism poverty alleviation	4.22	2015	2016
Tourism targeted poverty alleviation	7.76	2016	2020
Targeted poverty reduction	16.56	2017	2020
Rural revitalization	10.32	2018	2020

4 Conclusion and discussion

Chinese tourism poverty alleviation research appeared earlier, but it did not become a hotspot until 2014 under the guidance of relevant policies. In this field, Deng Xiaohai and Zeng Liang are the representatives in China; Relevant researches are mostly conducted by research institutes and in the form of research teams; The relevant research mainly focus on rural areas, ethnic minority areas and poor areas from the perspectives of rural revitalization, poverty alleviation measures, tourism and environmental protection; Among the numerous studies, Zhou's "Concerning for the Basic Elements in 'Tourism-based Poverty Elimination'" has been cited the most frequently in China and is an important core document in this field and have an important influence on subsequent studies. Since 2015, targeted poverty alleviation and rural revitalization have become new research frontiers.

Although the comprehensive poverty alleviation goal has been achieved, the poverty problem will not disappear. Tourism poverty alleviation will remain a hotspot for a long time. In this paper, VOSviewer and Citespace are used to visualize the research on tourism poverty alleviation in China, so as to provide reference for readers to quickly understand the research overview.

Acknowledgement

Reference

[1] Xiufang Song, Peijuan Chi. Comparative Study of the Data Analysis Results by Vosviewer and Citespace [J]. Information Science,2016,34(07): 108- 112+146.

[2] Xinhong Zhou. Concerning for the Basic Elements in "Tourism-based Poverty Elimination"[J].Tourism Tribune, 2002(01):17-21.

[3] Xiaohai Deng, Liang Zeng, Mingyi Luo. Study on the Accurate Identification of Tourism Poverty Alleviation under the Background of Accurate Poverty Alleviation[J].Ecological Economy, 2015,31(04):94-98.

[4] Huanfeng Ding. A Summary of the Researches on China's Poverty Elimination by Tourism[J]. Tourism Tribune,2004(03):32-36.

[5] Qiuhua Chen, Jinxiong Ji. Research on the Implementation Path of Rural Tourism Targeted Poverty Alleviation [J]. Fujian Forum (Humanities and Social Sciences),2016(05):196-200.

[6] Xiangming Liu, Zhimin Yang. Some Reflections on Chinese "The Aid－The Poor Program By Tourism"[J]. Economic Geography,2002(02):241-244.

[7] Qingxia Guo. Problems and Countermeasures on the Pro-Poor Tourism Development[J]. Economic Geography, 2003(04):558-560.

[8] Wei Zhang, Jianchun Zhang, Hongyan Wei. Effect Evaluation of Tourism-Based Poverty Elimination Based on the Poor's Benefit-An Example of Tongluozhai Resorts in Anhui Province [J]. Tourism Tribune,2005(05):43-49.

[9] Feng Mao. Innovation and Strategy of Rural Tourism Poverty Alleviation [J]. Chinese Journal of Agricultural Resources and Regional Planning, 2016,37(10):212-217.

[10] Benxiang Zeng. Literature review on the Research of Tourism Eliminating Poverty in China[J].Tourism Tribune, 2006(02):89-94.