International Association for Society and Natural Resources

William (Bill) Stewart, Executive Director
Department of Recreation, Sport and Tourism
University of Illinois
219 Huff Hall
Champaign, IL 61820
Tel. 217-244-4532
email: wstewart@illinois.edu

Rebecca (Becky) Schewe, Treasurer
Center for Policy Research
Syracuse University
426 Eggers Hall,
Syracuse, NY 13244
Tel. 315-443-9894
email: rlschewe@maxwell.syr.edu

Lee Cerveny, Secretary
United States Forest Service
Pacific Northwest Research Station
400 N 34th St., Suite 201
Seattle, WA 98103-8600
Tel. 206-732-7832
email: lee.cerveny@usda.gov

February 20, 2023

Daye Zhai
Master's Student
School of Agricultural Economics and Rural Development
Renmin University of China
syzhaidaye@163.com

Dear Daye Zhai,

On behalf of the Organizing Committee and the International Association for Society and Natural Resources (IASNR), I am very pleased to invite you to participate at the 2023 IASNR Conference, to be held at The Holiday Inn By The Bay in Portland, Maine, USA, from June 11-15, 2023. Your presentation titled "Transitions and Trends Dominating Conservation Social Science Research in China: A Bibliometric Analysis (1998–2022)" has been accepted for the conference.

Your research is aligned with the primary focus areas under the conference theme of "Bridging the Gap between Research & Practice – Communicating & Collaborating with Practitioners" and is well suited for presentation at this year's conference. Your presence and involvement would be an added value to the symposium and also demonstrate the important contributions from scientists and practitioners in China toward understanding complex relationships between society and the environment. Your presentation and participation will also be acknowledged in the conference materials.

We certainly hope that this invitation letter will lead to travel permission to participate in the 2023 IASNR Conference. Please contact the IASNR Office at info@iasnr.org with any related questions.

We look forward to welcoming you in Portland, Maine, USA this June.

Warm regards,

Jessica Hill

2023 IASNR Conference Program

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Thursday, June 15th

Transitions and Trends Dominating Conservation Social Science Research in China: A Bibliometric Analysis (1998–2022)

11:00 AM – 12:30 PM

York Room

Description

Authors: Daye Zhai; Weiye Wang; Jinlong Liu

Over the past two decades, the theory and practice of biodiversity conservation in China have shown striking tensions, as well as intractable problems and gaps. Whether domestic scholars are fully aware of these problems, however, requires a systematic examination. In this paper, bibliometric analysis was used to conduct landscape view, time zone view and burst detection of 3,802 publications on conservation social science in China between 1998 and July 2022. We show that the evolution of conservation social science in China has concurrently undergone four types of transition: (i) Research scale has shifted from macro to micro level, specifically from regional to community and then to individual level. (ii) The influence of politics on academia is growing. Interaction status between politics and academia that research is entitled to be translated into policy practice has been replaced by the overall leadership of politics over academia since 2008. (iii) Research focuses are getting integrated, overlapping and inextricably intertwined, influenced by the ambitious policy transition from single to multi-objective. (iv) Conservation social science research focuses on the expansion of extensive margins during the phase of conservation method germination and innovation, and then focuses on the expansion of intensive margins during the phase of integration of conservation policies and methods. Reexamination and reassessment of effectiveness of previous conservation methods under newly promulgated conservation policy background is becoming an emerging tendency.

Speaker

- **Daye Zhai** (Speaker) Renmin University of China

Transitions and Trends Dominating Conservation Social Science Research in China

A Bibliometric Analysis (1998–2022)

Daye Zhai[1] Weiye Wang[1] Jinlong Liu[1,*]

1 School of Agricultural Economics and Rural Development
Renmin University of China

15th June, 2023

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1 Introduction

1.1 Background

- **Dynamics of conservation policy and practice in China**
  - Rough salvage conservation → refined conservation with the aid of technology
  - Growth in the number, size, variety and function of protected areas
  - Coexistence of over-conservation and conservation gaps
  - Growth in conflicts over natural resource management (NRM)
- **Current status of conservation science research**
  - Independence, insufficient integration and collaboration between conservation natural and social sciences (Wang et al., 2023)
  - Call for interdisciplinary integration in frontier conservation science research: beyond a single dichotomy of natural and social sciences (Apostolopoulou et al., 2021)
  - Insufficient integrity, systematicity, depth and normalisation of the few existing interdisciplinary studies (Wang et al., 2023)

1 Introduction

1.2 Research questions

- What is the overall structure of the landscape of CSSRC?
- How does CSSRC evolve over time? What are the similarities and differences in the different phases of CSSRC?
- Does policy act as a critical driver in the evolution of CSSRC? How does the interaction between research focuses and conservation policies change?

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2 Methodology

2.1 Materials

- **Data source:** full-text journal database of China National Knowledge Infrastructure (CNKI)
- **Filter:** Chinese Social Sciences Citation Index (CSSCI)
- **Keywords**
  - "ecological protection" (*shengtai baohu*)
  - "protected area" (*baohudi*)
  - "nature reserve" (*baohuqu*)
  - "national park" (*guojia gongyuan*)
- **Time span:** January 1998 - July 2022

2 Methodology

2.2 Data processing

- Import data into CiteSpace: 5,166 records
- Convert data from CNKI style to WoS style
- Remove duplicates: 1,364 duplicated records
- Final dataset: 3,802 de-duplicated records

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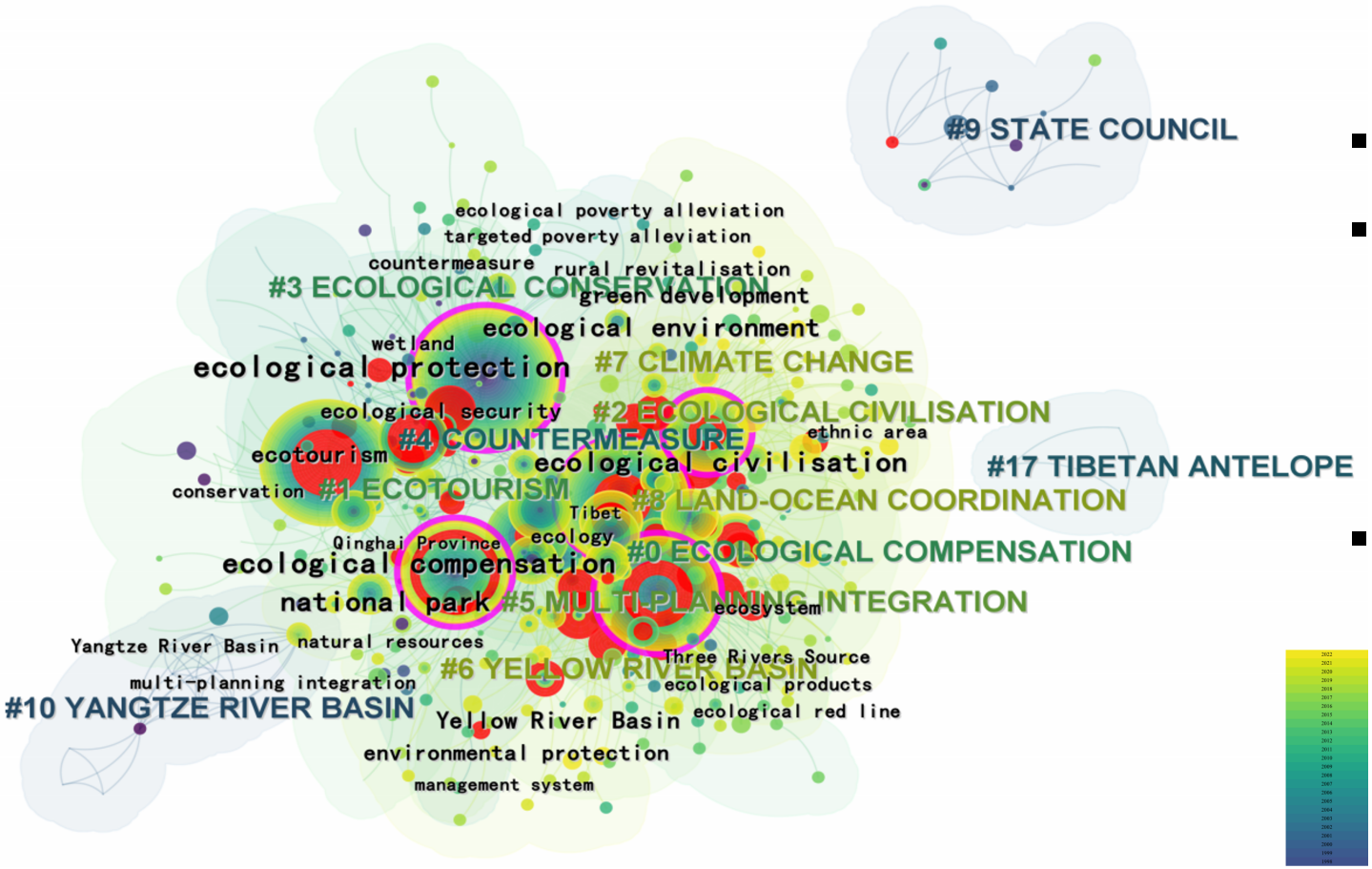
3 Bibliometric analysis

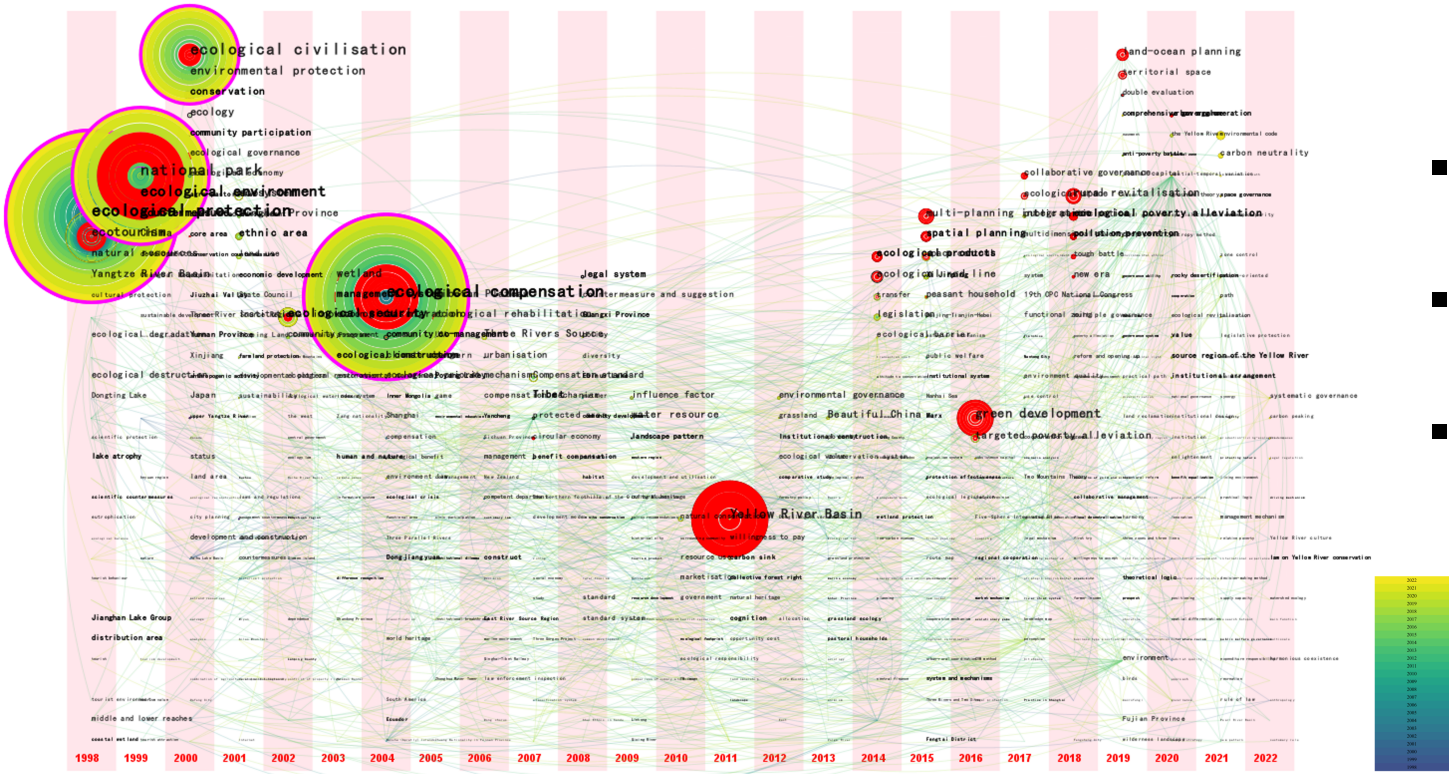
3.1 Landscape view



- **Bibliometric statistics**
  594 nodes and 1,340 links
  Density = 0.0076
  Modularity Q = 0.5116 > 0.3
  Weighted Mean Silhouette Score = 0.8047 > 0.5
- **Nodes with red growth rings:** keywords with citation bursts
- **Nodes with purple outer ring:** keywords with betweenness centrality of no less than 0.1
  ecological protection (0.39)
  eco-compensation (0.22)
  ecological civilisation (0.22)
  national park (0.21)
  ecological environment (0.12)
- **12/120 clusters with no less than 10 articles**
  conservation background (♯7)
  conservation concept (♯2 ♯3)
  conservation object (♯6 ♯10 ♯17)
  conservation policy and method (♯0 ♯1 ♯4 ♯5 ♯8)
  conservation policy-maker (♯9)

3 Bibliometric analysis

3.2 Timezone view



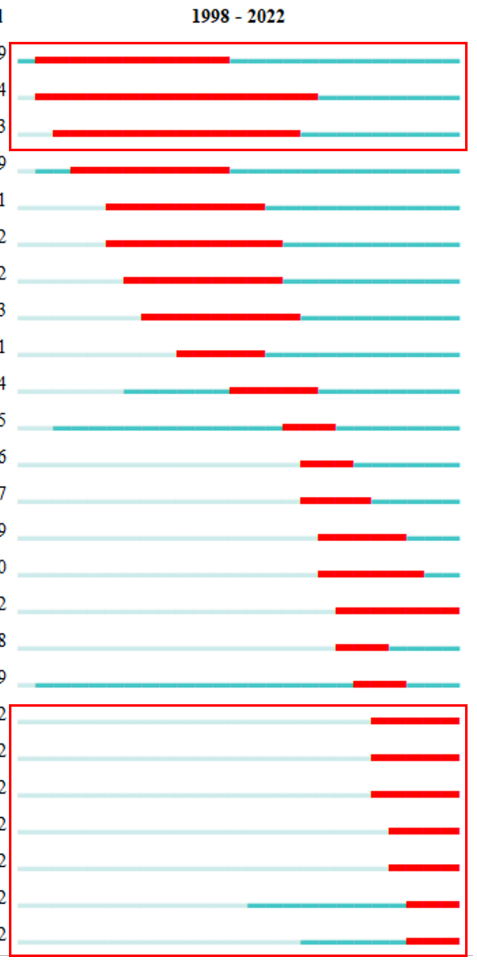
- **Phase 1**
  Conservation idea germination (1998-2000)
- **Phase 2**
  Conservation method innovation (2001-2011)
- **Phase 3**
  Integration of conservation policies and conservation methods (2012-2022)

3 Bibliometric analysis

3.3 Burst detection

Top 25 Keywords with the Strongest Citation Bursts

Keywords	Year	Strength	Begin	End	1998 - 2022
ecotourism	1998	24.52	**1999**	2009	
countermeasure	1999	9.45	**1999**	2014	
conservation	2000	6.09	**2000**	2013	
ecological environment	1999	4.61	**2001**	2009	
wetland	2003	12.28	**2003**	2011	
assessment	2003	4.75	**2003**	2012	
community co-management	2004	7.97	**2004**	2012	
pattern	2005	4.79	**2005**	2013	
circular economy	2007	4.78	**2007**	2011	
ecological compensation	2004	10.94	**2010**	2014	
ecological civilisation	2000	6.22	**2013**	2015	
ecological red line	2014	10.59	**2014**	2016	
transfer	2014	4.97	**2014**	2017	
multi-planning integration	2015	10.66	**2015**	2019	
spatial planning	2015	5.96	**2015**	2020	
green development	2016	8.59	**2016**	2022	
targeted poverty alleviation	2016	6.78	**2016**	2018	
national park	1999	16.85	**2017**	2019	
rural revitalisation	2018	7.88	**2018**	2022	
ecological poverty alleviation	2018	5.28	**2018**	2022	
pollution prevention	2018	4.95	**2018**	2022	
land-ocean planning	2019	7.72	**2019**	2022	
territorial space	2019	5.36	**2019**	2022	
Yellow River Basin	2011	43.89	**2020**	2022	
ecological products	2014	4.89	**2020**	2022	



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4 Discussion: four types of transition

4.1 Shrinking research scale

- **Regional level**
  Land use conflicts, PES (eco-compensation), conservation effectiveness
- **Community level**
  Livelihoods, well-beings, income, multi-dimensional poverty, poverty alleviation, community development, management effectiveness
- **Individual level**
  Conservation perceptions and behaviours, willingness to pay/accept

4 Discussion: four types of transition

4.2 Politicisation: leading or following?

Phase	Dimension	Count	Betweenness centrality	First year in research	First year of policy proposal	Percentage of articles published during gap years (%)
Phase 1:	ecological protection	270	0.39	1998	1997	—
Conservation	***national park***	212	0.21	1999	2013	***11.32***
Thinking	***ecological civilisation***	151	0.22	2000	2005	***0.66***
Germination	ecological environment	99	0.12	1999	1982	—
(1998-2000)	ecotourism	97	0.09	1998	2006	40.21
	environmental protection	42	0.04	2000	1973	—
	natural resources	29	0.02	1998	1950	—
	conservation	27	0.02	2000	1997	—
	community participation	15	0.01	2000	—	100.00
	Yangtze River Basin	17	0.05	1998	2020	***64.71***
	ecological economy	16	0.01	2000	2018	93.75

4 Discussion: four types of transition

4.2 Politicisation: leading or following?

Phase	Dimension	Count	Betweenness centrality	First year in research	First year of policy proposal	Percentage of articles published during gap years (%)
Phase 2: Conservation Method Innovation (2001-2011)	ecological compensation	254	0.22	2004	2005	0.79
	Yellow River Basin	118	0.07	2011	2021	***32.20***
	ecological security	42	0.02	2002	2000	—
	wetland	35	0.02	2003	2000	—
	Three Rivers Source	28	0.01	2006	2000	—
	ecosystem	27	0.01	2001	2013	***14.81***
	ecological rehabilitation	20	0.02	2005	2003	—
	ecological migration	19	0.01	2003	2000	—
	community co-management	19	0	2004	2005	21.05
	ecological construction	12	0	2003	1999	—
	protected area	12	0.02	2007	2019	***66.67***
	circular economy	10	0	2007	2005	—
	ecological priority	9	0.01	2004	2019	***22.22***
	Sloping Land Conversion Program	8	0	2001	1999	—
	farmland protection	6	0	2001	2005	33.33

4 Discussion: four types of transition

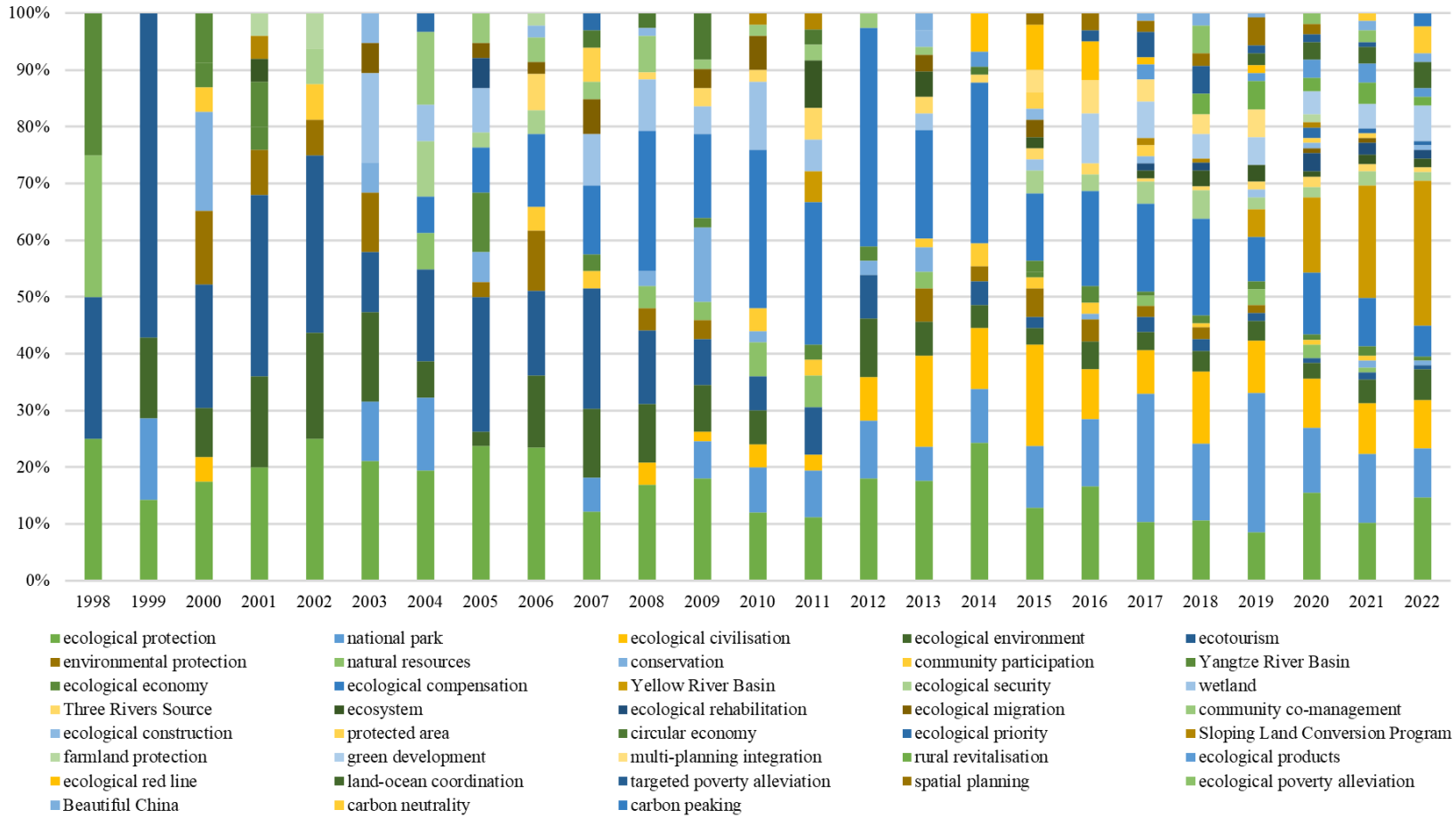
4.2 Politicisation: leading or following?

Phase	Dimension	Count	Betweenness centrality	First year in research	First year of policy proposal	Percentage of articles published during gap years (%)
Phase 3: Integration of Conservation Policies and Conservation Methods (2012-2022)	green development	59	0.04	2016	2015	—
	multi-planning integration	28	0.01	2015	2013	—
	rural revitalisation	28	0.02	2018	2017	—
	ecological products	25	0.02	2014	2010	—
	ecological red line	24	0.01	2014	2012	—
	land-ocean coordination	23	0.02	2019	2004	—
	targeted poverty alleviation	23	0.02	2016	2013	—
	spatial planning	22	0.01	2015	2013	—
	ecological poverty alleviation	16	0.01	2018	2015	—
	Beautiful China	14	0	2013	2012	—
	carbon neutrality	9	0	2021	2020	—
	carbon peaking	3	0	2022	2020	—

4 Discussion: four types of transition

4.2 Politicisation: crowding-out effect

A significant crowding-out effect of emerging policy-oriented keywords on conservation methods and measures-related keywords



4 Discussion: four types of transition

4.3 Integration of research focuses

- **Ambitious policy integration: from single to multi-objective**
  - **Five-Sphere Integrated Plan (wuwei yiti) (2012)**
    Economic construction, political construction, cultural construction, social construction, and ecological civilisation construction.
  - **Targeted Poverty Alleviation (2015)**
    "Five-pronged Poverty Alleviation Measures" (*wuge yipi*): production, relocation, ecological conservation, education, and social security.
  - **Rural Revitalisation Strategy (2017)**
    Thriving businesses, pleasant living environment (*shengtai yiju*), social etiquette and civility, effective governance, and prosperity.
- **Overlap and interweaving of policy-oriented research focuses**
  - Rural revitalisation, ecological poverty alleviation, ecological civilisation, green development, and territorial spatial planning.

4 Discussion: four types of transition

4.4 Dynamics of innovation margins

- **A significant literature creation effect of conservation policies**
  - **The low proportions of articles published during long gap years**
    national park (11.32%), ecological civilisation (0.66%), Yellow River Basin (32.20%), ecosystem (14.81%) and ecological priority (22.22%)
  - **The high proportions of articles published shortly after the introduction of corresponding policies**
    Yangtze River Basin (35.29%) and protected area (33.33%)
- **Shift of innovation margins**
  - The phase of conservation method germination and innovation (1998-2011): the expansion of extensive margins (creation of potentially influential conservation methods and measures)
  - The phase of integration of conservation policies and methods (2012-2022): the expansion of intensive margins (in-depth research of previous conservation methods and measures)

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5 Conclusion

- **Four types of transition in conservation social science research in China**
  - **Shrinking research scale:** macro → micro, regional → community → individual level.
  - **Politicisation:** a potential barrier to the interdisciplinary integration of conservation natural and social science research
  - **Research focuses:** integrated, overlapping and inextricably intertwined, driven by the ambitious policy transition from single to multi-objective.
  - **Innovation margins dynamics:** expansion of extensive margins → expansion of intensive margins.
- **Emerging trends**

  Reexamination and reassessment of effectiveness of previous conservation methods under newly promulgated conservation policy background.