ELSEVIER

Contents lists available at ScienceDirect

Ecological Indicators

journal homepage: www.elsevier.com/locate/ecolind



Land use policy as an instrument of rural resilience – The case of land withdrawal mechanism for rural homesteads in China



Xianjin Huang^{a,b}, Huan Li^{c,b,d}, Xiaoling Zhang^{d,*}, Xin Zhang^{a,b}

- ^a Geographic and Oceanographic Sciences School, Nanjing University, Nanjing 210093, China
- ^b Key Laboratory of Coastal Zone Exploitation and Protection, Ministry of Land and Resources, China
- ^c Department of Land Management, Zhejiang University, Hangzhou 310058, China
- d Department of Public Policy, City University of Hong Kong, Hong Kong, China; Shenzhen Research Institute, City University of Hong Kong, Shenzhen, China

ARTICLE INFO

Keywords: Rural sustainability Rural development Land market Government regulations Assessment index

ABSTRACT

Resilience has emerged as an attractive conceptual approach for theorizing rural development in terms of highly complex, vulnerable and adaptive systems. In China, land use policies have evidently influenced rural resilience. We conduct a co-citation analysis, especially the visualization of co-citation networks and research clusters, using CiteSpace 4.0.R5. Based on the analysis and literature review, we develop an assessment index system comprising four types of resilience – engineering, ecological, economic and social – to evaluate the changes in rural resilience resulting from a policy to develop a withdrawal mechanism for rural homesteads (WMRH). Our findings indicate that rural resilience in Guangzhou, Chongqing and Wuxi, selected as the study areas, increased by 123%, 61% and 88% respectively after the implementation of the policy. The main causes of these variations in changes in rural resilience are attributed to the diverse economic development modes in the different regions, as well as differing degrees of land market development and government regulation. Overall, the implementation of a WMRH, accompanied by a strong market and government regulation, is found to be optimal for enhancing rural resilience. We conclude that improving rural resilience involves appropriate government regulations as well as simply paying attention to the effects of the market on the optimal allocation of resources.

1. Introduction

Rural resilience entails a process of sustained monitoring, facilitation, maintenance and recovery of virtual cyclic interactions between ecosystem services and human well-being under the influence of external factors. Although connected, rural resilience and rural sustainability entail differences, including the scales at which they are applied (Olsson et al., 2015). Therefore, they cannot be substituted for each other (Fig. 1). Rural development that is rational and achievable must be both resilient and sustainable. There has been a meteoric rise in the prioritization and application of resilience within planning and management, as evidenced in regional studies. These studies indicate that the resilience agenda has been widely adopted by NGOs, governments, planners, managers, architects, designers, social scientists, ecologists and engineers (McPhearson, 2014). Thus, there has been an explosion in the popularity of resilience within both academic and policy discourses and numerous explanations have been offered for this dramatic rise (Meerow and Baud, 2012). In particular, the concept of resilience is appealing in rural development theorizing in terms of highly complex, vulnerable and adaptive systems.

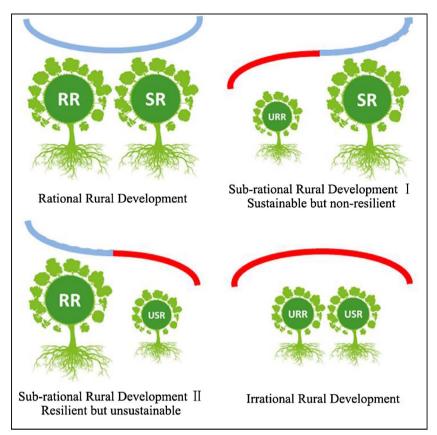
Rural resilience in the context of poverty, which is also governed by land use policies in rural context. The sustainable and resilient rural studies dealing with rural poverty, climate change adaptation through rural development program (Gerlitz et al., 2017). Rural areas in developing countries are largely expected to be disproportionally hurt by projected changes in temperature, precipitation, and extreme events (Skjeflo, 2013). The actual land use policy level response to these changes is not well understood. There is confusion about the kinds of policy problems to be solved by means of indicators worldwide(Hinkel, 2011). However, indicates can reflect some parts of the actual situation of rural poverty context and improve understanding of the environmental and socio-economic changes affecting rural livelihoods (Pandey et al., 2017). How policies can affect rural resilience is and will be a hot research topic.

Land use policies in China have had a significant influence on rural resilience, with the establishment of a leasehold property rights system and wide array of frequently

changing policies (Salant and Yu, 2016). Urban land in China is owned by the state, while rural land is jointly owned by rural collectives (i.e., communities residing in the same village) (Huang et al.,

^{*} Corresponding authors at: Department of Public Policy, City University of Hong Kong, Hong Kong, China. E-mail addresses: lihuan2039@163.com (H. Li), xiaoling.zhang@cityu.edu.hk (X. Zhang).

X. Huang et al. Ecological Indicators 87 (2018) 47–55



sustainable rural, non-resilient rural and unsustainable rural, respectively. If rural development is sustainable and resilient, it is a rational rural system. The concave blue line indicates that rational rural development is non-convergent, which means that this form of development facilitates rural sustainability and the implemented form of development is one of the potential forms of development, which is

Notes: The abbreviations RR, SR, URR and USR denote resilient rural,

Fig. 1. Rural resilience and rural sustainability.

opment facilitates rural sustainability and the implemented form of development is one of the potential forms of development, which is non-convergent. If rural development is unsustainable and non-resilient, it is an irrational rural system. The convex red line indicates that irrational rural development is convergent, which implies the eventual destruction of the rural environment and makes the rural system unsustainable. Between these two extremes of rational and irrational rural development exists two types of sub-rational rural development: sustainable but unresilient, and resilient but unsustainable.

2014). Land transactions entail exchanges of leases for land use rights, with terms ranging from 40 years for commercial land to 70 years for residential land (Krusekopf, 2002) and legal land tenure security has been improved during recent land tenure reforms (Ma et al., 2015). The central government controls the overall allocation of land use rights at the national level, while local governments contract-out land use rights through negotiations, tenders and auctions (Xu et al., 2016). Land use policies – for example, the withdrawal mechanism for rural homesteads (WMRH), which allows rural homesteads to be transferred by compensation and auction – significantly influence changes in rural resilience under this system (Zhang et al., 2006).

Withdrawal mechanism for rural homesteads(WMRH) refers to a type of rural construction land circulation that farmers completely abandon land use rights for better welfare compensation. The establishment of such mechanism, which based on the incentive and restraint rules, is an important way to improve the management system of rural residential land (Li et al., 2014). Homestead withdrawal mechanisms are being formulated aimed at improving rural resilience based on regional characteristics entailing differences in modes of economic development, degrees of development of the land market and government regulations. Varying levels of economic development and differences in regional cultures and environments in eastern, western and southern regions of China directly affect farmers' land-use behavior patterns, as well as the dynamics between farmers, governments and enterprises. These differences are among the most important factors affecting variations in changes in the rural resilience of areas where the policy has been implemented.

It is necessary to carry out quantitative research analyzing the relationship between rural resilience and land use policy. Thus we apply bibliometric analysis in a review of the academic literature concerning rural resilience published over the last four decades for an improved understanding of what rural resilience entails and how it is affected by land use policies. The withdrawal mechanism for rural homesteads (WMRH) in China is then introduced in detail for international readers, and an assessment index system is developed to evaluate changes in rural resilience resulting from the implementation of the WMRH policy based on the analysis of research clusters of rural resilience and the introduction of WMRH. Tianhe in Guangzhou City, Shizhu in Chongqing City and Huishan in Wuxi city are used in an empirical study of the characteristics of the WMRH and how the WMRH has affected rural resilience. Finally, some policy suggestions are introduced for reference by policy makers.

2. Literature review

2.1. Rural resilience and its research clusters

In this study, we conduct a co-citation analysis, especially the visualization of co-citation networks and research clusters, using CiteSpace 4.0.R5. The Science Citation Index and the Social Sciences Citation Index, included in the Database of the Web of Science™ Core Collection, are used to identify the rural resilience literature. The search topic "rural resilience" yields 816 hits. We subsequently review the titles and abstracts of these studies to determine whether they were actually relevant to the study of rural resilience. This results in 500 articles ultimately being selected for importing into CiteSpace for visualizing and analyzing the co-citation network and obtaining the literature clusters. In this way, 29 co-citation clusters are identified within the network. These are labeled using index terms provided by the citers. Fig. 2 depicts the five largest clusters (rural community, rural governance, development policies, rural building and climate change) within the network.

Within the rural resilience literature, the topic of rural communities has evidently attracted the most attention. For instance, the development of a conceptual framework for understanding the trajectories of rural communities, based on the economic, social, and environmental resilience and vulnerability of rural areas, has been widely discussed, arguing that policy implications are always associated with a transition

Download English Version:

https://daneshyari.com/en/article/8845566

Download Persian Version:

https://daneshyari.com/article/8845566

<u>Daneshyari.com</u>