

News and Highlights

Introduction to the Bama renowned longevity county in the Guangxi Zhuang Autonomous Region

Qi-feng Tang^a, Lu-dan Zhang^b^a Key Laboratory of Ecogeochemistry, Ministry of Natural Resources, National Research Center for Geoanalysis, Beijing 100037, China^b Administration of Culture, Radio, Television, Sports and Tourism of Bama Yao Autonomous County, Hechi, Guangxi 575400, China

Guangxi Zhuang Autonomous Region is one of the most densely clustered regions of “Longevity County” in China, and Bama County is a typical representative of mountainous and hilly longevity villages in the country. In recent years, the local government and residents have actively embraced the United Nations Sustainable Development Goals (SDGs) and the Healthy China Initiative, striving to implement the scientific principle that “lucid waters and lush mountains are invaluable assets.” Bama integrates karst landscapes, high-quality water sources, a favorable climate, rich biodiversity, and traditional ethnic health cultures. The county is actively exploring the intrinsic connections between its longevity environment and geological background, promoting the coordinated development of GeoHealth and ecological civilization to benefit local communities.

1. Overview of Bama Yao Autonomous County

According to the 2024 statistics of the China Association of Gerontology and Geriatrics and its official list of certified “China Longevity County”, Guangxi ranks first in the number of certified longevity regions, with 42 in total—over one-third of the national count—including three Longevity Cities. Among them, Bama Yao Autonomous County is a well-known exemplar. Located in Hechi City in northwestern Guangxi, Bama has a population of approximately 300000. Its centenarian density exceeds 30 per 100000 people—significantly higher than the national average (T/LXLY 0001-2019). It is also the first county in China to be officially recognized both domestically and internationally as a “World Longevity Area” and a “China Longevity County”

(Fig. 1).

2. Natural geographical and geological features

Situated in the northwestern part of Guangxi, Bama lies along the Earth’s “golden latitude” zone at approximately 24°N. The terrain resembles a natural Chinese ink painting, with an annual average temperature of 20°C–24°C—widely considered the most comfortable range for human well-being. With its spring-like climate year-round, Bama is both refreshing and pleasant.

This area blends natural wonders with rich cultural heritage: the Baimo Cave, once dubbed the “World’s Greatest Cave” by British explorers; the Bainiao Karst River Cave, and the dazzling underground Crystal Palace, known as a palace of natural art (Fig. 2). Sourced from 2500 meters beneath the World Longevity Region, the pure natural geothermal mineral water feeds the China Bama Geomagnetic Hot Spring Center, a destination that serves locals and visitors from both China and abroad.

The county features a constellation of longevity villages, the mirror-like Cifu Lake (*cifú*, meaning “to bestow blessings”), the picturesque rural scenery of Longhong, the Panyang River, which winds underground and resurfaces five times, and the Ming River, whose shape strikingly resembles the cursive form of the Chinese character “命” (*mìng*, meaning “life” or “fate”). This single character symbolizes the miracle and continuity of life. The river’s enduring flow subtly echoes the profound mystery behind Bama’s reputation as a land of longevity. A local poem captures its essence: “*In this land of longevity, like a paradise hidden, lies the source of benevolence and life*”.

The remarkable phenomenon of longevity in Bama is closely linked to its unique natural resources—what locals call the “Five Uniques”: geomagnetic fields, air, water, sunlight, and soil. These five elements correspond to the Five Elements (*Wu Xing*) in traditional Chinese philosophy—

First author: E-mail address: tangqifeng@mail.cgs.gov.cn (Qi-feng Tang).Literary editor: Xi-jie Chen
doi:10.31035/cg20250063

2096-5192/© 2025 China Geology Editorial Office.



Fig. 1. Centenarians in Bama Yao Autonomous County.

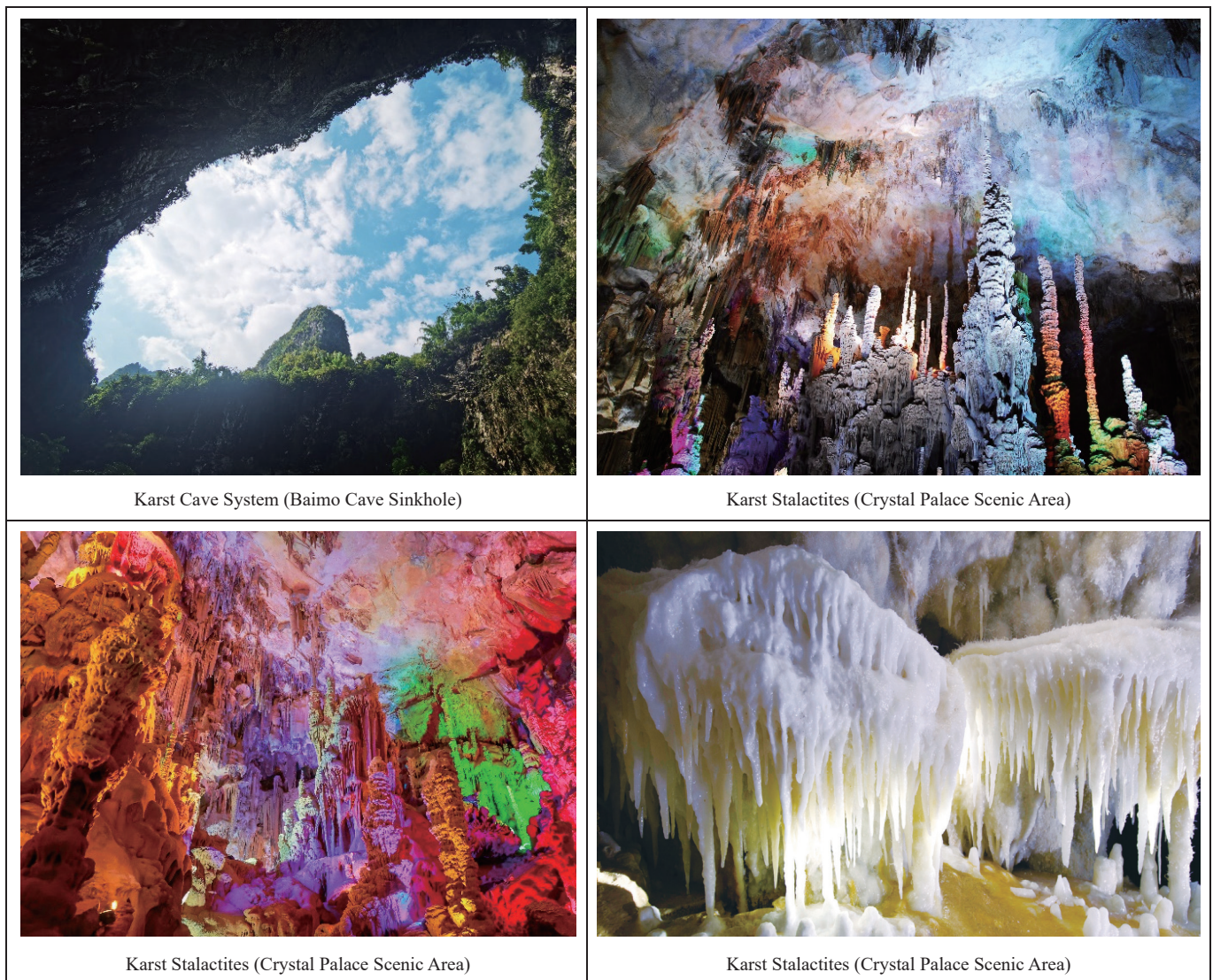


Fig. 2. Karst geological landscapes of Bama Yao Autonomous County.

metal, wood, water, fire, and earth. From the perspective of traditional Chinese medicine and its concept of harmony between nature and humanity (*Tian Ren He Yi*), Bama's balanced Five Elements environment is believed to support orderly, enduring human life (Fig. 3).

3. Insights from GeoHealth and Longevity studies in Bama

In addition to its idyllic rural landscapes, Bama is rich in intangible cultural traditions. Ancient rituals such as “grain



Fig. 3. Water system management and agricultural use in Bama karst region.

supplementation for longevity” remain widely practiced. Traditional festivals like the Yao people’s Zhuzhu Festival, the Zhuang people’s Third of March Singing Festival, and the Panwang Festival are celebrated with great enthusiasm. Folk practices such as crossbow-making, crossbow-shooting, and top-spinning have been passed down through generations. Notably, the Yao Zhuzhu Festival and the Elder-Respecting Ritual (Zhuang Grain Supplementation Ceremony) have been listed as National Intangible Cultural Heritage of China.

Insights drawn from Bama’s experience in longevity village development and GeoHealth research include:

(i) Geological environments have long-term and profound impacts on public health. Longevity villages serve as ideal pilot areas for GeoHealth demonstration zones.

(ii) The rational exploration and utilization of beneficial geological resources —such as selenium-rich soils and mineral-rich waters —is a key pathway to advancing the development of GeoHealth.

(iii) Existing longevity villages offer excellent geological, geographical, and cultural foundations for building GeoHealth model villages and wellness tourism zones, facilitating integration of scientific research and local industry.

(iv) Longevity GeoHealth research should be integrated into the Healthy China Initiative framework. A national GeoHealth monitoring network should be established, focusing on longevity areas and co-developing research bases.

(v) Under the guidance of the United Nations Sustainable Development Goals (SDGs), international cooperation projects and talent exchanges should be promoted. Pilot international GeoHealth villages and cooperation zones can elevate the field of Medical Geology/GeoHealth sciences, contributing to global health and well-being.

Acknowledgement

The authors gratefully acknowledge the Administration of Culture, Radio, Television, Sports and Tourism of Bama Yao Autonomous County for their generous contribution of all photographs and accompanying Chinese text.

Reference

T/LXLY 0001-2019. Criteria and methods for recognizing longevity area. China Association of Gerontology and Geriatrics. <http://www.cagg.org.cn/portal/page/index/id/13.html>