

Spatial Disparity of Cultivated Land Intensive Utilization and Its Driving Forces Based on Different Types of Geomorphology

——A Case Study of Jiangxi Province

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Abstract: Based on global and local spatial autocorrelation analyses of exploratory spatial data ,the spatial disparity and driving forces of cultivated land intensive utilization at the county level were discussed by using ArcView GIS and Geoda software. The results show that: Global Moran's I value was 0.16 and 0.30. There was an obviously temporal increase of Moran's I value from time I to II. The global spatial autocorrelation for intensive utilization levels of cultivated land was significant. The spatial clustering phenomenon about regional intensive utilization levels of cultivated land appeared on the whole. The intensive utilization levels was almost the same in some region by analyzing the Grid figure of Local Moran's I. The character of spatial clustering about regions of high value and low value was significant. The quantity of counties with the positive association was higher than that with the negative association. The regions with the "high-high" correlation were mainly located in the north of Jiangxi Province. However ,the regions with the "low-low" correlation were distributed in hilly area of northeast ,northwest and south. The result of study conforms to the facts basically and has certain feasibilities. The main driving forces influencing cultivated land intensive use in different regions were different.

Key words: cultivated land; intensive utilization; spatial disparity; IDW interpolation; driving forces; Jiangxi

封面照片说明: 青藏高原高寒草甸

高寒草甸(Alpine meadow)又称为高山草甸,是发育在高原和高山地带的一种草地类型。由于处在寒冷

的环境条件下,其植被组成主要是冷中生的多年生草本植物。

在青藏高原东部及其周围海拔3 000 m以上的高海拔山地,广泛分布着由蒿草等高寒植被组成的草甸,是青藏高原高寒生态系统的主要草地类型,分布面积约 $70 \times 10^4 \text{ km}^2$,占青藏高原可利用草场的近50%。作为具有水平地带性及山地垂直地带性的独特植被,高寒草甸在很多方面表现出极为明显的独特性。其分布区海拔高,气温低,气候寒冷,太阳辐射强,风大、风多,土层浅薄,生态环境恶劣,使得植物的生长期很短。蒿草等植物能适应这一恶劣的生态环境,因而形成大面积的以蒿草为主,还有高禾草、苔草及杂类草等种类繁多植物组成的草本植物群落,其草层低,草质良好,成为当地良好的夏季牧场,适于牛、羊等畜群放牧。

照片为西藏东南部米林县境内喜马拉雅山北坡海拔约3 500 m地带的高寒草甸。

(嘉 益)