



KAJIAN GEOMORFOLOGI KARST DAERAH BALI SELATAN

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INTISARI

Semenanjung selatan pulau Bali merupakan bentuklahan solusional terbentuk oleh karstifikasi menghasilkan morfologi khas yang disebut Karst. Karstifikasi dipengaruhi oleh faktor pengontrol dan faktor pendorong. Faktor pengontrol menentukan dapat tidaknya karstifikasi berlangsung; faktor pendorong menentukan kecepatan dan kesempurnaan karstifikasi. Kedua faktor ini terdapat di semenanjung selatan pulau Bali sehingga mungkin terbentuk perkembangan morfologi karst. Tujuan penelitian ini untuk mengkaji karakteristik morfologi karst dan proses geomorfologi yang berlangsung sehingga terbentuk perkembangan morfologi karst.

Metode analisis yang dilakukan adalah analisis aspek-aspek geomorfologi. Analisis morfografi dilakukan dengan mengamati bentuk luar dari karren, goa, bukit karst, doline dan lembah karst. Analisis morfometri ditekankan pada ukuran seperti panjang, lebar, tinggi, diameter, kedalaman dan kemiringan lereng. Analisis aspek geomorfologi dilakukan dengan mengaitkan antara bentuklahan dan perubahan stadiumnya yang nampak saat ini dengan lingkungan fisik dan perubahannya selama karstifikasi berlangsung. Analisis pola sebaran menggunakan metode tetangga terdekat.

Hasil penelitian menunjukkan bahwa di daerah penelitian telah berkembang morfologi karst minor, morfologi endokarst dan morfologi karst mayor dengan tingkatan yang berbeda. Perkembangan morfologi karst minor ditunjukkan dengan berkembangnya tipe karren seperti; pits, shaft, grike, clint dan coastal karren. Morfologi endokarst telah berkembang dibuktikan dengan ditemukannya tipe goa dengan karakteristik morfologi yang berbeda yaitu; goa pit, goa patahan dan flank margin caves. Morfologi karst mayor dibedakan menjadi dua yaitu bentuklahan karst positif dan bentuklahan karst negatif. Bentuklahan karst positif yang mengalami perkembangan adalah bukit karst simetri dan asimetri. Bentuklahan karst negatif yang mengalami perkembangan adalah doline dan lembah karst. Aspek geomorfologi memiliki pengaruh kuat terhadap perkembangan morfologi karst di daerah penelitian.

Kata kunci: karst, karstifikasi, geomorfologi



KARST GEOMORPHOLOGY ANALYSIS AT SOUTH BALI AREA

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ABSTRACT

South Bali peninsula was a zone with solutional landforms made by karstification and resulted a landforms with unique morphology called karst. Karstification is influenced by controled factor and motivated factor. The ability of karstification goes on determine by controls factor, the speedy and perfection kartification determine by motivates factor. Both of the factor was found at south Bali peninsula, with the result that probably shaped karst morphology development. The aim of this study is to investigate karst morphology characteristic shaped and the geomorphology process was goes on so that resulted karst morphology development.

The analysis method was taken in this research are; morphology analysis comprises morphography and morphometry, spread pattern analysis and geomorphology aspect analysis. Morphography analysis do by observe the outside shape of karren, cave, conical hill, doline and karst valley. Morphometry analysis focused to dimention as length, wide, high, diameter, deep and angle of slope. Nearest-neighbour analyssis model was use to find out spread patterns of conical hill and doline. Geomorphology aspect analysis do by connecting between landform and stadium changes visible in the present days with physical environment and changes during the karstifikation.

Result of research showed that minor karst morphology, endokarst morphology and major karst morphology was developed on different phase. Minor karst morphology development showed by many types of karren developed they are; pits, shaft, grike, clint and coastal karren. Some of karren types asossiated and formed minor karst geomorphology phenomenon. Endokarst morphology was developed well, some caves were found as an evidence. Caves at study area fall into three main types; Pits caves, fracture caves and flank margin caves. Each caves fate difference morphology characteristic appropriate to the process was caused. Development of major karst morphology at study area fall into two categories; positive karst landforms and negative karst landforms. The main positive karst landforms was developed are symmetrical conical hill and asymmetrical conical hill. The main negative karst landforms was developed are doline and karst valleys. Karst morphology development is significantly influenced by geomorphology aspect.

Key Words: karst, karstification, geomorphology