

SARI

GEOLOGI DAN FASE DIAGENESIS BATUGAMPING FORMASI RAJAMANDALA, DAERAH CITATAH DAN SEKITARNYA, KECAMATAN CIPATAT, KABUPATEN BANDUNG BARAT, PROVINSI JAWA BARAT

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Daerah penelitian secara administratif terletak di wilayah Desa Citatah dan sekitarnya, Kecamatan Cipatat, Kabupaten Bandung Barat, Provinsi Jawa Barat. Terletak pada koordinat 767420 mE – 772420 mE dan 9242500 mN – 9247500 mN dengan luas daerah pemetaan yaitu 25 km². Pembahasan meliputi aspek geologi, fasies, dan fase diagenesis batugamping Formasi Rajamandala. Geomorfologi dibagi menjadi dua satuan bentuk asal, yaitu bentuk asal struktural dengan bentuklahan perbukitan homoklin (S1) dan lembah antiklin (S2) serta satuan bentuk asal vulkanik yaitu lembah fluvio-vulkanik (V1). Pola pengaliran yang berkembang yaitu *Subdendritik* dan *Contorted*.

Stratigrafi berturut-turut yaitu Satuan batulempung Batuasih (Oligosen Akhir) yang diendapkan di lingkungan Bathial Atas. Satuan ini memiliki hubungan beda fasies menjari dengan Satuan batugamping Rajamandala (Oligosen Akhir-Miosen Awal) yang diendapkan di lingkungan Neritik Tengah. Satuan ini ditutupi secara selaras oleh Satuan batupasir vulkanik Citarum (Miosen Awal) yang memiliki hubungan beda fasies menjari dengan Satuan breksi Citarum (Miosen Awal) yang diendapkan di lingkungan laut dalam. Di atasnya ditutupi secara tidak selaras oleh Satuan endapan gunungapi Kuartar (Holosen) yang diendapkan di lingkungan darat. Terdapat struktur geologi berupa antiklin Padalarang, sesar naik Padalarang (*Right reverse slip fault*), sesar mendatar kanan Tagog Apu (*Normal right slip fault*), dan sesar turun Gunungmasigit (*Normal slip fault*).

Sebaran fasies dikelompokkan ke dalam asosiasi: *reef core framestone-bafflestone-bindstone*, *inter-reef channel floatstone-rudstone*, *fore reef rudstone-grainstone*, serta *open platform packstone-wackestone*. Fase diagenesis dimulai pada fase eogenesis (Oligosen Akhir-Miosen Awal), dicirikan dengan proses mikritisasi. Selanjutnya fase mesogenesis (Miosen Awal-Miosen Akhir), dicirikan dengan proses kompaksi dan neomorfisme. Fase terakhir yaitu telogenesis (Plio-Plistosen hingga sekarang), dicirikan dengan proses dolomitisasi, dedolomitisasi, pelarutan dan karstifikasi.

Kata Kunci : Batugamping, Formasi Rajamandala, Fasies karbonat, Fase diagenesis (eogenesis, mesogenesis, telogenesis).

ABSTRACT

GEOLOGY AND DIAGENETIC PHASE OF THE LIMESTONE FROM RAJAMADALA FORMATION, IN CITATAH AREA, CIPATAT SUBDISTRICT, BANDUNG BARAT REGENCY, WEST JAVA PROVINCE

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The studied area administratively located in Citatah Village area, Cipatat Subdistrict, Bandung Barat Regency, West Java Province. Located on coordinates 767420 mE – 772420 mE and 9242500 mN – 9247500 mN with covering about 25 km². The discussion is about geological aspect, facies, and diagenetic phase of The Limestone from Rajamandala Formation. The geomorphology is divided into two basic forms, such as the structural basic form which is subdivided into homoclinal ridges (S1) and anticline valley (S2) and the volcanic basic form which is fluvio-volcanic valley (VI). The drainage patterns that developed are Subdendritic and Contorted.

The stratigraphic succession respectively are Batuasih claystone unit (Late Oligocene), which is deposited in Upper Bathyal. This unit has an inter-fingering relation with Rajamandala limestone unit (Late Oligocene-Early Miocene) which is deposited in Middle Neritic. This unit has a conformity relation with Citarum volcanic-sandstone unit (Early Miocene) which has an inter-fingering relation with Citarum breccia unit (Early Miocene) which is deposited in deep marine. In the upper part with an unconformity relation is overlain by Quaternary volcanic sediment unit (Holocene). There are geological structures such as Padalarang anticline, Padalarang reverse fault (Right reverse slip fault), Tagog Apu right slip fault (Normal right slip fault), and Gunungmasigit normal fault (Normal slip fault).

Facies distribution is grouped based on facies association: reef core framestone-bafflestone-bindstone, inter-reef channel floatstone-rudstone, fore reef rudstone-grainstone, and open platform packstone-wackestone. The diagenetic phase of Rajamandala limestone unit was started in eogenetic phase (Late Oligocene-Early Miocene), characterized by micritization process. Then mesogenetic phase (Early Miocene-Late Miocene), characterized by compaction and neomorphism process. The last phase is telogenetic (Plio-Pleistocene until now), characterized by dolomitization, dedolomitization, dissolution, and karstification process.

Keywords : *Limestone, Rajamandala Formation, Carbonate facies, Diagenetic phase (eogenetic, mesogenetic, telogenetic).*