

STUDY OF BABULU GROUP IN THE BEHEDAN AREA, MANATUTO MUNICIPALITY: IMPLICATIONS FOR FACIES AND STRUCTURE

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ABSTRACT

Turbidite deposition was one of many depositional environment in Timor region. Babulu Goup in Behedan area is part of turbidite deposit which is consist of well bedded sandstones, shales and subordinate limestone's that shown the similarity description of sediment deposit by Cook 1986.

The purpose of study is to arrange a complete sequence of lithostratigraphy and structural geology analyses to discuss the implications of the facies for Babulu Group using stratigraphic logs to illustrate the characteristics of the facies. The depositional environment will be interpreted based on Walker and Mutti's sequence model (1973) which will be compared with the Bouma's sequence model (1962), and structural geology deformation.

The method of analysis is done by geological field observation by measuring stratigraphic section in some geological traverses to taking the stratigraphy data in detail, and laboratory analyses for petrography, micropaleontology to determine the depositional environment facies and structural geology implications.

The result of study shows that study area is part of Babulu Group and generally, this Group is Triassic age. The lithologies that found on field observations are showing an interbedded sandstone with the shale and massive sandstone which is interbedded sandstone with shale. The succession was deposited on the Lower to Middle Fans, following the facies model of Walker & Mutti's sequence, (1973) — equivalent to Ta to Tc units of the Bouma sequence (Bouma, 1962). The deposition had been overturned fold along fault which is showing the vergence to the south.

Keywords: Timor Region, Facies, Depositional Environment, Structural Geology.