

ANATOMY AND CATEGORIZATION OF PEGMATITES AROUND MORAGAHAKANDA AREA

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Pegmatitic occurrences are commonly observed in the proposed Moragahakanda-reservoir area. Most of them are characterized by economically important minerals such as quartz, feldspar and mica. At present, some pegmatites are mined for needs of the industry and there is a surplus of raw materials. As a result, there has not been any serious attempt to determine the extent and distribution of pegmatites.

Three types of pegmatite occurrences, which are genetically different from each other, are observed. The older occurrences formed perhaps due to metamorphic events contain coarse to very coarse grains (up to few cm) of quartz and feldspar as major minerals and amphibole and mica as accessory minerals. They are smaller light coloured bodies several meters in length. On the other hand, dark coloured pegmatites are characterized by coarse to very coarse grains (up to several cm) of pyroxene, amphibole and mica and they are occasionally associated with dykes of pyroxenite. They occur as bands parallel to the general trend of surrounding metamorphic rocks. The mineralogical composition and the field relationship suggest that these bodies had formed at greater depths, perhaps subsequent to a metamorphic event. However, younger, strongly zoned pegmatites may have been formed at shallow depths. They are mainly made up of mega size crystals (up to several meters) of quartz and feldspar. The minor mineral constituent of the bodies is mica. Fluorite, tourmaline and opaque minerals occur as accessory minerals.