ABSTRACT

Since the International Drinking Water Supply and Sanitation Decade (1981-1990) sanitation provision in Indonesia has been unable to maintain pace with population growth. Many sanitation projects have been undertaken during this period and in the years following, these projects have shown varying success. The aim of this research was to identify key factors in determining the effectiveness of sanitation projects in Indonesia. It is hoped that the findings can then be used to point to areas that can be improved in sanitation projects in order to make them more effective and thus improve the sanitation sector as a whole.

To conduct this research, nine sanitation projects underway or already completed in Indonesia were selected and studied. Three distinct methods were employed to gather information these were observation, interviews and documentary research. Information from sources other than the nine case studies was also collected employing the same three methods. The nine case studies included a range of sanitation project alternatives. BioMAX, Ecomax & Jasa Tirta are intermediate/community scale, technology transfer projects funded by foreign government aid organisations. Mergosono & Tlogomas are community scale projects, which were constructed and funded by local communities. Wirogunan and Jodipan are also community scale projects which required external funding for their construction. Pendowoharjo provides an example of a large-scale sewerage system while Bia Hula is an example at the other end of the scale of on-site treatment for individual households, with the system largely funded and built by recipients.

Sustainability, ease of replication and effluent quality were the measurements used to determine the effectiveness of a sanitation project. It was found that the most effective sanitation projects tended to be low cost options with a high level of community participation, which were instigated at a local level, using locally developed technologies. There was some discrepancy in these results in that more expensive

projects using technology transfer tended to produce a better quality effluent than the lower cost locally developed technologies. However as the level of effluent quality in the more expensive projects was often felt to be unsustainable and the ease of replication of these projects was low (due to their high cost), the low cost projects, using locally developed technologies were felt to be more effective overall.