

Coastal Protection Measures for Small Island Developing States (SIDS) – A First-Cut Classification



POH POH WONG

School of Social Sciences, University of Adelaide, SA 5005, Australia

Email: wong3921@gmail.com

Small Island Developing States (SIDS) are considered as one of most severely affected by climate change and sea-level rise (SLR). Some atoll nations would virtually disappear with one metre sea-level rise. The main objective is to derive a first-cut classification of coastal protection technology for the SIDS to address SLR. First, an assessment is made of the existing and future adaptation measures to SLR in the latest 35 English-language National Communications (NCs) submitted by the SIDS to the UNFCCC; the cut-off date is 23 January 2017. Next, a

wide variety of adaptation measures is culled from key coastal engineering manuals and other sources with a focus on more innovative tools and ideas beyond the traditional hard and soft measures. This yielded several possible adaptation tools that could be applied to the SIDS, and with further research, more tools could be applied. In conclusion, a first-cut classification of coastal protection technology is proposed for the SIDS to address SLR. The resulting table shows eight categories graded from the usual hard and soft measures to new and innovative ideas.