Annex 8.1   Rating of REA Results

Rapid Ecological Assessment involves 'semi-quantitative' swim-surveys allowing for assessment and classification of survey areas. The field data are collected by divers experienced in the underwater identification of sessile benthic taxa, swimming along coral communities or identified sections of coastline on SCUBA.

REA surveys provide information on the assessment of relative cover of coral and other major benthic groups, as well as an inventory of sessile benthic taxa used to define community types.

Five ecological and six substratum attributes shall be assessed on site and/or by reviewing video footages. Each of the attributes (**Table A1-1**) should be assigned to one of the seven standard ranked categories (from zero to six, representing percentage cover from none to over 76%)(**Table A1-2**).

An inventory of benthic taxa shall be complied for transect. Taxa shall be identified in situ to the following levels:
1) Hard corals to species level where possible;
2) Soft corals, anemones and macroalgae to genus level where possible; and
3) Other benthos to genus level where possible or phylum with growth form.

Each taxon in the inventory shall also be ranked to one of the six categories (**Table A1-3**) in terms of abundance (from 0 to 5, representing from absent to dominant) in the community.

Table A1-1   Ecological and Substratum attributes used in REA

Ecological attributes	Substratum
▪ Hard coral	▪ Bedrock/Continuous pavement
▪ Dead standing corals	▪ boulders
▪ Soft corals	▪ Rubble
▪ Sea anemone beds	▪ Cobbles
▪ Macroalgae	▪ Sand with gravel
	▪ Mud

Table A1-2   Ranking of Ecological and substratum attributes

Rank	Percentage cover (%)
0	None recorded
1	1-5
2	6-10
3	11-30
4	31-50
5	51-75
6	76-100

Table A1-3   Ranking of Benthos abundance

Rank	Abundance
0	Absent
1	Sparse
2	Uncommon
3	Common
4	Abundant
5	Dominant