

 $Figure\ 1.\ Displaced\ rock\ armour\ at\ the\ seaward\ side\ of\ the\ outer\ breakwater\ at\ Hikkaduwa.$



Figure 2.Displaced primary rock armour at the seaward and crest of the main breakwater at Mirissa



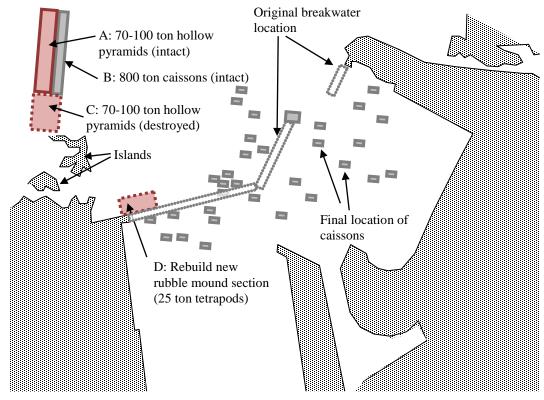
Figure 3. Displaced primary rock armour at seaward and crest of the main breakwater at Puranawella



Figure 4. Steep Tetrapod Armour Layer at Kuji Port.



 $Figure\ 5.\ Damaged\ Breakwater\ at\ Noda\ Port,\ provisionally\ repaired\ using\ 25\ ton\ tetrapods.$



 $Figure \ 6. \ Diagram \ showing \ the \ various \ breakwaters \ at \ Taro \ port. \ Note \ that \ diagram \ is \ not \ to \ scale.$



Figure 7. Damaged breakwater at Okirai port, showing missing caisson sections.



Figure 8. Recovered tetrapod units at Ishimaha port were temporarily stored behind the breakwater before being placed

back in their original location



Figure 9. Damaged Sea-Lock Armour Units at Ooya Port.



Figure 10. Failed X-Block Armour Units at Hikado Port.

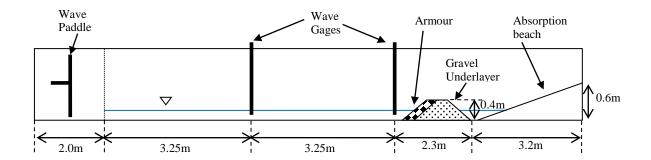


Figure 11. Schematic diagram of experimental set-up.

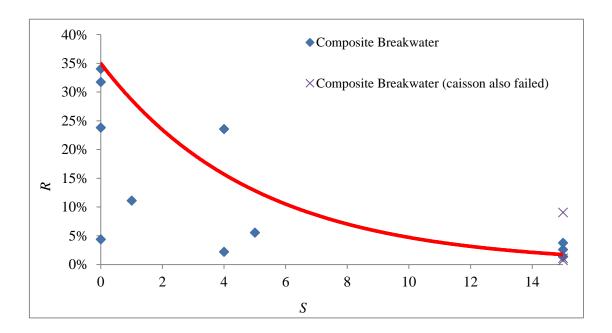


Figure 12. Plot of the actual over required Weight of armour and S for composite breakwaters

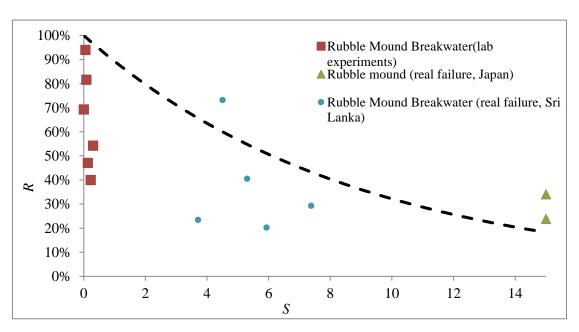


Figure 13. Plot of the actual over required Weight of armour and S for rubble mount breakwaters