

**a**

**d**

**e**

**c**

**b**

**Supplementary Fig. 4. Human-induced threats in the mainland patch reef;**

**a, industries in the vicinity; b, spearfishing; c, tilted *Turbinaria* colony by fishing activity; d, heaped coral bycatch from bottom settling nets; e, cultivation of invasive *Kappaphycus alvarezii***