



Figure 3. Climate-smart soils (CSS) and their relation with different soil parameters. **a.** Soil organic and inorganic carbon and their relation with climate and soil properties. SOC: soil organic carbon; SIC: soil inorganic carbon; ESP: exchangeable sodium per cent (controls soil pH and other soil properties); sHC: saturated hydraulic conductivity (controls soil drainage); MAR: mean annual rainfall, mm¹. **b.** chemically degraded land/soil (sodium-dominated black soils: Sodic Calcicusterts: US soil taxonomy,³² with low SCS_o and high SCS_i (Left of the Figure, semiarid and arid) in BAU (business as usual) showing resilience due to management intervention with typical black soils (sodium dominated black soils: Typic Haplusterts, ³² (right side of the Figure). No parcel of land should be kept fallow to keep soils /lands in good health. **c.** examples of a few Indian climate-smart soils, and **d, e.** climate-smart soils need an exact balance of organic and inorganic C sequestration.