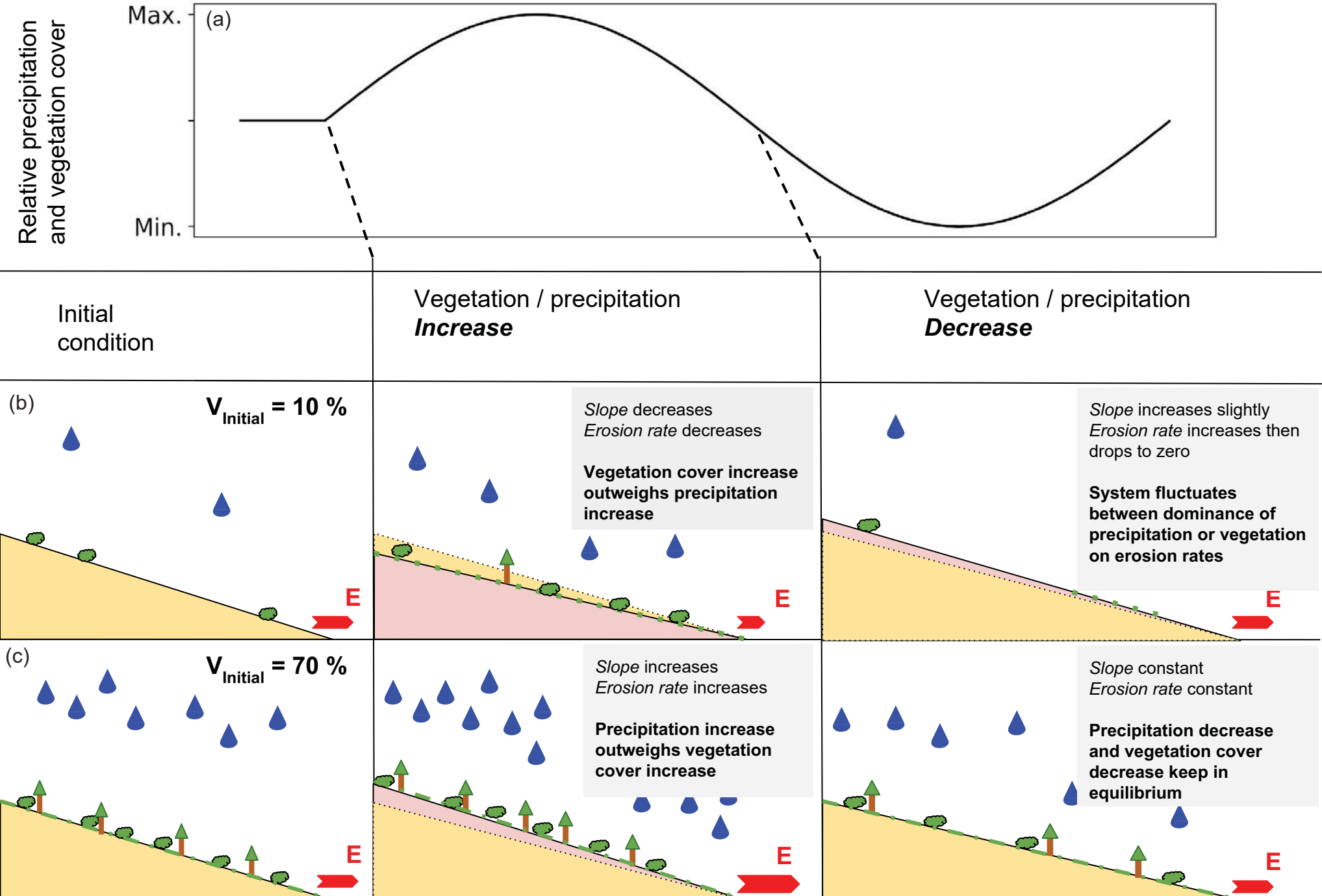
Relative precipitation and vegetation cover
Max.
Min.
(a)
Initial condition
Vegetation / precipitation *Increase*
Vegetation / precipitation *Decrease*
(b)
$V_{Initial}$ = 10 %
Slope decreases
Erosion rate decreases
Vegetation cover increase outweighs precipitation increase
Slope increases slightly
Erosion rate increases then drops to zero
System fluctuates between dominance of precipitation or vegetation on erosion rates
E
(c)
$V_{Initial}$ = 70 %
Slope increases
Erosion rate increases
Precipitation increase outweighs vegetation cover increase
Slope constant
Erosion rate constant
Precipitation decrease and vegetation cover decrease keep in equilibrium
E