



Variable	Definition
$T_{i,j}$	Technology system at Equipment scale. $i - th$ Facility $j - th$ Technological activity
$\underline{T_j}$	Technological systems at the value chain scale.
$\overline{T_j}$	Technological systems at the economy scale.
$E_{i,j}$	Ecosystem local to $T_{i,j}$ .
$\underline{E_j}$	Local ecosystem by aggregation of similar activities in a specific region.
$\overline{E_j}$	local ecosystem for an economic scale
$E_{i,j,k}^*$	The serviceshed for the $k - th$ ES
$\underline{E_{j,k}}^*$	The average serviceshed for value chain activities
$\overline{E_{j,k}}^*$	The average serviceshed for for economic activities.