

Overall water balance for the Pangani River Basin (95% prediction uncertainty boundaries):

<b>Water balance component</b>	<b>Amount [mm yr<sup>-1</sup>]</b>	<b>Percentage</b>
Precipitation	919 – 1019	100
Actual evaporation	829 – 889	86 – 91
Surface runoff	2 – 7	0 – 1
Lateral runoff	17 – 25	2
Shallow aquifer return flow	18 – 55	3 – 5
Deep aquifer recharge	23 – 59	2 – 6
Deep aquifer return flow	18 – 25	2 – 3

Final calibrated parameter value ranges (spatially averaged over parameter zones). Prefix v\_\_ indicates that the parameter value is replaced by the given value; prefix r\_\_ indicates the parameter value is multiplied by (1 + the given value):

<b>Parameter name</b>	<b>Description</b>	<b>Final SUFI-2 range</b>	
		<b>Min</b>	<b>Max</b>
v__PCOR.sub	Correction factor for precipitation (introduced in SWAT-P)	-0.05	0.07
v__TCOR.sub	Correction factor for temperature (introduced in SWAT-P)	-0.15	0.26
v__ALPHA_BF.gw	Base flow alpha factor [days]	0.22	1.00
v__GW_DELAY.gw	Groundwater delay time [days]	25.33	75.59
v__GWQMN.gw	Threshold depth of water in the shallow aquifer for return flow to occur [mm]	127.41	431.09
v__CH_K2.rte	Effective hydraulic conductivity in the main channel [mm/h]	46.67	142.14
v__RCHRG_DP.gw	Deep aquifer percolation fraction	0.42	0.83
v__PSCOR.sub	Correction factor for point source inflow (introduced in SWAT-P)	0.75	1.42
v__DIVCOR.hru	Correction factor for maximum allowed diversion for irrigation (introduced in SWAT-P)	-0.84	0.27
r__CH_N2.rte	Manning's n value for main channel	0.08	0.30
r__CN2.hru	SCD runoff curve number for moisture condition II	-0.14	-0.04
r__SOL_K.sol	Soil conductivity [mm/h]	-0.06	0.02
r__SOL_AWC.sol	Soil available water storage capacity [mm H <sub>2</sub> O / mm soil]	-0.01	0.03
r__SOL_BD.sol	Soil bulk density [g/cm <sup>3</sup> ]	0.00	0.07
r__ESCO.hru	Soil evaporation compensation factor	0.23	0.55
r__EPCO.hru	Plant evaporation compensation factor	0.39	0.99