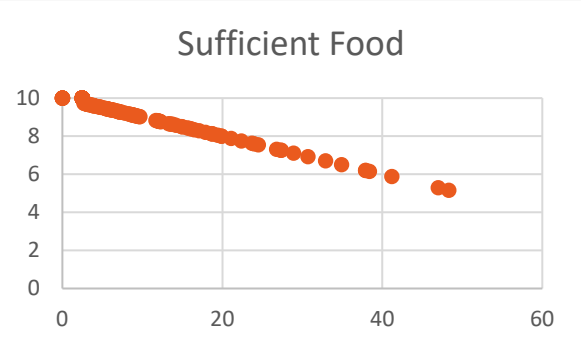
Indicator 1 – Sufficient Food

Formula:

F(X)=(100-X)/10 if 2.5≤X≤100

F(X)=10 if X<2.5, since FAO doesn't specify values <2.5.

X: Prevalence of undernourishment (percent)



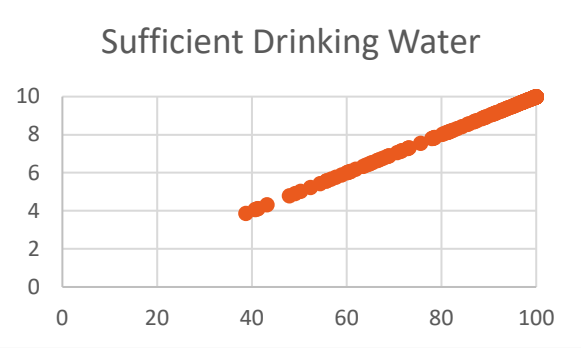
Indicator 2 – Sufficient Drinking Water

Formula:

F(X)=X/10

Range of validity: 0≤X≤100

X: Percentage of population using at least basic drinking water services (percent)



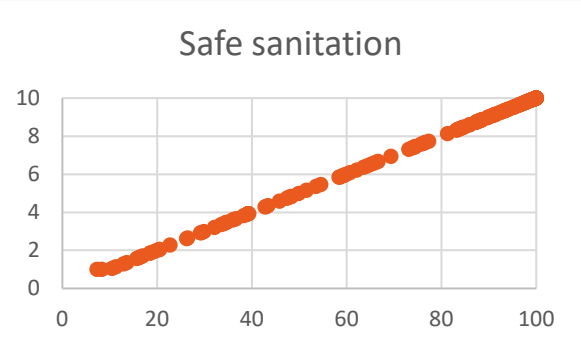
Indicator 3 – Safe Sanitation

Formula:

F(X)=X/10

Range of validity: 0≤X≤100

X: Percentage of population using at least basic sanitation services (percent)



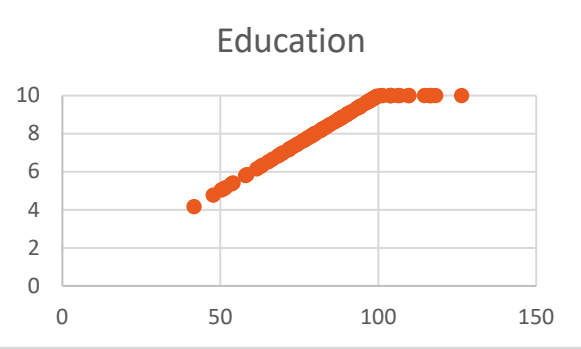
Indicator 4 – Education

Formula:

F(X)=X/10 if 0≤X≤100

F(X)=10 if X>100

X: Gross enrolment ratio, primary to tertiary, both sexes (%)



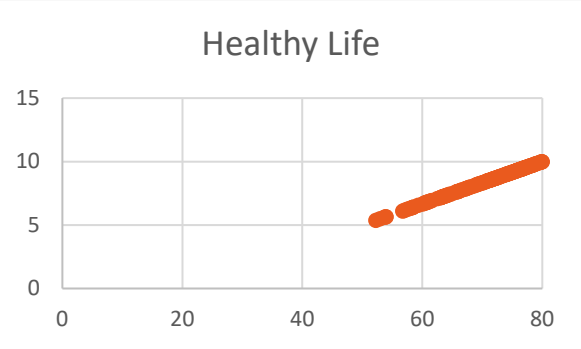
Indicator 5 – Healthy Life

Formula:

F(X)=((X-20)/60)*10

Range of validity: 20≤X≤80

X: Life expectancy at birth, total (years)



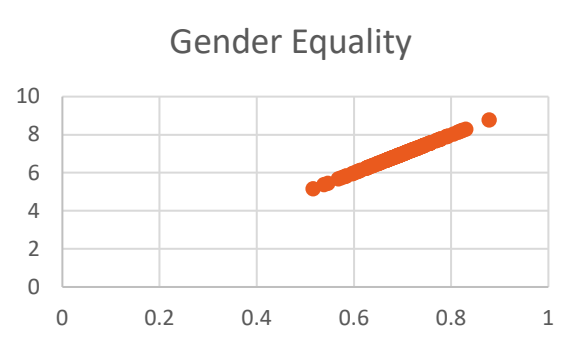
Indicator 6 – Gender Equality

Formula:

F(X)=X*10

Range of validity: 0≤X≤1

X: Gender Gap Index

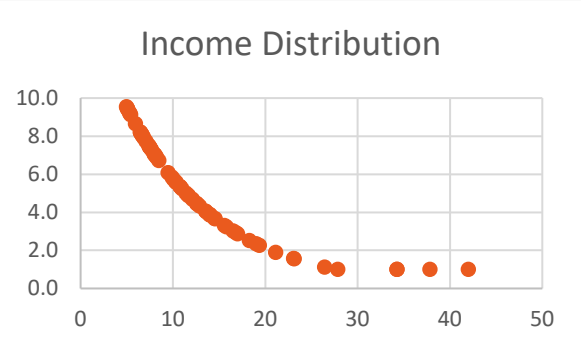


Indicator 7 – Income Distribution

Formula:

F(X)=EXP(-0.1*(X-4.5))*10 if 4.5≤X

X: Ratio of income share held by lowest 10% to income share held by highest 10%



Indicator 8 – Population Growth

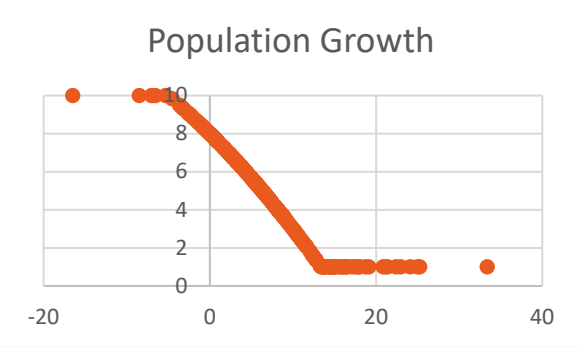
Formula:

F(X)=-0.0067*X^2-0.4333*X+8 if -5<X<15

F(X)=1 if X≥15

F(X)=10 if X<-5

X: Average yearly 5-years change in Population, total



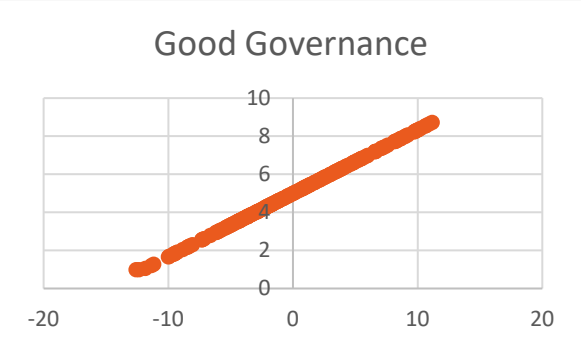
Indicator 9 – Good Governance

Formula:

F(X)=((X+15)/30)*10

Range of validity: -15≤X≤+15

X: Sum of the values of the six Worldwide Governance Indicators



Indicator 10 – Biodiversity

Formula:

F(X)=(F(X1)+F(X2))/2

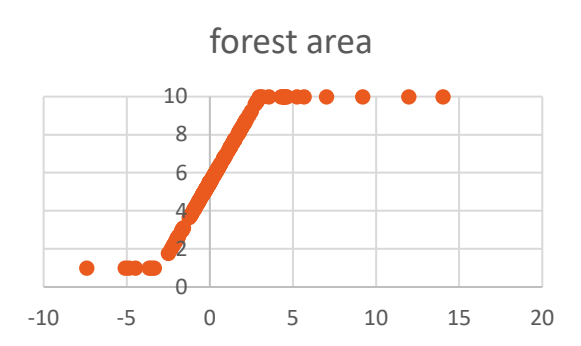
Forest Area:

F(X1)=0.15*X1*10+5.5 if -3<X1<3

F(X1)=10 if X1≥3

F(X1)=1 if X1<-3

X1: 10-years change in Forest area (% of land area)

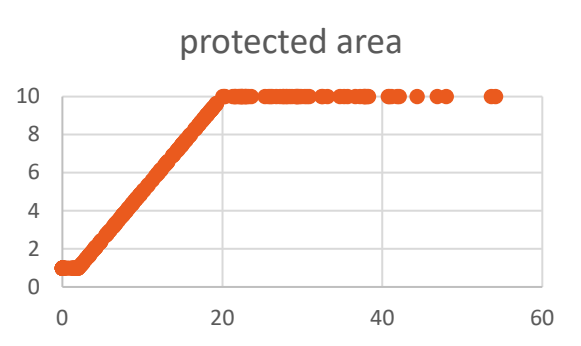


Protected Area:

F(X2)=X2/20*10 if X2<20

F(X2)=10 if X2≥20

X2: Terrestrial protected areas (% of total land area)



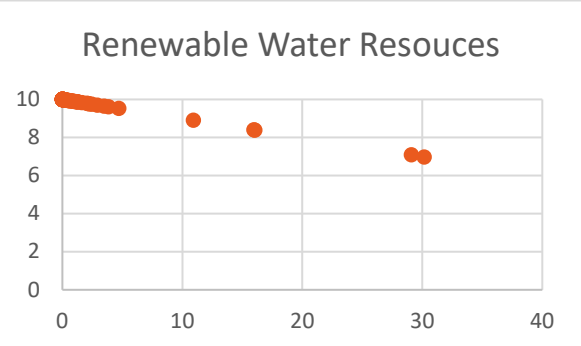
Indicator 11 – Renewable Water Resources

Formula:

F(X)=(100-X)/10 if X≤90

F(X)=1 if X>90

X: Total freshwater withdrawal



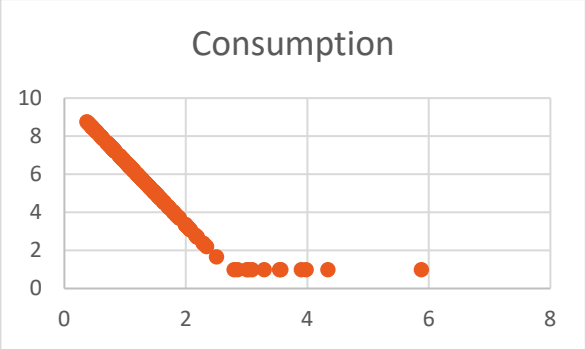
Indicator 12 – Consumption

Formula:

F(X)=10-3*X*2/1.8 if X≤2.7

F(X)=1 if X>2.7

X: Ecological Footprint (gha per person)



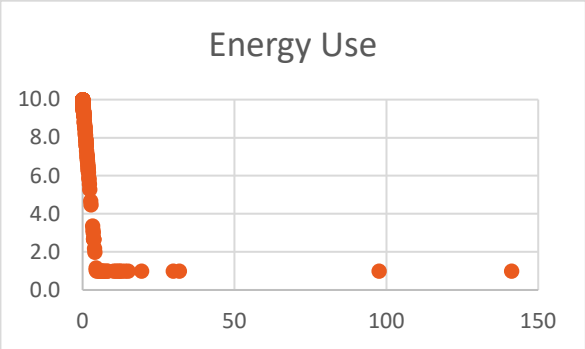
Indicator 13 – Energy Use

Formula:

F(X)=-2*X+10 if X≤5

F(X)=1 if X>5

X: Primary energy usage



Indicator 14 – Energy Savings

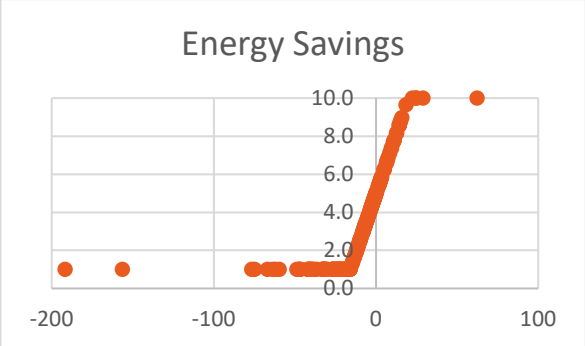
Formula:

F(X)=0.25*X+5 if -16≤X≤20

F(X)=1 if X<-16

F(X)=10 if X>20

X: Change in primary energy usage between 2013 and 2017 in %



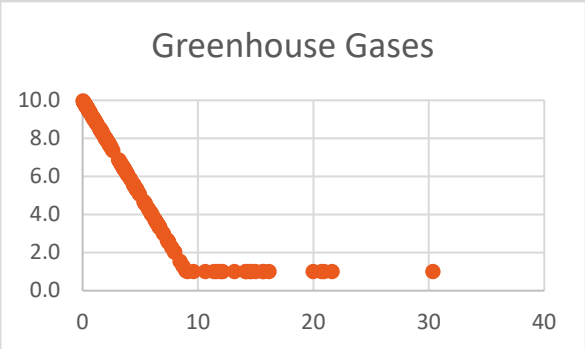
Indicator 15 – Greenhouse Gases

Formula:

F(X)=10-X if 0≤X≤9

F(X)=1 if X>9

X: Total CO_2 emissions - Fuel Combustion (Mt of CO_2)



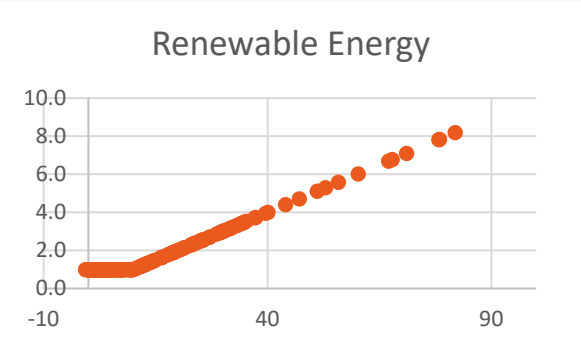
Indicator 16 –Renewable Energy

Formula:

F(X)=X/10 if 0≤X≤100

F(X)=10 if X>100

X: Renewable energy consumption (% of total final energy consumption)

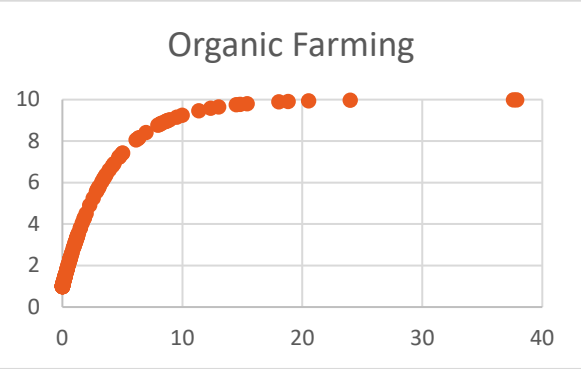


Indicator 17 – Organic Farming

Formula:

F(X)=9*(1-EXP(-0.25*X)) +1

X: organic area share of total farmland [%]

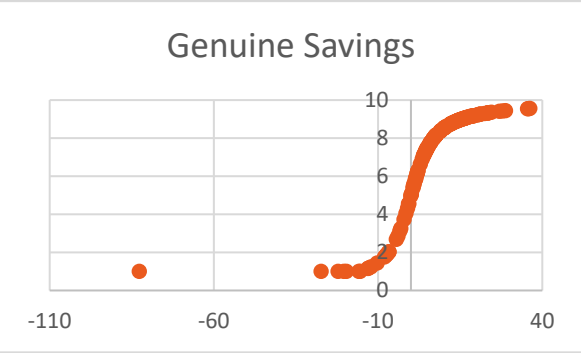


Indicator 18 – Genuine Savings

Formula:

F(X)=10*ARCTAN(0.2*X)/π +5

X: Adjusted net savings, including particulate emission damage (% of GNI)



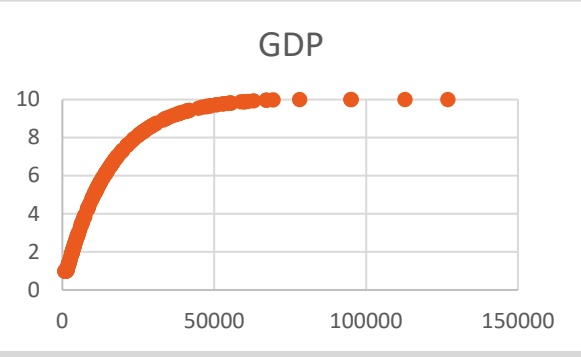
Indicator 19 – Gross Domestic Product

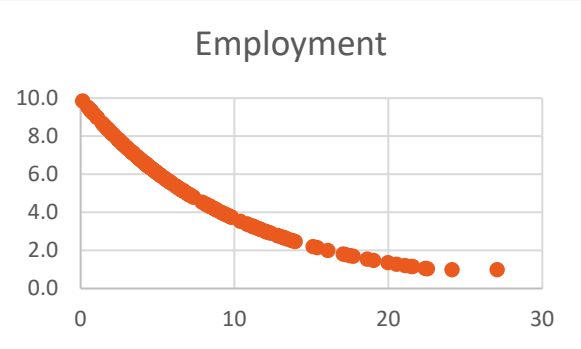
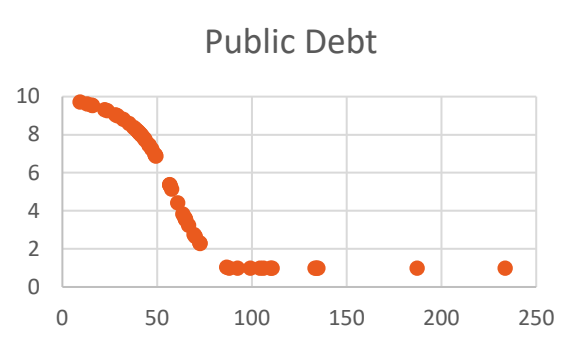
Formula:

F(X)=10*(1.01-EXP(-0.000065*X)) if 0≤X≤70000

F(X)=10 if X>70000

X: GDP per capita, PPP (current international $)



Indicator 20 – Employment *Formula:* F(X)=EXP(-0.1*X)*10 if 0≤X≤60 F(X)=1 if X>60 X: Unemployment, total (% of total labor force) (modeled ILO estimate)	
Indicator 21 – Public Debt *Formula:* F(X)=-3.8*ARCTAN(0.06*X-3.5)+5 if 2.5≤X<117 F(X)=1 if X≥117 F(X)=10 if X<2.5 Gross PSD, General Gov., All maturities, All instruments, Nominal Values, % of GDP (4. quarter)	

An aggregate sustainability index is not calculated because SSI is based on the understanding that sustainability rests on the Triple Bottom Line Approach. Each of the three dimensions is important in its own way, represents a different aspect of sustainability and it should not be "mixed" with one or the two other dimensions.

The indicators are aggregated into categories by an unweighted geometric mean. The same process applies to the aggregation of categories into dimensions.

More information on the calculation of the SSI can be obtained in the 2012 publication by Saisana and Philippas listed on the SSI website under literature.