Tonga

Detailed Human Capital projections to 2060

Demographic indicators, CEPAM Medium	n Scenario	(SSP2)				
	2015	2020	2030	2040	2050	2060
Population (in millions)	0.11	0.11	0.11	0.11	0.10	0.09
Proportion age 65+	5.9%	6.0%	8.0%	10.8%	13.0%	14.6%
Proportion below age 20	47.5%	45.6%	38.7%	35.0%	32.4%	26.8%
	2015-2020	2020-2025	2030-2035	2040-2045	2050-2055	2055-2060
Total Fertility Rate	3.32	2.91	2.46	2.13	1.94	1.87
Life expectancy at birth (in years)						
Male	70.2	71.4	73.7	76.0	78.3	79.5
Female	76.3	77.3	79.5	81.7	83.8	85.9
Five-year net-migration flow (in thousands)	-7.2	-7.3	-7.2	-7.1	-6.7	-6.4

Human Capital indicators, CEPAM Me	dium Scenario ((SSP2)				
	2015	2020	2030	2040	2050	2060
Population age 25+: highest education	nal attainment	(columns su	ım to 100%)		
E1 - no education	1.0%	0.9%	0.6%	0.5%	0.4%	0.3%
E2 - incomplete primary	0.8%	0.7%	0.4%	0.3%	0.2%	0.2%
E3 - primary	18.5%	14.9%	8.7%	4.9%	2.8%	1.5%
E4 - lower secondary	49.6%	49.9%	48.6%	45.0%	41.0%	36.1%
E5 - upper secondary	15.6%	17.8%	23.1%	27.9%	31.6%	35.1%
E6 - post-secondary	14.5%	15.8%	18.6%	21.5%	24.0%	26.9%
Mean years of schooling (in years)	10.6	10.9	11.6	12.2	12.7	13.0
Gender gap (population age 25+): high	nest education	ıl attainme	nt (ratio mo	ale/female)		
E1 - no education	0.87	0.83	0.77	0.75	0.72	0.68
E2 - incomplete primary	0.99	1.00	0.97	0.97	0.98	0.98
E3 - primary	0.87	0.85	0.78	0.75	0.77	0.83
E4 - lower secondary	1.02	1.03	1.06	1.09	1.11	1.15
E5 - upper secondary	0.99	0.99	1.00	1.00	1.00	1.02
E6 - post-secondary	1.13	1.08	0.99	0.91	0.86	0.82
Mean years of schooling (male minus female)	0.1	0.1	0.1	0.0	-0.1	-0.1
Women age 20-39: highest educations	al attainment (d	columns sur	n to 100%)			
E1 - no education	0.5%	0.4%	0.2%	0.1%	0.0%	0.0%
E2 - incomplete primary	0.2%	0.2%	0.1%	0.0%	0.0%	0.0%
E3 - primary	6.3%	3.9%	0.8%	0.3%	0.1%	0.1%
E4 - lower secondary	52.6%	49.1%	42.5%	35.3%	27.4%	19.7%
E5 - upper secondary	24.6%	28.8%	35.3%	39.5%	44.2%	48.0%
E6 - post-secondary	15.9%	17.7%	21.2%	24.8%	28.2%	32.1%
Mean years of schooling (in years)	11.5	11.9	12.9	13.5	13.9	14.2

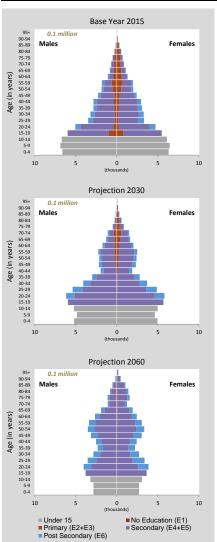
Education scenarios

SSP2/GET: Global Education Trend Scenario (Medium assumption)

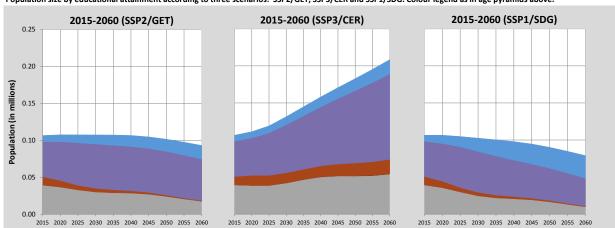
SSP3/CER: Constant Enrollment Rates Scenario (assumption of no future improvements)

SSP1/SDG: Sustainable Development Goal Scenario (universal primary and secondary education by 2030)

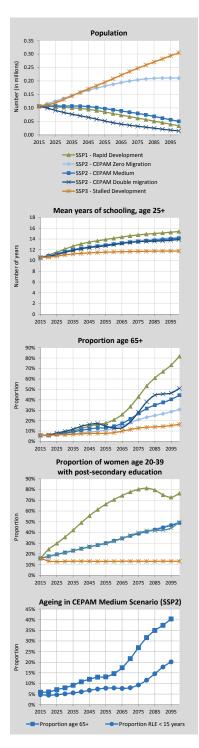
Pyramids by education, CEPAM Medium Scenario







Tonga (Continued)



Alternative Scenarios to 2100

Proportion RLE < 15 years

Projection Results by Scenar	io (SSP1-3)						
	2015	2020	2030	2050	2060	2075	2100
Population (in millions)							
SSP1 - Rapid Development	0.11	0.11	0.10	0.09	0.08	0.06	
SSP2 - CEPAM Zero Migration	0.11	0.12	0.14	0.17	0.19	0.20	
SSP2 - CEPAM Medium	0.11	0.11	0.11	0.10	0.09	0.08	
SSP2 - CEPAM Double Migration	0.11	0.10	0.08	0.06	0.05	0.03	
SSP3 - Stalled Development	0.11	0.11	0.13	0.18	0.21	0.25	0.30
Proportion age 65+	F 00/	C 40/	0.60/	16.50/	20.00/	42.40/	04.70
SSP1 - Rapid Development	5.9%	6.1%	8.6%	16.5%	20.8%	43.1%	
SSP2 - CEPAM Zero Migration	5.9%	5.7%	6.7% 8.0%	9.9%	12.8%	20.9%	
SSP2 - CEPAM Medium	5.9%	6.0%		13.0%	14.6%	26.9%	
SSP2 - CEPAM Double Migration	5.9%	6.4%	9.7%	17.1%	12.8%	28.2%	
SSP3 - Stalled Development	5.9%	5.8%	6.5%	7.8%	8.6%	12.9%	16.4%
Proportion below age 20	47.50/	45 40/	25.20/	25 40/	10.00/	11.00/	1.70
SSP1 - Rapid Development	47.5%	45.1%	35.2%	25.4%	19.0%	11.9%	
SSP2 - CEPAM Zero Migration	47.5%	44.3%	37.7%	30.7%	26.3%	22.9%	
SSP2 - CEPAM Medium	47.5%	45.6%	38.7%	32.4%	26.8%	22.3%	
SSP2 - CEPAM Double Migration	47.5%	47.2%	39.8%	36.4%	29.1%	23.5%	
SSP3 - Stalled Development	47.5%	45.7%	41.1%	37.2%	33.8%	32.2%	29.3%
Proportion of women age 20	•			64.20/	70.60/	20.22/	76.50
SSP1 - Rapid Development	15.9%	24.3%	35.6%	61.3%	70.6%	80.3%	
SSP2 - CEPAM Zero Migration	15.9%	17.8%	21.3%	28.3%	32.4%	39.0%	
SSP2 - CEPAM Medium	15.9%	17.7%	21.2%	28.2%	32.1%	38.9%	
SSP2 - CEPAM Double Migration	15.9%	17.6%	21.1%	28.1%	31.8%	39.6%	
SSP3 - Stalled Development	15.9%	13.3%	12.9%	12.9%	13.0%	13.1%	13.1%
Mean years of schooling, ag							
SSP1 - Rapid Development	10.6	11.0	12.1	13.7	14.1	14.8	
SSP2 - CEPAM Zero Migration	10.6	10.9	11.7	12.8	13.2	13.7	
SSP2 - CEPAM Medium	10.6	10.9	11.6	12.7	13.0	13.5	
SSP2 - CEPAM Double Migration	10.6	10.8	11.5	12.6	13.0	13.5	
SSP3 - Stalled Development	10.6	10.6	11.0	11.5	11.6	11.7	11.8
Demographic assumptions u	inderlying SSF	Ps					
	2015-2020	2020-2025	2030-2035	2050-2055	2060-2065	2075-2080	2095-2100
Total fertility rate							
SSP1 - Rapid Development	3.04	2.42	1.83	1.39	1.32	1.24	
SSP2 - CEPAM Zero Migration	3.32						1.16
		2.91	2.45	1.94	1.82	1.71	
SSP2 - CEPAM Medium			2.45			1.71	1.59
	3.32	2.91	2.45 2.46	1.94	1.82	1.71 1.71	1.59 1.59
SSP2 - CEPAM Double Migration	3.32 3.33	2.91 2.91	2.45 2.46 2.46	1.94 1.94	1.82 1.82	1.71 1.71 1.71	1.59 1.59 1.88
SSP2 - CEPAM Double Migration SSP3 - Stalled Development	3.32 3.33 3.63	2.91 2.91 3.45	2.45 2.46	1.94	1.82	1.71 1.71	1.59 1.59 1.88
SSP2 - CEPAM Double Migration SSP3 - Stalled Development L ife expectancy at birth for f i	3.32 3.33 3.63 emales (in yea	2.91 2.91 3.45	2.45 2.46 2.46 3.15	1.94 1.94 2.64	1.82 1.82 2.53	1.71 1.71 1.71 2.45	1.59 1.59 1.88 2.37
SSP2 - CEPAM Double Migration SSP3 - Stalled Development Life expectancy at birth for form SSP1 - Rapid Development	3.32 3.33 3.63 Emales (in yea 76.8	2.91 2.91 3.45 ars)	2.45 2.46 2.46 3.15	1.94 1.94 2.64	1.82 1.82	1.71 1.71 1.71 2.45	1.59 1.59 1.88 2.37
SSP2 - CEPAM Double Migration SSP3 - Stalled Development Life expectancy at birth for fi SSP1 - Rapid Development SSP2 - CEPAM Zero Migration	3.32 3.33 3.63 emales (in yea 76.8 76.3	2.91 2.91 3.45 ars) 78.4 77.3	2.45 2.46 2.46 3.15 81.6 79.5	1.94 1.94 2.64 87.8 83.8	1.82 1.82 2.53 90.8 86.0	1.71 1.71 1.71 2.45 95.2 89.2	1.59 1.59 1.88 2.37 33.8
SSP2 - CEPAM Double Migration SSP3 - Stalled Development Life expectancy at birth for fi SSP1 - Rapid Development SSP2 - CEPAM Zero Migration SSP2 - CEPAM Medium	3.32 3.33 3.63 emales (in yea 76.8 76.3	2.91 2.91 3.45 ars) 78.4 77.3 77.3	2.45 2.46 2.46 3.15 81.6 79.5 79.5	1.94 1.94 2.64 87.8 83.8 83.8	1.82 2.53 90.8 86.0 85.9	1.71 1.71 1.71 2.45 95.2 89.2 89.1	1.55 1.59 1.88 2.37 33.8 93.4 93.0
SSP2 - CEPAM Double Migration SSP3 - Stalled Development Life expectancy at birth for for SSP1 - Rapid Development SSP2 - CEPAM Zero Migration SSP2 - CEPAM Medium SSP2 - CEPAM Double Migration	3.32 3.33 3.63 emales (in yea 76.8 76.3 76.3 76.3	2.91 2.91 3.45 78.4 77.3 77.3 77.3	2.45 2.46 2.46 3.15 81.6 79.5 79.5 79.5	1.94 1.94 2.64 87.8 83.8 83.8 83.8	1.82 1.82 2.53 90.8 86.0 85.9 85.7	1.71 1.71 1.71 2.45 95.2 89.2 89.1 88.5	1.55 1.59 1.88 2.37 33.8 93.4 93.0
SSP2 - CEPAM Double Migration SSP3 - Stalled Development Life expectancy at birth for for SSP1 - Rapid Development SSP2 - CEPAM Zero Migration SSP2 - CEPAM Medium SSP2 - CEPAM Double Migration SSP3 - Stalled Development	3.32 3.33 3.63 emales (in yea 76.8 76.3 76.3 76.3 75.7	2.91 2.91 3.45 78.4 77.3 77.3 77.3 76.2	2.45 2.46 2.46 3.15 81.6 79.5 79.5	1.94 1.94 2.64 87.8 83.8 83.8	1.82 2.53 90.8 86.0 85.9	1.71 1.71 1.71 2.45 95.2 89.2 89.1	1.55 1.59 1.88 2.37 33.8 93.4 93.0 34.4
SSP2 - CEPAM Double Migration SSP3 - Stalled Development Life expectancy at birth for for SSP1 - Rapid Development SSP2 - CEPAM Zero Migration SSP2 - CEPAM Medium SSP2 - CEPAM Double Migration SSP3 - Stalled Development Migration — net flow over fit	3.32 3.33 3.63 emales (in yed 76.8 76.3 76.3 75.7 ve years (in th	2.91 2.91 3.45 ars) 78.4 77.3 77.3 77.3 76.2 cousands)	2.45 2.46 2.46 3.15 81.6 79.5 79.5 79.5 77.3	1.94 1.94 2.64 87.8 83.8 83.8 83.8 79.4	1.82 1.82 2.53 90.8 86.0 85.9 85.7 80.4	1.71 1.71 1.71 2.45 95.2 89.2 89.1 88.5 82.0	1.55 1.55 1.88 2.37 33.8 93.4 93.0 34.4
SSP2 - CEPAM Double Migration SSP3 - Stalled Development Life expectancy at birth for for SSP1 - Rapid Development SSP2 - CEPAM Zero Migration SSP2 - CEPAM Medium SSP2 - CEPAM Double Migration SSP3 - Stalled Development Migration — net flow over fit SSP1 - Rapid Development	3.32 3.33 3.63 emales (in yed 76.8 76.3 76.3 75.7 ve years (in th	2.91 2.91 3.45 78.4 77.3 77.3 77.3 76.2 10usands)	2.45 2.46 2.46 3.15 81.6 79.5 79.5 79.5 77.3	1.94 1.94 2.64 87.8 83.8 83.8 79.4	1.82 1.82 2.53 90.8 86.0 85.9 85.7 80.4	1.71 1.71 1.71 2.45 95.2 89.2 89.1 88.5 82.0	1.59 1.59 1.88 2.37 33.8 93.4 93.0 34.4 84.1
SSP2 - CEPAM Double Migration SSP3 - Stalled Development Life expectancy at birth for fit SSP1 - Rapid Development SSP2 - CEPAM Zero Migration SSP2 - CEPAM Medium SSP2 - CEPAM Double Migration SSP3 - Stalled Development Migration — net flow over fit SSP1 - Rapid Development SSP2 - CEPAM Zero Migration	3.32 3.33 3.63 emales (in yeu 76.8 76.3 76.3 75.7 ve years (in th	2.91 2.91 3.45 78.4 77.3 77.3 76.2 10usands) -7.2 0.0	2.45 2.46 2.46 3.15 81.6 79.5 79.5 79.5 77.3	1.94 1.94 2.64 87.8 83.8 83.8 79.4 -6.0	1.82 1.82 2.53 90.8 86.0 85.9 85.7 80.4	1.71 1.71 1.71 2.45 95.2 89.2 89.1 88.5 82.0	1.555 1.555 1.886 2.377 33.8 93.4 93.0 34.4 84.1
SSP2 - CEPAM Double Migration SSP3 - Stalled Development Life expectancy at birth for fi SSP1 - Rapid Development SSP2 - CEPAM Zero Migration SSP2 - CEPAM Medium SSP3 - Stalled Development Migration — net flow over fit SSP1 - Rapid Development SSP2 - CEPAM Zero Migration SSP3 - Stalled Development SSP2 - CEPAM Zero Migration SSP2 - CEPAM Zero Migration SSP2 - CEPAM Medium	3.32 3.33 3.63 emales (in yea 76.8 76.3 76.3 75.7 ye years (in th	2,91 2,91 3,45 78,4 77,3 77,3 77,3 76,2 10usands) -7,2 0,0	2.45 2.46 2.46 3.15 81.6 79.5 79.5 79.5 77.3	1.94 1.94 2.64 87.8 83.8 83.8 79.4 -6.0 0.0	1.82 2.53 90.8 86.0 85.9 85.7 80.4	1.71 1.71 1.71 2.45 95.2 89.2 89.1 88.5 82.0 -4.0 0.0	1.55 1.58 2.37 33.8 93.4 93.0 34.4 84.1
SSP2 - CEPAM Double Migration SSP3 - Stalled Development Life expectancy at birth for fi SSP1 - Rapid Development SSP2 - CEPAM Zero Migration SSP2 - CEPAM Medium SSP3 - Stalled Development Migration — net flow over fit SSP1 - Rapid Development SSP1 - Rapid Development SSP2 - CEPAM Zero Migration SSP2 - CEPAM Double Migration SSP2 - CEPAM Medium SSP2 - CEPAM Double Migration	3.32 3.33 3.63 emales (in yea 76.8 76.3 76.3 75.7 ve years (in th -7.2 0.0 -7.2 -14.5	2.91 2.91 3.45 78.4 77.3 77.3 76.2 10usands) -7.2 0.0 -7.3 -13.4	2.45 2.46 2.46 3.15 81.6 79.5 79.5 77.3 -6.9 0.0 -7.2 -11.0	1.94 1.94 2.64 87.8 83.8 83.8 79.4 -6.0 0.0 -6.7 -7.4	1.82 1.82 2.53 90.8 86.0 85.9 85.7 80.4 -5.2 0.0 -6.1 -5.5	1.71 1.71 1.71 2.45 95.2 89.2 89.1 88.5 82.0 -4.0 0.0 -5.1	1.55 1.55 1.88 2.37 33.8 93.4 93.0 34.4 84.1
SSP1 - Rapid Development SSP2 - CEPAM Zero Migration SSP2 - CEPAM Medium SSP2 - CEPAM Double Migration SSP3 - Stalled Development Migration - net flow over fit SSP1 - Rapid Development SSP2 - CEPAM Zero Migration SSP2 - CEPAM Medium SSP2 - CEPAM Double Migration	3.32 3.33 3.63 emales (in yea 76.8 76.3 76.3 75.7 ye years (in th	2,91 2,91 3,45 78,4 77,3 77,3 77,3 76,2 10usands) -7,2 0,0	2.45 2.46 2.46 3.15 81.6 79.5 79.5 79.5 77.3	1.94 1.94 2.64 87.8 83.8 83.8 79.4 -6.0 0.0	1.82 2.53 90.8 86.0 85.9 85.7 80.4	1.71 1.71 1.71 2.45 95.2 89.2 89.1 88.5 82.0 -4.0 0.0	1.59 1.59 1.88 2.37 33.8 93.4 93.0 34.4 84.1 -2.3 0.0 -3.4 -1.5
SSP2 - CEPAM Double Migration SSP3 - Stalled Development Life expectancy at birth for fi SSP1 - Rapid Development SSP2 - CEPAM Zero Migration SSP2 - CEPAM Medium SSP2 - CEPAM Double Migration SSP3 - Stalled Development Migration — net flow over fil SSP1 - Rapid Development SSP2 - CEPAM Zero Migration SSP2 - CEPAM Medium SSP2 - CEPAM Medium SSP2 - CEPAM Double Migration SSP3 - Stalled Development	3.32 3.33 3.63 emales (in yea 76.8 76.3 76.3 75.7 ve years (in th -7.2 0.0 -7.2 -14.5 -4.8	2.91 2.91 3.45 78.4 77.3 77.3 77.3 76.2 10usands) -7.2 0.0 -7.3 -13.4 -2.5	2.45 2.46 2.46 3.15 81.6 79.5 79.5 77.3 -6.9 0.0 -7.2 -11.0	1.94 1.94 2.64 87.8 83.8 83.8 79.4 -6.0 0.00 -6.7 -7.4 0.00	1.82 1.82 2.53 90.8 86.0 85.9 85.7 80.4 -5.2 0.00 -6.1 -5.5, 0.0	1.71 1.71 1.71 2.45 95.2 89.2 89.1 88.5 82.0 -4.0 0.0 -5.1 -3.7	1.59 1.59 1.88 2.37 33.8 93.4 93.0 0.0 -3.4 -1.5 0.0
SSP2 - CEPAM Double Migration SSP3 - Stalled Development Life expectancy at birth for fit SSP1 - Rapid Development SSP2 - CEPAM Zero Migration SSP2 - CEPAM Medium SSP2 - CEPAM Double Migration SSP3 - Stalled Development Migration - net flow over fit SSP1 - Rapid Development SSP2 - CEPAM Zero Migration SSP2 - CEPAM Medium SSP2 - CEPAM Development SSP3 - Stalled Development SSP3 - Stalled Development Ageing indicators, CEPAM Medium	3.32 3.33 3.63 emales (in yeu 76.8 76.3 76.3 75.7 ve years (in th -7.2 0.0 -7.2 -14.5 -4.8	2.91 2.91 3.45 78.4 77.3 77.3 76.2 1008ands) -7.2 0.0 -7.3 -13.4 -2.5 rto (SSP2) 2020	2.45 2.46 2.46 3.15 81.6 79.5 79.5 79.5 77.3 -6.9 0.0 -7.2 -11.0 0.0	1.94 1.94 2.64 87.8 83.8 83.8 79.4 -6.0 0.0 -6.7 -7.4 0.0	1.82 1.82 2.53 90.8 86.0 85.9 85.7 80.4 -5.2 0.0 -6.1 -5.5 0.0	1.71 1.71 1.71 2.45 95.2 89.1 88.5 82.0 -4.0 0.0 -5.1 -3.7 0.0	1.59 1.59 1.88 2.37 33.8 93.4 93.0 93.0 93.0 93.0 93.0 93.0 93.0 93.0
SSP2 - CEPAM Double Migration SSP3 - Stalled Development Life expectancy at birth for fit SSP1 - Rapid Development SSP2 - CEPAM Zero Migration SSP2 - CEPAM Medium SSP3 - Stalled Development Migration — net flow over fit SSP1 - Rapid Development SSP2 - CEPAM Zero Migration SSP3 - Stalled Development SSP2 - CEPAM Medium SSP2 - CEPAM Medium SSP3 - Stalled Development Ageing indicators, CEPAM M Median age	3.32 3.33 3.63 emales (in yeu 76.8 76.3 76.3 75.7 ve years (in th -7.2 0.0 -7.2 -14.5 -4.8 ledium Scena 2015	2.91 2.91 3.45 78.4 77.3 76.2 0.0usands) -7.2 0.0 -7.3 -13.4 -2.5 rio (SSP2) 2020	2.45 2.46 2.46 3.15 81.6 79.5 79.5 79.5 77.3 -6.9 0.0 -7.2 -11.0 0.0	1.94 1.94 2.64 87.8 83.8 83.8 79.4 -6.0 0.0 -6.7 -7.4 0.0	1.82 1.82 2.53 90.8 86.0 85.9 85.7 80.4 -5.2 0.0 -6.1 -5.5 0.0	1.71 1.71 1.71 2.45 95.2 89.2 89.1 88.5, 82.0 -4.0 0.0 -5.1 -3.7 0.0	1.59 1.59 1.88 2.37 33.8 93.4 93.0 34.4.8 84.1 -2.3 0.0 -3.4.4 -1.5 0.0
SSP2 - CEPAM Double Migration SSP3 - Stalled Development Life expectancy at birth for fit SSP1 - Rapid Development SSP2 - CEPAM Zero Migration SSP2 - CEPAM Medium SSP2 - CEPAM Double Migration SSP3 - Stalled Development Migration - net flow over fit SSP1 - Rapid Development SSP2 - CEPAM Medium SSP2 - CEPAM Medium SSP2 - CEPAM Medium SSP2 - CEPAM Medium SSP3 - Stalled Development Ageing indicators, CEPAM Medium	3.32 3.33 3.63 emales (in yeu 76.8 76.3 76.3 75.7 ve years (in th -7.2 0.0 -7.2 -14.5 -4.8	2.91 2.91 3.45 78.4 77.3 77.3 76.2 1008ands) -7.2 0.0 -7.3 -13.4 -2.5 rto (SSP2) 2020	2.45 2.46 2.46 3.15 81.6 79.5 79.5 79.5 77.3 -6.9 0.0 -7.2 -11.0 0.0	1.94 1.94 2.64 87.8 83.8 83.8 79.4 -6.0 0.0 -6.7 -7.4 0.0	1.82 1.82 2.53 90.8 86.0 85.9 85.7 80.4 -5.2 0.0 -6.1 -5.5 0.0	1.71 1.71 1.71 2.45 95.2 89.1 88.5 82.0 -4.0 0.0 -5.1 -3.7 0.0	1.5: 1.8i 2.3i 33 93 93 34 842 031.1 0.0