## **Sao Tome and Principe**

**Detailed Human Capital projections to 2060** 

| Demographic indicators, CEPAM Medium Scenario (SSP2)     |                          |                          |                          |                          |                          |                       |  |  |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-----------------------|--|--|
|  | 2015                     | 2020                     | 2030                     | 2040                     | 2050                     | 2060                  |  |  |
| Population (in millions)                                 | 0.20                     | 0.21                     | 0.25                     | 0.28                     | 0.29                     | 0.30                  |  |  |
| Proportion age 65+                                       | 3.0%                     | 2.8%                     | 3.8%                     | 5.2%                     | 7.6%                     | 10.0%                 |  |  |
| Proportion below age 20                                  | 54.1%                    | 52.4%                    | 45.2%                    | 38.1%                    | 33.0%                    | 29.1%                 |  |  |
|  |                          |                          |                          |                          |                          |                       |  |  |
|  | 2015-2020                | 2020-2025                | 2030-2035                | 2040-2045                | 2050-2055                | 2055-2060             |  |  |
| Total Fertility Rate                                     | <b>2015-2020</b><br>3.90 | <b>2020-2025</b><br>3.34 | <b>2030-2035</b><br>2.49 | <b>2040-2045</b><br>2.05 | <b>2050-2055</b><br>1.90 | <b>2055-2060</b> 1.83 |  |  |
| Total Fertility Rate Life expectancy at birth (in years) |                          |                          |                          |                          |                          |                       |  |  |
|  |                          |                          |                          |                          |                          |                       |  |  |
| Life expectancy at birth (in years)                      | 3.90                     | 3.34                     | 2.49                     | 2.05                     | 1.90                     | 1.83                  |  |  |

| Human Capital indicators, CEPAM Medium Scenario (SSP2) |                 |             |             |            |             |           |  |
|--|-----------------|-------------|-------------|------------|-------------|-----------|--|
|  | 2015            | 2020        | 2030        | 2040       | 2050        | 2060      |  |
| Population age 25+: highest education                  | al attainment   | (columns s  | um to 100   | %)         |             |           |  |
| E1 - no education                                      | 10.9%           | 7.8%        | 3.6%        | 1.7%       | 0.9%        | 0.5%      |  |
| E2 - incomplete primary                                | 45.9%           | 42.1%       | 32.8%       | 23.7%      | 16.9%       | 11.6%     |  |
| E3 - primary   | 26.0%           | 29.3%       | 34.3%       | 35.6%      | 34.5%       | 31.7%     |  |
| E4 - lower secondary                                   | 10.5%           | 12.5%       | 17.8%       | 23.7%      | 28.3%       | 32.0%     |  |
| E5 - upper secondary                                   | 5.4%            | 6.5%        | 9.1%        | 12.4%      | 15.9%       | 19.9%     |  |
| E6 - post-secondary                                    | 1.4%            | 1.8%        | 2.3%        | 2.9%       | 3.6%        | 4.4%      |  |
| Mean years of schooling (in years)                     | 4.0             | 4.6         | 5.9         | 6.9        | 7.7         | 8.3       |  |
| Gender gap (population age 25+): high                  | est education   | al attainme | ent (propor | tion males | - proportio | n females |  |
| E1 - no education                                      | -10.0           | -8.0        | -4.0        | -2.0       | -1.0        | 0.0       |  |
| E2 - incomplete primary                                | -5.0            | -5.0        | -7.0        | -6.0       | -5.0        | -4.0      |  |
| E3 - primary   | 7.0             | 6.0         | 4.0         | 1.0        | -2.0        | -3.0      |  |
| E4 - lower secondary                                   | 3.0             | 3.0         | 4.0         | 4.0        | 3.0         | 3.0       |  |
| E5 - upper secondary                                   | 4.0             | 4.0         | 4.0         | 4.0        | 5.0         | 6.0       |  |
| E6 - post-secondary                                    | 0.0             | 0.0         | 0.0         | -1.0       | -1.0        | -1.0      |  |
| Mean years of schooling<br>(male minus female)         | 1.0             | 0.9         | 0.7         | 0.5        | 0.4         | 0.4       |  |
| Women age 20-39: highest educations                    | ıl attainment ( | columns su  | ım to 100%  | ()         |             |           |  |
| E1 - no education                                      | 3.5%            | 2.2%        | 0.3%        | 0.1%       | 0.1%        | 0.0%      |  |
| E2 - incomplete primary                                | 42.0%           | 33.2%       | 19.5%       | 10.4%      | 4.8%        | 1.9%      |  |
| E3 - primary   | 32.4%           | 36.6%       | 40.6%       | 38.5%      | 32.2%       | 24.0%     |  |
| E4 - lower secondary                                   | 14.5%           | 17.8%       | 24.9%       | 31.3%      | 36.9%       | 40.2%     |  |
| E5 - upper secondary                                   | 6.4%            | 8.3%        | 11.9%       | 15.9%      | 21.2%       | 27.5%     |  |
| E6 - post-secondary                                    | 1.2%            | 2.0%        | 2.9%        | 3.8%       | 4.9%        | 6.3%      |  |
| Mean years of schooling (in years)                     | 5.0             | 6.0         | 7.6         | 8.3        | 8.9         | 9.5       |  |

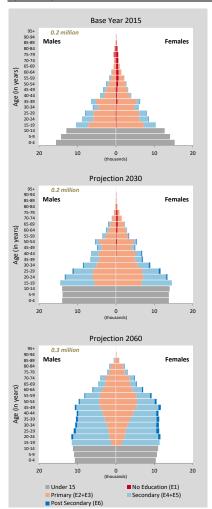
Education scenarios

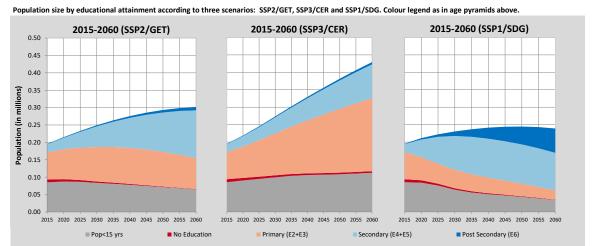
SSP2/GET: Global Education Trend Scenario (Medium assumption)

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

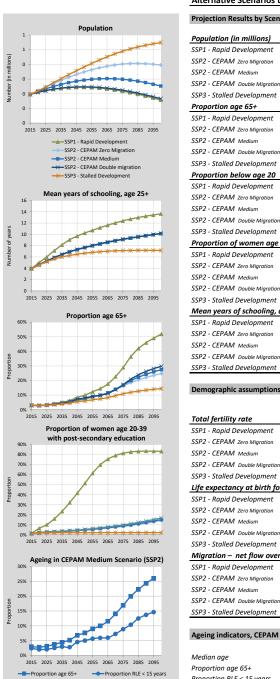
SSP1/SDG: Sustainable Development Goal Scenario (universal primary and secondary education by 2030)

## Pyramids by education, CEPAM Medium Scenario





## **Sao Tome and Principe (Continued)**



| Alternative Scenarios to 2     | <b>100</b> Py | ramids by edu | cation, CEPAM | Medium Scen | ario  |       |       |
|--------------------------------|---------------|---------------|---------------|-------------|-------|-------|-------|
| Projection Results by Scenario | (SSP1-3)      |               |               |             |       |       |       |
|                                | 2015          | 2020          | 2030          | 2050        | 2060  | 2075  | 2100  |
| Population (in millions)       |               |               |               |             |       |       |       |
| SSP1 - Rapid Development       | 0.20          | 0.21          | 0.23          | 0.24        | 0.24  | 0.22  | 0.16  |
| SSP2 - CEPAM Zero Migration    | 0.20          | 0.22          | 0.27          | 0.35        | 0.38  | 0.40  | 0.40  |
| SSP2 - CEPAM Medium            | 0.20          | 0.21          | 0.25          | 0.29        | 0.30  | 0.30  | 0.25  |
| SSP2 - CEPAM Double Migration  | 0.20          | 0.21          | 0.23          | 0.25        | 0.24  | 0.22  | 0.17  |
| SSP3 - Stalled Development     | 0.20          | 0.22          | 0.27          | 0.38        | 0.43  | 0.49  | 0.55  |
| Proportion age 65+             |               |               |               |             |       |       |       |
| SSP1 - Rapid Development       | 3.0%          | 2.9%          | 4.2%          | 10.0%       | 14.5% | 29.0% | 51.9% |
| SSP2 - CEPAM Zero Migration    | 3.0%          | 2.8%          | 3.6%          | 7.2%        | 9.9%  | 16.1% | 24.7% |
| SSP2 - CEPAM Medium            | 3.0%          | 2.8%          | 3.8%          | 7.6%        | 10.0% | 16.9% | 27.4% |
| SSP2 - CEPAM Double Migration  | 3.0%          | 2.9%          | 3.9%          | 8.0%        | 9.8%  | 17.2% | 29.8% |
| SSP3 - Stalled Development     | 3.0%          | 2.8%          | 3.5%          | 6.0%        | 7.4%  | 10.9% | 14.4% |
| Proportion below age 20        |               |               |               |             |       |       |       |
| SSP1 - Rapid Development       | 54.1%         | 51.5%         | 40.3%         | 24.2%       | 20.1% | 14.6% | 9.5%  |
| SSP2 - CEPAM Zero Migration    | 54.1%         | 51.7%         | 44.1%         | 31.8%       | 28.0% | 24.1% | 20.0% |
| SSP2 - CEPAM Medium            | 54.1%         | 52.4%         | 45.2%         | 33.0%       | 29.1% | 24.7% | 20.0% |
| SSP2 - CEPAM Double Migration  | 54.1%         | 53.1%         | 46.4%         | 34.3%       | 30.4% | 25.4% | 20.0% |
| SSP3 - Stalled Development     | 54.1%         | 52.7%         | 47.0%         | 37.4%       | 34.3% | 31.5% | 29.0% |
| Proportion of women age 20-3   | 9 with post-  | secondary e   | ducation      |             |       |       |       |
| SSP1 - Rapid Development       | 1.2%          | 6.4%          | 16.0%         | 51.4%       | 69.8% | 81.4% | 83.3% |
| SSP2 - CEPAM Zero Migration    | 1.2%          | 1.7%          | 2.6%          | 4.5%        | 5.9%  | 8.3%  | 14.2% |
| SSP2 - CEPAM Medium            | 1.2%          | 2.0%          | 2.9%          | 4.9%        | 6.3%  | 8.9%  | 15.1% |
| SSP2 - CEPAM Double Migration  | 1.2%          | 2.2%          | 3.2%          | 5.3%        | 7.0%  | 9.8%  | 16.8% |
| SSP3 - Stalled Development     | 1.2%          | 1.6%          | 1.9%          | 2.0%        | 2.1%  | 2.1%  | 2.1%  |
| Mean years of schooling, age   | 25+           |               |               |             |       |       |       |
| SSP1 - Rapid Development       | 4.0           | 5.0           | 7.1           | 10.2        | 11.2  | 12.4  | 13.6  |
| SSP2 - CEPAM Zero Migration    | 4.0           | 4.6           | 5.9           | 7.6         | 8.3   | 9.1   | 10.1  |
| SSP2 - CEPAM Medium            | 4.0           | 4.6           | 5.9           | 7.7         | 8.3   | 9.1   | 10.1  |
| SSP2 - CEPAM Double Migration  | 4.0           | 4.6           | 5.9           | 7.7         | 8.4   | 9.2   | 10.2  |
|                                |               |               |               |             |       |       |       |

| Demographic assumptions underlying SSPs |                |           |           |           |           |           |           |  |
|---|----------------|-----------|-----------|-----------|-----------|-----------|-----------|--|
|   | 2015-2020      | 2020-2025 | 2030-2035 | 2050-2055 | 2060-2065 | 2075-2080 | 2095-2100 |  |
| Total fertility rate                    |                |           |           |           |           |           |           |  |
| SSP1 - Rapid Development                | 3.43           | 2.53      | 1.64      | 1.25      | 1.22      | 1.16      | 1.09      |  |
| SSP2 - CEPAM Zero Migration             | 3.90           | 3.34      | 2.49      | 1.90      | 1.83      | 1.73      | 1.59      |  |
| SSP2 - CEPAM Medium                     | 3.90           | 3.34      | 2.49      | 1.90      | 1.83      | 1.73      | 1.59      |  |
| SSP2 - CEPAM Double Migration           | 3.90           | 3.33      | 2.49      | 1.90      | 1.83      | 1.73      | 1.59      |  |
| SSP3 - Stalled Development              | 4.20           | 3.85      | 3.13      | 2.49      | 2.42      | 2.33      | 2.22      |  |
| Life expectancy at birth for f          | emales (in ye  | ars)      |           |           |           |           |           |  |
| SSP1 - Rapid Development                | 69.6           | 71.2      | 74.3      | 80.0      | 82.7      | 87.1      | 92.8      |  |
| SSP2 - CEPAM Zero Migration             | 69.0           | 69.8      | 71.6      | 75.1      | 76.8      | 79.5      | 83.0      |  |
| SSP2 - CEPAM Medium                     | 69.0           | 69.9      | 71.6      | 75.1      | 76.9      | 79.5      | 83.0      |  |
| SSP2 - CEPAM Double Migration           | 69.0           | 69.9      | 71.6      | 75.2      | 76.9      | 79.6      | 83.1      |  |
| SSP3 - Stalled Development              | 68.5           | 68.8      | 69.4      | 70.5      | 71.0      | 71.7      | 72.7      |  |
| Migration – net flow over fi            | ve years (in t | housands) |           |           |           |           |           |  |
| SSP1 - Rapid Development                | -4.9           | -5.3      | -5.8      | -6.1      | -5.9      | -5.2      | -3.8      |  |
| SSP2 - CEPAM Zero Migration             | 0.0            | 0.0       | 0.0       | 0.0       | 0.0       | 0.0       | 0.0       |  |
| SSP2 - CEPAM Medium                     | -4.9           | -5.4      | -6.3      | -7.4      | -7.5      | -7.3      | -6.2      |  |
| SSP2 - CEPAM Double Migration           | -9.8           | -10.5     | -11.5     | -12.1     | -11.7     | -10.5     | -7.7      |  |
| SSP3 - Stalled Development              | -3.2           | -1.8      | 0.0       | 0.0       | 0.0       | 0.0       | 0.0       |  |

| Ageing indicators, CEPAM Medium Scenario (SSP2) |      |      |      |      |       |       |       |
|---|------|------|------|------|-------|-------|-------|
|   | 2015 | 2020 | 2030 | 2050 | 2060  | 2075  | 2095  |
| Median age                                      | 18.1 | 19.0 | 22.2 | 30.1 | 34.0  | 39.7  | 45.6  |
| Proportion age 65+                              | 3.0% | 2.8% | 3.8% | 7.6% | 10.0% | 16.9% | 25.9% |
| Proportion RLE < 15 years                       | 2.5% | 2.1% | 2.6% | 5.1% | 6.0%  | 8.9%  | 14.6% |