TCAC simulation scenario results

Author: [IOTC Secretariat](mailto:IOTC-Secretariat@fao.org)

# General scenario configuration

|  |  |
| --- | --- |
| Species | Yellowfin tuna |
| Total allowable catch | 500,000 t |
| **Main allocation components** |  |
| 1 - Baseline weight | 10% |
| 2 - Coastal state weight | 20% |
| 3 - Catch-based weight | 70% |
| **Coastal State components (item 2)** |  |
| 2.1 - Equal share weight | 35% |
| 2.2 - Socio-economic weight | 47.5% |
| 2.3 - National jurisdiction area surface weight | 17.5% |
| **Socio-economic weight components (item 2.2)** |  |
| 2.2.1 - Human Development Index status weight | 30% |
| 2.2.2 - Gross national income status weight | 30% |
| 2.2.3 - Small Islands Development status weight | 40% |
| **Catch-based configuration parameters** |  |
| Reference years | 2000-2016 |
| Reference method | Selected period |
| Part of foreign catch taken in NJA re-attributed to coastal states (Year 1) | 10% |
| Part of foreign catch taken in NJA re-attributed to coastal states (Year 2) | 20% |
| Part of foreign catch taken in NJA re-attributed to coastal states (Year 3) | 30% |
| Part of foreign catch taken in NJA re-attributed to coastal states (Year 4) | 40% |
| Part of foreign catch taken in NJA re-attributed to coastal states (Year 5) | 50% |
| Part of foreign catch taken in NJA re-attributed to coastal states (Year 6) | 60% |
| Part of foreign catch taken in NJA re-attributed to coastal states (Year 7) | 70% |
| Part of foreign catch taken in NJA re-attributed to coastal states (Year 8) | 80% |
| Part of foreign catch taken in NJA re-attributed to coastal states (Year 9) | 90% |
| Part of foreign catch taken in NJA re-attributed to coastal states (Year 10) | 100% |

# Baseline allocation for Contracting Parties

| Entity code | Entity name | Status | Allocation (%) | TAC (t) |
| --- | --- | --- | --- | --- |
| AUS | Australia | CP | 3.45 | 1,724.1 |
| BGD | Bangladesh | CP | 3.45 | 1,724.1 |
| CHN | China | CP | 3.45 | 1,724.1 |
| COM | Comoros | CP | 3.45 | 1,724.1 |
| EUR | European Union | CP | 3.45 | 1,724.1 |
| FRAT | France (OT) | CP | 3.45 | 1,724.1 |
| GBR | United Kingdom | CP | 3.45 | 1,724.1 |
| IDN | Indonesia | CP | 3.45 | 1,724.1 |
| IND | India | CP | 3.45 | 1,724.1 |
| IRN | Iran (Islamic Republic of) | CP | 3.45 | 1,724.1 |
| JPN | Japan | CP | 3.45 | 1,724.1 |
| KEN | Kenya | CP | 3.45 | 1,724.1 |
| KOR | Republic of Korea | CP | 3.45 | 1,724.1 |
| LKA | Sri Lanka | CP | 3.45 | 1,724.1 |
| MDG | Madagascar | CP | 3.45 | 1,724.1 |
| MDV | Maldives | CP | 3.45 | 1,724.1 |
| MOZ | Mozambique | CP | 3.45 | 1,724.1 |
| MUS | Mauritius | CP | 3.45 | 1,724.1 |
| MYS | Malaysia | CP | 3.45 | 1,724.1 |
| OMN | Oman | CP | 3.45 | 1,724.1 |
| PAK | Pakistan | CP | 3.45 | 1,724.1 |
| PHL | Philippines | CP | 3.45 | 1,724.1 |
| SDN | Sudan | CP | 3.45 | 1,724.1 |
| SOM | Somalia | CP | 3.45 | 1,724.1 |
| SYC | Seychelles | CP | 3.45 | 1,724.1 |
| THA | Thailand | CP | 3.45 | 1,724.1 |
| TZA | United Republic of Tanzania | CP | 3.45 | 1,724.1 |
| YEM | Yemen | CP | 3.45 | 1,724.1 |
| ZAF | South Africa | CP | 3.45 | 1,724.1 |

# Coastal state allocation

## Equal allocation

| Entity code | Entity name | Status | Allocation (%) | TAC (t) |
| --- | --- | --- | --- | --- |
| AUS | Australia | CP | 0.28 | 1,400 |
| BGD | Bangladesh | CP | 0.28 | 1,400 |
| CHN | China | CP | 0.00 | 0 |
| COM | Comoros | CP | 0.28 | 1,400 |
| EUR | European Union | CP | 0.28 | 1,400 |
| FRAT | France (OT) | CP | 0.28 | 1,400 |
| GBR | United Kingdom | CP | 0.28 | 1,400 |
| IDN | Indonesia | CP | 0.28 | 1,400 |
| IND | India | CP | 0.28 | 1,400 |
| IRN | Iran (Islamic Republic of) | CP | 0.28 | 1,400 |
| JPN | Japan | CP | 0.00 | 0 |
| KEN | Kenya | CP | 0.28 | 1,400 |
| KOR | Republic of Korea | CP | 0.00 | 0 |
| LKA | Sri Lanka | CP | 0.28 | 1,400 |
| MDG | Madagascar | CP | 0.28 | 1,400 |
| MDV | Maldives | CP | 0.28 | 1,400 |
| MOZ | Mozambique | CP | 0.28 | 1,400 |
| MUS | Mauritius | CP | 0.28 | 1,400 |
| MYS | Malaysia | CP | 0.28 | 1,400 |
| OMN | Oman | CP | 0.28 | 1,400 |
| PAK | Pakistan | CP | 0.28 | 1,400 |
| PHL | Philippines | CP | 0.00 | 0 |
| SDN | Sudan | CP | 0.28 | 1,400 |
| SOM | Somalia | CP | 0.28 | 1,400 |
| SYC | Seychelles | CP | 0.28 | 1,400 |
| THA | Thailand | CP | 0.28 | 1,400 |
| TWN | Taiwan Province of China | OBS | 0.00 | 0 |
| TZA | United Republic of Tanzania | CP | 0.28 | 1,400 |
| YEM | Yemen | CP | 0.28 | 1,400 |
| ZAF | South Africa | CP | 0.28 | 1,400 |

## Socio-economic allocation

### Human Development Index status allocation

| Entity code | Entity name | Status | HDI | Allocation (%) | TAC (t) |
| --- | --- | --- | --- | --- | --- |
| AUS | Australia | CP | VH | 0.00 | 0.0 |
| BGD | Bangladesh | CP | ME | 0.16 | 822.1 |
| CHN | China | CP | - | 0.00 | 0.0 |
| COM | Comoros | CP | ME | 0.16 | 822.1 |
| EUR | European Union | CP | VH | 0.00 | 0.0 |
| FRAT | France (OT) | CP | VH | 0.00 | 0.0 |
| GBR | United Kingdom | CP | VH | 0.00 | 0.0 |
| IDN | Indonesia | CP | HI | 0.11 | 548.1 |
| IND | India | CP | ME | 0.16 | 822.1 |
| IRN | Iran (Islamic Republic of) | CP | HI | 0.11 | 548.1 |
| JPN | Japan | CP | - | 0.00 | 0.0 |
| KEN | Kenya | CP | ME | 0.16 | 822.1 |
| KOR | Republic of Korea | CP | - | 0.00 | 0.0 |
| LKA | Sri Lanka | CP | HI | 0.11 | 548.1 |
| MDG | Madagascar | CP | LO | 0.22 | 1,096.2 |
| MDV | Maldives | CP | HI | 0.11 | 548.1 |
| MOZ | Mozambique | CP | LO | 0.22 | 1,096.2 |
| MUS | Mauritius | CP | VH | 0.00 | 0.0 |
| MYS | Malaysia | CP | VH | 0.00 | 0.0 |
| OMN | Oman | CP | VH | 0.00 | 0.0 |
| PAK | Pakistan | CP | LO | 0.22 | 1,096.2 |
| PHL | Philippines | CP | - | 0.00 | 0.0 |
| SDN | Sudan | CP | LO | 0.22 | 1,096.2 |
| SOM | Somalia | CP | LO | 0.22 | 1,096.2 |
| SYC | Seychelles | CP | HI | 0.11 | 548.1 |
| THA | Thailand | CP | VH | 0.00 | 0.0 |
| TWN | Taiwan Province of China | OBS | - | 0.00 | 0.0 |
| TZA | United Republic of Tanzania | CP | LO | 0.22 | 1,096.2 |
| YEM | Yemen | CP | LO | 0.22 | 1,096.2 |
| ZAF | South Africa | CP | HI | 0.11 | 548.1 |

### Gross national income status allocation

| Entity code | Entity name | Status | GNI | Allocation (%) | TAC (t) |
| --- | --- | --- | --- | --- | --- |
| AUS | Australia | CP | HI | 0.00 | 0.0 |
| BGD | Bangladesh | CP | LM | 0.15 | 737.1 |
| CHN | China | CP | - | 0.00 | 0.0 |
| COM | Comoros | CP | LM | 0.15 | 737.1 |
| EUR | European Union | CP | HI | 0.00 | 0.0 |
| FRAT | France (OT) | CP | HI | 0.00 | 0.0 |
| GBR | United Kingdom | CP | HI | 0.00 | 0.0 |
| IDN | Indonesia | CP | UM | 0.10 | 491.4 |
| IND | India | CP | LM | 0.15 | 737.1 |
| IRN | Iran (Islamic Republic of) | CP | LM | 0.15 | 737.1 |
| JPN | Japan | CP | - | 0.00 | 0.0 |
| KEN | Kenya | CP | LM | 0.15 | 737.1 |
| KOR | Republic of Korea | CP | - | 0.00 | 0.0 |
| LKA | Sri Lanka | CP | LM | 0.15 | 737.1 |
| MDG | Madagascar | CP | LO | 0.20 | 982.8 |
| MDV | Maldives | CP | UM | 0.10 | 491.4 |
| MOZ | Mozambique | CP | LO | 0.20 | 982.8 |
| MUS | Mauritius | CP | UM | 0.10 | 491.4 |
| MYS | Malaysia | CP | UM | 0.10 | 491.4 |
| OMN | Oman | CP | HI | 0.05 | 245.7 |
| PAK | Pakistan | CP | LM | 0.15 | 737.1 |
| PHL | Philippines | CP | - | 0.00 | 0.0 |
| SDN | Sudan | CP | LO | 0.20 | 982.8 |
| SOM | Somalia | CP | LO | 0.20 | 982.8 |
| SYC | Seychelles | CP | HI | 0.05 | 245.7 |
| THA | Thailand | CP | UM | 0.10 | 491.4 |
| TWN | Taiwan Province of China | OBS | - | 0.00 | 0.0 |
| TZA | United Republic of Tanzania | CP | LM | 0.15 | 737.1 |
| YEM | Yemen | CP | LO | 0.20 | 982.8 |
| ZAF | South Africa | CP | UM | 0.10 | 491.4 |

### Small Islands Development status allocation

| Entity code | Entity name | Status | Allocation (%) | TAC (t) |
| --- | --- | --- | --- | --- |
| AUS | Australia | CP | 0.00 | 0 |
| BGD | Bangladesh | CP | 0.00 | 0 |
| CHN | China | CP | 0.00 | 0 |
| COM | Comoros | CP | 0.95 | 4,750 |
| EUR | European Union | CP | 0.00 | 0 |
| FRAT | France (OT) | CP | 0.00 | 0 |
| GBR | United Kingdom | CP | 0.00 | 0 |
| IDN | Indonesia | CP | 0.00 | 0 |
| IND | India | CP | 0.00 | 0 |
| IRN | Iran (Islamic Republic of) | CP | 0.00 | 0 |
| JPN | Japan | CP | 0.00 | 0 |
| KEN | Kenya | CP | 0.00 | 0 |
| KOR | Republic of Korea | CP | 0.00 | 0 |
| LKA | Sri Lanka | CP | 0.00 | 0 |
| MDG | Madagascar | CP | 0.00 | 0 |
| MDV | Maldives | CP | 0.95 | 4,750 |
| MOZ | Mozambique | CP | 0.00 | 0 |
| MUS | Mauritius | CP | 0.95 | 4,750 |
| MYS | Malaysia | CP | 0.00 | 0 |
| OMN | Oman | CP | 0.00 | 0 |
| PAK | Pakistan | CP | 0.00 | 0 |
| PHL | Philippines | CP | 0.00 | 0 |
| SDN | Sudan | CP | 0.00 | 0 |
| SOM | Somalia | CP | 0.00 | 0 |
| SYC | Seychelles | CP | 0.95 | 4,750 |
| THA | Thailand | CP | 0.00 | 0 |
| TWN | Taiwan Province of China | OBS | 0.00 | 0 |
| TZA | United Republic of Tanzania | CP | 0.00 | 0 |
| YEM | Yemen | CP | 0.00 | 0 |
| ZAF | South Africa | CP | 0.00 | 0 |

## National Jurisdiction Area allocation

| Entity code | Entity name | Status | NJA size (km2) | Allocation (%) | TAC (t) |
| --- | --- | --- | --- | --- | --- |
| AUS | Australia | CP | 4,320,207 | 0.56 | 2,800 |
| BGD | Bangladesh | CP | 77,773 | 0.07 | 350 |
| CHN | China | CP | NA | 0.00 | 0 |
| COM | Comoros | CP | 164,571 | 0.07 | 350 |
| EUR | European Union | CP | 378,244 | 0.07 | 350 |
| FRAT | France (OT) | CP | 1,294,307 | 0.28 | 1,400 |
| GBR | United Kingdom | CP | 638,580 | 0.14 | 700 |
| IDN | Indonesia | CP | 1,948,313 | 0.28 | 1,400 |
| IND | India | CP | 2,283,347 | 0.28 | 1,400 |
| IRN | Iran (Islamic Republic of) | CP | 161,846 | 0.07 | 350 |
| JPN | Japan | CP | NA | 0.00 | 0 |
| KEN | Kenya | CP | 111,436 | 0.07 | 350 |
| KOR | Republic of Korea | CP | NA | 0.00 | 0 |
| LKA | Sri Lanka | CP | 530,275 | 0.07 | 350 |
| MDG | Madagascar | CP | 1,199,904 | 0.14 | 700 |
| MDV | Maldives | CP | 916,244 | 0.14 | 700 |
| MOZ | Mozambique | CP | 570,059 | 0.07 | 350 |
| MUS | Mauritius | CP | 1,272,857 | 0.21 | 1,050 |
| MYS | Malaysia | CP | 62,343 | 0.07 | 350 |
| OMN | Oman | CP | 535,212 | 0.07 | 350 |
| PAK | Pakistan | CP | 220,792 | 0.07 | 350 |
| PHL | Philippines | CP | NA | 0.00 | 0 |
| SDN | Sudan | CP | 66,483 | 0.07 | 350 |
| SOM | Somalia | CP | 829,359 | 0.14 | 700 |
| SYC | Seychelles | CP | 1,332,252 | 0.21 | 1,050 |
| THA | Thailand | CP | 118,137 | 0.07 | 350 |
| TWN | Taiwan Province of China | OBS | NA | 0.00 | 0 |
| TZA | United Republic of Tanzania | CP | 240,763 | 0.07 | 350 |
| YEM | Yemen | CP | 543,647 | 0.07 | 350 |
| ZAF | South Africa | CP | 781,573 | 0.14 | 700 |

# Catch-based allocation following the transition period

| Entity code | Entity name | Status | Allocation (%) | TAC (t) |
| --- | --- | --- | --- | --- |
| AUS | Australia | CP | 0.24 | 1,175.3 |
| BGD | Bangladesh | CP | 0.01 | 44.8 |
| CHN | China | CP | 0.22 | 1,109.2 |
| COM | Comoros | CP | 0.89 | 4,472.4 |
| EUR | European Union | CP | 9.91 | 49,560.6 |
| FRAT | France (OT) | CP | 0.87 | 4,348.1 |
| GBR | United Kingdom | CP | 0.90 | 4,511.7 |
| IDN | Indonesia | CP | 5.46 | 27,292.5 |
| IND | India | CP | 5.25 | 26,227.4 |
| IRN | Iran (Islamic Republic of) | CP | 3.45 | 17,270.6 |
| JPN | Japan | CP | 0.77 | 3,833.9 |
| KEN | Kenya | CP | 0.28 | 1,397.8 |
| KOR | Republic of Korea | CP | 0.37 | 1,871.0 |
| LKA | Sri Lanka | CP | 6.40 | 32,018.1 |
| MDG | Madagascar | CP | 0.90 | 4,514.9 |
| MDV | Maldives | CP | 5.67 | 28,355.1 |
| MOZ | Mozambique | CP | 0.71 | 3,528.9 |
| MUS | Mauritius | CP | 0.86 | 4,314.3 |
| MYS | Malaysia | CP | 0.09 | 425.7 |
| OMN | Oman | CP | 2.34 | 11,709.1 |
| PAK | Pakistan | CP | 3.11 | 15,569.1 |
| PHL | Philippines | CP | 0.11 | 544.0 |
| SDN | Sudan | CP | 0.09 | 457.3 |
| SOM | Somalia | CP | 1.58 | 7,896.7 |
| SYC | Seychelles | CP | 10.36 | 51,815.3 |
| THA | Thailand | CP | 0.13 | 664.9 |
| TWN | Taiwan Province of China | OBS | 2.24 | 11,177.2 |
| TZA | United Republic of Tanzania | CP | 1.54 | 7,705.7 |
| YEM | Yemen | CP | 5.09 | 25,431.2 |
| ZAF | South Africa | CP | 0.15 | 757.3 |

# Final allocation table

## Quota table after transition period

| Entity code | Entity name | Status | Baseline (%) | Coastal States (%) | Catch-based (%) | Total (%) |
| --- | --- | --- | --- | --- | --- | --- |
| AUS | Australia | CP | 0.345 | 0.840 | 0.235 | 0.014 |
| BGD | Bangladesh | CP | 0.345 | 0.662 | 0.009 | 0.010 |
| CHN | China | CP | 0.345 | 0.000 | 0.222 | 0.006 |
| COM | Comoros | CP | 0.345 | 1.612 | 0.894 | 0.029 |
| EUR | European Union | CP | 0.345 | 0.350 | 9.912 | 0.106 |
| FRAT | France (OT) | CP | 0.345 | 0.560 | 0.870 | 0.018 |
| GBR | United Kingdom | CP | 0.345 | 0.420 | 0.902 | 0.017 |
| IDN | Indonesia | CP | 0.345 | 0.768 | 5.459 | 0.066 |
| IND | India | CP | 0.345 | 0.872 | 5.245 | 0.065 |
| IRN | Iran (Islamic Republic of) | CP | 0.345 | 0.607 | 3.454 | 0.044 |
| JPN | Japan | CP | 0.345 | 0.000 | 0.767 | 0.011 |
| KEN | Kenya | CP | 0.345 | 0.662 | 0.280 | 0.013 |
| KOR | Republic of Korea | CP | 0.345 | 0.000 | 0.374 | 0.007 |
| LKA | Sri Lanka | CP | 0.345 | 0.607 | 6.404 | 0.074 |
| MDG | Madagascar | CP | 0.345 | 0.836 | 0.903 | 0.021 |
| MDV | Maldives | CP | 0.345 | 1.578 | 5.671 | 0.076 |
| MOZ | Mozambique | CP | 0.345 | 0.766 | 0.706 | 0.018 |
| MUS | Mauritius | CP | 0.345 | 1.538 | 0.863 | 0.027 |
| MYS | Malaysia | CP | 0.345 | 0.448 | 0.085 | 0.009 |
| OMN | Oman | CP | 0.345 | 0.399 | 2.342 | 0.031 |
| PAK | Pakistan | CP | 0.345 | 0.717 | 3.114 | 0.042 |
| PHL | Philippines | CP | 0.345 | 0.000 | 0.109 | 0.005 |
| SDN | Sudan | CP | 0.345 | 0.766 | 0.091 | 0.012 |
| SOM | Somalia | CP | 0.345 | 0.836 | 1.579 | 0.028 |
| SYC | Seychelles | CP | 0.345 | 1.599 | 10.363 | 0.123 |
| THA | Thailand | CP | 0.345 | 0.448 | 0.133 | 0.009 |
| TZA | United Republic of Tanzania | CP | 0.345 | 0.717 | 1.541 | 0.026 |
| YEM | Yemen | CP | 0.345 | 0.766 | 5.086 | 0.062 |
| ZAF | South Africa | CP | 0.345 | 0.628 | 0.151 | 0.011 |

## TAC table after transition period

| Entity code | Entity name | Status | Baseline (t) | Coastal States (t) | Catch-based (t) | Total (t) |
| --- | --- | --- | --- | --- | --- | --- |
| AUS | Australia | CP | 1724.1 | 4200.0 | 1175.3 | 7099.4 |
| BGD | Bangladesh | CP | 1724.1 | 3309.2 | 44.8 | 5078.2 |
| CHN | China | CP | 1724.1 | 0.0 | 1109.2 | 2833.4 |
| COM | Comoros | CP | 1724.1 | 8059.2 | 4472.4 | 14255.7 |
| EUR | European Union | CP | 1724.1 | 1750.0 | 49560.6 | 53034.7 |
| FRAT | France (OT) | CP | 1724.1 | 2800.0 | 4348.1 | 8872.2 |
| GBR | United Kingdom | CP | 1724.1 | 2100.0 | 4511.7 | 8335.9 |
| IDN | Indonesia | CP | 1724.1 | 3839.5 | 27292.5 | 32856.1 |
| IND | India | CP | 1724.1 | 4359.2 | 26227.4 | 32310.7 |
| IRN | Iran (Islamic Republic of) | CP | 1724.1 | 3035.1 | 17270.6 | 22029.9 |
| JPN | Japan | CP | 1724.1 | 0.0 | 3833.9 | 5558.0 |
| KEN | Kenya | CP | 1724.1 | 3309.2 | 1397.8 | 6431.1 |
| KOR | Republic of Korea | CP | 1724.1 | 0.0 | 1871.0 | 3595.1 |
| LKA | Sri Lanka | CP | 1724.1 | 3035.1 | 32018.1 | 36777.4 |
| MDG | Madagascar | CP | 1724.1 | 4178.9 | 4514.9 | 10417.9 |
| MDV | Maldives | CP | 1724.1 | 7889.5 | 28355.1 | 37968.6 |
| MOZ | Mozambique | CP | 1724.1 | 3828.9 | 3528.9 | 9081.9 |
| MUS | Mauritius | CP | 1724.1 | 7691.4 | 4314.3 | 13729.8 |
| MYS | Malaysia | CP | 1724.1 | 2241.4 | 425.7 | 4391.3 |
| OMN | Oman | CP | 1724.1 | 1995.7 | 11709.1 | 15429.0 |
| PAK | Pakistan | CP | 1724.1 | 3583.2 | 15569.1 | 20876.5 |
| PHL | Philippines | CP | 1724.1 | 0.0 | 544.0 | 2268.1 |
| SDN | Sudan | CP | 1724.1 | 3828.9 | 457.3 | 6010.4 |
| SOM | Somalia | CP | 1724.1 | 4178.9 | 7896.7 | 13799.8 |
| SYC | Seychelles | CP | 1724.1 | 7993.8 | 51815.3 | 61533.2 |
| THA | Thailand | CP | 1724.1 | 2241.4 | 664.9 | 4630.4 |
| TZA | United Republic of Tanzania | CP | 1724.1 | 3583.2 | 7705.7 | 13013.0 |
| YEM | Yemen | CP | 1724.1 | 3828.9 | 25431.2 | 30984.3 |
| ZAF | South Africa | CP | 1724.1 | 3139.5 | 757.3 | 5620.8 |