Supplementary material

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Groundwater salinity in the Horn of Africa: Spatial prediction modeling and estimated people at risk

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Highlights:

- Groundwater salinity health risk maps created for the Horn of Africa
- Drivers of high salinity: precipitation, recharge, fractured rocks, evaporation, ocean proximity
- The most strongly-affected areas are Somalia, northeast Kenya, and the Somali region of Ethiopia
- 11.6 million people, incl. 400k infants and 500k pregnant women at risk from high salinity groundwater
- Five of Somalia's 18 regions have >50% of infants exposed to unsafe salinity levels

Graphical abstract

- Probability of groundwater salinity >1500 μS/cm
- ~45% of the Horn of Africa's land area has a high probability of groundwater salinity exceeding the threshold of 1500 μS/cm.
- ~11.6 million people live in areas at risk, including:
  - 491,000 pregnancies
  - 372,000 infants (0-12 months)
Supplementary material

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S1. Geology map

**FIGURES**

**S1. Geology map**

*Fig. S1.* Geology map of Horn Africa, USGS (Persits et al., 1997).
S2. Predictor variable maps

Fig. S2. Predictor variables. The description of the geology classes can be seen in detail in Fig. S1, Geology Map.
S3. Estimation of the percentage of area at risk

Fig. S3. Estimation of the percentage of area at risk for each of the countries in the horn of Africa according to the three thresholds studied.

S4. Measures of the importance of random forest variables EC 800 (µS/cm)

Fig. S4. Distribution of the relative importance of the 16 final predictor variables from 100 iterations.
S5. Measures of the importance of random forest variables EC 1500 (µS/cm)

![Image of figure S5]

**Fig. S5.** Distribution of the relative importance of the 16 final predictor variables from 100 iterations.

S6. Measures of the importance of random forest variables EC 2500 (µS/cm)

![Image of figure S6]

**Fig. S6.** Distribution of the relative importance of the 16 final predictor variables from 100 iterations.
**S7. Partial dependence plots for the predictor variables EC 800 (µS/cm)**

Fig. S7. Partial dependence plots for the predictor variables. The x-axis shows the distribution of the data for the explanatory variable, and the y-axis reports the impact of the variable on the prediction of salinity in concentrations greater than EC 800 (µS/cm).
Fig. S7, continued. Partial dependence plots for the predictor variables. The x-axis shows the distribution of the data for the explanatory variable, and the y-axis reports the impact of the variable on the prediction of salinity in concentrations greater than EC 800 (µS/cm). Symbols of the Geology plot: Cretaceous (K), Jurassic (J), Jurassic through Carboniferous (JC), Jurassic Triassic (JTr), Cretaceous Jurassic (KJ), Lower Cretaceous (Kl), Lower Jurassic (Jl), Ordovician (O), Holocene (Qe), Quaternary Pleistocene (Qp), Cenozoic (QT), Tertiary (T), Triassic-Permian (TrP).
Fig. S8. Partial dependence plots for the predictor variables. The x-axis shows the distribution of the data for the explanatory variable, and the y-axis reports the impact of the variable on the prediction of salinity in concentrations greater than EC 1500 (µS/cm).
Fig. S8, continued. Partial dependence plots for the predictor variables. The x-axis shows the distribution of the data for the explanatory variable, and the y-axis reports the impact of the variable on the prediction of salinity in concentrations greater than EC 1500 (µS/cm). Symbols of the Geology plot: Cenozoic (QT), Cretaceous (K), Jurassic(J), Jurassic Triassic (JTr), Cretaceous Jurassic (KJ), Lower Cretaceous (KL), Lower Jurassic (JL), Ordovician (O), Holocene (Qe), Quaternary Pleistocene (QP), Tertiary (T).
S9. Partial dependence plots for the predictor variables EC 2500 (µS/cm)

Fig. S9. Partial dependence plots for the predictor variables. The x-axis shows the distribution of the data for the explanatory variable, and the y-axis reports the impact of the variable on the prediction of salinity in concentrations greater than EC 2500 (µS/cm).
Fig. S9, continued. Partial dependence plots for the predictor variables. The x-axis shows the distribution of the data for the explanatory variable, and the y-axis reports the impact of the variable on the prediction of salinity in concentrations greater than EC 2500 (µS/cm). Symbols of the Geology plot: Cretaceous (K), Jurassic (J), Jurassic Triassic (JTr), Lower Cretaceous (Kl), Lower Jurassic (Jl), Ordovician (O), Quaternary Pleistocene (Qp), Cenozoic (QT), Tertiary (T).
Fig. S10. Population of the study areas. Figure (a) presents the total population for the first level administrative units, and figure (b) presents the population density for the first level administrative units. All the maps were created by the authors using ArcGIS Pro v.2.7.2 software. Base maps are from Esri within ArcGIS Pro v.2.7.2 and are credited to: Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap, and the GIS user community.
### TABLES

**Salinity data**

**Table S1.** Summary by country of the distribution of groundwater salinity concentrations and sources used for analysis and modeling.

<table>
<thead>
<tr>
<th>Country</th>
<th>Source</th>
<th>No of samples</th>
<th>% N EC&gt;800 μS/cm</th>
<th>% N EC&gt;1500 μS/cm</th>
<th>% N EC&gt;2500 μS/cm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>(Tadesse, 2020)</td>
<td>18</td>
<td>33</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>(Bairu et al., 2013)</td>
<td>10</td>
<td>100</td>
<td>40</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>(WASH, 2020)</td>
<td>213</td>
<td>59</td>
<td>29</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>(Acacia, 2020a)</td>
<td>549</td>
<td>12</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>(Ministry of Agriculture, 2018)</td>
<td>10</td>
<td>100</td>
<td>100</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>(Addisu Deressa Geleta, 2012)</td>
<td>142</td>
<td>74</td>
<td>28</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>(Charity Water, 2020)</td>
<td>369</td>
<td>27</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>(Rango et al., 2010)</td>
<td>25</td>
<td>40</td>
<td>24</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>(Tadesse, 2013)</td>
<td>44</td>
<td>57</td>
<td>20</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>(Brhane, 2016)</td>
<td>17</td>
<td>24</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>(Demile et al., 2008)</td>
<td>42</td>
<td>17</td>
<td>5</td>
<td>5</td>
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<tr>
<td></td>
<td>(Tadesse et al., 2010)</td>
<td>9</td>
<td>44</td>
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<td>11</td>
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<tr>
<td></td>
<td>(Reimann et al., 2002)</td>
<td>107</td>
<td>46</td>
<td>21</td>
<td>5</td>
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<tr>
<td></td>
<td>(Bretzler et al., 2011)</td>
<td>72</td>
<td>40</td>
<td>22</td>
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<tr>
<td></td>
<td>(Adem, 2012)</td>
<td>13</td>
<td>23</td>
<td>15</td>
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<tr>
<td></td>
<td>(Gulta Abdurahman and Moltot, 2018)</td>
<td>25</td>
<td>16</td>
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<tr>
<td></td>
<td>(Ayenew et al., 2009)</td>
<td>83</td>
<td>51</td>
<td>17</td>
<td>7</td>
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<td>(Acacia, 2020b)</td>
<td>719</td>
<td>100</td>
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<tr>
<td></td>
<td>(Gebrehiwot et al., 2011)</td>
<td>20</td>
<td>45</td>
<td>0</td>
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</tr>
<tr>
<td></td>
<td>Total</td>
<td>2493</td>
<td>38</td>
<td>14</td>
<td>5</td>
</tr>
<tr>
<td>Kenya</td>
<td>(Ashun, 2014)</td>
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<td>25</td>
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<tr>
<td></td>
<td>(Tanui et al., 2020)</td>
<td>59</td>
<td>20</td>
<td>19</td>
<td>17</td>
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<tr>
<td></td>
<td>(Ezekiel et al., 2017)</td>
<td>39</td>
<td>85</td>
<td>69</td>
<td>41</td>
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<td>(Sottas, 2013)</td>
<td>25</td>
<td>48</td>
<td>8</td>
<td>4</td>
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<tr>
<td></td>
<td>(Kanoti, 2021)</td>
<td>69</td>
<td>62</td>
<td>23</td>
<td>9</td>
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<tr>
<td></td>
<td>(Blandenier, 2015)</td>
<td>293</td>
<td>84</td>
<td>35</td>
<td>19</td>
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<tr>
<td></td>
<td>(Makokha K. Jacquelyne, 2017)</td>
<td>9</td>
<td>0</td>
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<tr>
<td></td>
<td>(Muraguri and A, 2013)</td>
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<tr>
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<td>(Rusiniai and Sekula, 2021)</td>
<td>35</td>
<td>63</td>
<td>34</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>(Owango Wadira, 2020)</td>
<td>42</td>
<td>76</td>
<td>60</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>(Kang’ethe, 2015)</td>
<td>9</td>
<td>44</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>(UNHCR, 2020)</td>
<td>20</td>
<td>70</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>696</td>
<td>61</td>
<td>28</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>(FAO-SWALIM, 2018)</td>
<td>2025</td>
<td>88.5</td>
<td>76.1</td>
<td>57.9</td>
</tr>
<tr>
<td></td>
<td>(FAO-SWALIM, 2020)</td>
<td>3382</td>
<td>96</td>
<td>0.5</td>
<td>0.4</td>
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<td>(Nasreldin et al., 2016)</td>
<td>50</td>
<td>100</td>
<td>94</td>
<td>86</td>
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<td>5457</td>
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<td>29.3</td>
<td>22.4</td>
</tr>
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<td>Total</td>
<td>8646</td>
<td>61.1</td>
<td>40.7</td>
<td>27.8</td>
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</table>
**Predictor variables**

**Table S2.** List of variables tested for the modelling of groundwater contamination by salinity. The final selected variables are highlighted in grey (for features selection, see methods).

<table>
<thead>
<tr>
<th>Class</th>
<th>Predictor variable</th>
<th>Resolution</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Soil</strong></td>
<td>Clay fraction (2m depth)</td>
<td>250 meters</td>
<td>ISRIC (Hengl et al., 2015)</td>
</tr>
<tr>
<td></td>
<td>Sand fraction (2m depth)</td>
<td>250 meters</td>
<td>ISRIC (Hengl et al., 2015)</td>
</tr>
<tr>
<td></td>
<td>Silt fraction (2m depth)</td>
<td>250 meters</td>
<td>ISRIC (Hengl et al., 2015)</td>
</tr>
<tr>
<td></td>
<td>Electric conductivity of the soil (2m depth)</td>
<td>250 meters</td>
<td>ISRIC (Hengl et al., 2015)</td>
</tr>
<tr>
<td></td>
<td>Absolute depth to bedrock</td>
<td>250 meters</td>
<td>ISRIC (Hengl et al., 2015)</td>
</tr>
<tr>
<td></td>
<td>Caption exchange capacity of the soil (2m depth)</td>
<td>250 meters</td>
<td>ISRIC (Hengl et al., 2015)</td>
</tr>
<tr>
<td></td>
<td>Soil water capacity until wilting point (2m depth)</td>
<td>250 meters</td>
<td>ISRIC (Hengl et al., 2015)</td>
</tr>
<tr>
<td></td>
<td>Soil texture class (USDA system)</td>
<td></td>
<td>(Hengl, 2018a)</td>
</tr>
<tr>
<td></td>
<td>Soil taxonomi class (USDA system)</td>
<td></td>
<td>(Hengl and Nauman, 2018)</td>
</tr>
<tr>
<td></td>
<td>Soil organic carbon density in kg per cubic-m (2m depth)</td>
<td>250 meters</td>
<td>ISRIC (Hengl et al., 2015)</td>
</tr>
<tr>
<td></td>
<td>Soil organic carbon content (2m depth)</td>
<td>250 meters</td>
<td>ISRIC (Hengl et al., 2015)</td>
</tr>
<tr>
<td></td>
<td>Normalized difference vegetation index (NDVI)</td>
<td>250 meters</td>
<td>(U.S. Geological Survey (USGS), 2022)</td>
</tr>
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<td></td>
<td>Soil water capacity until wilting point (2m depth)</td>
<td>250 meters</td>
<td>ISRIC (Hengl et al., 2015)</td>
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<tr>
<td></td>
<td>Soil hydraulic conductivity</td>
<td></td>
<td>(Gupta et al., 2021)</td>
</tr>
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<td></td>
<td>Soil hydraulic properties</td>
<td></td>
<td>(Simons et al., 2020)</td>
</tr>
<tr>
<td></td>
<td>Soil coarse fragments (2m depth)</td>
<td>250 meters</td>
<td>ISRIC (Hengl et al., 2015)</td>
</tr>
<tr>
<td></td>
<td>Soil pH (2m depth)</td>
<td>250 meters</td>
<td>ISRIC (Hengl et al., 2015)</td>
</tr>
<tr>
<td></td>
<td>Soil Nitrogen (2m depth)</td>
<td>250 meters</td>
<td>ISRIC (Hengl et al., 2015)</td>
</tr>
<tr>
<td></td>
<td>Soil Manganese (2m depth)</td>
<td>250 meters</td>
<td>ISRIC (Hengl et al., 2017)</td>
</tr>
<tr>
<td></td>
<td>Soil Sodium (2m depth)</td>
<td>250 meters</td>
<td>ISRIC (Hengl et al., 2017)</td>
</tr>
<tr>
<td></td>
<td>Soil Potassium (2m depth)</td>
<td>250 meters</td>
<td>ISRIC (Hengl et al., 2017)</td>
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<td><strong>Geology</strong></td>
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<td>USGS (Persits et al., 1997)</td>
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<tr>
<td></td>
<td>Temperature</td>
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<td>WorldClim (Fick and Hijmans, 2017)</td>
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<td></td>
<td>Priestley Taylor alpha coefficient (AET/PET)</td>
<td>1 Kilometer</td>
<td>CGIAR (Trabucco and Zomer, 2010)</td>
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<tr>
<td><strong>Climate</strong></td>
<td>Potential evapotranspiration (PET)</td>
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<td>Actual evapotranspiration (AET)</td>
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<td>CGIAR (Trabucco and Zomer, 2010)</td>
</tr>
<tr>
<td></td>
<td>Mean annual precipitation</td>
<td>1 Kilometer</td>
<td>CGIAR (Trabucco and Zomer, 2019)</td>
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<td>Aridity (MAP/MAE)*</td>
<td>1 Kilometer</td>
<td>CGIAR (Trabucco and Zomer, 2019)</td>
</tr>
<tr>
<td></td>
<td>Slope</td>
<td>90 meters</td>
<td>HydroSHEDS/WWF(Lehner et al., 2008)</td>
</tr>
<tr>
<td></td>
<td>Digital elevation model (DEM)</td>
<td>90 meters</td>
<td>HydroSHEDS/WWF(Lehner et al., 2008)</td>
</tr>
<tr>
<td><strong>Topography</strong></td>
<td>Terrain forms</td>
<td>250 meters</td>
<td>OpenLandMap (Amatulli et al., 2018)</td>
</tr>
<tr>
<td></td>
<td>Drainage basins</td>
<td>250 meters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Drainage density</td>
<td>250 meters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Topographic wetness index (TWI)</td>
<td>1 Kilometer</td>
<td>OpenLandMap (Hengl, 2018b)</td>
</tr>
<tr>
<td></td>
<td>Water table depth (WTD)</td>
<td>1 Kilometer</td>
<td></td>
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<tr>
<td></td>
<td>Long-term average groundwater recharge</td>
<td>1 Kilometer</td>
<td>(MacDonald et al., 2021)</td>
</tr>
<tr>
<td></td>
<td>Coastal distance</td>
<td>250 meters</td>
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<tr>
<td><strong>Others</strong></td>
<td>Crop land</td>
<td>1 Kilometer</td>
<td>(ESA, 2017)</td>
</tr>
<tr>
<td></td>
<td>Urban areas</td>
<td>1 Kilometer</td>
<td>(ESA, 2017)</td>
</tr>
<tr>
<td></td>
<td>Shrubland</td>
<td>1 Kilometer</td>
<td>(ESA, 2017)</td>
</tr>
<tr>
<td></td>
<td>Grass land</td>
<td>1 Kilometer</td>
<td>(ESA, 2017)</td>
</tr>
<tr>
<td></td>
<td>Sparse vegetation</td>
<td>1 Kilometer</td>
<td>(ESA, 2017)</td>
</tr>
</tbody>
</table>

*Aridity = Mean Annual Precipitation (MAP)/Mean Annual Potential Evaporation (MAE)*
### Estimates of the affected population for the first level administrative units

**Table S3.** Estimate of the total affected population. The range is based on cut-off points at the 0.05 and 0.95 percentile.

<table>
<thead>
<tr>
<th>Country</th>
<th>Region</th>
<th>Total population in the risk area (EC &gt; 800 µS/cm) (Thousand)</th>
<th>% of Total population affected (EC &gt; 800 µS/cm)</th>
<th>Total population in the risk area (EC &gt; 1500 µS/cm) (Thousand)</th>
<th>% of Total population affected (EC &gt; 1500 µS/cm)</th>
<th>Total population in the risk area (EC &gt; 2500 µS/cm) (Thousand)</th>
<th>% of Total population affected (EC &gt; 2500 µS/cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ethiopia</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Afar</td>
<td>878 (778-904)</td>
<td>48% (42-49)</td>
<td>264 (153-391)</td>
<td>14% (8-21)</td>
<td>27 (12-66)</td>
<td>1.5% (0.6-3.6)</td>
</tr>
<tr>
<td></td>
<td>Amhara</td>
<td>55 (39-64)</td>
<td>0.2% (0.2-0.3)</td>
<td>1 (1-1)</td>
<td>0% (0-0)</td>
<td>0 (0-0)</td>
<td>0% (0-0)</td>
</tr>
<tr>
<td></td>
<td>Dire Dawa</td>
<td>150 (142-155)</td>
<td>32% (30-33)</td>
<td>1 (0-4)</td>
<td>0.3% (0.1-0.8)</td>
<td>1 (0-1)</td>
<td>0.1% (0-0)</td>
</tr>
<tr>
<td></td>
<td>Harari</td>
<td>34 (29-36)</td>
<td>13% (11-14)</td>
<td>9 (1-18)</td>
<td>3.3% (0.5-6.8)</td>
<td>0 (0-0)</td>
<td>0% (0-0)</td>
</tr>
<tr>
<td></td>
<td>Oromia</td>
<td>1218 (866-1381)</td>
<td>3.1% (2.2-3.5)</td>
<td>215 (132-323)</td>
<td>0.5% (0.3-0.8)</td>
<td>8 (4-19)</td>
<td>0.1% (0-0)</td>
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<td>SNNP</td>
<td>178 (121-212)</td>
<td>1.3% (0.9-1.6)</td>
<td>38 (18-57)</td>
<td>0.3% (0.1-0.4)</td>
<td>8 (5-14)</td>
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<tr>
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<td>Somali</td>
<td>3412 (3081-3468)</td>
<td>55% (49-55)</td>
<td>2184 (1653-2729)</td>
<td>35% (26-44)</td>
<td>1310 (986-1640)</td>
<td>21% (16-26)</td>
</tr>
<tr>
<td></td>
<td>Tigray</td>
<td>280 (143-343)</td>
<td>6.8% (4.1.5.8)</td>
<td>7 (0-1)</td>
<td>0% (0-0)</td>
<td>1 (0-0)</td>
<td>0% (0-0)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>6,204 (5,201-6,562)</td>
<td>6% (5-6.3)</td>
<td>2,712 (1,959-3,522)</td>
<td>2.6% (1.9-3.4)</td>
<td>1,354 (1,008-1,739)</td>
<td>1.3% (1-1.7)</td>
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<tr>
<td><strong>Somalia</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Awdal</td>
<td>239 (225-242)</td>
<td>54% (50-54)</td>
<td>75 (54-102)</td>
<td>17% (12-23)</td>
<td>28 (22-34)</td>
<td>6% (5-8)</td>
</tr>
<tr>
<td></td>
<td>Bakool</td>
<td>276 (274-276)</td>
<td>60% (60-60)</td>
<td>276 (272-276)</td>
<td>60% (60-60)</td>
<td>272 (268-274)</td>
<td>59% (59-60)</td>
</tr>
<tr>
<td></td>
<td>Banadir</td>
<td>458 (458-458)</td>
<td>37% (37-37)</td>
<td>451 (432-457)</td>
<td>36% (35-37)</td>
<td>227 (102-354)</td>
<td>18% (8-28)</td>
</tr>
<tr>
<td></td>
<td>Bari</td>
<td>309 (308-309)</td>
<td>55% (55-55)</td>
<td>307 (300-309)</td>
<td>55% (53-55)</td>
<td>267 (250-281)</td>
<td>47% (45-50)</td>
</tr>
<tr>
<td></td>
<td>Bay</td>
<td>539 (539-539)</td>
<td>59% (59-59)</td>
<td>539 (538-539)</td>
<td>59% (59-59)</td>
<td>493 (476-507)</td>
<td>54% (52-55)</td>
</tr>
<tr>
<td></td>
<td>Galgaduud</td>
<td>298 (295-299)</td>
<td>59% (58-59)</td>
<td>300 (297-300)</td>
<td>59% (58-59)</td>
<td>298 (267-283)</td>
<td>59% (53-56)</td>
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<tr>
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<td>Gedo</td>
<td>278 (264-282)</td>
<td>55% (52-56)</td>
<td>274 (258-278)</td>
<td>54% (51-55)</td>
<td>275 (260-283)</td>
<td>54% (51-56)</td>
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<tr>
<td></td>
<td>Hiiraan</td>
<td>293 (293-293)</td>
<td>59% (59-59)</td>
<td>293 (292-293)</td>
<td>59% (59-59)</td>
<td>288 (274-292)</td>
<td>58% (55-59)</td>
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<tr>
<td></td>
<td>Lower Juba</td>
<td>180 (178-181)</td>
<td>32% (32-33)</td>
<td>167 (158-175)</td>
<td>30% (28-31)</td>
<td>146 (128-159)</td>
<td>26% (23-29)</td>
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<tr>
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<td>Lower Shabelle</td>
<td>715 (713-713)</td>
<td>57% (56-57)</td>
<td>698 (679-704)</td>
<td>55% (53-56)</td>
<td>476 (411-527)</td>
<td>38% (33-42)</td>
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<tr>
<td></td>
<td>Middle Juba</td>
<td>128 (123-129)</td>
<td>36% (35-37)</td>
<td>110 (103-117)</td>
<td>31% (29-33)</td>
<td>76 (71-78)</td>
<td>22% (20-22)</td>
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<tr>
<td></td>
<td>Middle Shebelle</td>
<td>440 (438-440)</td>
<td>57% (57-58)</td>
<td>440 (437-441)</td>
<td>57% (57-58)</td>
<td>412 (349-401)</td>
<td>54% (46-52)</td>
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<td>Mudug</td>
<td>315 (314-315)</td>
<td>58% (58-58)</td>
<td>315 (313-315)</td>
<td>58% (58-58)</td>
<td>311 (303-315)</td>
<td>57% (56-58)</td>
</tr>
<tr>
<td></td>
<td>Nugaal</td>
<td>110 (110-110)</td>
<td>60% (60-60)</td>
<td>110 (109-110)</td>
<td>60% (59-60)</td>
<td>110 (110-110)</td>
<td>60% (60-60)</td>
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<tr>
<td>Region</td>
<td>Total Population</td>
<td>Percentage (Total)</td>
<td>Population</td>
<td>Percentage (Total)</td>
<td>Population</td>
<td>Percentage (Total)</td>
<td>Population</td>
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<tr>
<td><strong>Sanaag</strong></td>
<td>5,620 (5,494-5,661)</td>
<td>51% (50-51)</td>
<td>5,304 (5,109-5,455)</td>
<td>48% (46-49)</td>
<td>4,416 (3,970-4,715)</td>
<td>40% (36-43)</td>
<td></td>
</tr>
<tr>
<td><strong>Sool</strong></td>
<td>131 (131-131)</td>
<td>60% (60-60)</td>
<td>131 (131-131)</td>
<td>60% (60-60)</td>
<td>131 (130-131)</td>
<td>60% (60-60)</td>
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<tr>
<td><strong>Togdheer</strong></td>
<td>327 (316-331)</td>
<td>55% (53-55)</td>
<td>312 (296-327)</td>
<td>52% (50-55)</td>
<td>269 (247-285)</td>
<td>45% (41-48)</td>
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</tr>
<tr>
<td><strong>Woqooyi G.</strong></td>
<td>357 (290-383)</td>
<td>34% (28-37)</td>
<td>288 (223-358)</td>
<td>28% (21-34)</td>
<td>123 (90-179)</td>
<td>12% (9-17)</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td>5,620 (5,494-5,661)</td>
<td>51% (50-51)</td>
<td>5,304 (5,109-5,455)</td>
<td>48% (46-49)</td>
<td>4,416 (3,970-4,715)</td>
<td>40% (36-43)</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Population</th>
<th>Percentage (Total)</th>
<th>Population</th>
<th>Percentage (Total)</th>
<th>Population</th>
<th>Percentage (Total)</th>
<th>Population</th>
<th>Percentage (Total)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kenya</strong></td>
<td>5,572 (4,475-5,925)</td>
<td>10% (8-11)</td>
<td>3,164 (2,272-3,910)</td>
<td>6% (4-7)</td>
<td>1,873 (1,442-2,403)</td>
<td>3% (3-4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Coast</strong></td>
<td>773 (349-909)</td>
<td>19% (8-22)</td>
<td>511 (292-762)</td>
<td>12% (7-18)</td>
<td>144 (122-148)</td>
<td>3.5% (2.9-3.6)</td>
<td></td>
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</tr>
<tr>
<td><strong>Eastern</strong></td>
<td>953 (687-1035)</td>
<td>13% (10-15)</td>
<td>231 (172-307)</td>
<td>3% (2-4)</td>
<td>120 (82-165)</td>
<td>1.7% (1.2-2.3)</td>
<td></td>
<td></td>
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<tr>
<td><strong>North-Eastern</strong></td>
<td>3113 (2978-3138)</td>
<td>51% (49-52)</td>
<td>2322 (1774-2592)</td>
<td>38% (29-43)</td>
<td>1573 (1216-2036)</td>
<td>26% (20-34)</td>
<td></td>
<td></td>
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<tr>
<td><strong>Nyanza</strong></td>
<td>155 (89-187)</td>
<td>2.3% (1.3-2.7)</td>
<td>3.4 (3.4-4.91)</td>
<td>0% (0-0.1)</td>
<td>36 (22-53)</td>
<td>0.2% (0.2-0.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Rift Valley</strong></td>
<td>577 (373-654)</td>
<td>3.9% (2.5-4.4)</td>
<td>97 (29-244)</td>
<td>0.7% (0.2-1.7)</td>
<td>0 (0-0)</td>
<td>0% (0-0)</td>
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<tr>
<td><strong>Western</strong></td>
<td>0.14 (0-1)</td>
<td>0% (0-0)</td>
<td>0 (0-0)</td>
<td>0% (0-0)</td>
<td>1,873 (1,442-2,403)</td>
<td>3% (3-4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5,572 (4,475-5,925)</td>
<td>10% (8-11)</td>
<td>3,164 (2,272-3,910)</td>
<td>6% (4-7)</td>
<td>1,873 (1,442-2,403)</td>
<td>3% (3-4)</td>
<td></td>
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<table>
<thead>
<tr>
<th>Region</th>
<th>Total Population</th>
<th>Percentage (Total)</th>
<th>Population</th>
<th>Percentage (Total)</th>
<th>Population</th>
<th>Percentage (Total)</th>
<th>Population</th>
<th>Percentage (Total)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Djibouti</strong></td>
<td>274 (274-274)</td>
<td>43% (43-43)</td>
<td>273 (272-275)</td>
<td>43% (43-44)</td>
<td>9 (3-18)</td>
<td>1.4% (0.5-2.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ali Sabeh</strong></td>
<td>71 (71-71)</td>
<td>51% (51-51)</td>
<td>19 (8-28)</td>
<td>13% (6-21)</td>
<td>0.1 (0-1.3)</td>
<td>0.1% (0-0.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Obock</strong></td>
<td>36 (36-36)</td>
<td>53% (53-53)</td>
<td>33 (31-35)</td>
<td>49% (45-51)</td>
<td>21 (17-25)</td>
<td>31% (25-37)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tadjourah</strong></td>
<td>78 (75-79)</td>
<td>46% (45-47)</td>
<td>46 (25-67)</td>
<td>27% (15-40)</td>
<td>0.4 (0-1.7)</td>
<td>0.3% (0-1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dilkhil</strong></td>
<td>70 (70-69)</td>
<td>50% (50-50)</td>
<td>15 (5-35)</td>
<td>11% (3-25)</td>
<td>0.6 (0.1-1.3)</td>
<td>0.4% (0.1-0.9)</td>
<td></td>
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</tr>
<tr>
<td><strong>Djibouti</strong></td>
<td>274 (274-274)</td>
<td>43% (43-43)</td>
<td>273 (272-275)</td>
<td>43% (43-44)</td>
<td>9 (3-18)</td>
<td>1.4% (0.5-2.9)</td>
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</tr>
<tr>
<td><strong>total</strong></td>
<td>528 (525-529)</td>
<td>46% (46-46)</td>
<td>387 (341-441)</td>
<td>34% (30-39)</td>
<td>31 (21-48)</td>
<td>2.7% (1.8-4.2)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Total Population       | 17,924 (15,695-18,676) | 11% (9-11) | 11,567 (9,680-13,328) | 7% (6-8) | 7,674 (6,441-8,904) | 5% (4-5) |
Table S4. Pregnant women potentially affected by salinity by country and first-level administrative units. The range is based on cut-off points at the 0.05 and 0.95 percentile.

<table>
<thead>
<tr>
<th>Country</th>
<th>Region</th>
<th>Pregnancies in the risk area (EC &gt; 800 µS/cm) (Thousand)</th>
<th>% of Pregnancies affected (EC &gt; 800 µS/cm)</th>
<th>Pregnancies in the risk area (range) (EC &gt; 1500 µS/cm) (Thousand)</th>
<th>% of Pregnancies affected (EC &gt; 1500 µS/cm)</th>
<th>Pregnancies in the risk area (EC &gt; 2500 µS/cm) (Thousand)</th>
<th>% of Pregnancies affected (EC &gt; 2500 µS/cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>Addis Ababa</td>
<td>0.06 (0-0.06)</td>
<td>0% (0-0)</td>
<td>0 (0-0)</td>
<td>0% (0-0)</td>
<td>0 (0-0)</td>
<td>0% (0-0)</td>
</tr>
<tr>
<td></td>
<td>Afar</td>
<td>41 (37-42)</td>
<td>48% (43-49)</td>
<td>15 (9.4-20)</td>
<td>17% (11-24)</td>
<td>1.8 (0.7-3.7)</td>
<td>2% (0.8-4.3)</td>
</tr>
<tr>
<td></td>
<td>Amhara</td>
<td>4.3 (3.1-4.8)</td>
<td>0.4% (0.3-0.5)</td>
<td>0.1 (0-0.1)</td>
<td>0% (0-0)</td>
<td>0 (0-0)</td>
<td>0% (0-0)</td>
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<tr>
<td></td>
<td>Dire Dawa</td>
<td>4.7 (4.5-4.8)</td>
<td>25% (24-25)</td>
<td>0.1 (0.0-0.2)</td>
<td>0.5% (0.1-1)</td>
<td>0 (0-0.1)</td>
<td>0% (0-0)</td>
</tr>
<tr>
<td></td>
<td>Harari</td>
<td>1.8 (1.6-1.8)</td>
<td>19% (18-20)</td>
<td>0.4 (0-1.2)</td>
<td>4.6% (0.3-13)</td>
<td>0.3 (0.1-0.9)</td>
<td>0.2% (0.1-0.4)</td>
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<tr>
<td></td>
<td>Oromia</td>
<td>60 (44-67)</td>
<td>3.5% (2.6-3.9)</td>
<td>12 (7-19)</td>
<td>0.7% (0.4-1.1)</td>
<td>0.1 (0.1-0.2)</td>
<td>0% (0-0)</td>
</tr>
<tr>
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<td>SNPP</td>
<td>6.6 (4.1-8)</td>
<td>1.2% (0.7-1.5)</td>
<td>1 (0.5-1.7)</td>
<td>0.2% (0.1-0.3)</td>
<td>0 (0-0)</td>
<td>0% (0-0)</td>
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<td>Somali</td>
<td>201 (182-204)</td>
<td>55% (50-56)</td>
<td>139 (105-170)</td>
<td>38% (29-47)</td>
<td>84 (64-104)</td>
<td>23% (18-29)</td>
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<td>Tigray</td>
<td>14 (7-17)</td>
<td>5.5% (2.8-6.9)</td>
<td>0 (0-0)</td>
<td>0% (0-0)</td>
<td>0 (0-0)</td>
<td>0% (0-0)</td>
</tr>
<tr>
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<td>Total</td>
<td>333 (284-350)</td>
<td>8% (7-8)</td>
<td>167 (122-213)</td>
<td>4% (3-5)</td>
<td>86 (65-109)</td>
<td>2% (1.5-2.5)</td>
</tr>
<tr>
<td>Somalia</td>
<td>Awdal</td>
<td>11.9 (11-12.2)</td>
<td>42% (39-43)</td>
<td>4.8 (3.8-7.1)</td>
<td>17% (14-25)</td>
<td>0.8 (0.7-1)</td>
<td>3% (2-4)</td>
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<td></td>
<td>Bakool</td>
<td>13.9 (13-14)</td>
<td>58% (58-58)</td>
<td>14 (13-19)</td>
<td>58% (58-58)</td>
<td>13.7 (13.6-13.9)</td>
<td>57% (57-58)</td>
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<td>Banadir</td>
<td>19.4 (19.4-19.4)</td>
<td>25% (25-25)</td>
<td>19 (17.2-19.3)</td>
<td>25% (22-25)</td>
<td>11.6 (5.1-15.3)</td>
<td>15% (7-20)</td>
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<td></td>
<td>Bari</td>
<td>13.9 (13.9-13.9)</td>
<td>34% (34-34)</td>
<td>13.8 (13.6-13.9)</td>
<td>34% (33-34)</td>
<td>12.6 (12.1-12.9)</td>
<td>31% (29-31)</td>
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<td></td>
<td>Bay</td>
<td>24.8 (24.7-24.8)</td>
<td>50% (50-50)</td>
<td>24.2 (24-24.5)</td>
<td>49% (49-50)</td>
<td>18.6 (18.2-19.3)</td>
<td>38% (37-39)</td>
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<td>Galgaduud</td>
<td>11.4 (11.3-11.5)</td>
<td>49% (48-49)</td>
<td>11.5 (11.4-11.5)</td>
<td>49% (49-49)</td>
<td>11.4 (10.3-10.8)</td>
<td>49% (44-46)</td>
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<td>Gedo</td>
<td>12.1 (11.2-12.3)</td>
<td>49% (45-50)</td>
<td>12.2 (11.1-12.3)</td>
<td>49% (45-50)</td>
<td>12.5 (11.6-12.8)</td>
<td>51% (47-52)</td>
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<td>Hiiraan</td>
<td>16.5 (16.5-16.5)</td>
<td>56% (56-56)</td>
<td>16.5 (15.9-16.5)</td>
<td>56% (54-56)</td>
<td>15.2 (14.2-16.1)</td>
<td>52% (48-55)</td>
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<td>Lower Juba</td>
<td>11.7 (11.7-11.8)</td>
<td>36% (36-36)</td>
<td>10.8 (10.1-11.6)</td>
<td>33% (31-35)</td>
<td>9.7 (8.6-10.9)</td>
<td>30% (26-33)</td>
</tr>
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<td>Lower Shabelle</td>
<td>31.6 (31.5-31.6)</td>
<td>45% (45-45)</td>
<td>31.1 (30.3-31.4)</td>
<td>45% (43-45)</td>
<td>20.9 (18.3-23)</td>
<td>30% (26-33)</td>
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<td>Middle Juba</td>
<td>5.9 (5.9-6)</td>
<td>29% (28-29)</td>
<td>5.6 (5.5-5.6)</td>
<td>27% (26-27)</td>
<td>4.5 (4.4-4.6)</td>
<td>22% (21-22)</td>
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<td>Middle Shebelle</td>
<td>18.2 (18.1-18.2)</td>
<td>45% (45-45)</td>
<td>18.2 (18.1-18.2)</td>
<td>45% (45-45)</td>
<td>16.8 (14.7-16.6)</td>
<td>41% (36-41)</td>
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<td>Mudug</td>
<td>13.9 (13.9-13.9)</td>
<td>45% (45-45)</td>
<td>13.9 (13.9-13.9)</td>
<td>45% (45-45)</td>
<td>13.9 (13.7-13.9)</td>
<td>45% (44-45)</td>
</tr>
<tr>
<td>Region</td>
<td>Total Pregnancies</td>
<td>11% (9-11)</td>
<td>7% (6-8)</td>
<td>4% (4-5)</td>
<td></td>
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<tr>
<td>Nugaal</td>
<td>3 (3-3)</td>
<td>35% (35-35)</td>
<td>35% (34-35)</td>
<td>35% (35-35)</td>
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<tr>
<td>Sanaag</td>
<td>9.4 (9.3-9.4)</td>
<td>49% (48-49)</td>
<td>47% (45-47)</td>
<td>46% (46-47)</td>
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<tr>
<td>Sool</td>
<td>3.9 (3.9-3.9)</td>
<td>39% (39-39)</td>
<td>39% (39-39)</td>
<td>38% (38-38)</td>
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<tr>
<td>Togdheer</td>
<td>12.9 (12.3-13.2)</td>
<td>42% (40-43)</td>
<td>41% (39-43)</td>
<td>36% (32-38)</td>
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<tr>
<td>Woqooyi G.</td>
<td>16.2 (13.3-16.9)</td>
<td>24% (20-25)</td>
<td>19% (16-24)</td>
<td>7% (6-9)</td>
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<tr>
<td>Total</td>
<td>251 (245-252)</td>
<td>40% (39-40)</td>
<td>38% (36-39)</td>
<td>31% (28-33)</td>
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<tr>
<td>Kenya</td>
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<tr>
<td>Central</td>
<td>0 (0-0)</td>
<td>0% (0-0)</td>
<td>0% (0-0)</td>
<td>0% (0-0)</td>
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<tr>
<td>Coast</td>
<td>37.6 (15.3-44.8)</td>
<td>17% (7-20)</td>
<td>10% (5-17)</td>
<td>4.74 (4.25-4.85)</td>
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<tr>
<td>Eastern</td>
<td>37.5 (26.1-41.3)</td>
<td>11% (8-12)</td>
<td>2% (1.7-3)</td>
<td>4.25 (3.08-5.81)</td>
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<tr>
<td>North-Eastern</td>
<td>30.8 (29.2-31.2)</td>
<td>50% (47-51)</td>
<td>33% (26-37)</td>
<td>14.67 (11.86-17.69)</td>
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<tr>
<td>Nyanza</td>
<td>7.6 (4.1-9.3)</td>
<td>2.2% (1.2-2.7)</td>
<td>0% (0-0)</td>
<td>0 (0-0)</td>
<td>0% (0-0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rift Valley</td>
<td>16.4 (10-18.8)</td>
<td>3.1% (2-4)</td>
<td>0.5% (0.1-1.3)</td>
<td>1.06 (0.62-1.54)</td>
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<tr>
<td>Western</td>
<td>0.01 (0-0.04)</td>
<td>0% (0-0)</td>
<td>0% (0-0)</td>
<td>0 (0-0)</td>
<td>0% (0-0)</td>
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</tr>
<tr>
<td>Total</td>
<td>130 (85-145)</td>
<td>6.6% (4-7)</td>
<td>3% (2-4)</td>
<td>25 (20-30)</td>
<td>1.2% (0.9-1.4)</td>
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<tr>
<td>Djibouti</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ali Sabeh</td>
<td>1.2 (1.2-1.2)</td>
<td>37% (37-37)</td>
<td>10% (5-15)</td>
<td>0 (0-0)</td>
<td>0.1% (0-0.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obock</td>
<td>0.7 (0.7-0.7)</td>
<td>53% (53-54)</td>
<td>50% (47-52)</td>
<td>0.4 (0.3-0.5)</td>
<td>30% (24-36)</td>
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<td></td>
</tr>
<tr>
<td>Tadjourah</td>
<td>1.4 (1.3-1.4)</td>
<td>45% (44-45)</td>
<td>24% (9-38)</td>
<td>0 (0-0)</td>
<td>0.2% (0-0.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dilkhil</td>
<td>1.5 (1.5-1.5)</td>
<td>44% (44-44)</td>
<td>9% (3-22)</td>
<td>0 (0-0)</td>
<td>0.2% (0-0.6)</td>
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<td></td>
</tr>
<tr>
<td>Djibouti</td>
<td>8.6 (8.6-8.8)</td>
<td>44% (44-44)</td>
<td>43% (42-43)</td>
<td>0.1 (0-0.5)</td>
<td>0.5% (0.1-2.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>13.4 (13.3-13.4)</td>
<td>44% (43-44)</td>
<td>34% (31-38)</td>
<td>0.5 (0.4-1)</td>
<td>1.7% (1.1-3.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Pregnancies</td>
<td>764 (642-805)</td>
<td>11% (9-11)</td>
<td>7% (6-8)</td>
<td>4% (4-5)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table S5. Infant population (0-12 months) potentially affected by salinity by country and first-level administrative units. The range is based on cut-off points at the 0.05 and 0.95 percentile.

<table>
<thead>
<tr>
<th>Country</th>
<th>Region</th>
<th>Infants in the risk area (EC &gt; 800 µS/cm) (Thousand)</th>
<th>% of Infants affected (EC &gt; 800 µS/cm)</th>
<th>Infants in the risk area (range) (EC &gt; 1500 µS/cm) (Thousand)</th>
<th>% of Infants affected (EC &gt; 1500 µS/cm)</th>
<th>Infants in the risk area (EC &gt; 2500 µS/cm) (Thousand)</th>
<th>% of Infants affected (EC &gt; 2500 µS/cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>Afar</td>
<td>20.7 (18.1-21.3)</td>
<td>47% (41-48)</td>
<td>6 (3.5-9)</td>
<td>14% (8-20)</td>
<td>0.7 (0.3-1.6)</td>
<td>1.5% (0.7-3.6)</td>
</tr>
<tr>
<td></td>
<td>Amhara</td>
<td>1.6 (1.2-1.9)</td>
<td>0.2% (0.2-0.3)</td>
<td>0 (0-0)</td>
<td>0% (0-0)</td>
<td>0 (0-0)</td>
<td>0% (0-0)</td>
</tr>
<tr>
<td></td>
<td>Dire Dawa</td>
<td>4.1 (3.9-4.3)</td>
<td>32% (30-33)</td>
<td>0 (0-0.1)</td>
<td>0.3% (0.1-0.8)</td>
<td>0 (0-0)</td>
<td>0% (0-0)</td>
</tr>
<tr>
<td></td>
<td>Harari</td>
<td>1 (0.9-1.1)</td>
<td>13% (11-14)</td>
<td>0.3 (0-0.5)</td>
<td>3.3% (0.5-6.7)</td>
<td>0 (0-0)</td>
<td>0% (0-0)</td>
</tr>
<tr>
<td></td>
<td>Oromia</td>
<td>48.8 (34.5-55.3)</td>
<td>3.2% (2.3-3.7)</td>
<td>8.2 (4.9-12.5)</td>
<td>0.5% (0.3-0.8)</td>
<td>0 (0-0)</td>
<td>0% (0-0)</td>
</tr>
<tr>
<td></td>
<td>SNPP</td>
<td>6.6 (4.5-8)</td>
<td>1.4% (0.9-1.7)</td>
<td>1.5 (0-7-2.2)</td>
<td>0.3% (0.1-0.4)</td>
<td>0 (0-0)</td>
<td>0% (0-0)</td>
</tr>
<tr>
<td></td>
<td>Somali</td>
<td>79.5 (71.2-81)</td>
<td>54% (48-55)</td>
<td>49.9 (37.2-63.3)</td>
<td>34% (25-43)</td>
<td>28.9 (21.7-36.3)</td>
<td>20% (15-25)</td>
</tr>
<tr>
<td></td>
<td>Tigray</td>
<td>10 (5.1-12.2)</td>
<td>5% (2.6-6.1)</td>
<td>0 (0-0)</td>
<td>0% (0-0)</td>
<td>0 (0-0)</td>
<td>0% (0-0)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>172 (139-185)</td>
<td>4.9% (4-5.3)</td>
<td>66 (46-88)</td>
<td>1.9% (1.3-2.5)</td>
<td>30.1 (22.4-39.1)</td>
<td>0.9% (0.6-1.1)</td>
</tr>
<tr>
<td>Somalia</td>
<td>Awdal</td>
<td>7.9 (7.4-8)</td>
<td>53% (50-54)</td>
<td>2.5 (1.8-3.4)</td>
<td>17% (12-23)</td>
<td>0.9 (0.7-1.1)</td>
<td>6% (5-8)</td>
</tr>
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<td>Bakool</td>
<td>11.3 (11.3-11.3)</td>
<td>60% (60-60)</td>
<td>11.3 (11.2-11.3)</td>
<td>60% (60-60)</td>
<td>11.2 (11-11.3)</td>
<td>59% (59-60)</td>
</tr>
<tr>
<td></td>
<td>Banadir</td>
<td>18.9 (18.9-18.9)</td>
<td>37% (37-37)</td>
<td>18.6 (17.8-18.9)</td>
<td>36% (35-37)</td>
<td>9.4 (4.2-14.6)</td>
<td>18% (8-29)</td>
</tr>
<tr>
<td></td>
<td>Bari</td>
<td>12.9 (12.9-12.9)</td>
<td>55% (55-55)</td>
<td>12.9 (12.6-12.9)</td>
<td>55% (53-55)</td>
<td>11.2 (10.5-11.8)</td>
<td>47% (45-50)</td>
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<td>Bay</td>
<td>22.2 (22.2-22.2)</td>
<td>59% (59-59)</td>
<td>22.1 (22.1-22.2)</td>
<td>59% (59-59)</td>
<td>20.3 (19.6-20.8)</td>
<td>54% (52-55)</td>
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<td>Galgaduud</td>
<td>12 (11.9-12.1)</td>
<td>59% (58-59)</td>
<td>12.1 (12-12.1)</td>
<td>59% (58-59)</td>
<td>12 (10.8-11.4)</td>
<td>59% (52-56)</td>
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<td>Gedo</td>
<td>11.3 (10.8-11.5)</td>
<td>55% (53-56)</td>
<td>11.2 (10.6-11.4)</td>
<td>55% (52-56)</td>
<td>11.2 (10.6-11.5)</td>
<td>55% (52-56)</td>
</tr>
<tr>
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<td>Hiiraan</td>
<td>11.9 (11.9-11.9)</td>
<td>59% (59-59)</td>
<td>11.9 (11.9-11.9)</td>
<td>59% (59-59)</td>
<td>11.7 (11.2-11.9)</td>
<td>58% (55-59)</td>
</tr>
<tr>
<td></td>
<td>Lower Juba</td>
<td>7.4 (7.3-7.4)</td>
<td>32% (32-32)</td>
<td>6.8 (6.5-7.2)</td>
<td>30% (28-31)</td>
<td>6 (5.2-6.5)</td>
<td>26% (23-29)</td>
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<td>Lower Shabelle</td>
<td>29.4 (29.3-29.4)</td>
<td>57% (57-57)</td>
<td>28.7 (27.9-29)</td>
<td>55% (54-56)</td>
<td>19.6 (16.9-21.7)</td>
<td>38% (33-42)</td>
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<td>Middle Juba</td>
<td>5.2 (5.1-5.3)</td>
<td>36% (35-37)</td>
<td>4.5 (4-2.8)</td>
<td>31% (29-33)</td>
<td>3.1 (2.9-3.2)</td>
<td>22% (20-22)</td>
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<td>Middle Shebelle</td>
<td>18.1 (18-18.1)</td>
<td>57% (57-58)</td>
<td>18.1 (18-18.1)</td>
<td>57% (57-58)</td>
<td>16.9 (14.3-16.5)</td>
<td>54% (46-52)</td>
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<td>Mudug</td>
<td>12.9 (12.8-12.9)</td>
<td>58% (58-58)</td>
<td>12.9 (12.8-12.9)</td>
<td>58% (58-58)</td>
<td>12.7 (12.3-12.8)</td>
<td>58% (56-58)</td>
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<td>Nugaal</td>
<td>4.6 (4.6-4.6)</td>
<td>60% (60-60)</td>
<td>4.6 (4.5-4.6)</td>
<td>60% (59-60)</td>
<td>4.6 (4.6-4.6)</td>
<td>60% (60-60)</td>
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<td>Median (Range)</td>
<td>Median (Range)</td>
<td>Median (Range)</td>
<td>Median (Range)</td>
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<td>Sanaag</td>
<td>7.6 (7.6-7.6)</td>
<td>7.4 (7.3-7.4)</td>
<td>7.3 (7.1-7.4)</td>
<td>7.3 (7.1-7.4)</td>
<td>54% (53-55)</td>
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<td>Sool</td>
<td>4.4 (4.4-4.4)</td>
<td>4.4 (4.4-4.4)</td>
<td>4.4 (4.4-4.4)</td>
<td>4.4 (4.4-4.4)</td>
<td>60% (60-60)</td>
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<td>Togdheer</td>
<td>10.9 (10.6-11.1)</td>
<td>10.4 (9.9-10.9)</td>
<td>9.8 (8.3-9.5)</td>
<td>9.8 (8.3-9.5)</td>
<td>45% (41-48)</td>
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<td>Woqooyi G.</td>
<td>11.9 (9.6-12.7)</td>
<td>9.5 (7.4-11.9)</td>
<td>4.1 (3-6)</td>
<td>4.1 (3-6)</td>
<td>12% (9-17)</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td>221 (216-222)</td>
<td>210 (203-215)</td>
<td>175 (158-187)</td>
<td>175 (158-187)</td>
<td>41% (36-43)</td>
<td></td>
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</tr>
<tr>
<td>Kenya</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central</td>
<td>0 (0-0)</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coast</td>
<td>25 (11.5-29.3)</td>
<td>20% (9-23)</td>
<td>16.7 (9.6-24.8)</td>
<td>13% (8-19)</td>
<td>5.3 (4.5-5.4)</td>
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<tr>
<td>Eastern</td>
<td>3.9 (2.1-4.2)</td>
<td>15% (11-16)</td>
<td>7.3 (5.4-9.6)</td>
<td>3.8% (2.8-5)</td>
<td>3.8 (2.7-5.2)</td>
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<tr>
<td>North-Eastern</td>
<td>85 (81-86)</td>
<td>50% (48-51)</td>
<td>63 (48-70)</td>
<td>38% (29-43)</td>
<td>42 (33-55)</td>
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</tr>
<tr>
<td>Nyanza</td>
<td>5 (2.8-6)</td>
<td>2% (1-3)</td>
<td>0.1 (0.1-0.1)</td>
<td>0% (0-0.1)</td>
<td>0 (0-0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rift Valley</td>
<td>16 (10-19)</td>
<td>3% (2-4)</td>
<td>2.6 (0.8-6.4)</td>
<td>0.6% (0.2-1.4)</td>
<td>1 (0.6-1.5)</td>
<td></td>
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</tr>
<tr>
<td>Western</td>
<td>0.01 (0.0-0.04)</td>
<td>0%</td>
<td>0 (0-0)</td>
<td>0% (0-0)</td>
<td>0 (0-0)</td>
<td></td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td>160 (127-171)</td>
<td>11% (8-11)</td>
<td>90 (64-111)</td>
<td>5.6% (4-7)</td>
<td>52 (40-67)</td>
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<tr>
<td>Djibouti</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ali Sabeh</td>
<td>1.4 (1.4-1.4)</td>
<td>51% (51-51)</td>
<td>0.4 (0.2-0.6)</td>
<td>14% (6-21)</td>
<td>0 (0-0)</td>
<td></td>
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</tr>
<tr>
<td>Obock</td>
<td>0.7 (0.7-0.7)</td>
<td>53% (53-53)</td>
<td>0.7 (0.6-0.7)</td>
<td>49% (45-52)</td>
<td>0.4 (0.3-0.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tadjourah</td>
<td>1.6 (1.5-1.6)</td>
<td>46% (45-47)</td>
<td>0.9 (0.5-1.4)</td>
<td>27% (15-40)</td>
<td>0 (0-0)</td>
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</tr>
<tr>
<td>Dilkhil</td>
<td>1.4 (1.4-1.4)</td>
<td>50% (50-50)</td>
<td>0.3 (0.1-0.7)</td>
<td>11% (3-26)</td>
<td>0 (0-0)</td>
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<td></td>
</tr>
<tr>
<td>Djibouti</td>
<td>4.5 (4.5-4.5)</td>
<td>48% (48-48)</td>
<td>4.6 (4.5-4.6)</td>
<td>48% (48-48)</td>
<td>0.2 (0.1-0.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>9.6 (9.6-9.6)</td>
<td>49% (49-49)</td>
<td>6.8 (5.9-7.9)</td>
<td>35% (30-40)</td>
<td>0.6 (0.4-0.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Infant</strong></td>
<td>563 (492-588)</td>
<td>10% (9-11)</td>
<td>372 (319-422)</td>
<td>7% (6-8)</td>
<td>259 (221-294)</td>
<td>5% (4-5)</td>
<td></td>
</tr>
</tbody>
</table>
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