Probabilistic projections of the total fertility rate for all countries

**Background:** The United Nations Population Division publishes deterministic population projections for every country in the world in the World Population Prospects. These projections are used throughout the UN system and by academics worldwide.

**Objective:** To develop statistical methodology to construct probabilistic projections of the total fertility rate, as part of the population projections produced by the United Nations Population Division.

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**Achievements and impact:**

- Fertility projection methodology has been used for 2010 revision of World Population Prospects (WPP, UN Population Division, see http://esa.un.org/unpd/wpp/index.htm).
- Methodology was published in Alkema, Raftery, Gerland, Clark, Pelletier, Buettner and Heilig (2010): "Probabilistic Projections of the Total Fertility Rate for All Countries". Demography. DOI: 10.1007/s13524-011-0040-5.

The UN projections were covered by the New York Times: "U.N. Forecasts 10.1 Billion People by Century's End", see http://www.nytimes.com/2011/05/04/world/04population.html?_r=3

From NY Times article:

**Toward 10 Billion**

New projections by the United Nations suggest the world’s population may surpass 10 billion by 2100 — with Asia and Africa far and away the most populous regions.

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Source: United Nations