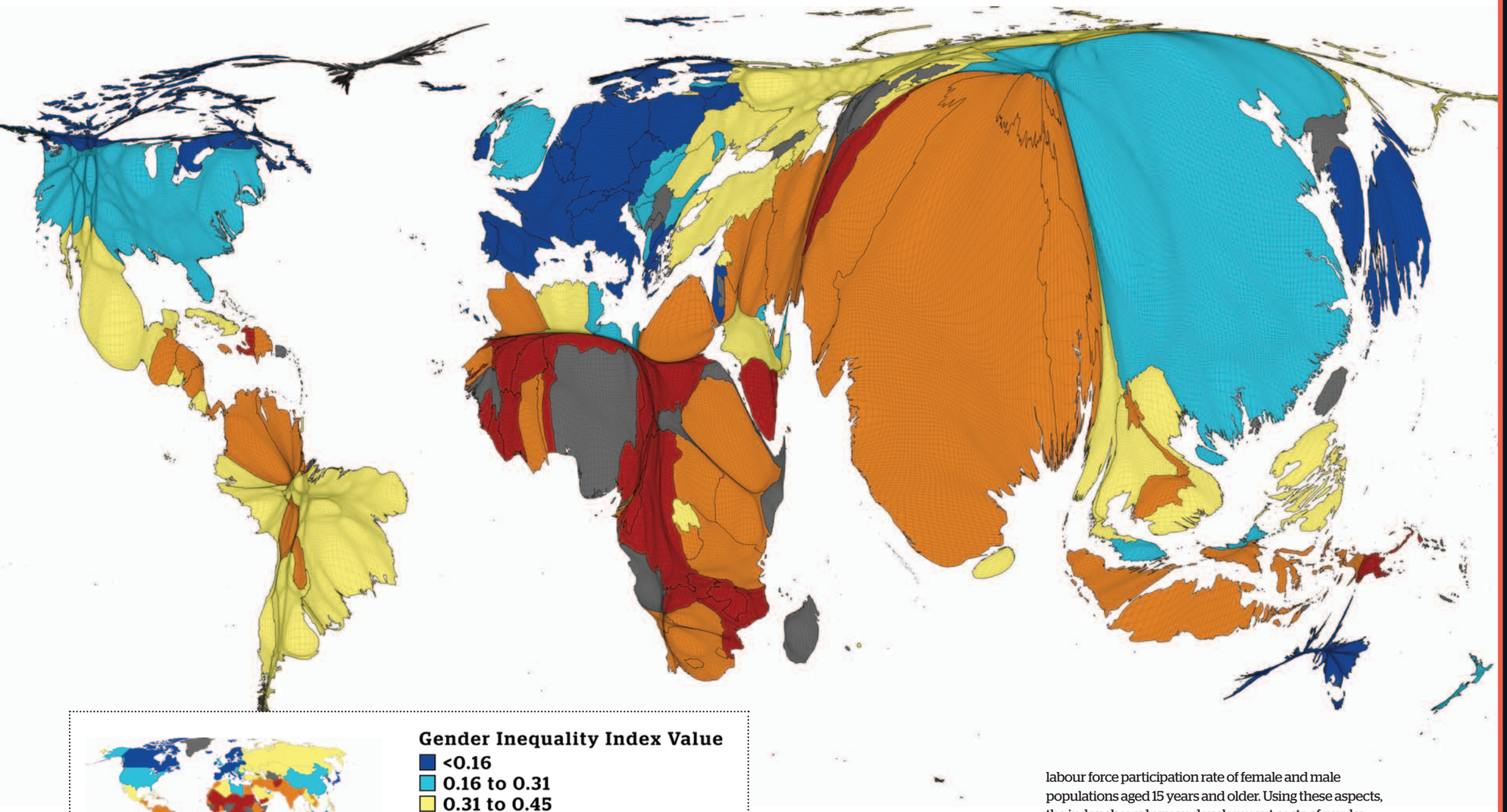

CARTOGRAMS

GENDER INEQUALITY

BY BENJAMIN HENNIG

The unequal treatment of individuals based on their gender is a deeply rooted problem in most societies. It started becoming an important part of academic research in the 1980s. The issue of gender inequality also became, in various measures, part of the Human Development Index (HDI), the annual report by the United Nations Development Programme (UNDP), and was eventually integrated as the Gender Inequality Index (GII) in the 2010 report. It is designed to measure the loss of achievement within a country caused by gender inequality.

According to the report, discrimination and under-representation of women in health, education, politics, work and other parts of life has repercussions for the development of their capabilities and their freedom of choice. Four of these aspects form the index which puts them in a globally measurable and comparable form: reproductive health is measured by the maternal mortality ratio and adolescent birth rates; female empowerment is measured by proportion of parliamentary seats occupied by females; education is expressed by the proportion of adult females and males aged 25 years and older with at least some secondary education; the economic status is included as labour market participation and measured by labour force participation rate of female and male populations aged 15 years and older. Using these aspects, the index shows human development costs of gender inequality. A higher GII value relates to more disparities between females and males within a country.

While gender inequality remains a problem even in the more equal societies, it is a major barrier to human development in others, with the worst performing in the two highest quintiles of the data (having index values of 0.45 and above) covering a substantial part of the global population, most notably the African continent and the Indian subcontinent.

The cartogram above shows this in its real human dimensions. The map is a gridded population cartogram in which every square of land is resized according to the total number of people living in that space. The transformed map therefore shows the gender inequality index on an equal population projection, emphasizing where and how many people live in the more equal or unequal societies. This highlights the high need for action combating gender gaps for a large share of the world's population in order to overcome systematic disadvantages of women.

Benjamin Hennig is a senior research fellow in the School of Geography and the Environment at the University of Oxford. He is involved in the Worldmapper project and maintains the visualisation blog www.viewsoftheworld.net

CONSERVATION

KEEPING YEW SAFE

Plans are underway to protect the Ankerwycke yew, believed to grow on the site of the signing of the Magna Carta, reports **Hazel Southam**

The most celebrated historical document in English history was drawn up on 15 June 1215 at Runnymede, on the banks of the River Thames. Ankerwycke, the mighty and ancient yew tree that saw its signing, still stands there today nearly 800 years later.

Now, six saplings, taken as cuttings from the Ankerwycke yew, are being grown in a hedge around the Royal Botanic Garden in Edinburgh. The hedge includes saplings from other famous yews across Britain including trees at Borrowdale in Yorkshire, which feature in William Wordsworth's 1803 poem *Yew Trees*, and cuttings from the Fortingall Yew in Perthshire, which is reputed to be 4,000 years old.

The first sapling was planted in May 2014 and by the time the hedge – which will entirely surround the Botanic Gardens – is completed in 2020, it will contain some 2,000 trees.

Martin Gardner MBE, the Gardens' International Conifer Conservation Programme Co-ordinator who heads the scheme, says that the hedge is being grown because Britain's historic yew trees 'are under threat'.

Ancient trees like the Ankerwycke yew are not protected in the UK, leaving them vulnerable to damage by agriculture or development. The Woodland Trust is therefore campaigning for a statutory register of Trees of Special Interest – dubbed 'V I Trees' – which would be protected from developers. It's including the Ankerwycke yew on its list.

The Woodland Trust's Jill Butler said, 'These trees are national landmarks, are vital for wildlife, and are as important as any listed building.'

The impressive trunk of Ankerwycke, the yew tree that looked over the signing of the Magna Carta

ROYAL BOTANIC GARDEN EDINBURGH