

## FuturePop: Meeting the Climate Challenge

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### Transcript

**Dr Natalia Tejedor Garavito:** Climate Change is the greatest challenge of our times. It's having fundamental impacts on health, the environment, the global economy and society. But these are not being felt equally across the World.

Where people live, how communities grow, and the makeup of their populations all affect how vulnerable they are to climate change.

At the same time, climate change is expected to reshape where and how billions of people live. This will have a big impact on things like healthcare - especially depending on where older adults and younger women are likely to live in the future.

**Professor Andy Tatem:** At WorldPop at the University of Southampton we specialise in creating high-resolution population maps which track changes over time, and co-developing population mapping solutions with governments and UN agencies around the world. Researchers, policymakers, and international organisations all use our population datasets to help guide their work.

But there's a gap when it comes to future population data at small area scales that's broken down by age and sex - data we need to understand who might be most at risk from things like changing health threats, extreme weather, and natural disasters. Without it, we're trying to plan for tomorrow's climate impacts using yesterday's population numbers.

Now, thanks to funding from the Wellcome Trust, our new initiative - FuturePop - brings together expertise from Southampton, Bristol, and global health experts. It's a powerful collaboration between data science, demography, urbanisation research, and climate-health specialists. FuturePop will map population size, age, and gender around the world all the way to the end of the century, based on different possible futures outlined in climate change scenarios.

We know that climate change won't impact everyone equally. Floods, heatwaves, displacement - these will reshape communities in complex ways. Who will be where in the coming decades, and how vulnerable will they be to changes in climate? FuturePop's data will help governments, scientists, and aid agencies plan smarter for housing, healthcare, and disaster relief.

**Dr Laurence Hawker:** WorldPop has integrated satellite imagery, mobile phone mobility data, census information, and machine learning to generate forty-five thousand global datasets up to the year twenty thirty. FuturePop will map population projections to show how age groups and densities might change over the next few decades, according to different scenarios. These high-resolution projection maps will help identify hotspots of population growth, aging, or decline - essential intelligence for targeting interventions and resources.

Understanding where populations are most climate vulnerable is crucial for effective, future-ready planning. With WorldPop apps and tools researchers and decision-makers can explore projections and their uncertainties, tailoring strategies from neighbourhood to global scales.

FuturePop will be an open, peer-reviewed resource available to governments, NGOs, and scientists worldwide

**Dr Natalia Tejedor Garavito:** As the planet warms, knowing where people will be, and the demographics of future populations is vital. FuturePop aims to give that foresight - with precision, purpose, and hope.

Discover more about FuturePop, and access tools at [worldpop.org/futurepop](https://worldpop.org/futurepop).