



The United Nations Sustainable Development Goals

THE ROLE FOR ACTUARIES

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The role for actuaries

- Policymakers, business, the third sector and industry all have a role to play in achieving the goals, as does the financial services industry.
- There is £300 trillion in capital markets which could be harnessed to support, rather than undermine, sustainable development globally.
- Actuaries are increasingly being looked to, to make a valuable contribution. Can the profession rise to the challenge?



The role for actuaries (cont.)

- The Institute and Faculty of Actuaries (IFoA) asked, ‘how are actuaries relevant to the SDGs and how can they, and their employers, contribute to the goals being met?’
- The response has been overwhelmingly positive.
- Submissions have been wide-reaching, having been sent to us from all over the world.
- Submissions relate to a wide variety of practice areas including investment, pensions, general insurance and resource and environment.



Case Study 1: Agricultural Insurance in Kenya



- Agriculture accounts for 26 percent of Kenya's annual Gross Domestic Product.
- The sector is highly vulnerable to drought and other weather events. These events are increasing in frequency and severity as a result of climate change.
 - Drought between 2008 and 2011 caused crop losses costing \$1.2 billion and;
 - Caused the death of 9 percent of all Kenyan livestock.
- Despite the risks take up of agriculture insurance is low but it is increasing.
- Actuarial science can help with the design and refinement of innovative agriculture insurance products which are both affordable and easy to access.



Case Study 2: Environmental Risk Solutions in China



- China's rapid industrialisation and urbanisation has resulted in widespread man-made water pollution. It has caused:
 - damage to wildlife and nature
 - crop failure
 - health consequences for those who do not have access to safe drinking water.
- Mr Xiaoxuan (Sherwin) Li, FIA, and his actuarial team used actuarial and catastrophe modelling methodologies to evaluate and place a cost on environmental risk.
- This cost is to be recouped from the entities causing the pollution via an insurance premium.



Case Study 3: Road Safety in India

- The UN's SDGs include a target to halve the number of road accident-related deaths and injuries by 2020. This target is particularly relevant in India where road safety presents a significant problem.
- In 2013, the World Health Organisation (WHO) estimated the number of fatalities which resulted from road accidents to be 238, 562.



- WHO also estimates that India loses 3% of its GDP annually due to road accidents.
- To address this, actuarial expertise can support the development and application of innovative motor insurance products which incentivise and encourage good driving behaviour in India and other developing nations.



IFoA's SDG Campaign: Next Steps



Sustainable Development Goals Workshop guide



- Global Webinar
- Workshops
- Informing IFoA's narrative

- Please contact policy@actuaries.org.uk if you would like more information about the campaign