

## Save our soils: snapshot reveals top threats

The top threats facing Australian soils—erosion, contamination, urban encroachment, salinity and climate change—must be addressed or prevented through a nationally co-ordinated approach before irreversible damage is done according to the national peak body for soils.

The inaugural [Save our Soils: Australian Soil Snapshot 2020](#) commissioned by Soil Science Australia, released today on World Soil Day, suggests protection of Australia's most valuable natural asset, now worth \$1 trillion per year, will demand co-ordinated education, data-sharing, research, policy and on-farm application to achieve sustainable land management on a national scale.

"Soil is the living skin of the earth, supporting our food production, economy and health, yet our valuable soils are under increasing attack," said Associate Professor Mosley, President, Soil Science Australia.

"Erosion from wind and water is the most obvious risk to soil. Everyone understands dust storms, but these can rip a trailer load of fertile topsoil per hour per hectare from an average farm which is terrifying.

"What does that mean for future harvests? What does it mean for that farming family? With 10% loss of crop yield forecast by 2050 our ability to sustain livelihoods and our food and fibre production is threatened," he said.

Furthermore, with only around 10% of Australia suitable for crops or improved pasture, the impacts of climate change and extreme weather events are decreasing that parcel every year.

"Longer and harsher droughts are sucking the life out of soils and battering too many regional communities as well," said Associate Professor Mosley. "Our farmers are looking for new answers but there is still a disconnect with the soil science."

The fallout from poor soil management can be felt for generations yet sustainable agricultural practices can dramatically reduce soil damage and improve productivity.

The report highlighted other soil issues like urban encroachment onto valuable agricultural land, acidification, salinisation and contamination as common threats that are increasing across Australia.

"On one level, we understand how to fix these problems, but this will require investment and everyone working together on this urgent national priority," said Associate Professor Mosley.

"We need to strike the right balance between growth and land care, and we must reframe our approach to soil management through an integrated strategy that brings soil scientists, researchers, policymakers and farmers together."

Associate Professor Mosley said despite the challenges most landowners wanted to improve their soils.

"Information and education is everything. Australia has some of the oldest, poorest soils on earth, but we also have some of the most innovative and resilient farmers and communities who really care about their land. We can sustain our economy, environment and feed the planet if we save our soils.

"We need soil security in Australia, it's not just about water. A world without soils would be a world without life," he said. "It all begins and ends beneath our feet."

## **Quotes from Dr Michael Crawford Chief Executive Officer Soil CRC**

“Soil research is the key to finding solutions to our underperforming soils in agriculture. The Soil CRC provides the opportunity for effective collaboration between industry and science as well as a pathway to adoption of new soil management technologies by farmers.

“Through its soil research and innovation program, the Soil CRC is developing new solutions that will unlock the potential of Australia’s agricultural sector.

“Australian agriculture is facing increasing challenges of longer, more frequent droughts and a hotter, drier climate. Good soil management is one way to help address these challenges.”

“Climate change and drought are reinforcing the value of soil stewardship. Better soil management can help farms become more resilient in drought by improving water-retention capacity. It can also reduce soil erosion, fertiliser usage and chemical run-offs from farms into the environment. Better soil stores more carbon dioxide, in turn mitigating the effects of climate change and global warming.”

“By bridging a gap between soil scientists and farmers, we will ensure that soil performance is increased not just in the short term, but in the long term.”

**Soil Science Australia is the national peak body for soils, soil science and soil scientists.**

**[Download the \*Save our Soils\* Australian Soil Snapshot 2020 infographic](#)**