



THE CRAWFORD FUND FOR FOOD SECURITY ANNUAL CONFERENCE

Emerging Voices Shaping Regional Integration for a Food Secure World

10-11 August 2026

Parliament House, Canberra,
Australia, and online



Integrated science for a food-secure region: what the next decade of investment must deliver

Dr. Sandra Milach, Chief Scientist, CGIAR

Crawford Fund Annual Conference, Parliament House, Canberra, 11 August 2026

Food, land, water, and climate. One connected system



The challenge

120 kcal less food
per person per day,
for every 1°C of warming

$\sim \frac{1}{3}$
of the year-to-year swing in
crop yields is driven by climate



Sources: *Hultgren et al., Nature, 2025; Hu et al., Environmental Modelling & Software, 2024*



What integrated systems mean in practice

Odisha, India

- Climate-resilient varieties
- Reliable seed
- Water + irrigation
- Climate-smart practices
- Market access



One resilient system

- + 67% productivity
(*target 20%*)
- 85,000+ farmers reached

Source: World Bank

How we measure success

What counts:

adoption

+

resilience through a bad season

+

policy that changes



The investment case and Australia's role

\$10 back for every **\$1** invested in CGIAR research
(since 1971)

\$7.82 returned for every **\$1** in Australian agricultural research
(in the last decade)

Sources: Alston, Pardey & Rao, 2021; Chancellor
(ABARES), 2023



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Thank you