Dr Peter Carberry is bringing Australian innovation to the challenge of world hunger

India may seem a long way from his upbringing on a grain and cotton farm in Narrabri, New South Wales, but not to Dr Peter Carberry.

“Our systems are not so different. Innovation in Australian agriculture benefits world agriculture, and vice versa,” Dr Carberry says.

He is well known to Australian growers for agricultural systems modelling and helping growers to interpret the interaction between climate forecasting and soil moisture management, particularly in the northern region where he spent 24 years with CSIRO based in Toowoomba. His career in simulation modelling began in 1982, when he started his PhD on pearl millet at the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) in India.

The skills Dr Carberry learnt at ICRISAT were put to good use with CSIRO where, with GRDC investment, he was a key developer of the Agricultural Production Systems sIMulator (APSIM) cropping systems model. It is now used extensively for on-farm decision-making in the public and private research sectors. The model, influenced by Australian-funded projects in Kenya in the 1980s, simulates plant, soil and management options to overcome climate risk.