Climate change roils farming in Australia

Generations of the Kirkby family have farmed the dark alluvial soils near Moree in Australia's southeast corner. Where merino sheep once grazed, there are now groves of olives and oranges. Cotton, which sustains the business now, may soon be gone as the global grain shortage makes a move further into wheat irresistible.

The Kirkby's Gwydir Grove brand of olive oil is in shops in the US, China, Sweden and Singapore. The latest offering is an extra virgin oil infused with blood oranges. Those new olive and orange groves are being irrigated with treated water from Moree's sewerage system.

It's all change in agriculture in Australia, with global warming and globalisation the drivers. New crops are coming up, traditional farming methods being abandoned, and small farms gobbled up by bigger ones.

Over the past 20 years, a third of farms have closed and the land folded into enterprises that are more efficient and better able to meet the peaks and troughs that come with the long droughts and drenching rains that characterise the continent's weather.

Phillip Glyde, the head of the state-financed Australian Bureau of Agricultural and Resource Economics, said that even after six years of drought a quarter of the nation's 130,000 farmers had a comfortable cash income. His worries are with the 25 percent who haven't.

There are 24,000 farmers receiving income support. Glyde is a critic of handouts, arguing that the state 'needs to get out of the way of productive farmers' by letting inefficient ones go broke.

A half-hour drive from the Kirkby's small spread is Auscott, a 15,000-hectare property that is the behemoth of the Moree region's cotton industry.

It doesn't look like a conventional farm. The furrows on Auscott's Gwydir Valley spread are laser-levelled to make the most of the water allocation through the irrigation pipes. Satellite navigation systems guide the tractors that do the planting. Remote-sensing probes tell farm managers at their workstations where the precious water needs to go.

'Everyone likes green fields and fluffy sheep and fat cattle, but that can be a pretty inefficient way of turning water into product,' says Harvey Gaynor, general manager at Gwydir Valley. 'We make no apologies for using the water we are allocated to produce the highest value product.'

Gaynor, who was brought up in Sydney, has no sentimental attachment to a particular crop. This year, because Auscott's water allocation is so low and the cost of buying water in from other farmers so high, the cotton planting is down by 90 percent and the bigger cash crop will be wheat.

Farmers are expecting bumper harvests this year as the country comes out of a six-year drought. Global shortages are raising commodity prices.

National Australia Bank economist Frank Drum predicts production will be up 30 percent and incomes will rise 43 percent.

Bill Cordingly, from major agricultural lender Rabobank, says high demand means the coming harvest will be 'as good as it has been in living memory with record prices for wheat, oilseeds, feed grain and coarse grains'.

Not far away from Auscott is Trawalla, a 700-hectare property owned by US-born Deane Stahmann that has 70,000 pecan nut trees. It's the largest pecan farm in the southern hemisphere and a match for Stahmann's 100,000-tree northern-hemisphere pecan plantation in the US state of New Mexico.

Trawalla, set up the 1980s, ensures Stahmann has a pecan harvest in the southern hemisphere autumn. The New Mexico crop is harvested six months earlier in the northern hemisphere autumn. Stahmanns, effectively, has two crops a year.

Trawalla is an Aboriginal word that means floodwaters and the big question is how well the farm can be refitted to be as productive with less water.

Stahmann is switching over from flood irrigation, where water is simply pumped out of the Gwydir River onto the ground, to much-more-miserly drip irrigation, in which pipes deliver a regulated amount of water to each tree.

Sid Astbury (© IANS / India eNews)