

What's wrong with agricultural planning in Australia? The answer to this question is the 'why' behind the interest in the Bradfield Scheme. Pictured are the catchments for new dams identified by a long and detailed study of northern Australian opportunities by CSIRO.

The Fitzroy and Mitchell catchments are not in areas where many people live and have little infrastructure to support agricultural industries. Like the Ord River Scheme, while the farmers have done a great job getting crops established, its taken decades for an industry, ...and it's still hamstrung by the isolation. Eg, experimental cotton has now been successful, thanks to new CSIRO varieties, but until they build a cotton gin, further investment, it's not a profitable crop.

To expand Australian agriculture we need to 'add water' where there is infrastructure, where people already live, eg. central and southern Queensland and central New South Wales. But these areas do not have suitable large dam sites.

In addition, large dam sites are typically low in the catchment in Australia, and so provide less opportunity for cheap gravity-fed irrigation channels. So the water must be first pumped up from rivers. Large dams are also a big problem for fish migration.

The Bradfield Scheme addresses these problems. It conveys water from sites high in the catchment by gravitational flow in tunnels or channels and transports it to areas of suitable soils with existing roads, railways, cotton gins, and experienced farmers.

Thus allowing the rapid expansion of irrigated land. The water can also be used by mines, avoiding the use of surface or groundwater like Adani, and by townships and manufacturing for further expansion.

The additional cost of building the channels to convey the water to off-stream storages is offset by the savings from smaller dams, no pumping costs, and delivering the water to where there is existing infrastructure and people.

So the answer to the viability question of a revised Bradfield Scheme is pretty obvious. It's going to cost as much and any comparable size irrigation scheme but deliver vastly greater benefits by virtue of where the water is delivered - to existing farming communities.

It's said in Murrumbidgee that the soil would grow anything if they only had water. St George, Bourke and beyond are proven cropping areas that could expand quickly given more reliable water supplies. So why prioritize mega-dams in the Fitzroy (WA) and Mitchell (Q) catchments?