

Submission for agricultural competitiveness green paper.

The following is a potential part of the solution to improving family farm profitability and significantly improving water use efficiency on these farms.

One of the most sustainable and economically efficient methods for freshwater aquaculture and the use of water, is the integration of small scale aquaculture with other farming practices. For example a small aquaculture operation integrated with a horticulture operation.

This integration is beginning to be found in small scale "family" operations where the water is first used for the growth of fish, then used for the irrigation of crops with the benefit of added nutrients from the fish removing or reducing the need for fertilisers on the crops.

These operations, although small can greatly increase the cash flow and income for small farming operations making them more efficient and viable, and improving small rural and regional community economies. The growing movement to source local products over imported products and the constantly increasing price of seafood is beginning to make these small operations viable income producing activities.

One common issue that often inhibits the integration of aquaculture and agriculture on family farms are the local government planning schemes. Some schemes are well founded and allow low impact aquaculture in the rural zones without application. Unfortunately many planning schemes treat small scale low impact aquaculture the same as large scale aquaculture and require code or impact assessable applications. The act of having to go through a planning application will deter almost all small family operations from integrating a small number of tanks with their farming enterprise. This reduces the potential for income in these family businesses with flow on lost opportunity effects for the community.

The Commonwealth Government should discuss with the State Governments the options for mechanisms to ensure that small scale low impact aquaculture is treated appropriately by all local government planning schemes in each state in Australia. Hence providing no barrier to the integration of aquaculture and agriculture on family farms.

Additionally, for three years I have been developing simple low head aquaculture systems to significantly reduce the capital and operating costs of small aquaculture operations. This is progressing well but is restricted by the spare funds that I have available. I have investigated government funding programs, but these all appear to provide \$250,000 plus grants and require the use of expensive and poor value for money consultants and research organisations. To test the remaining components of my system is only likely to cost \$30,000 to \$50,000. Still 2 to 3 years using my spare income. I am probably not wrong in thinking that there are many other innovators out there in a similar situation to me.

When your department starts thinking about research grants to aid agricultural competitiveness, they would be wise to provide options for small scale research projects as well as the large projects regularly provided for.