‘Devil in the detail’ could derail water progress

Achieving real advances in the sustainability of water management will require much more than just a change in government responsibilities and legislation. Critical to the future success of water reforms will be a careful policy approach recognising the full complexities of water management and the full participation of the irrigation industry, according to water experts writing in the latest edition of the Australian Farm Institute’s Farm Policy Journal.

‘Much of the public debate on water management has been overly simplistic and driven more by recent climatic events than objective data’, according to Mick Keogh, Executive Director of the Institute.

‘For example, there is frequent reference to the declining health of inland rivers, yet long-term water monitoring data shows that water quality in the Murray River has been progressively improving over the last two decades, and Adelaide’s water is now on average about half as salty as it was ten years ago.’

‘And while some real challenges are being faced at present by some Murray Valley irrigators who have been given zero allocations, it should not be forgotten that but for dams and storages, the Murray River would not be flowing at present and would have stopped flowing at least six times in the last 70 years.’

‘During recent debate there has been a lot of criticism of so-called “thirsty crops” like cotton and rice, despite the fact that they are annual crops that can be sown when water is available, and are therefore much more suited to those situations where water supply is highly variable than are permanent plantings of trees or vines.’

Among the authors contributing to this edition of the Journal is Professor Shahbaz Khan, leader of the team that was recently announced as the winner of the 2007 Eureka Prize for Water Research and Innovation.

‘Many have hailed water trading and farmer investment to increase water use efficiency as the way to improve water sustainability. However, experts such as Professor Khan highlight that water trading could actually exacerbate irrigation-induced salinity. Moreover, encouraging farmers to invest heavily in on-farm water infrastructure will mean reduced irrigator flexibility – potentially resulting in poor economic outcomes if farmers are locked in to growing one crop when markets are providing higher returns for other produce.’

‘The main message arising from this collection of papers is that Australia’s irrigation industries are highly complex and variable, and there is not a “one-size-fits-all” solution that will magically resolve all the challenges faced by the sector. The devil is really in the detail, and a lack of attention to the fine detail could see the Australian Government’s water reforms derailed.’

‘This complexity makes it imperative that policy changes are very carefully considered, and water users need to be fully engaged in planning processes to ensure that policies accommodate the varied interests of Australia’s 35,000 irrigation farms, which directly and indirectly contribute an estimated $12.4 billion dollars to the national economy each year.’

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(Abstracts of Journal papers follow)
A National Plan for Water Security: Pluses and Minuses
Alistair Watson, Freelance Economist

In January 2007, the Australian Government announced A National Plan for Water Security. The National Plan provides for $10 billion of Commonwealth expenditure to deal with over-allocation of water and other problems with Australian irrigation industries. The Commonwealth also proposes to take over many of the administrative functions previously undertaken by state governments. This paper critiques the National Plan in light of the history of Australian water management policy, as well as practical and political considerations. It concludes that the National Plan leans too far in the direction of an imposed solution based on crude approaches to benchmarking irrigation efficiency, rather than a market-based solution.

Investing in the Modernisation of Irrigation Infrastructure: The Challenges and Opportunities for Government and Agriculture
John Madden, Manager and Senior Economist, Hassall & Associates Australia
Jack Knowles, Senior Consultant, Hassall & Associates Australia
Arthur Buckingham, Senior Consultant, Hassall & Associates Australia

Following more than a decade of reform in rural water management, Australian governments have recently announced substantial funding to further increase the ‘efficiency’ of irrigation and to recoup ‘water savings’. The proposed investment is intended to provide irrigators and rural water suppliers with the opportunity to obtain funding in return for the transfer of part or all of the resultant savings to government. Before taking advantage of such funding, potential participants should consider the effect on their profitability and the return on their contribution. Infrastructure modernisation does not necessarily provide profitable returns. To meet the sometimes conflicting objectives of efficiency, savings and profitability, the challenge for government and program participants will be to obtain and share information to enable informed investment decisions. This paper considers key information requirements and highlights some of the challenges that may arise given that the irrigation sector is in the midst of a range of significant reform processes.

What will be the value of environmental benefits arising from water reform?
Mick Keogh, Executive Director, Australian Farm Institute

Major reforms of Australian water management policies are currently being implemented, with the objective of improving the environmental sustainability of Australia’s water resources by reducing irrigation allocations. While the costs of reducing irrigation allocations are able to be estimated, the value of improved environmental outcomes is much more difficult to establish. This is because environmental changes, such as better water quality or increased numbers of waterbirds, are not easily allocated an economic value. An added challenge arises due to the lack of objective data about the amount of environmental change a specific reduction in irrigation allocations would produce. Further confounding the issue, water quality has been steadily improving in major rivers over recent decades, raising real questions about claims of declining environmental sustainability.

Frontiers in Irrigation Investment and Management
Professor Shahbaz Khan, Director, International Centre of Water for Food Security, Charles Sturt University

A shift in the future allocation of water among competing uses is inevitable. The global trend is to allocate a reduced share of water resources to agricultural uses. The global food system has responded to the doubling of world population by more than doubling food production during the past 50 years, and irrigated agriculture has played a major role. The growth in irrigated area has slowed in the past decade and is projected to increase at an annual rate of less than 1% between 1995 and 2020. New investments in irrigation and water supply systems alone will be inadequate for meeting the growing non-agricultural demand for water and for mitigating the impact of water withdrawals from agriculture. Major changes in practices, policies and institutions, along with sustainable irrigation management tools, will be required to ensure that limited water resources are appropriately managed to increase the productivity of water in irrigated agriculture. The key pressure points to improve water productivity in a water system are not necessarily biophysical. They can also be economic, social, environmental or institutional. Changes in these elements need to be assessed in a comprehensive and systematic way to enhance the multifunctional productivity of irrigation systems.
Water Resource Management: Multiple Values Demand Multiple Objectives

Leith Boully, Adjunct Professor, School of Natural Rural Systems Management, University of Queensland

As well as being essential to all life, water is a social resource. Collective decision-making about its distribution and protection is fundamental to building a sense of community. Different people in different places with different aspirations and needs will hold diverse values for the resource and the rivers and groundwater systems that nurture it. On this basis, water policy and reform in Australia must meet multiple objectives to be seen as successful across communities. Multiple objectives will only be met if there are effective processes to enable people to understand the science, debate values and priorities and negotiate solutions to complex problems in water resource management. This paper argues that the overarching objective for water reform should be the development of rigorous, adaptive, inclusive, informed and fair processes for managing complex water resource systems.