Australian Sugar Industry

Statement on Priorities for Research 2011 – 2014.

The Australian Sugar industry Alliance (ASA) is providing this statement on research priorities to research organisations as guidance for planning and allocation of Industry funds over 2011 to 2014.

ASA anticipates implementing major and vital reforms to sugar RD&E arrangements and performance by 2013-2014. Processes will need to be further developed for incorporating Industry priorities into R&D planning, iterative consideration of proposals including longer term investments, and extending and branding research outcomes.

This statement has been distilled from analysis of industry-researcher workshops and review of research entity plans and government priorities (30 documents), as well as more than 100 interviews and written inputs from industry groups and individuals during 2011.

Three dimensions to the challenge of aligning R&D activity with Industry priorities have been identified in this analysis:

A. KEY ISSUES for action through focussed research

B. TYPES of RESEARCH ACTIVITY

C. RESEARCH PERFORMANCE and management.

ASA is providing a weighted set of priorities for each of these dimensions of research planning and for reviews of current projects and gaps. It is anticipated research organisations expending sugar industry funds will develop criteria and measures that ensure alignment of programs and projects with these priorities.

The Industry is not listing sub-elements or themes as there is a need for focus on top-level objectives. The challenge is with research entities in planning, and researchers in proposing projects, to show how strong outcomes should be generated for the industry. Overall, the Industry is looking for a higher proportion of larger projects, targeting step change results, rather than numerous smaller incremental change projects.

A. KEY ISSUES for action through focussed research

It is generally acknowledged that the Sugar Industry R&D spend has been spread over too many topics. In part, this echoes work-shops where participants try to 'cover everything and more'.

Over 2011-2014, while RD&E is restructured, Industry R&D funding should be focussed on inventive programs and projects designed by researchers to address three major, linked, issues. The single major challenge is the reduction of industry size by 18-20% since 2002, to a point where a number of mills face viability questions.

Issue 1. Industry growth – need to stop decline and build to 36 mtpa.

Issue 2. Cost and profitability of sugarcane and sugar production, across different farms types and mills.

Issue 3. Environmental and regulatory pressures including water.

To sharpen focus, the Industry is placing a low priority on use of Industry funds for research into diversification of cane uses and new products. Funding outside the Industry is accessible for such commercial RD.

KEY ISSUES for research action	Priority weighting
Industry growth – need to stop decline and build to 36 mtpa including by R&D to increase yield and achieve step change in productivity.	40%
Cost and profitability of cane and sugar production, across different farms types and mills, including by R&D on efficiency along the chain	35-40%
Environmental and regulatory pressures including by R&D into water, chemicals, and technologies/systems to lift environmental sustainability	15-20%
Diversification – biomass, fuel, new products.	0-10%

B. TYPES of RESEARCH ACTIVITY

Many think of priorities in terms of types of research and associated anticipated outcomes, so Industry views on strategic alignment include a level of expectation around weighting of forms of R&D. Research managers also think in terms of balance of research type.

Based on consideration of multiple Industry and researcher statements, the following weighting for Industry investment in types of research is provided as guidance for research planners and researchers in use of Industry funding over 2011 to 2014.

TYPE of R&D	A description	Priority weighting
Variety development	delivery of new more productive varieties to the industry with appropriate disease and insect resistance, milling and sugar quality, and usages such as biomass where weighted	25%
Plant Breeding – molecular	plant breeding research including DNA markers, GM technologies/ varieties and seed and tissue propagation	20%
Biosecurity	breeding trials for disease, disease study, quarantine	5-10%
Environment, water, farming systems	sustainable cane production, future cane production systems, innovative ways of facilitating adoption on-farm	25%
Milling and supply	milling processes and systems, transport, harvesting, supply arrangements, including quality	10-15%
Social, people and adoption	development of individuals, networks and social capacity, industry, regions, communities	10%
Analytical technologies	chemical analysis of sugar and other cane products, Near Infra-Red	0-5%[1]
Alternate cane uses, biomass by-products	Investigation of alternate uses for sugarcane biomass including fuel, by products from cane, other sugar products	0-5%[1]

[1] Existence of commercial providers and wider R&D funding sources in these areas is noted.

C. RESEARCH PERFORMANCE and MANAGEMENT

Rural industries expect outcomes from investment in research. In general, Australian rural research tends to the applied, with industries expecting researchers to put forward well-designed projects with a strong likelihood of both research success and user uptake. A level of risk is recognised but overall, useful outcomes must be achieved.

Industry participants want R&D strategy and funding usage to be aligned with priorities and to make a difference to industry prospects. It is reasonable to expect 80%+ of projects to deliver forecast results, including at key stages taking into account timelines for some R&D.

ASA is looking for increased performance, greater accountability and a more rigorous evaluation of research. The Sugar Industry has been grappling with research decision-making processes, multiple entities and costs. From 2011, the Industry is placing high priority on RD&E reform. With further development of industry-research interfaces, a range of tools including economic evaluation of risk-returns, research success and adoption could be used to develop cases for higher risk projects and longer term programs. Potential of collaboration across industries is also recognised but this is a low priority for 2011-14.

RESEARCH PERFORMANCE expectation	Priority weighting
Results achieved and delivered, demonstrable Industry outcomes from 80%+ of projects	HIGH
Strategic alignment with priorities	HIGH
A single R&D project review pathway and project portfolio with minimal duplication	High
Robust and efficient program management	High
Transparency of process and projects	High
Industry-wide benefits (75%+ of mill areas)	Medium
Higher risk, blue sky, long-term research	Low, pending new structures
Collaboration across rural industries	Low, pending new structures