# Australian Prawn Farmers' Association

*5 Year R&D Strategic Priorities 2015-2019*

*December 2014*

## *Introduction*

The APFA R&D Strategic plan outlines the research priorities that will direct our research investment for the next 5 years, 2015-19.  The plan also identifies the research areas that should be considered as immediate priority over the next 12 months.  This document does not go into great detail intentionally.  Only general research priority areas are provided, not specifics.  This is so our focus is not too narrow.  The level of detail presented reflects the outputs from the APFA Executive and R&D Committee's Strategic Workshop, November 2014.

In addition to the R&D priorities, the APFA Strategic Issues & Risks have been included (identified in the same workshop), as are the key performance indicators reported from the APFA's valuation model.  These should be used as a secondary reference when reviewing the R&D plan.

## APFA R&D Priorities 2015-19

The complete research and development priority list for the next 5 years is shown in the following table.  Within this list, of course, there are areas of research that the APFA Executive and R&D Committees placed greater importance on, and areas that were deemed not as crucial.  Irrespective of the level of priority, the list encapsulates the collective committees' views on what R&D areas APFA should focus on for the next 5 years.

| *APFA R&D Priority List 2015-19* |
| --- |
| Genetic & PL's |
| Nutrition |
| Farm Efficiency |
| Disease & Biosecurity |
| Social License |
| Staff & Training |
| Marketing |
| Farm Profit |
| Waste Management |
| Value Adding |
| APFA Communications |
| Regulations |

The clear immediate and 5 year research priority area is '*Genetics and PL's*' FIGURE 1.  This area had more than triple the support for research over the next 12 months compared to all other priority areas identified.  Our R&D activities over the next 12 months and 5 years should include an appropriate level of research investment into this area.  The more immediate need is increasing post larval quality and health, and consistent hatchery output.  Domestication remains a high priority research area, and plans should be considered to ensure that R&D continues on this front for the benefit of the long term future of the industry.

'*Farm Efficiency*' is a broad area that should be considered for research investment over the next 5 years.  Examples of potential 'Farm Efficiency' R&D that were identified were energy efficient technology, automation and increasing aeration efficiencies.

Priority areas under the banner of 'Nutrition' fall into two areas, notably 'fish meal reduction' and 'feeding efficiency'. Both should be considered in the short and long term research plans for APFA. Both 'feeding efficiency' and 'farm efficiency', particularly in terms of automation, could obviously be investigated under the scope of the same project.

The other standout priority area for research is 'Disease & Biosecurity'. Preventing exotic viruses and diseases, and viral clearance and mitigation are considered important to protecting our industry. Our research over the next 5 years should include projects and activities that help us deliver increased biosecurity and disease prevention / mitigation protocols.

The other research areas identified in the priority list need to be considered as well, and research into these areas should not be excluded. However, the main areas for our research have been clearly identified, and prioritising our investment over the next 5 years into these areas is recommended.
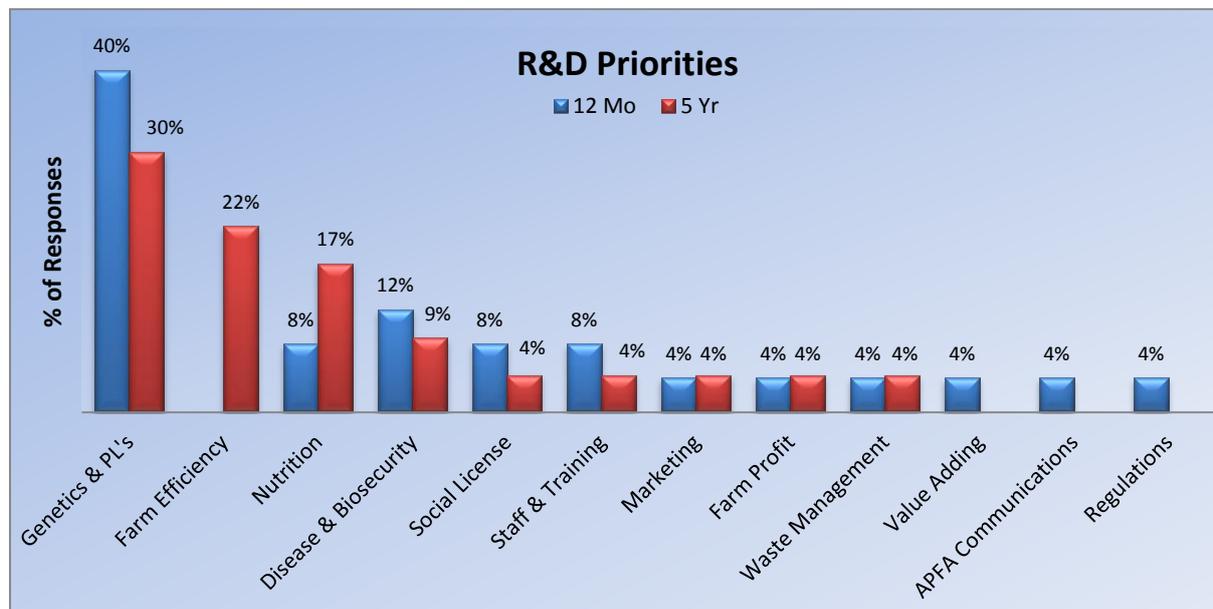


**Figure 1** R&D priority areas for the next 12 months and the next five years. The % of responses refers to survey answers of the APFA Executive and R&D committees.

## APFA Strategic Issues & Risks

The strategic issues and risks represented in the following chart are not included to provide a primary reference point to guide the APFA's R&D direction FIGURE 2. They are included as a secondary reference point should the R&D committee need to further appraise proposals on their benefit to the association.

It should be noted that *Disease & Biosecurity* and *Genetics & PL's* feature among the top 5 priorities for R&D as well as in the top 5 for Strategic Issues & Risks, further highlighting their importance. There are a number of others that are identified in both as well.
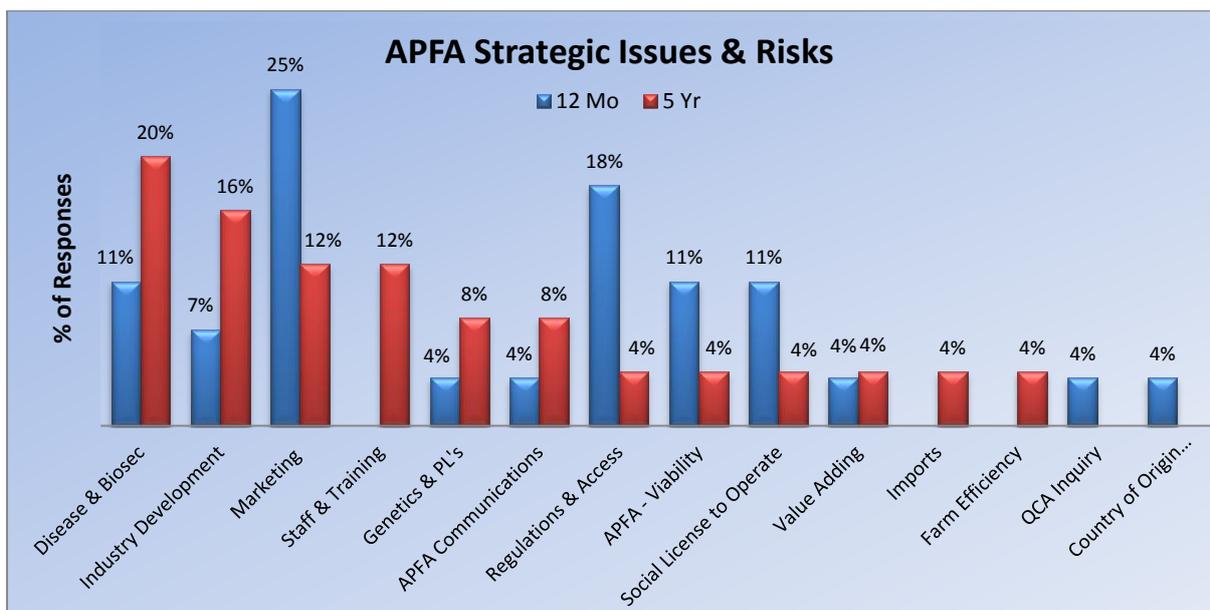


**Figure 2** APFA strategic issues and risks for the next 12 months and the next five years. The % of responses refers to survey answers of the APFA Executive and R&D committees.

## *Farm Valuation Model - Key Performance Indicators (KPI's)*

The farm valuation model was created so that the industry can learn the factors that are contributing the most to the economic success of a farm. For example, in the list below a 1% increase in Growth provides a better economic return than a 1% decrease in Cost of Feed.

The top ten KPI's generated from APFA's farm valuation model are (based on the latest data collected season 2012-13):

| *APFA KPI List* |
| --- |
| **1.** Growth (g/week) |
| **2.** Days to Harvest |
| **3.** Price ($/kg) |
| **4.** Survival (%) |
| **5.** Stocking |
| **6.** # Hectares in crop / yr. |
| **7.** Cost of Feed ($/kg) |
| **8.** Farm (FCR) |
| **9.** Avg. Farm Labour Cost / ha |
| **10.** Power Cost / ha. |

## *Recommendations*

The priority areas outlined in this document encapsulate the current Executive and R&D Committee's view on what R&D is needed to best benefit the Australian Prawn Farming Industry over the next 5 years. These priorities should be the primary focus when investigating potential R&D projects.

The APFA strategic issues and risks, along with the industry's KPI's are also important, and it is recommended they be used as a secondary reference when developing potential R&D. Using these three together will ensure that we have the most effective and informed platform to guide our R&D direction over the next 5 years.