

Supplementary questions Water inquiry

1. If water was not a concern could you estimate what the potential economic output of this area would be?

Response

I refer members to the attached report prepared by the Regional Australia Institute for the Namoi Joint Organisation of Councils and titled Shaping the Future in the Namoi



Shaping-the-Future-in-the-Namoi-Report-FINAL-20150914.pdf

2. Can you please provide details of water saving initiatives implemented by Namoi Councils Joint Organisation member councils?
3. For each member council:
 - (a) What has been the impact of these water saving initiatives?
 - (b) Please provide estimates of actual quantities of water saved?
 - (c) What is the total cost of implementing each water saving initiative?

Response

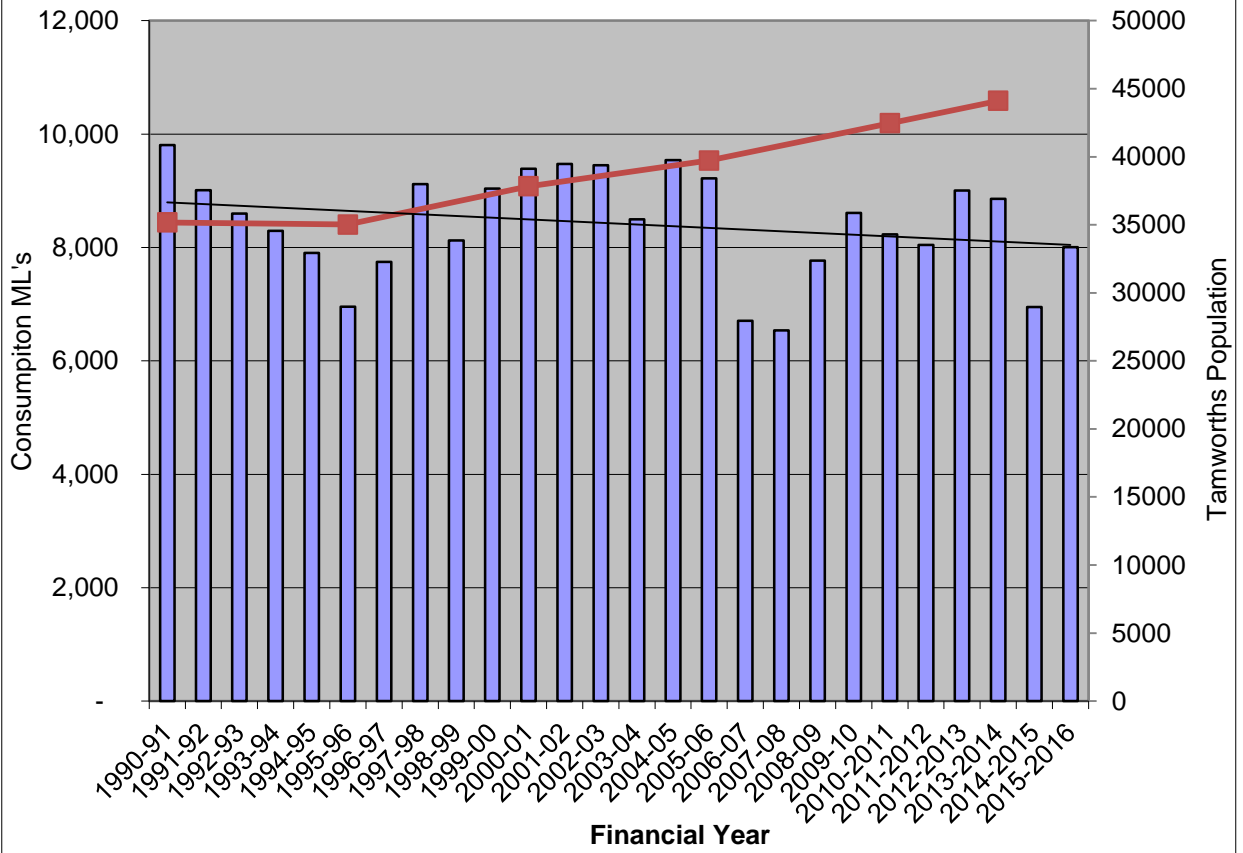
In response to question 2 and 3 I have no information for Namoi Councils other than Tamworth Regional Council.

For Tamworth Regional Council a listing of water sustainability initiatives undertaken by Council is shown below. A graph is also included which demonstrates the success of the ongoing community awareness program for water sustainability and shows how total water consumption in Tamworth City has stayed relatively steady despite a significant increase in population.

Action	Commenced	Ongoing or one off	Approx. Cost to date	Water savings made per annum
Engaged Water Sustainability Officer	2007	Ongoing	\$100k per year	195 ML
Implementation of Demand Management Plan		Ongoing		
Implementation of Drought Management Plan		Ongoing		
Residential Water Saving Rebates Scheme		Ongoing	\$700k	
National Water Week promotion		Ongoing		
Water restrictions awareness and compliance		Ongoing		
Community information presentations		Ongoing		
Water News newsletters	2008	Ongoing		
Audit of Large Water Users above 3.5 megalitres		Ongoing	\$50k of Catchment Management Authority funding	Consumption has increased during last five year audit due to increase in growth and production
Water Sustainability Strategy		Ongoing		

Schools education program		Ongoing		
Installation of roadside waterwise signage		One off	\$10k	
Water sustainability media campaigns		Ongoing		
Media releases		Ongoing		
Caroma Dorf Toilet Exchange program	2009	One off	\$40k of Catchment Management Authority funding	13.5 ML
Updated water notices to include comparative information and perforated information strip		One off		
Liaison with Horticulture and Recreation on water restrictions management and use of groundwater	2014	Ongoing		
Assistance with development of Integrated Groundwater Scheme for parks, gardens and playing fields		Ongoing	\$675k initially requested from Council with additional \$90k	66.6 ML
Bore water in use signage installed in parks and gardens		Ongoing	\$10k	
System for three distinct types of WMP: Variation to standard restrictions hours, 6 Week New Turf, and rainwater/bore/recycled water in use		Ongoing		
Review and updating of Demand Management Plan	2015	Ongoing		
Review and updating of Drought Management Plan		Ongoing		
\$50k per annum internal TRC water audit and upgrade		Ongoing		
Oxijet shower aerator and showerhead promotion and exchange	2016	One off	\$150k	2.3 ML
Water sustainable showcase garden	2017		\$12.3k	39 ML
TAFE partnership			\$5k	
Sustainable public greenspace staff TAFE training			\$5k	
Analysis of total previous 10 year consumption, including period of employment of sustainability officer		Ongoing		

Raw Water Treated at Calala Treatment Plant (ML's)





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PATHFINDER INITIATIVE

Navigating opportunities for growth

SHAPING THE FUTURE IN THE NAMOI

Report

Namoi Joint Organisation of Councils, Regional Australia Institute

September 2015

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PATHFINDER INITIATIVE

Navigating opportunities for growth

The Regional Australia Institute's Pathfinder Initiative combines the knowledge and experience of local leaders and stakeholders with RAI's analytical capability and unparalleled access to the best available information on regions.

This allied approach allows a collective focus on the drivers shaping a region's future – its 'future factors' – over the next 10-15 years. Pathfinder Initiatives look beyond the symptoms of change affecting a region to identify underpinning causes, how they can be addressed as well as new and emerging opportunities for regions to secure future prosperity.

The RAI works with local leaders to understand how these future factors will shape the region's future, and what practical actions can be undertaken to realise the full potential of the community.

For more information go to www.regionalaustralia.org.au/pathfinder



EXECUTIVE SUMMARY

Collectively, if all of the Future Factors' upside potential identified in this project is fully harnessed, the Regional Australia Institute (RAI) estimates that the economy of the Namoi could expand by an additional \$900 million by 2030¹, on top of the roughly \$2 billion in potential economic growth the region is already likely to experience by this time².

After extensive analysis of social, demographic and economic data, surveying key stakeholders in the region and consulting with local leaders, the RAI has identified the six Future Factors that are likely to have the greatest plausible effects on the future of the Namoi region.

The six Future Factors identified for the Namoi region are:

- National and global cycles in commodity markets;
- Maximising innovation in agricultural production;
- Seeking international investment, on the right terms;
- Engaging the Namoi in major overseas markets;
- Urbanisation; and
- Leveraging regional/brand marketing to attract people to live and work in the Namoi.

Chart 1 describes the individual potential effect that each of these Future Factors could have on the Namoi region.

Chart 1 also highlights the value in focusing on a handful of Future Factors that are likely to have the greatest impact on the future of the region. Maximising innovation in agricultural production, for example, has twice the effect of leveraging regional/brand marketing to attract people to live and work in the region.

Expanding efforts beyond more than these handful of Future Factors quickly diminishes the value of this collaboration to the region.

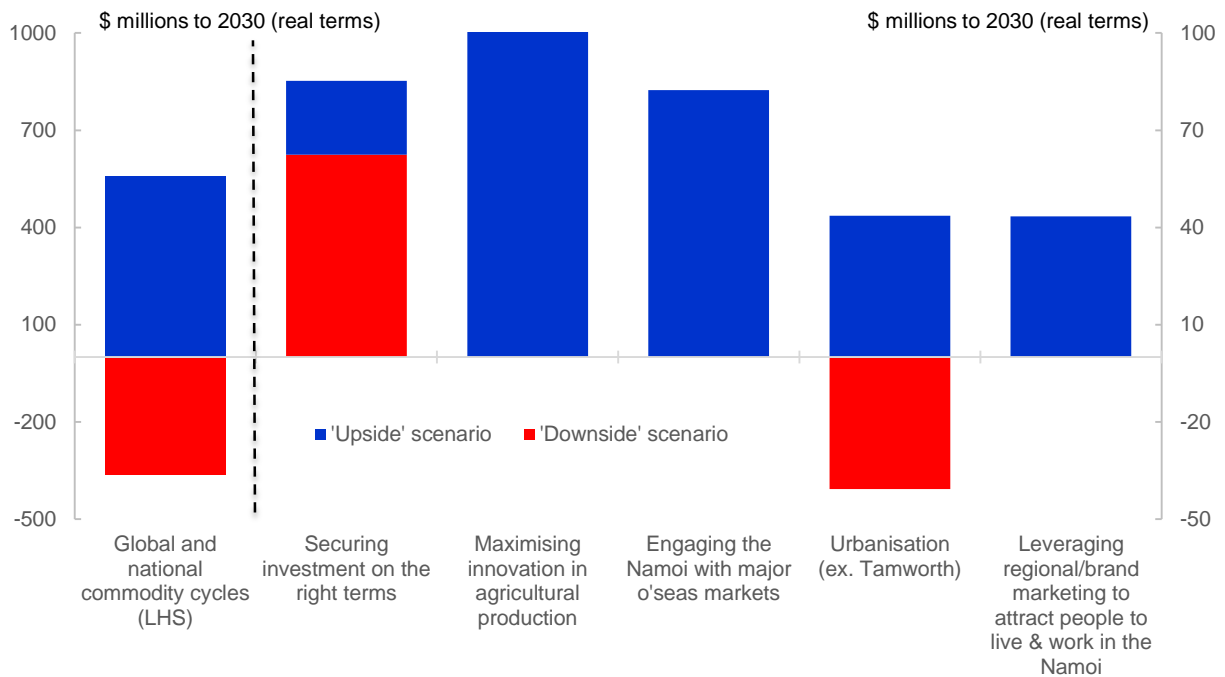
Some of these Future Factors also present potential downside risks to the region. These downsides could detract close to \$400 million from economic activity in the Namoi by 2030, though a pro-active approach to Future Factors represents the best way to managing this downside risk.

¹ All dollar figures quoted in this report are in real (inflation-adjusted) gross value added terms – that is, the value of output produced in the Namoi region, minus the intermediate consumption required to achieve this output.

² See 'State of Play in the Namoi', for further detail.



Chart 1 – Cumulative impact of Future Factors on the Namoi’s economy (to 2030)



The collective potential benefits of these Future Factors for the Namoi are considerable. Each Future Factor will have different impacts on different Local Government Areas (LGAs). For example, agriculture-focused Future Factors naturally have a greater effect in LGAs where this industry dominates.

Using this information, the Namoi Joint Organisation of Councils (JOC) can now engage in a focused approach to shaping the region’s future. For the external Future Factors of global and national commodity cycles and urbanisation, a ‘light-touch’ approach from the Namoi JOC in disseminating information about these trends will support better response within the region.

Leveraging regional/brand marketing to attract people to live and work in the Namoi, and securing investment on the right terms are areas where the Namoi JOC can take direct and targeted action to shape future outcomes.

Maximising innovation in agricultural productivity and engaging the Namoi with major overseas markets requires a facilitative approach by the Namoi JOC, focused on interactions between key stakeholders. Some practical strategies to commence activity in each area suggested are contained in this report.



TABLE OF CONTENTS

EXECUTIVE SUMMARY	2
TABLE OF CONTENTS.....	4
INTRODUCTION.....	5
STATE OF PLAY IN THE NAMOI	6
FUTURE FACTORS AND SCENARIO MODELLING	7
Distribution across the Namoi.....	8
National and global cycles in commodity markets	9
Maximising innovation in agricultural production	10
Securing international investment on the right terms.....	12
Engaging the namoi in major overseas markets	14
Urbanisation	16
Leveraging regional/brand marketing to attract people to live and work in the Namoi.....	18
MOVING TO ACTION.....	20
Light touch strategies	21
Direct action strategies	21
Facilitating change	22
CONCLUSION.....	23
CONTACTS	23
ABOUT THE REGIONAL AUSTRALIA INSTITUTE	23
APPENDIX 1 – SURVEY OUTCOMES AND INITIAL ENGAGEMENT OVERVIEW	24
APPENDIX 2 – SCENARIO TECHNIQUES	28



INTRODUCTION

This project enables the Namoi Joint Organisation of Councils (JOC) to define its role in leading the future development of the region. The project provides leaders in the Namoi with a clear understanding of the factors that will have the greatest influence on the future of the region – the ‘Future Factors’ for the Namoi – and how the region can act to shape a positive future.

Change is inevitable in the Namoi as markets, local industry and the population changes over time. Some Future Factors are beyond the control of local leaders, and their impacts will be felt regardless of local action. Other Future Factors require leadership and collaboration within the Namoi to see their potential fully realised.

Shifting focus to the drivers of this change and how they can be proactively influenced is crucial to making the most of the opportunities that the future presents. Collaboration within the Namoi JOC, proactive engagement with external stakeholders such as investors, overseas markets and other levels of government as well as the Namoi JOC facilitating change from within the region will be important in realising the full potential of the Namoi.

This report has three components. The first is to describe the most important drivers of the future of the Namoi from the hundreds of possible choices that could be made – the identification of the Future Factors. The second is to give Namoi JOC a means of articulating the importance of these factors to the future of the region – the scenario modelling results. The third is a strategy for the JOC to assume a leadership position and begin to act for the future of the region.



The Pathfinder initiative combines the knowledge and experience of local leaders and stakeholders with RAI’s analytical capability, and unparalleled access to the best available information on regions. This allied approach allows us to focus on the drivers of what’s shaping a region’s future – its “future factors” – over the next 10-15 years. These ‘future factors’ look past the symptoms of change that affect a region, and examine what drives these changes. The RAI works with local leaders to understand how these future factors will shape the region’s future, and what practical actions can be undertaken to realise the full potential of the community.



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STATE OF PLAY IN THE NAMOI

The Namoi region is one of Australia’s oldest and most productive agricultural regions, and has been the forefront of agricultural development. The region has also benefitted from its deposits of energy resources at various times throughout its history. The region has built upon this foundation with the LGAs within the Namoi providing diversity to the local economy, including a substantial manufacturing, construction and logistics presence – as well as a strong foundation in services, particularly in the ‘social’ services. Employment in education and healthcare now form a significant portion of the region’s labour force which will continue to grow.

As much as the region has built on its foundation of primary production to diversify the regional economy, so too is their great diversity amongst the economies of the Namoi region. Naturally, with this internal diversity comes an array of different challenges and opportunities within the region. For example, within the Namoi region there are LGAs whose economies are highly connected to the national economy such as Tamworth, and LGAs whose economic performance is likely to continue apace regardless of developments in the wider economic landscape, such as Moree Plains.

The future of the region is expected to be broadly positive. Around \$2 billion of potential economic growth, and jobs growth of 18,000 persons could plausibly be expected to occur in the region by 2030 if the status quo is maintained and macroeconomic conditions are favourable (charts 2 and 3). It is against these baseline figures that the scenario modelling in this document is compared. Expanding the potential of the region beyond this and shaping growth so it best supports the existing communities will require moving beyond the status quo. The JOC as an organisation formed by each Local Government and supported by the State Government is well positioned to lead this process.

Chart 2 – Output projections for the Namoi, by industry

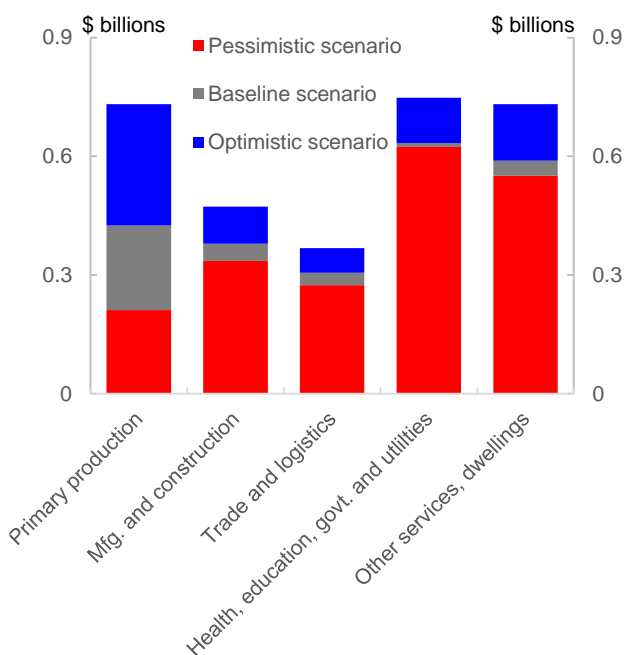
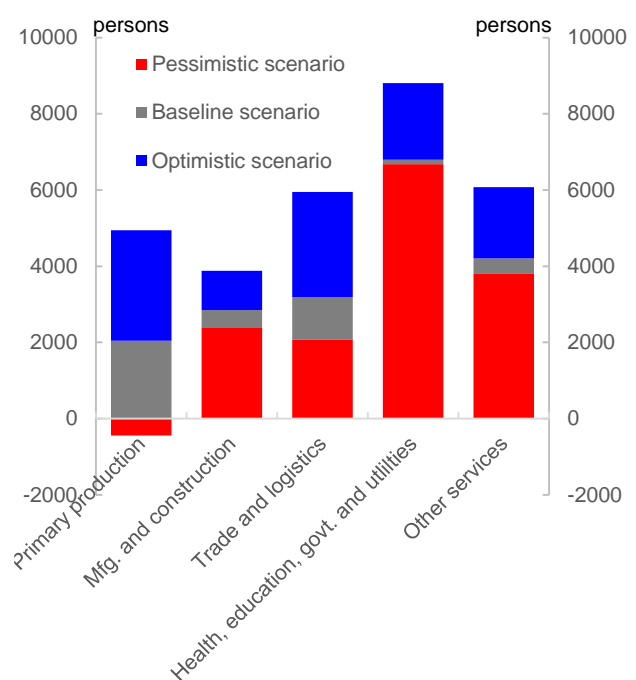


Chart 3 – Employment projections for the Namoi, by industry



Source: PricewaterhouseCoopers



FUTURE FACTORS AND SCENARIO MODELLING

A diversity of views on the potential drivers of change in the region exist within the region. Through an initial survey and workshop, the RAI identified a range of views spanning potential drivers as far afield as the effect of commodity prices and export demand on the region, to localised drivers such as the tourism potential of the region and internal market opportunities.

The RAI has complemented these local insights with economic, demographic and social analysis of the Namoi, including the relative performance of each of its component LGAs. Together, local perspectives and the objective analysis yielded the handful of the most influential factors outlined in this report - the Namoi Future Factors.

This section of the report details the specifics of each of the Future Factors that the RAI has identified for the Namoi region for the next 15 years. It also describes the potential economic impact that each of these Future Factors could have on the region, if fully realised. Each Future Factor is described separately from one another, though there are greater complementarities between some Future Factors than others. The Future Factors outlined in this report are grouped together in the following way:

National and global commodity cycles, and maximising innovation in agricultural production;

Commodity cycles, including the weather and international markets, impact the agricultural and resources industries in the region are an external Future Factor. This Future Factor will have both positive and negative interactions with every other Future Factor and is beyond the control of the region. It must be understood and engaged with actively but it can't be controlled.

Maximising innovation in agricultural production is the way in which the region can respond to and shape the influence of external commodity cycles on the local economy.

Securing investment on the right terms, and engaging the Namoi with major overseas markets.

Investment on the right terms and engaging the Namoi with major overseas markets have the strongest, direct complementary interaction between any two Future Factors listed in this report.

By becoming increasingly visible to international investors, and increasingly skilled in cultivating market relationships, these two Future Factors can have much higher upsides than estimated in this report.

Urbanisation, and leveraging regional/brand marketing to attract people to live and work in the Namoi;

Urbanisation is a global phenomenon that will continue to shape the Namoi region.

However, if the Namoi can proactively attract people to live and work in the region, the negative effects of urbanisation can be mitigated to a degree.



FUTURE FACTORS – DISTRIBUTION ACROSS THE NAMOI

The following matrix highlights the Future Factors by their relative important for each LGA within the Namoi JOC, and the size of the opportunity which these most impactful Future Factors represent for each community ('baseline' refers to 2030 economic output in gross value added terms, without Future Factors being realised):

	Gunnedah (baseline = \$200m)	Gwydir (baseline = \$71m)	Liverpool Plains (baseline = \$120m)	Moree Plains (baseline = \$100m)	Narrabri (baseline = \$280m)	Tamworth (baseline = \$1.2b)	Walcha (baseline = \$53m)
Nat. & global cycles in comm. mkts.	Up to \$45 million	Up to \$41 million	Up to \$42 million	Up to \$215 million	Up to \$109 million	Up to \$77 million	Up to \$24 million
Max. innov. in ag. production	Up to \$13 million	Up to \$16 million	Up to \$6 million	Up to \$41 million	Up to \$21 million	Up to \$5 million	Up to \$1 million
Seeking intrnl. investment, on the right terms	Up to \$15 million	Up to \$15 million	Up to \$10 million	Up to \$44 million	Up to \$30 million	Up to \$14 million	Up to \$15 million
Engaging the Namoi in major o/s mkts.	Up to \$13 million	Up to \$4 million	Up to \$13 million	Up to \$9 million	Up to \$13 million	Up to \$24 million	Up to \$4 million
Urbanisation	Variable	Variable	Variable	Variable	Variable	Variable	Variable
Leveraging regional/brand marketing	Up to \$11 million	Up to \$4 million	Up to \$2 million	Up to \$6 million	Up to \$19 million	Up to \$19 million	Up to \$4 million

Green = Future Factor with greatest relative impact in this LGA

Gold = Future Factor with medium relative impact in this LGA

Orange = Future Factor with lower relative impact in this LGA



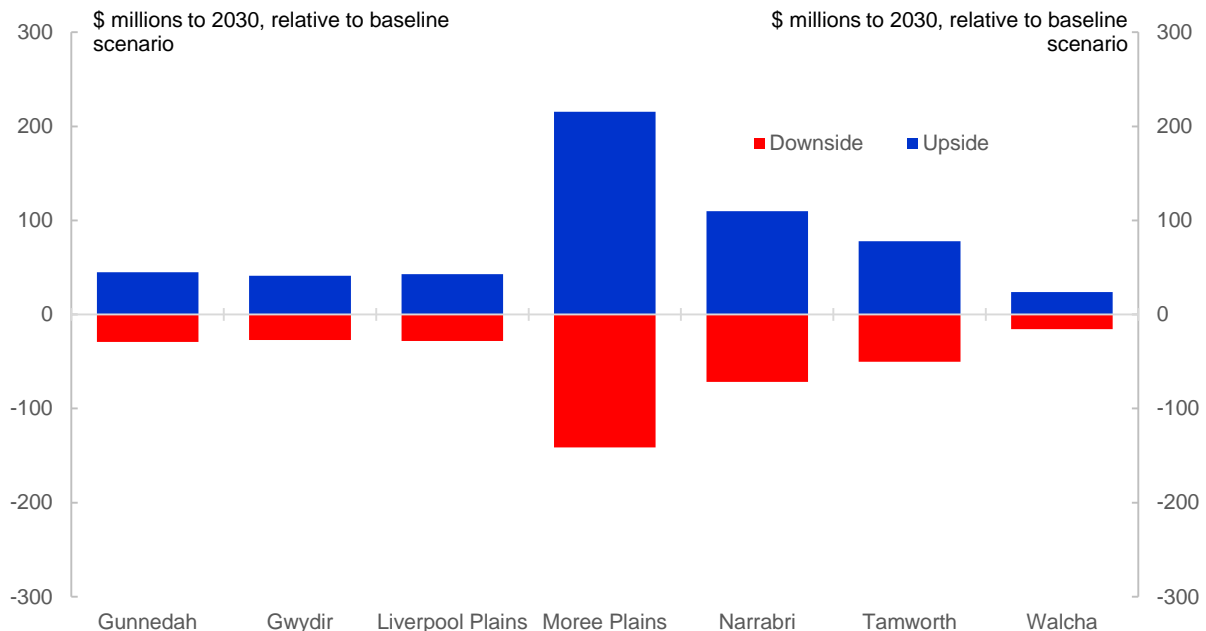
FUTURE FACTOR – NATIONAL AND GLOBAL CYCLES IN COMMODITY MARKETS

The future of the Namoi region over the next few decades is going to be heavily dependent on national and global cycles in the prices of agricultural, mineral and energy commodities, climate variability and international economic developments. This external factor needs to be managed by leaders, businesses and the community.

The scenarios presented in this report are taken directly from the RAI's *Regional Economic Projections Framework*, for each LGA in the Namoi region under a range of different macroeconomic scenarios (Chart 4). The downside scenario represents losses in economic output compared to the baseline scenario in the *Regional Economic Projections Framework*, if conditions in commodity markets are unfavourable. The upside scenario is the reverse. Positive effects for the region could be as much as \$560 million, while downsides could amount to \$360 million by 2030.

Specific prices of commodities will have an important influence on the future of the region. However, these projections should not be considered as 'point forecasts' of a set of parameters for commodity prices. Rather, they are designed to provide a perspective on the *range* of likely impacts on the region under some broad conditions. As such, their use in creating a strategic plan of action for the Namoi, and for individual LGAs should be used with the appropriate caution – decision makers should be prepared to experience a wide range of possible futures stemming from this factor, that are beyond their control.

Chart 4 – The projected impact of national and global commodity cycles on the Namoi region



Ensuring the other Future Factors in this report are fully realised is the best way to respond to this volatility that cannot be controlled. Monitoring this Future Factor, and ensuring the region responds flexibly to change will also be important.



FUTURE FACTOR – MAXIMISING INNOVATION IN AGRICULTURAL PRODUCTION

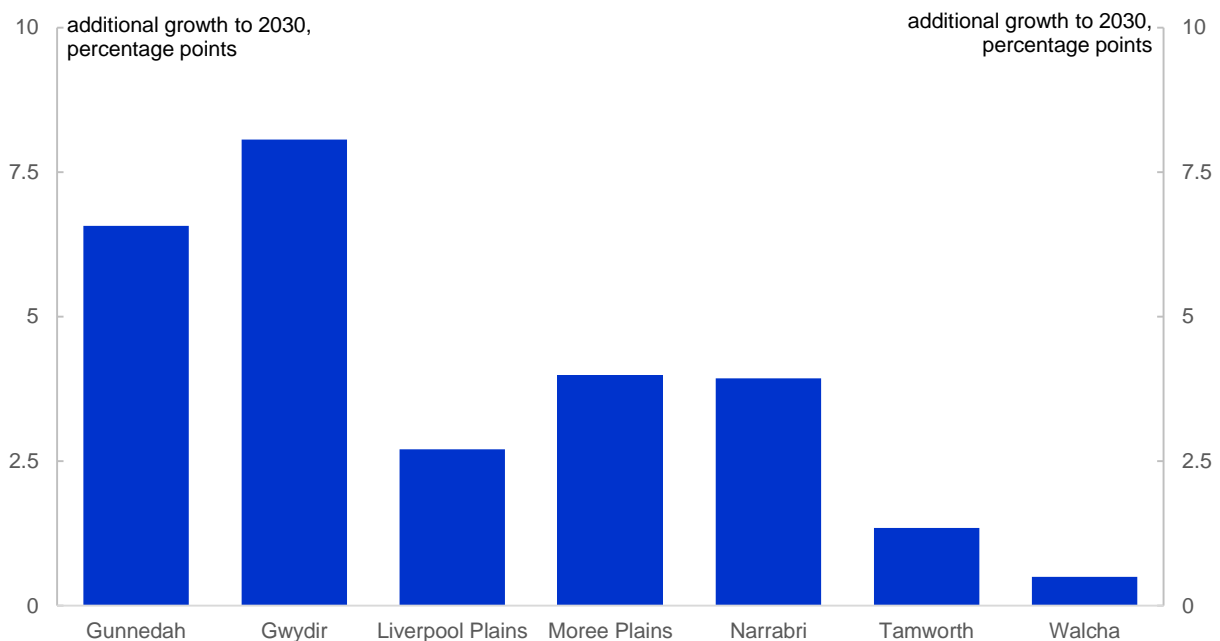
The agriculture industry has always been central to the economy of the Namoi region. The productivity of this important sector of the Namoi’s economy remains crucial to the region’s future. Australia-wide, agricultural output per worker has been rising. Part of this has been a result of falling employment in this industry, but measured productivity in agricultural production has also improved.

Productivity gains often accrue as a result of intensive pressure and competition for resources. This is true in the Namoi. Factors like reduced water availability, climatic factors and most importantly, direct competition for resources from the mining industry have actually helped improve agricultural productivity.

The estimates in Chart 5 represent the cumulative effects out to 2030 of plausibly maximising agricultural productivity, under each of the scenarios in the RAI’s *Regional Economic Projections Framework*. Based on this methodology, the RAI derived the following estimates of increased economic growth in each of the LGAs in the Namoi region. Variations occur as a result of differences in the size of agricultural output in each LGA, as well as variability in productivity. The collective benefits for the Namoi as a whole, for this Future Factor, could be as much as \$100 million by 2030.

In practice, it is entirely plausible that this Future Factor could generate new industries and opportunities in the region. Necessarily, it would likely increase the rate of the adoption of technology in the sector as well. While this may have some negative consequences for employment in the industry, a proactive approach to this Future Factor would allow the region to be ahead of this inevitable change.

Chart 5 – Impact of maximising agricultural innovation in the Namoi, by LGA





A certain proportion of the potential gains from this Future Factor are likely to be realised without any intervention at all by local leaders – as productivity growth is usually an organic process, accelerated by competition, or some other form of stress on producers.

However, there is a role for local leaders to play in maximising the potential benefits of this Future Factor. Local leaders can facilitate improved collaborations between producers, R&D providers and agricultural services providers to increase their collective productivity.

While it is undoubtedly the remit of the region's R&D providers to improve agricultural productivity – their remit is not confined to the Namoi. Moreover, it is also important to acknowledge that R&D is not the only source of productivity improvement – a substantial portion of productivity improvement in any industry can often be traced back to collaboration and sharing of basic ideas. The reason for typically higher levels of productivity observed in densely populated economic regions is primarily the result of 'network-effects', and this work efforts would help to increase these effects in the Namoi.

In the Namoi, local leaders can play a role in encouraging these collaborations that might not otherwise occur, due to a lack of density and interaction between stakeholders in this space.



FUTURE FACTOR – SECURING INTERNATIONAL INVESTMENT ON THE RIGHT TERMS

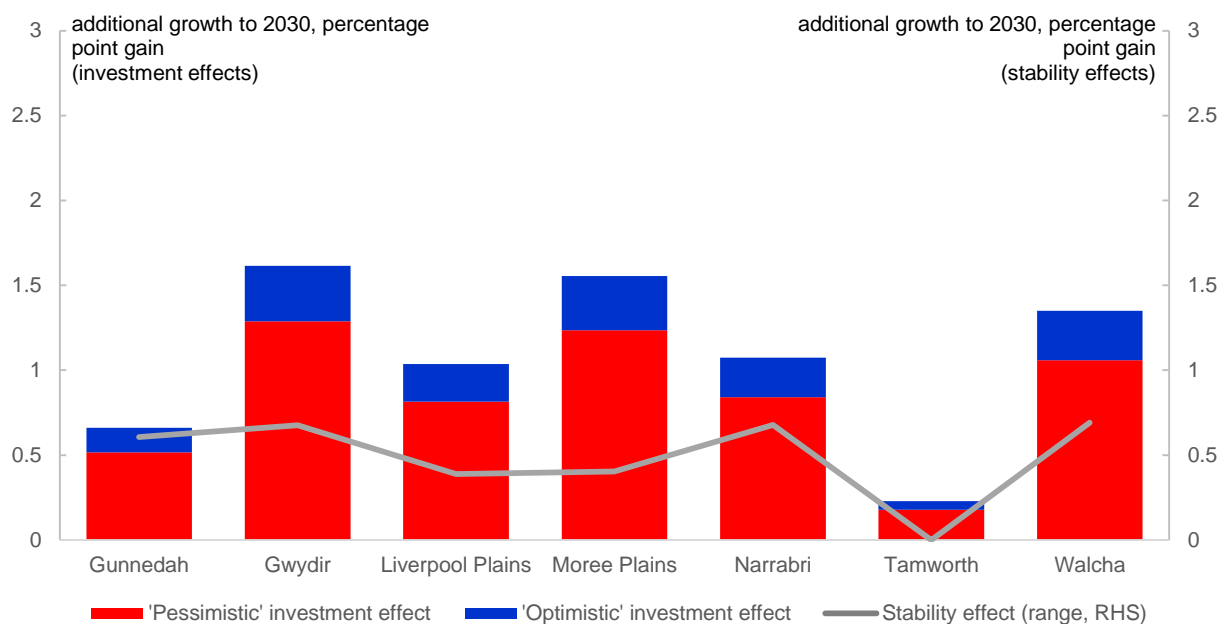
Investment flows are fundamentally important to the viability of an economy of any size – from the national economy, to the smallest economic unit. As vital as investment is for economic growth in general, a wide literature shows that foreign investment in particular is associated with high flow-on benefits to the communities in which this investment occurs.

In analysing the possible effects on the Namoi region, the RAI considered the impacts of ‘direct’ foreign investment on the region. The Namoi is a particularly attractive destination for foreign direct investment, given the prevalence of primary producers in agriculture and mining in the area, which have a strong track record of attracting this form of foreign investment.

To secure investment on the right terms it is important to ensure that benefits accrue to the region, as well as to the investor. In this case, there are first- and second-order benefits that the region stands to gain. Productivity gains from receiving foreign investment are the initial effect, and the potentially stabilising effect on the local economy that foreign ownership could have on the labour market is the second.

The first-order benefits to securing foreign investment in a portion of local industries are quite small in comparison to the potential second-order benefits of the stability that this kind of investment might bring to the local labour market. Collectively, the region could gain as much as \$85 million from securing investment on the right terms. Chart 6 describes the distribution of the benefits of this Future Factor across the LGAs of the Namoi.

Chart 6 – The projected impact of seeking investment on the right terms in the Namoi region



Note: Tamworth is at the top of the stability/growth relationship, and can't gain additional benefit.



In order to fully realise the potential of this Future Factor, it is important that local businesses are encouraged to learn from, and adopt new ideas and practices that flow from foreign investment in the region. But more importantly, local leaders should encourage changes in the labour market, such that becomes more flexible and more stable.

For example, by attracting investment into the region and securing commitments to provide education and training, and to change business practices to take advantage of different ownership structures, the labour market in the Namoi could become stabler – by increasing the skill and hence ‘transferability’ of labour – securing prosperity for the region as a whole.

Local leaders could encourage networking between local producers to specifically determine how to maximise the benefits flowing from foreign investors needs for their own businesses. This could allow the labour market *as a whole* to become more agile, having the effect of smoothing variations that are associated with lower economic growth outcomes. This also represents an opportunity for Namoi JOC to work proactively with other levels of government, and approach them with an agenda for change determined from within the region designed to benefit all parties.



FUTURE FACTOR – ENGAGING THE NAMOI IN MAJOR OVERSEAS MARKETS

Of the six Future Factors identified in this report, the effect of engaging the Namoi with major overseas markets is the most difficult to quantify – but the upsides to achieving it are considerable. The estimates for this Future Factor in this report should be considered as the *minimum* upside for the region.

The changing nature of the global economy and Australia's place in it means that the opportunities of the future lie in Asia. Australia's experience in doing business in this part of the world falls short of what our geographic proximity to this growing market would suggest.

There are existing State government programs to help businesses and regions tap in to these markets – whose business culture typically requires the formation of relationships over an extended period of time. Without this sort of assistance, fulfilling this requirement of successfully doing business in Asia can be an impossible hurdle for many regional businesses to overcome.

This Future Factor is about overcoming those hurdles and becoming deeply engaged in overseas markets, and could be worth upwards of \$80 million to the Namoi region.

The benefits of successfully realising this Future Factor are difficult to measure, but the RAI has identified the potential first-order benefits of taking the first steps toward fully realizing the potential of this Future Factor.

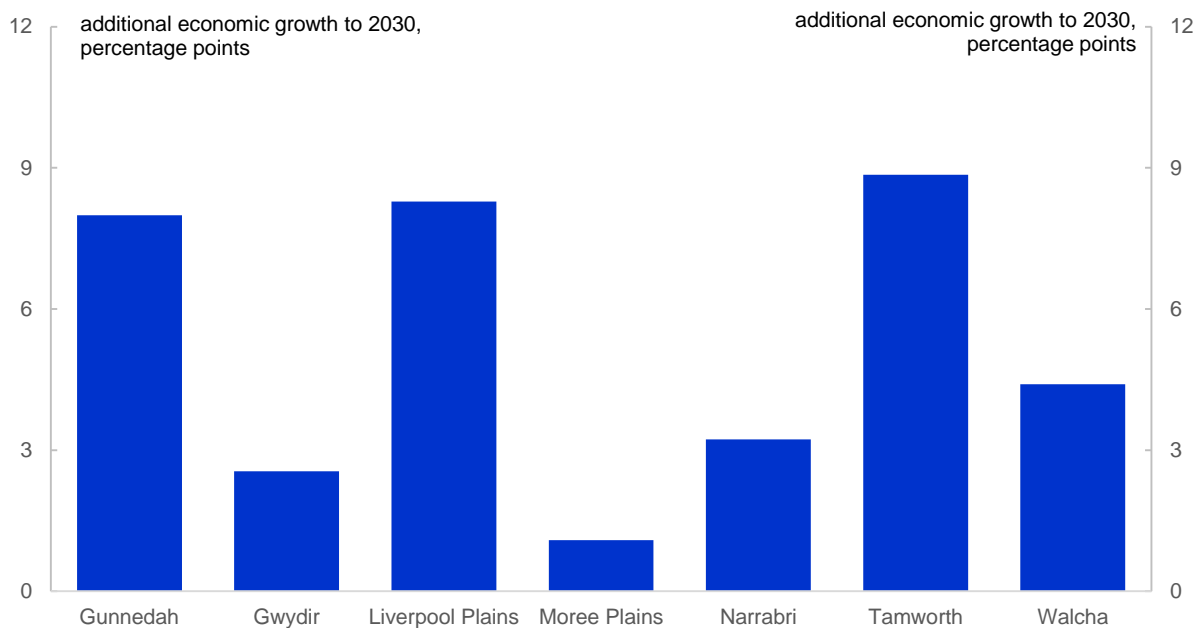
The nearby Hunter region in NSW secured foreign investment from China, in a new manufacturing plant to the value of around \$6 million, which itself generated 200 jobs in the area. The Hunter region secured this investment under the auspices of the NSW Government's *NSW Economic Development Framework*, in a program administered by the NSW Department of Trade & Investment, Regional and Infrastructure Services.

This program is designed specifically to put regions in touch with overseas investors and foster these relationships. To clarify – this Future Factor is not about investment – it is about using the available tools to build engagement in major overseas markets. In this example, investment is a vehicle for achieving this. The experience of securing one such relationship via investment. Circulating the learnings about engaging with overseas markets are circulated amongst the business community in a region should make the success of future efforts more likely.

Chart 7 describes the RAI's conservative evaluation of the possible benefits to each LGA of securing a similarly-sized investment split across the entire Namoi region.



Chart 7 – The projected impact of engaging the Namoi with major overseas markets



Even with these extremely conservative estimates, additional activity across the Namoi region had an expected value for individual LGAs ranging from around \$4 million to almost \$25 million. Again, these estimates should be considered as indicative of the *minimum* potential upside that this Future Factor could have for the region.

The best way for local leaders to fully realise the potential of this Future Factor is twofold. Firstly, securing investment on the right terms for the Namoi will improve the experience of regional businesses in general in directly operating in Asian markets. Success begets success, and the second stage in realising the potential of this Future Factor is to highlight these successful investor relationships. This will go a long way to securing the help of the State government to build and maintain *new* relationships in the biggest markets in this part of the world.

It is important to acknowledge that realising this Future Factor in practice will also require the Namoi JOC to manage attitudes and perceptions about the value of this effort. Realistically, increasing collaboration between LGAs in targeting and sharing information in regard to their overseas engagement efforts will have a large impact in reducing the need for individual JOC members to ‘cover the same ground’.



FUTURE FACTOR - URBANISATION

Trends toward urbanisation are not just a Future Factor for the Namoi region. All over the world larger communities are tending to remain stable or become ever-larger at the expense of population decline in smaller communities.

The *net* effect for economic growth in the entire region of variations in this Future Factor is expected to be small – the effects of urbanisation will be significant in the region, but they are already factored in to our baseline projections for the Namoi.

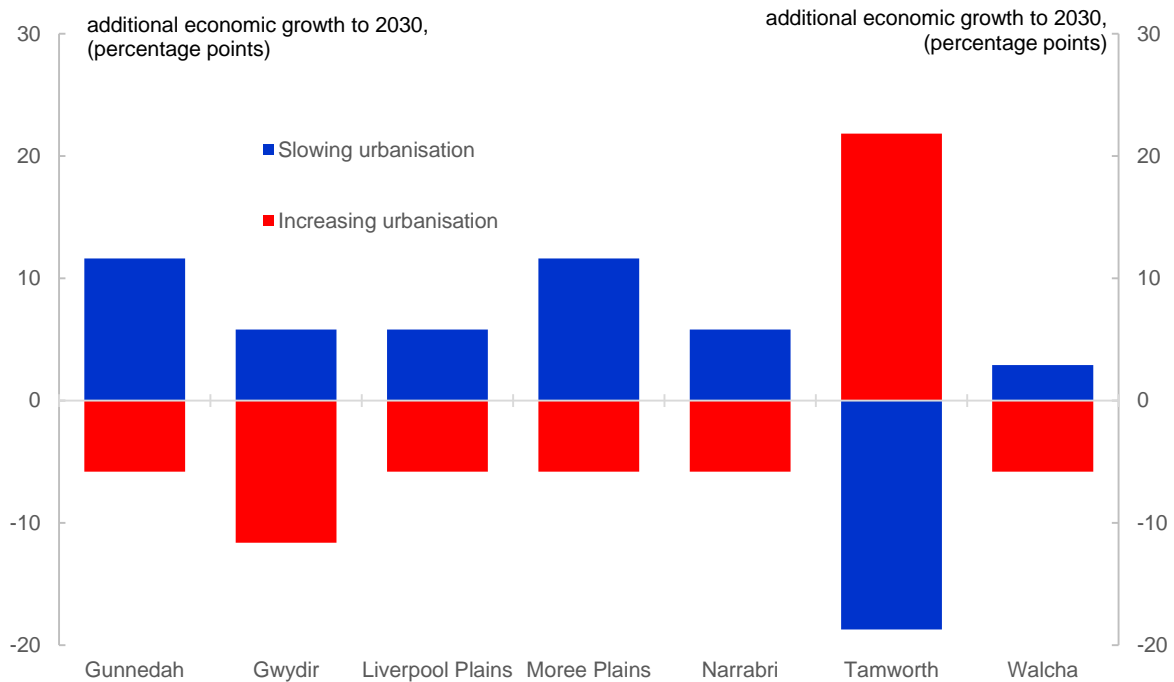
However, as a region with LGAs of varying size throughout, it is inevitable that this Future Factor will have negative consequences for some LGAs. Indeed, as a key external Future Factor for the region, urbanisation's effects can be far reaching – including altering internal market opportunities in some LGAs, and the existing industry base.

But it also presents new opportunities – for example, while this factor may increase the 'transience' of the workforce, who may not reside in a particular LGA for 7 days a week, this also represents an opportunity to expand the networks and connectivity of the LGA in question. Realising such benefits will require management from local leaders to create their desired future for the region, in the face of this trend.

The RAI has taken population growth trends over the past decade in the region, and examined plausible variations in urbanisation trends *within* the Namoi – it does not assume changes in urbanisation dynamics from outside the Namoi. The results in this report are based on trends in urbanisation slowing, or speeding up in the Namoi, relative to our baseline forecasts. Chart 8 describes the distribution of the benefits of this Future Factor across the LGAs of the Namoi.



Chart 8 – The projected impact of urbanisation, by LGA in the Namoi region



The best way to maximise the benefits of this Future Factor across the Namoi is to encourage migration to the region as a whole – that is, leveraging regional/brand marketing to encourage people to live and work in the Namoi. This may not significantly alter the pattern of urbanisation in the Namoi, but could help offset the downsides experienced in some LGAs.



FUTURE FACTOR – LEVERAGING REGIONAL/BRAND MARKETING TO ATTRACT PEOPLE TO LIVE AND WORK IN THE NAMOI

The Namoi is not a typical region from the perspective regional branding, and therefore has unique opportunities to leverage this point of difference.

The rationale for this comes from acknowledging that some level of attrition is inevitable (and indeed, related to urbanisation), and rather than trying to combat the ‘pull’ factors that drive much of this attrition, the region instead can better-calibrate its own ‘pull-factor’ to moderate the effect of this attrition by attracting new residents to the area. Naturally, this could also generate new opportunities and industries in the region.

Practically all regional communities in Australia have a tourism and brand marketing strategy. However, the value propositions within these strategies often fail to capture outsider perceptions – leading to a lack of differentiation in practice between many regions in the brand marketing space, and incomplete targeting of potential visitors³. This makes taking the next step – attracting visitors to stay, live and work in the region even more difficult.

However, the Namoi is unique amongst inland communities, in that it has a proven, recognised brand presence – meaning the value proposition of the Namoi is acknowledged from *outside* of the region, most notably through the association of Tamworth with music (though this doesn’t preclude other communities in the Namoi from benefitting from this Future Factor). The rarity of an inland destination meeting this criteria therefore distinguishes the Namoi from similarly competitive coastal regions.

The collective economic diversity of the region also means that there are a range of job opportunities available to potential migrants to the area. This is critical to the success of a region’s ability to leverage regional/brand marketing to generate jobs in a region – the availability of employment is the single most important determinant in generating migration to a region.

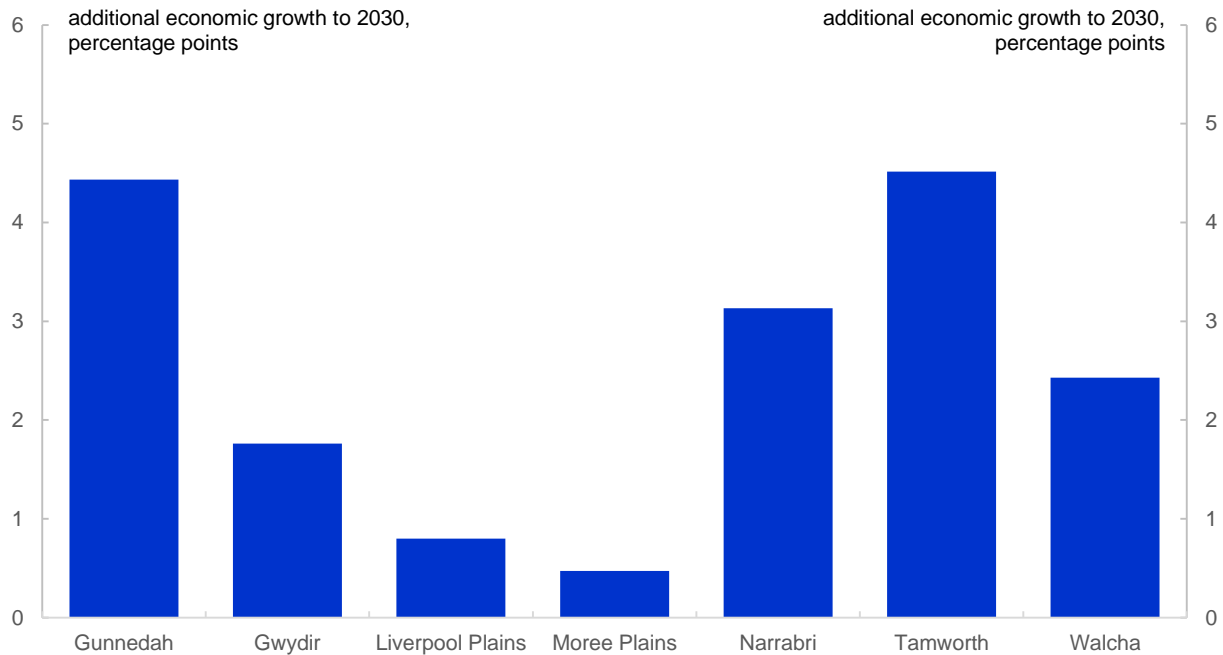
For the Namoi as a whole, the potential benefits are upwards of \$43 million by 2030. The distribution of this combined benefit across each LGA in the region varies as a result of economic size, diversity and population trends. The measured benefits of successfully realising this Future Factor are considered independently of retention strategies.

For example, Tamworth, as a *Regional City* under the RAI’s [Foundations of Regional Australia](#) analysis, is likely to generate around \$49,000 of extra economic growth per year, per person added to the population. This effect is slightly smaller in the remaining LGAs in the Namoi. Chart 9 outlines the range of growth potential that this represents for each LGA in the Namoi.

³ See Vargo and Lusch, 2004, *Evolving to a New Dominant Logic for Marketing*, for an example of this underlying logic.



Chart 9 – Impact of leveraging regional/brand marketing to generate jobs in the Namoi, by LGA



In order to realise the full potential of this Future Factor, the existing brand presence of the Namoi should be closely aligned with the employment opportunities in the region. In practice, this would involve researching the alignment between visitors to the region and the requirements of the local labour market, to determine the most effective value proposition to attract increased visitor numbers and the opportunity to convince people to live and work in the area.

Other factors in the Namoi's value proposition are likely to be relevant from the perspective of migrants to the region are the *diversity* of available jobs, social and wellbeing-related services, connectivity of the region to the rest of Australia and cost of living factors.



MOVING TO ACTION

Leadership by the Namoi JOC will be central to realising the full potential of the Future Factors described in this report. However, the strategy and role of the Namoi JOC will differ:

- Factors requiring a **light-touch approach** from the Namoi JOC;
Urbanisation and the impact of national and global commodity cycles are trends ‘external’ to the Namoi. The challenge for the region is how well it understands these trends and responds to their influence over time.

The Namoi JOC can play a leadership role by building an understanding of how these Future Factors impact the region and monitoring their impacts over time.

- Factors requiring the Namoi JOC to take **direct action in leading change**;
Namoi JOC is in the best position to develop a regional strategy to attract people to live in the Namoi.

Namoi JOC is also best placed to engage the region with major overseas markets by liaising with other levels of government and international markets themselves to attract investment interest.

- Factors requiring the Namoi JOC to **facilitate change** that will allow other stakeholders to realise their full potential.
Securing investment on the right terms, and maximising innovation in agricultural production requires action by local leaders in business and the community. The Namoi JOC can motivate and enable business and the community to find the right ways to embrace these opportunities.



Light touch strategies – increasing the rate at which the regions absorbs information about external change

The goal of the JOC's light touch strategies should be to improve the rate at which relevant information about population and commodity trends is absorbed by key stakeholders.

Developing a system to better inform the region can achieve this goal. Under this approach the JOC would monitor key market and population trends and regularly disseminate this information throughout the region. Collaboration with relevant NSW Departments on information gathering and sharing could make this a relatively low cost activity for the JOC.

The JOC would also facilitate collaboration between local Chambers of Commerce, producers in key industries and service providers in the region to compare perspectives about the effect that commodity cycles and population trends are having on the region. This information is generally fragmented across a region and provides an effective real time view of economic changes and local expectations about the future.

Formalising this process of information collection and dissemination could greatly improve the rate at which relevant information is absorbed by key stakeholders and result in a meaningful impact in terms of regional responsiveness to these external factors.

Direct action strategies – marketing to new residents and investors

The Namoi JOC will be best placed to take direct action in leading change in marketing the region to new residents and investors.

An approach to attracting new residents should be based upon:

- developing an objective understanding of who is moving to the region and why (this may require compilation of existing work or new work);
- an integrated tourism strategy that prioritises events and experiences that encourage potential residents to visit the region; and
- targeted promotion of the employment, housing and lifestyle options available in the region to the potential new resident market and to portions of the current population at greatest risk of leaving.

Attracting new investors requires the JOC to:

- develop investment prospectus(es) that provide targeted information relevant to the best investment options available in the region;
- examine option to make the Namoi an easy investment destination (e.g. through harmonising and simplifying development and other requirements);



- coordinate investor engagement activities across the region, amongst business groups and with other levels of government; and
- be proactive in identifying and engaging with potential investors.

Facilitating change – local innovation and foreign investment

It is not feasible for the JOC itself to do the work necessary to **maximise innovation in agricultural production** or to **secure investment on the right terms**.

However, the effort in the region across both of these issues is likely to benefit from JOC efforts to better coordinate and focus resources in each area. The challenge for the JOC is to strengthen the local culture of innovation and encourage engagement with investors by businesses within the region.

Defining the particular strategies that will work in each area requires the JOC to engage with key stakeholders in each area. R&D stakeholders, producers, suppliers to the industry and associated business (such as logistics providers) all have a role to play.

In fact, many of the gains that could be realised can occur simply through networking effects. Facilitating business innovators to engage with each other, potential investors and experts should be an important strategy.



CONCLUSION

The upside benefits that the Namoi region stands to gain by realising the Future Factors outlined in this report are considerable.

Some of the Future Factors identified here are quite familiar – the role of commodities, and the productivity of the agriculture industry in the Namoi was always going to be central to the future of the region.

Other Future Factors may be controversial – using foreign investment to the region's advantage is not something that is typically considered in regional development strategies.

But whether these Factors are familiar or not, whether they are ambitious or not, does not change their potential importance to the future of the region. As the leaders of the region, it is up to the JOC to seize the opportunities for new growth and responsiveness to change.

CONTACTS

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ABOUT THE REGIONAL AUSTRALIA INSTITUTE

Independent and informed by both research and ongoing dialogue with the community, the Regional Australia Institute (RAI) develops policy and advocates for change to build a stronger economy and better quality of life in regional Australia – for the benefit of all Australians.

To find out more about the RAI contact us at info@regionalaustralia.org.au or visit www.regionalaustralia.org.au



APPENDIX 1 – SURVEY OUTCOMES AND INITIAL ENGAGEMENT OVERVIEW

The RAI's information-gathering in the Namoi region commenced with the distribution of a survey to local leaders and other key stakeholders in the region, to determine local perspectives on possible Future Factors.

The survey revealed the following common factors, considered by participants to be central in driving change in the region:

- Rural sustainability;
- Government relations;
- Population pressures;
- Perceptions of the region;
- Tourism potential of the region;
- Commodity prices, and export demand;
- Infrastructure and logistical capacity;
- Education, workforce training and skills;
- Natural resources;
- Water availability and climate;
- Competition;
- Export demand;
- Foreign investment; and
- Locally-based value adding.

The first meeting between Namoi JOC and the RAI was convened to present the initial analysis conducted by the RAI, to seek Namoi JOCs input into this analysis and to use this analysis to come to a consensus on what will matter the most for the future of the Namoi region.



The meeting commenced with this analysis being presented to Namoi JOC. Namoi JOC participants added useful perspectives on the results of this analysis, as well as extending this input to include perceptions on social aspects of the Namoi's future – which are not readily captured by the analysis.

The importance of these factors was acknowledged, and throughout the meeting, their interrelationship with economic factors relevant to the future of the region was expanded upon. The social factors relevant to the future of the region can be summarised as follows:

- A lack of upskilling techniques, potentially contributing to social disenfranchisement;
- Existing lifestyle elements of the community and social infrastructure need to be built upon, to retain people in the region;
- The tension between looking after the existing population and their preferences, balanced against needs for the future;
- Adapting to a 'transient' workforce, who may not live, work or reside in the Namoi region 7 days per week; and
- Consideration of the 'lifecycle' needs within the community, and whether structures are in place to avoid preventable losses in any particular demographic.

The meeting proceeded with further discussion of the relevant factors for the future of the region. These factors were divided into two groups. Those 'external' to the region – beyond local leaders' control, and those 'internal' to the region – those factors within local leaders' control.

'External' factors relevant to the future of the Namoi region were:

- Commodity prices;
- Weather/climate change;
- Urbanisation trends;
- State/Federal government policy;
- Proximity to large cities/ports;
- International economic developments;
- Technological change;
- Perceptions and preferences (of investors, residents and potential residents);



- Competition (international and domestic); and
- Uncertainty.

The 'internal' factors relevant to the future of the Namoi discussed at the meeting were:

- Collaboration;
- Internal market opportunities;
- Increased understanding the operating environment;
- Relationship with other levels of government;
- International relationships;
- Investment on the right terms;
- Maximising productivity and innovation;
- New industries in the area;
- Attitudinal change;
- Attracting visitors to the region;
- The quality of the built environment; and
- Securing water resources.

The meeting concluded with participants identifying what they considered to be the most important 'internal' factor – the factor that would, with some action on their part, yield the greatest benefit for the future of the region. These factors are listed in order of collective significance:

- Increasing the understanding of the operating environment;
- Securing water resources;
- Managing the relationship with other levels of government (this factor tied for second place);
- Investment on the right terms;



- Maximising productivity and innovation; and
- Attitudinal change.

From the insights gained in this meeting, the RAI then proceeded to finalise the Future Factors presented in this report, based on information gained from local leaders' knowledge, as well as the insights from the RAI's data and analytical frameworks.



APPENDIX 2 – SCENARIO TECHNIQUES

This section of the report outlines the RAI's methods for modelling the impact that the Future Factors are likely to have on the Namoi over the next 15 years. The basis for many of these estimates is the economic data underlying the RAI's *Regional Economic Projections Framework*, which includes information on economic output and employment for every LGA in Australia, by industry. This data also includes a range of projections for these parameters, for each LGA under a range of scenarios for the national economy. The RAI gratefully acknowledges PricewaterhouseCoopers' partnership with the RAI in providing the data, which allowed the RAI to develop this framework.

Scenario methods – National and global commodity cycles

The effect that commodity cycles are likely to have on individual LGAs in the Namoi is taken directly from the projections underpinning the RAI's *Regional Economic Projections Framework*. Projections for the agriculture and mining industries are considered for three different scenarios that might play out at the national level – an optimistic, pessimistic and baseline scenario.

The value in this approach is that it gives an estimate of how each LGA in the region responds to changes beyond the local economy. The approach the RAI has used gives a much wider estimate of plausible futures for the region.

This is distinct from a series of specific, point-forecasts for commodity prices and their flow-on effect to the region. Point-forecasts have limited durability, and do not provide sufficient context for understanding the range of potential impacts on the region.

Scenario methods – Maximising innovation in agricultural production

The basis of the scenario modelling for this Future Factor is research undertaken by the Australian Bureau of Agricultural Research, Economics and Science (ABARES) on productivity trends in Australian agricultural production in general.

Step 1 – The RAI examined the variation in historical output per worker in agricultural production across all of the LGAs in the Namoi, and conservatively estimated 'maximised innovation' in agriculture in the region would in most cases achieve a modest 60 and 80 per cent of the annual historical gain in farm productivity observed by the ABARES research.

Step 2 – These productivity estimates were applied to current levels of agricultural output in each LGA in the Namoi region, holding employment projections from the RAI's *Regional Economic Projections Framework* constant for this sector, in each LGA in the Namoi. This approach yields an estimate of additional output in agricultural output that can be traced specifically to improvements in productivity, with a time lag of five years – under the assumption that action will take time to yield results.



Scenario methods – Securing investment on the right terms

Securing the productivity benefits of foreign investment in the region requires local businesses to learn from their foreign-owned counterparts, in terms of their approach to business – and adapt this knowledge to their own situation. Relevant literature on the topic suggests that foreign direct investment confers an additional 0.63 percentage point productivity gain on recipient firms.

Step 1 - In estimating the potential effect on the Namoi region, the RAI assumes that 20 per cent of output in the agriculture and mining industries is accounted for by increased foreign ownership – and that commensurate productivity gains follow. To be clear, the RAI assumes that a proportion of *existing* businesses in the area become foreign-owned. This is distinct from the sixth Future Factor for the Namoi region, which concerns *new* investment.

The variation between LGAs on this basis is the result of the differing sizes of these particular industries in each LGA in the Namoi, as well as how changes in macroeconomic conditions are expected to influence the output of these industries in each LGA. Step 1 accounts for the first-order benefits of securing investment on the right terms, in the Namoi.

Step 2 - The RAI evaluated the effect of the second-order benefits of potential labour market stabilisation by considering the effect that labour market stability has on economic growth, by the types of region outlined in the RAI's *Foundations of Regional Australia* paper.

Each of the LGAs are grouped relative to their peer-regions of the type to which they belong under the *Foundations* framework. This data is divided into five 'groups', and the stabilising effect of investment on the right terms is considered to have a one in three chance of moving each LGA into the next 'group' of the growth/stability relationship for its regional type.

The additional effect on growth that this change in stability is on average likely to have is then applied to each of the LGAs in the Namoi. As such, differences between LGAs reflect the typology to which it belongs under the *Foundations* framework, as well as the characteristics of its labour market, with a time lag of five years – under the assumption that action will take time to yield results. Note that Tamworth does not receive an additional stability effect – it is already in the top grouping for the stability/growth relationship as a *Regional City*.

Scenario methods – Engaging the Namoi in major overseas markets

The indirect benefits of this Future Factor are extremely difficult to quantify – however, successfully securing foreign interest in a new venture in the region provides a baseline estimate for the kind of opportunities for the Namoi. As such, these estimates should be considered the minimum upside potential of this Future Factor.

While the indirect benefits of successfully realising this Future Factor are difficult to measure, the RAI has identified the potential first-order benefits of taking the first steps toward fully realising the potential of this Future Factor.



Our investigation into this Future Factor for the Namoi revealed that the nearby Hunter region in NSW secured foreign investment from China, in a new manufacturing plant to the value of around \$6 million, which itself generated 200 jobs in the area.

Step 1 – The RAI conservatively evaluated the potential first-order benefits of a similarly-sized investment, which was split across the region, with any individual LGA only having a modest chance of successfully attracting its possible share of this investment.

The chance of success is assumed to never exceeding 50 per cent, and its chance is dependent on the size of the LGA in question.

Step 2 – Multiplying these probabilities by the distribution of this \$6 million investment across the region, a multiplier for the jobs effect was applied to these expected values. This multiplier was taken from the investment/jobs relationship implied in the Hunter region case study. A time lag is applied, under the assumption that success in this Future Factor requires an investment of time, before it yields results.

Step 3 – The ongoing effect of this increase in employment was considered to attract as much additional economic activity to the LGA as the RAIs previously mentioned analysis of our *Regional Economic Projections Tool*. That is, on average, an additional person joining the population of a *Heartland Region* (the majority of the Namoi's LGAs are *Heartland Regions*) adds a further \$46,000 of economic growth to the local economy. Tamworth, as a *Regional City*, could expect to see each additional person in the population add around \$49,000 of economic growth to the local economy.

Scenario methods – Urbanisation

Step 1 – The RAI has taken urbanisation trends in the Namoi over the past decade and applied plausible variations in this trend to the future for each LGA in the region. The variations are around a baseline scenario for population growth – and hence urbanisation – in the Namoi. There are two scenarios considered – a 'slow' and a 'fast' scenario, which relate to the pace of urbanisation. In the slow scenario, urbanisation trends proceed at a far slower rate, or halt altogether in some LGAs. This reduces the rate at which Tamworth grows by absorbing these migrants. The fast case represents a slight increase in the rate of urbanisation.

Step 2 – Using the RAIs *Regional Economic Projections Tool* to analyse the typologies outlined in the *Foundations of Regional Australia* paper reveals that on average, an additional person joining the population of a *Heartland Region* (the majority of the Namoi's LGAs are *Heartland Regions*) adds a further \$46,000 of economic growth to the local economy. Tamworth, as a *Regional City*, could expect to see each additional person in the population add around \$49,000 of economic growth to the local economy.

Step 3 – Applying these figures to the population trends projected from the data reveals the disparate effect that urbanisation is likely to have across the Namoi region.



Scenario methods – Leveraging regional/brand marketing to attract people to live and work in the Namoi

In evaluating the effect that leveraging regional/brand marketing to generate jobs in the region could have for the future of the Namoi, the RAI examined population growth in each of the LGAs in the region and compared them to regions of their 'type', as defined in the RAI's *Foundations of Regional Australia* paper.

Step 1 - The range of population growth figures by these typologies was split into five groups, and the RAI estimated that successfully leveraging regional/brand marketing to generate jobs in the Namoi would take the form of a one-in-three chance of this Future Factor causing an LGA in the Namoi jump into the next-highest 'group' of the population growth/economic growth relationship. The exception to this being when an LGA is *already* within the top group of population growth, for its type.

Step 2 - Using the RAI's *Regional Economic Projections Framework* to analyse the typologies outlined in the *Foundations of Regional Australia* paper reveals that on average, an additional person joining the population of a *Heartland Region* (the majority of the Namoi's LGAs are *Heartland Regions*) adds a further \$46,000 of economic growth to the local economy. Tamworth, as a *Regional City*, could expect to see each additional person in the population add around \$49,000 of economic growth to the local economy.

Step 3 - The RAI applied these estimates in Step 2 to each LGAs position in the new 'group' that they had been assigned to in Step 1, with a time lag of five years – under the assumption that action will take time to yield results.