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Rural and regional development in NSW in the aftermath of COVID-19

Bill Pritchard, BA(Hons), PhD
Professor of Geography, University of Sydney

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Key points

- The COVID-19 pandemic of 2020–22 triggered significant short-term shifts in the movement of people in rural and regional NSW. Outward flows of rural and regional residents to the cities were stemmed, while inward flows of internal migrants to coastal and high-amenity regions were given added impetus by work from home opportunities.
- As the demographic shifts associated with the COVID-19 pandemic reverberated through housing and labour markets in rural and regional NSW, diverse social and economic impacts were generated. Severe housing and labour shortages were experienced in some coastal and high-amenity rural locations.
- Consideration of how to respond to recent shifts in population flows to rural and regional NSW is best undertaken through frames of reference that understand the intersections between population change and the drivers of regional economic development.
- This report identifies 3 key drivers of regional economic development: (1) rapid technological change; (2) shifts in the ways that food and agribusiness sectors are contributing to rural and regional development; and (3) elevated consideration of sustainability, resilience and climate adaptation within policy frameworks.
- Holistic consideration of these issues requires policy coherence across areas of government to ensure objectives in one sphere (for example, protecting land for agriculture) are not undermined by objectives in another sphere (for example, providing more land for housing in response to strategies to improve resilience by relocating populations from flood and fire-prone lands).

Contents

1. Introduction

Rural and regional NSW is bouncing back from the disruptions of the COVID-19 pandemic and the devastations of bushfires and floods associated with intense recent El Niño/La Niña cycles. Economic and social recovery varies considerably in different parts of the state, and between different communities within individual regions. Cost of living pressures, labour shortages, housing prices and energy transitions are adding new dimensions to the policy challenges that face rural and regional NSW. The need to navigate these issues will frame the capacity of rural and regional NSW to meet the growth aspirations of an additional 180,000 residents and 64,000 jobs by 2038 that were established in the NSW Government's 20-year plan for regional NSW, published in 2021.[1]

The aim of this report is to review the shifting demography of rural and regional NSW and explore what it means for future policy debates. It is prompted by wide public discussion on domestic migration to rural and regional NSW in the context of extensive acceptance of geographically and temporally flexible employment arrangements involving work from home. The impacts of these developments, however, do not occur in a vacuum. They are situated within longer term processes that have restructured, and continue to have effect on demographic, economic and socio-cultural trends in rural and regional NSW.

The report addresses these processes in 2 major sections. First, the demographic backdrop to rural and regional NSW is established. The report's timeframe is the 2 decades leading up to the 2019–20 bushfires and 2020–22 pandemic, extrapolated forward to 2030, based on population forecasts from the NSW Department of Planning and Environment (DPE). Second, the implications of those trends are applied to identify 3 policy concerns central to regional development agendas: (1) an elevated need to respond to rapid economic and technological changes; (2) enhanced appreciation of the shifting ways in which food and agribusiness sectors are contributing to rural and regional development, and (3) mainstreaming of sustainability, resilience and climate adaptation within policy frameworks.

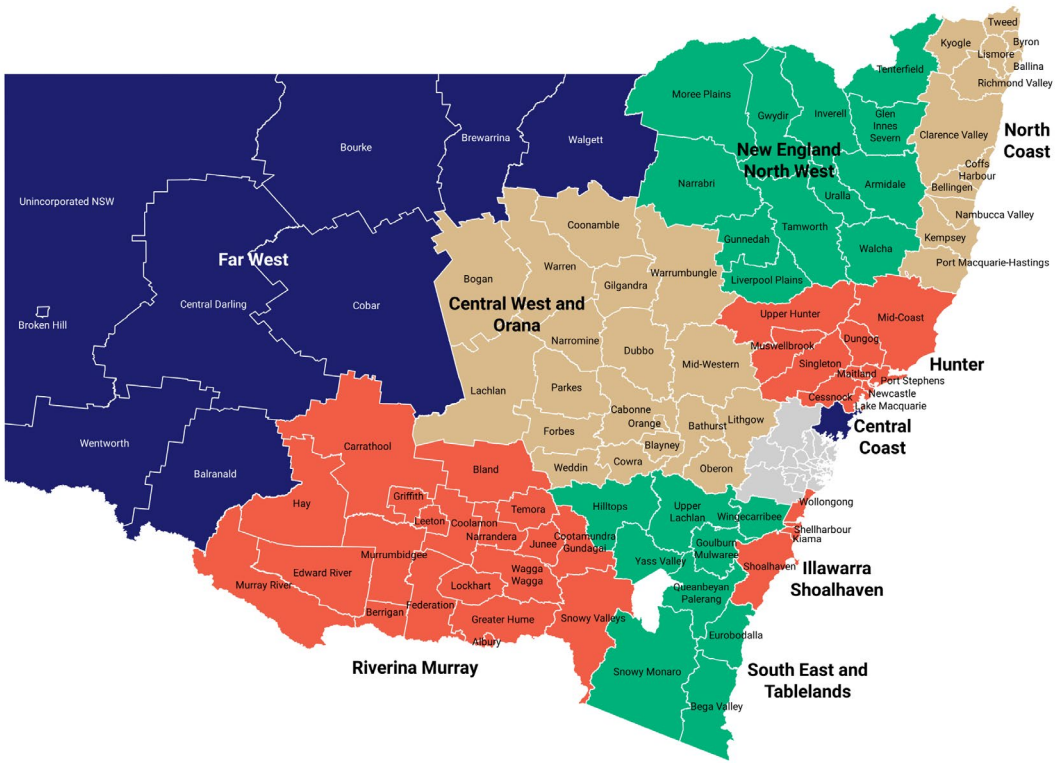
These 3 policy concerns are united by the importance of whole of government policy coherence. The increasingly complex interconnection of processes that is driving change in rural and regional NSW reinforces the importance of taking a holistic approach to strategic thinking and planning. Policy decisions will increasingly confront difficult trade-offs to balance settlement needs, environmental assets and amenity, agricultural resources, and climate/disaster resilience. Fixation on only one dimension of the rural and regional policy challenge at a time may encourage knee-jerk responses that fail to recognise the potential

[1] NSW Government (2021) A 20-year economic vision for regional NSW.

for 'friendly-fire' negative outcomes, for example when policies to respond to one issue have inadvertent negative consequences for another.[2]

Before delving into these issues, a caveat. Rural and regional NSW is diverse. Drivers of change in Byron are far different from those in Barellan. Hence, this report shies away from geographically generalist observations. As far as possible, data is interpreted at regional and local scales defined in terms of the 10 regions used by the NSW Government for planning purposes (Figure 1). 'Rural and regional NSW' is defined in this paper as excluding the 35 local government areas (LGAs) within the Greater Sydney region, and the largely built-up LGAs of Central Coast, Newcastle and Lake Macquarie north of Sydney, and Kiama, Wollongong and Shellharbour on the South Coast.

Figure 1. NSW Government regional boundaries and local government areas



Source: Parliamentary Research Service adapted from Office of Sport.

[2] An example being if prime agricultural land is rezoned for residential purposes to assist in relocating populations from floodplains. This addresses a problem of safeguarding populations from flood, but places pressure on the agricultural sector.

2. Recent demographic shifts and future challenges

2.1 Overview

The population of rural and regional NSW has grown over the past 2 decades, although with major geographical variations (Table 1). Regions with coastal portions (Hunter, Illawarra Shoalhaven, North Coast, and South East and Tablelands) have experienced consistent, relatively strong population growth, in contrast to slower growth in inland regions, and declining population in the Far West. The discussion that follows looks forward from the pandemic, identifying key population debates of key relevance to the state.

Table 1. Population by NSW region ('000s)

Region	2001	2006	2011	2016	2021	2022	20 year change (2001–21)
Coastal							
Hunter*	244	256	275	291	305	308	125%
Illawarra Shoalhaven*	69	72	76	81	85	86	124%
North Coast	452	474	498	517	536	546	119%
South East and Tablelands	281	295	312	325	328	330	117%
Inland							
Central West and Orana	255	253	264	272	279	280	109%
Riverina Murray	231	232	237	244	251	258	109%
New England North West	200	194	200	202	202	202	101%
Far West	38	35	34	32	28	29	78%

Source:[3] Notes: *excluding Newcastle and Lake Macquarie in the Hunter, and Kiama, Wollongong and Shellharbour in Illawarra Shoalhaven.

2.2 Domestic migration before and after the pandemic

In the years leading up to the COVID-19 pandemic, net domestic migration was the largest contributor to population growth in the 4 regions with coastal portions identified in Table 1. In the inland regions (Central West and Orana, Far West, New England North West, and Riverina Murray), there was a net exodus of people from domestic migration. This history is

[3] Data here from DPE 2022 CPA Population and Dwelling projections ('CSA2 Projections' tab), accessed 21 April 2023. Note: Hunter excludes Newcastle and Lake Macquarie LGAs; Illawarra Shoalhaven excludes Wollongong, Kiama and Shellharbour LGAs.

shown in Appendix A, which then extrapolates forecast components of population change to 2030, using the median common population assumption (CSA) projections of the NSW Department of Planning and Environment (DPE).

The pandemic was disruptive to the pre-COVID domestic migration trends in 2 ways. First, it curtailed migration *from* the regions. This has been an underemphasised aspect of this issue. However, research using internal migration data from the Australian Bureau of Statistics[4] (ABS) concluded that 'people who usually leave regional areas for major cities were staying during pandemic times'[5], and this was a major factor that mitigated population loss in many rural and regional areas over the pandemic period. Whether this trend remains post-pandemic is unclear. The pull of Sydney (and other capitals) for school leavers from rural and regional NSW is likely to remain strong, largely because of metropolitan universities and other post-school opportunities, but higher city housing costs, job opportunities in the regions and the growth of regional universities may mitigate these forces.

The second, much more widely discussed disruption, was an impetus for accelerated migration to rural and regional areas as Sydneysiders and others took advantage of work from home flexibility or brought forward retirement-linked rural relocation plans. It needs noting that net domestic migration from Sydney to regional NSW was occurring before the pandemic. Sydney has been losing people through net domestic migration since the ABS began recording these data in 2001, with regional NSW being the destination of approximately 45% of these outmigrants, a proportion that has stayed remarkably steady over 2 decades.[6]

At a national scale, the acceleration of net domestic migration from capital cities during the pandemic was captured by the Commonwealth Bank/Regional Australia Institute *Regional Movers Index*, which tracked address changes of 1.6 million Commonwealth Bank customers. The index identified a sharp upwards shift in March 2020 in the number of people moving from capital cities to regional areas, continuing until the end of 2021, but then subsiding in 2022 (though at a rate that was still higher than in the pre-pandemic period).[7]

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[4] Borsellino, R., Bernard, A., Charles-Edwards, E., and Corcoran J. (2022). A Regional Renaissance? The Shifting Geography of Internal Migration Under COVID-19. *Australian Geographer*. 53 (4): 405-23, Doi: 10.1080/00049182.2022.2074622

[5] Buckle, C. & Osbaldiston, N. (2022) Editorial introduction: counter-urbanisation in contemporary Australia: a review of current issues and events, *Australian Geographer*, 53:4, 347-362, Doi:10.1080/00049182.2022.2137902, p.355.

[6] Baum, S., Baker, E., Davies, A., Stone, J., Taylor, E. (2022) *Pandemic Cities: The COVID-19 Crisis and Australian Urban Regions*, Springer. p.16.

[7] Commonwealth Bank and Regional Australia Institute (2022) Regional Movers Index, December 2022 Quarterly Report, accessed 11 May 2023. Note the national rate captured by the *Regional Movers Index* is somewhat

This shift is also evidenced in the graphs in Appendix A. In most regions, net migration flows 'wobbled' in 2019–20 before increasing in 2021–22. In all regions, DPE forecasts an upwards shift in the contribution of net domestic migration to population change in the period to 2030. In coastal regions, this means a further net inflow of domestic migrants. In Riverina Murray and Central West and Orana, the DPE forecasts suggest a flip from net exodus to net inflow. In New England North West and Far West, the DPE forecasts suggest a slight stemming of the net incidence of domestic migration outflow.

The phenomenon of 'rural revival' through accelerated domestic migration to rural and regional areas has provided prominent grist for the mill for media commentary and regional advocacy, tapping into a zeitgeist of future digital nomadism[8] and ascendent lifestyle migration, in which people move to rural and regional areas 'for a purpose of recapturing something lost or discovering something new in their way of living'.[9] In November 2021, the CEO of the Regional Australia Institute, Liz Ritchie, commented that 'more Australians than ever have been voting with their feet on the type of future they want – more time, more space, more connection to community and to nature.'[10]

This process is real but easily overstated. Amidst hiatuses in the mobility lockdowns that punctuated 2020–22, there was certainly a domestic migration rush to some parts of rural and regional Australia, as suggested by the *Regional Movers Index* cited above. However, the highly selective nature of these flows concentrated population growth to only a few places, and in general, these were the same places that were already experiencing growth. Table 2 shows the places in rural and regional NSW which experienced strong and accelerating migration immediately before (2017–20) and during and immediately after (2021–24) the pandemic, using DPE's data and forecasts. The places in this table are those with net domestic migration forecast to be over 500 persons in the 2021–24 period, and where this is an increase from 2017–20. These places are all high-amenity coastal or rural landscape locations or expanding parts of large regional cities (including Bathurst, Orange, Maitland, Wagga Wagga, and Goulburn), evocatively labelled 'sea-change, e-change, or flee-change' havens.[11] Placing these trends in a longer-term perspective, contemporary trends have accelerated but have not restructured pre-existing domestic migration patterns.

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misleading for our concerns here, because it includes migration to large non-capital city urban areas such as the Gold Coast. Nevertheless, it does provide an overarching illustration of the phenomenon.

[8] Holleran, M. (2022) Pandemics and geoarbitrage: digital nomadism before and after COVID-19, *City*, 26:5-6, 831-847, Doi:10.1080/13604813.2022.2124713.

[9] Buckle, C. & Osbaldiston, N. (2022) Editorial introduction: counter-urbanisation in contemporary Australia: a review of current issues and events, *Australian Geographer*, 53:4, 347-362, Doi:10.1080/00049182.2022.2137902, p.355.

[10] Regional Australia Institute (2021) Forget the Great Resignation–the Great Regionalisation Is the Shakeup Australia Needs! Regional Australia Institute, 12 November 2021, accessed 11 May 2022.

[11] Guaralda, M., Hear, G., Foth, M., Yigitcanlar, T., Mayere, S., and Law. L., 2020. Towards Australian Regional Turnaround: Insights Into Sustainably Accommodating Post-Pandemic Urban Growth in Regional Towns and Cities. *Sustainability* 12 (10492). https://doi.org/10.3390/su122410492

Table 2. Areas with strong and accelerating net domestic migration, 2017–2020 compared to 2021–24

Region	Statistical Area Level 2 (SA2)[12]	Net domestic migration 2017–20 (3-year total, historical)	Net domestic migration 2021–24 (3-year total, historical and forecast)
Central West and Orana	Bathurst-East	801	837
Central West and Orana	Orange-North	678	901
Hunter	Branxton–Greta-Pokolbin	598	796
Hunter	Cessnock	1,124	1,468
Hunter	Cessnock Region	531	710
Hunter	Dungog	436	788
Hunter	Forster	423	737
Hunter	Maitland	1,014	1,267
Hunter	Maitland – North	486	907
Hunter	Maitland – West	1,142	1,690
Hunter	Nelson Bay Peninsula	1,017	1,445
Hunter	Taree Region	542	735
Hunter	Tea Gardens-Hawks Nest	530	538
Hunter	Tuncurry	498	589
Illawarra Shoalhaven	Berry-Kangaroo Valley	401	542
Illawarra Shoalhaven	Nowra	933	1,447
Illawarra Shoalhaven	St Georges Basin	916	941
New England North West	Tamworth-North	457	671
North Coast	Ballina	1,137	1,280
North Coast	Banora Point	314	581
North Coast	Coffs Harbour-South	83	548
North Coast	Maclean-Yamba-Iluka	351	657
North Coast	Old Bar-Manning Point	831	952
North Coast	Tweed Heads	573	680
Riverina Murray	Wagga Wagga Region	217	525
South East and Tablelands	Bowral	624	909
South East and Tablelands	Goulburn	368	760
South East and Tablelands	Goulburn Region	452	543
South East and Tablelands	Mittagong	651	960

[12] The ABS defines SA2s as medium-sized general purpose areas designed to represent a community that interacts together socially and economically. SA2s generally have an average population of about 10,000, with a range of 3,000 to 25,000 people. Remote and regional SA2s areas generally have smaller populations than those in urban areas.

Region	Statistical Area Level 2 (SA2)[12]	Net domestic migration 2017–20 (3-year total, historical)	Net domestic migration 2021–24 (3-year total, historical and forecast)
South East and Tablelands	Ulladulla	1,209	1,433
South East and Tablelands	Ulladulla region	421	546

Source:[13]

Data from the 2021 Census further brings into question the strength of this process. Professionals aged in their 40s and 50s are the popular archetype of internal migrants moving to amenity-rich areas to take advantage of flexible work from home opportunities. However, the 2021 Census suggests that migration from Sydney to the NSW North Coast skewed towards younger people and their families during 2020–21 (Table 3). These data are calculated by comparing the age profile of people in the Mid-North Coast, Coffs Harbour-Grafton, and Richmond-Tweed SA4 areas[14] who at the 2021 Census indicated they had lived in Sydney '1 year ago' and '5 years ago' respectively. This suggests the pandemic period had a stronger trigger in encouraging people in 20–29 and 30–39 age cohorts and their dependent children to leave Sydney, compared to the much more widely discussed work from home migration of people in slightly older cohorts.

Table 3. Internal migrants to the North Coast from Sydney, by age, 2021 Census

	0–9 years	10–19 years	20–29 years	30–39 years	40–49 years	50-59 years	60–69 years	70 years and over	Total
Lived in Sydney 1 year ago (i.e. 2020)	10.3%	5.8%	16.5%	19.7%	13.2%	12.8%	14.2%	7.6%	100.0%
Lived in Sydney 5 years ago (i.e. 2016)	6.9%	7.2%	9.2%	18.2%	15.6%	13.7%	17.9%	11.3%	100.0%

Source: ABS Tablebuilder. Notes: This table shows the age profile of persons who migrated from Sydney to the Mid-North Coast, Coffs Harbour-Grafton, and Richmond-Tweed SA4s in 2021.

While domestic migration to the high-amenity coastal locations in Table 2 is not surprising, the continued appeal of large regional centres is worthy of further comment. The expansion of regional cities is a major theme of demographic change in Australia, identified first in the 1990s.[15] Their attractiveness as sites for domestic migrants has rested on an enhanced

[13] Data calculated from: DPE (2022) CPA Population and Dwelling projections ('CSA2 Population Accounts' tab), accessed 21 April 2023.
[14] Statistical Areas Level 4 (SA4s) are the largest sub-state region in the ABS statistical geography. There are 28 in NSW, with 13 outside of Sydney, and they represent a labour market or group of labour markets.
[15] Beer, A., Bolam, A., Maude, A. (1994) *Beyond the Capitals: Urban Growth in Regional Australia,* Commonwealth Department of Housing and Regional Development, AGPS, Canberra.

capacity to provide a range of services and facilities increasingly commensurate with the capitals. This aspect of liveability has been core to place-marketing campaigns over recent years, a case in point being the *Evocities Alliance*, developed in 2005 by 7 large inland NSW regional cities (Albury, Armidale, Bathurst, Dubbo, Orange, Tamworth and Wagga Wagga).[16] As recounted by one of the principals behind this initiative, the marketing campaigns designed for Sydney residents to move to these locations deliberately emphasised their city status: 'We deliberately sought to avoid using the people in paddocks with horses' images. Why? Because these types of images tend to only reinforce the stereotypical images that metropolitan residents have of the country.'[17] Large regional cities in inland NSW are all characterised by fringe suburban expansion facilitated by residential land releases in urban growth areas gazetted in local environmental plans, including Bathurst-East, Orange-North, Goulburn, and Maitland North and West, which are listed in Table 2. Submissions by the *Evocities Alliance* to Senate and NSW Legislative Council inquiries heralded their successes, although the Senate noted the potential contradictions of regional city growth adversely affecting smaller adjacent settlements.[18]

2.3 The direct and indirect effects of net overseas migration

Net overseas migration is a key source of national population growth. In 2021, ABS forecasts suggested that net overseas migration would account for 60% of population growth in Australia in the coming decade.[19] With the threat of the pandemic receding, international travel recommenced on 21 February 2022, and the Australian Government has signalled a shift to a slightly expanded international migration policy. In the decade prior to the pandemic, Australia's net overseas migration hovered around 200,000 persons per annum. This plummeted during the pandemic, but the Australian Government is anticipating a return to these levels by 2023–24 and an increase to 235,000 persons per annum by 2024–25.[20] A contributing factor to the planned increase in net overseas migration is substantial workforce shortages, with job vacancies of 438,500 in February 2023, almost twice the pre-pandemic level of 227,900 in February 2020.[21]

This national context frames the way that net overseas migration will contribute to demographic change in rural and regional NSW. Net overseas migration is the most important driver of population growth in NSW as a whole, but the Greater Sydney Region is

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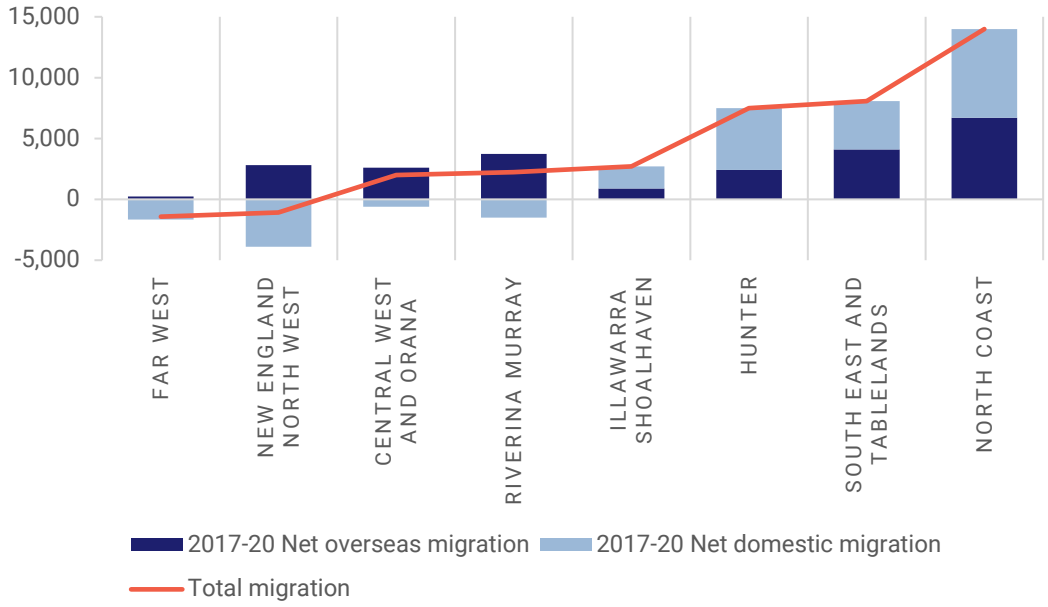
[16] Of the original 7 Evocities, four remain in the program: Albury, Bathurst, Dubbo and Tamworth.
[17] Manley, S. (2013) Evocities: The Regional Liveability Success Story. In: Kinnear, S., Charters, K., Vitartas, P. (eds) *Regional Advantage and Innovation*. Physica, Heidelberg. Doi:10.1007/978-3-7908-2799-6_10, p. 212.
[18] The Senate: Economic References Committee (2020) Final Report: Inquiry into the indicators of, and impact of, regional inequality in Australia, Parliament of Australia, p.27. NSW Legislative Council Standing Committee on State Development (2018) Regional Development and a Global Sydney inquiry.
[19] Baum, S., Baker, E., Davies, A., Stone, J., Taylor, E. (2022) *Pandemic Cities: The COVID-19 Crisis and Australian Urban Regions*, Springer. p.11
[20] Australian Government Centre for Population (2023) 2022-23 Budget: Australia's Future Population.
[21] Australian Bureau of Statistics (2023) Job vacancies, February 2023, accessed 12 May 2023.

the overwhelming beneficiary of these flows. In 2019, just prior to the COVID-19 pandemic, net overseas migration added 73,679 people to NSW's population. Only 8.5% of this increase flowed to rural and regional NSW as defined in this report, despite these areas accounting for 24.8% of NSW's population.[22]

Nevertheless, net overseas migration can be an important contributor to population growth for individual regions, as illustrated in the graphs in Appendix A. This is especially the case for inland regions with relatively small or negative net domestic migration flows, such as Central West and Orana, Riverina Murray and New England North West. Figure 2 shows that in the immediate pre-pandemic years, 2017–20, net inflows of overseas migrants in these regions counteracted population shrinkage from net domestic migration outflows. International migration to rural and regional areas, especially inland regions, is strongly connected to the interplay of employment opportunities and migration policy, to which we now turn.

[22] Data calculated from: DPE (2022) CPA Population and Dwelling projections ('CSA2 Population Accounts' tab), accessed 21 April 2023.

Figure 2. Net overseas and domestic migration to NSW regions, 2017–20



Source: [23]

The future role of net overseas migration in these regions will hinge on policy decisions by the Australian Government. In September 2022, the newly elected government launched a review of migration policy.[24] The review identified a skills mismatch in that existing policies failed 'to attract the most highly skilled migrants and fail[ed] to enable business to efficiently access workers.'[25] The review also found that existing policies result in large numbers of migrants on various subclasses of temporary visas who, while providing critical labour in sectors such as agriculture, can face long-term uncertainty in terms of their ability to 'make Australia home' and are vulnerable to 'systemic exploitation and [contribute to] the risk of an emerging permanently temporary underclass.'[26]

As of June 2023, the Australian Government had not fully responded to the review, however reforms to the Pacific Australia Labour Mobility (PALM) scheme announced in the 2023–24 Federal budget provide a precursor to this agenda. The PALM scheme currently sponsors 37,700 workers from Pacific Islands and Timor Leste to work in Australia. The 2023–24 Federal budget announced an expansion of the scheme in conjunction with enhanced

[23] Data calculated from: DPE (2022) CPA Population and Dwelling projections ('CSA2 Population Accounts' tab), accessed 21 April 2023.
[24] Commonwealth of Australia (2023) *Review of the Migration System: Final Report*.
[25] Commonwealth of Australia (2023) *Review of the Migration System: Final Report*.
[26] Commonwealth of Australia (2023) *Review of the Migration System: Final Report*.

skills-based training opportunities for participants and a strengthening of employee safety net provisions.[27] I

International migration flows to rural and regional NSW will also be shaped by future decisions on regional visas available for skilled migrants and their dependent family members. At present, two visa subclasses (491 and 494) exist to specifically assist employers in rural and regional Australia to attract skilled migrants, augmenting visa subclass 489 for skilled workers who want to live and work in regional Australia. These visas provide potential pathways to permanent residency through visa subclass 191.[28] As of May 2022, there were approximately 29,000 persons holding 489 and 491 visas in regional Australia.[29]

Inflows of culturally and linguistically diverse international migrants to rural and regional Australia can place demand on community infrastructure and support services, requiring policy attention. Approximately 10% of the international migrants who moved to Australia between 2011–2020 and settled in rural and regional NSW were identified in the 2021 Census as not being able to speak English 'very well' or 'not at all', amounting to 8,700 people.[30] Due to the probable under-enumeration of non-English speakers in the Census, this is likely to be a lower-bound estimation. Research into and evaluation of these dynamics on places such as Armidale, selected as a regional resettlement location in 2017 by the Australian Government, has identified the importance of local government programs to provide welcoming and support systems for facilitating community-inclusive migrant settlement.[31]

Finally, net overseas migration to the Greater Sydney Region may have indirect flow-on effects for rural and regional NSW in contexts where it adds to upwards pressure on property availability and prices in Sydney, leading to intensified net domestic migration. As noted earlier, approximately 45% of people moving out of Sydney each year move to rural and regional NSW.[32] The strength of these processes intersects with housing supply in the

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[27] Pacific Australia Labour Mobility (2023), Budget 2023-24 – Reforming the PALM scheme, accessed 15 May 2023.

[28] Department of Home Affairs (2023) Regional visas, accessed 15 May 2023.

[29] More detailed data (for example by state or region) is not provided by the Department of Home Affairs. These data originate from internal documents made public through a Freedom of Information request.

[30] ABS Tablebuilder.

[31] Healey, S.J.R., Ghafournia, N., Massey, P.D., Andrich, K., Harrison, J., Taylor, K. and Bolsewicz, K., 2022. Ezidi voices: The communication of COVID-19 information amongst a refugee community in rural Australia-a qualitative study. *International Journal for Equity in Health*, *21*(1), p.10; Kivunja, C., Kuyini, A.B. and Maxwell, T., 2014. Settlement experiences of African refugees: a case study of the Armidale, Tamworth and Coffs Harbour regions of New South Wales, Australia. *Journal of Asian and African Studies*, *49*(1), p.64-79; Schech, S., 2014. Silent bargain or rural cosmopolitanism? Refugee settlement in regional Australia. *Journal of Ethnic and Migration Studies*, *40*(4), p.601-618; Boese, M., Phillips, M. (2017) The role of local government in migrant and refugee settlement in regional and rural Australia, *Australian Journal of Social Issues*, 52(4): 388-404.

[32] Baum, S., Baker, E., Davies, A., Stone, J., Taylor, E. (2022) *Pandemic Cities: The COVID-19 Crisis and Australian Urban Regions*, Springer. p.16.

Greater Sydney Region via residential land release and urban densification, underlining the ties between the fortunes of Sydney and regional housing markets.

2.4 Demographic challenges for policy in rural and regional NSW

2.4.1 Not 'killing the goose that lays the golden egg' in areas of high population growth

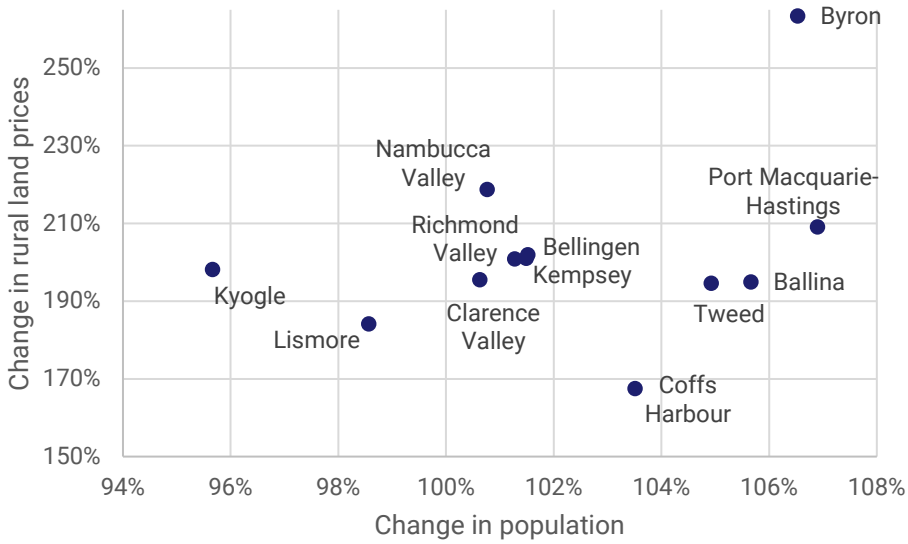
Population growth in attractive coastal or landscape locations can generate major policy challenges. The natural assets and amenity attributes that make these places inviting to incoming residents can readily be despoiled by excess or inappropriate development – 'killing the goose that lays the golden egg' (as described in a recent commentary of these issues in Byron Shire).[33] The positive flow of net domestic migration to these regions during the COVID-19 pandemic aggravated these pressures and raise its importance for regional policy.

Increased domestic migration to attractive coastal or landscape locations during the pandemic meant that the excess demand for housing that existed prior to the pandemic was sent into overdrive, leading to phenomenally sharp increases in land and housing prices (Appendix B).[34] Rural land has been placed under intensified pressures for conversion from agricultural to residential purposes, where planning provisions permit, fuelling price increases. Figure 3 illustrates this trend for North Coast LGAs for 2017–22. Byron Shire stands out as having the highest appreciation of rural land prices, on the back of high population growth.

[33] Heilpern, D. (2023) Growth, housing rights and the golden egg – the Ballina-isation of Byron, *The Echo*, 4 May,

[34] As the Valuer-General's data in Appendix B indicate, acute appreciations in prices not were not limited to coastal areas but experienced across the state. In inland regions, these increases were heavily driven by strong growth in the price of agricultural (rather than residential) land. For example, in the inland region of Murray, agricultural land accounts for 57% of total land value in the region as calculated by the Valuer-General. In the North Coast by contrast, residential land comprised 67% of the total value of land. The relative importance of residential, agricultural and other land categories (commercial, industrial) feed into the total regional data published by the Valuer-General. The contexts and ramifications of increased agricultural land prices are discussed later in this report.

Figure 3. Population change and rural land prices 2017–22, North Coast



Source:[35]

Housing markets in many of these locations were already under stress prior to the pandemic, because of the rapid expansion of the short-term rental market. Research from the North Coast has documented how this factor has contributed to low-income earners and essential workers being placed under increasing housing stress.[36] Local governments are currently considering their options on how to respond to these issues. Byron Bay has been the epicentre for policy debate, with 24.5% of its housing stock being listed on Airbnb,[37] but the issue has confronted other coastal councils as well.[38] In April 2023, the Independent Planning Commission supported Byron Shire's proposal to amend its local

[35] Population data from DPE (2023) Projections Explorer, accessed 6 June 2023; Rural land price data from NSW Valuer General accessed 6 June 2023.
[36] von der Heidt, T., Muschter, S., Caldicott, R., Che, D. and Corlis, P., 2020. Study of resident perceptions of short-term holiday letting (STHL) in 12 Mid and North Coast NSW Council Areas, Southern Cross University, Lismore: Doi: 10.25918/report.33; Burke, T., Ralston, L., Stone, W. and Goodall, Z. (2023) Short term rental accommodation: new directions, new debates, report prepared by Australian Housing and Urban Research Institute (AHURI) Professional Services for NSW Independent Planning Commission, AHURI, Melbourne.
[37] Burke, T., Ralston, L., Stone, W. and Goodall, Z. (2023) Short term rental accommodation: new directions, new debates, report prepared by AHURI Professional Services for NSW Independent Planning Commission, Australian Housing and Urban Research Institute Limited, Melbourne, p.4.
[38] von der Heidt, T., Muschter, S., Caldicott, R., Che, D. and Corlis, P., 2020. Study of resident perceptions of short-term holiday letting (STHL) in 12 Mid and North Coast NSW Council Areas, Southern Cross University, Lismore: Doi: 10.25918/report.33

environmental plan so that owners wanting to rent out their properties for more than 60 days per year would require council approval.[39]

More generally, recent housing price escalation has encouraged further debate on the merits of land release as an escape valve for pent up demand. Existing regional planning by the NSW Government in areas of population growth, such as the *North Coast Regional Plan 2041* (published 2019) sought to constrain the impacts of future population growth by directing most new settlement into existing urban growth areas.[40] This approach has supported the maintenance of agriculture-zoned land, protected state significant agricultural land, and minimised the encroachment of residential development on biodiversity hotspots and vital habitats.[41] The added impetus of population pressures coming out of the pandemic raises the question of whether additional land release may be justified, potentially compromising the delicate balance sought by existing plans. In the Northern Rivers, these debates are further complicated by the need to relocate populations from flood zones. Through the Resilient Lands Program, coordinated by the Northern Rivers Reconstruction Corporation,[42] rural landholders have been invited to lodge expressions of interest on whether their properties could be earmarked for future residential development.

Three policy questions are highly relevant to these issues. First, is the current suite of planning controls fit-for-purpose in the context of intensified land use pressures? Planning can be a blunt instrument because many planning controls derive their power from proscribing what *cannot* occur on land, rather than what should occur. Recent agricultural land conversion on the Far North Coast highlights these concerns. Agricultural land is largely protected through planning controls that restrict the permissibility of alternatives (residential subdivision or industrial developments, for example). However, on the Far North Coast, proscribing those alternatives has not necessarily led to agriculture-zoned land being used for farming. There is an abundance of farm-sized lots on agriculture-zoned land being used for large lot rural residential purposes. If housing supply through residential land release does not match demand, a consequence is that the price of farmland will inflate for its rural residential potential, causing an unplanned spill over of lifestyle properties on agricultural land.[43]

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[39] The existing requirement is that council approval is required for properties rented out 180 days/year.

[40] NSW Department of Planning and Environment (2019) *North Coast Regional Plan 2041* p.5.

[41] English, V., and Keith. A., D. 2015. Assessing Risks to Ecosystems Within Biodiversity Hotspots: A Case Study from Southwestern Australia. Austral Ecology 40: 411–422. McManus, P. (2022) Counterurbanisation, demographic change and discourses of rural revival in Australia during COVID-19, *Australian Geographer*, 53:4, 363-378, Doi: 10.1080/00049182.2022.2042037.

[42] NSW Government, Resilience Land Program.

[43] Pritchard, B., Welch, E., Umana Restrepo, G., Stone, C., Mitchell, L. (2023). *Land Ownership Change in Rural NSW: Northern Transect Report*, (p.1-103). Australia: University of Sydney & NSW Department of Primary Industries. Also see *Sydney Morning Herald* 12 May 2023 'Big 'lifestyle' properties part of Byron's housing problem'. And as argued by Guralda et al. (2020): "Superimposing planning and development policies meant for metropolitan cities could

Second, how should potentially intensified land use conflicts be managed? In 2019, the NSW Government weighed into this contested space with right to farm legislation that instructed courts to consider options for agricultural activities to continue when hearing nuisance complaints.[44] However, these issues have complex nuances. Significant changes to farm operations, such as conversion from grazing to intensive horticulture, can occur without development consents. This can create new axes of land use conflict with neighbours. A report by Coffs Harbour City Council noted that in such instances, farmers may be sometimes unaware of what obligations they do have, such as with respect to buffer strips, farm dam construction and water runoff.[45]

Third, how should ecosystem integrity and the protection of biodiversity be managed in contexts of increased housing demand in coastal areas? Poorly managed development can fragment landscapes in ways that interrupt wildlife corridors and contribute to colonisation of invasive species. New rural landholders acquiring lifestyle blocks may revegetate their properties with little knowledge of local ecosystems.[46] Many local governments have rural landholder initiatives to assist appropriate ecosystem restoration[47] and these programs will grow in importance with continuing lifestyle block conversion from agriculture.

2.4.2 Managing smalltown decline in inland NSW

During the period 2021–30, more than one-quarter (56 out of 209) of local areas in rural and regional NSW are expected to experience population decline.[48] The overwhelming majority of these areas are inland and with populations dispersed into small settlements.[49] Population decline in these areas is expected to result from negative net migration and a surplus of deaths over births due to an ageing population. These demographic outcomes are underpinned by economic drivers relating to a shrinking number of local agriculture-based households due to farm consolidation and the continuation of a decades-long trend for small towns and villages to lose service functions as enhanced transport links and a

simply result in transferring the ills of capital cities to regions and exacerbate unsustainable development and heightened socioeconomic inequalities." Guaralda, M., Hear, G., Foth, M., Yigitcanlar, T., Mayere, S., and Law. L., 2020. Towards Australian Regional Turnaround: Insights Into Sustainably Accommodating Post-Pandemic Urban Growth in Regional Towns and Cities. Sustainability 12 (10492) Doi:10.3390/su122410492

[44] *Right to Farm Act* 2019.

[45] Coffs Harbour City Council (2018) *Discussion Paper: Intensive Plant Agriculture*, Paper for Coffs Harbour Local Growth Management Strategy.

[46] Revegetation by new rural landholders: "has the potential to restore valuable habitat for native biodiversity, but land management challenges to new residents on smaller land parcels include weeds and pests; unexpected 'novel ecosystems'; and heavily cleared farmlands depleted of their original fauna richness". Llausàs, A., Buxton M.& Beilin, R. (2016) Spatial planning and changing landscapes: a failure of policy in peri-urban Victoria, Australia, *Journal of Environmental Planning and Management*, 59:7, 1304-1322, Doi: 10.1080/09640568.2015.1074888, p.1307.

[47] As an example, see this program by Lismore City Council: Rural Landholders Initiative.

[48] 'Local areas' here defined as Statistical Area 2 in ABS Geography. DPE (2022) CPA Population and Dwelling projections ('CSA2 Projections' tab), accessed 21 April 4 2023.

[49] The term 'small settlement' here is used here to describe the least populous built environments in a local region. In inland NSW, these places are typically less than 2,000 people.

shift to scale in retailing centralises economic functions into fewer and larger entities. These processes are manifested in main street façades of boarded up shopfronts as built environments are mismatched with service demand. Such places have been pejoratively labelled 'zombie towns' in international research,[50] however the critical policy question is *what is to be done* to the underused housing and commercial assets and the mainly aged or disadvantaged populations still residing in places bypassed by contemporary economic drivers. Two decades ago, the rural researcher Gordon Forth courted controversy by opining that the 'slow death' of such places was inexorable and that community investment to help prop them up was wasteful.[51] Other analyses have countered this pessimism by pointing to the role of community resilience and a strong sense of belonging in these places.[52] However, such analyses typically frame these factors as curbing what otherwise might be a faster rate of decline, rather than suggesting that social capital alone can provide seeds for growth.

The predominant demographic trend, especially in inland areas, has been a changed settlement hierarchy that has seen proportionately more of the population in large regional cities compared with smaller towns and villages. As this occurs, the functions of settlements of different sizes alters. If the manifestation of smalltown decline is boarded main street shopfronts, its counterpoint in large regional cities is the expansion of large-format retail complexes on the highway zones of regional cities such as Dubbo, Wagga Wagga and Orange.[53] The trend towards online shopping has further exacerbated the commercial advantages of the large-format retailers located in regional cities, especially in sectors such as grocery and hardware where national chains have invested heavily in servicing customers through home-delivery or 'click-and-collect' options.[54] These changes add further momentum to functional repurposing in small settlements. The range of commercial activities that once dominated main streets will not return, as most local residents increasingly shop and procure services by driving to larger centres or acquiring these online.

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[50] Ashraful Alam & Etienne Nel (2023) Migration, emerging multiculturalism and planning in rural and small town Aotearoa New Zealand, *Australian Planner*, Doi: 10.1080/07293682.2023.2169724

[51] Forth, G., & Howell, K. (2002). Don't cry for me Upper Wombat: the realities of regional/small town decline in non coastal Australia. *Sustaining Regions*, 2(2), 4-11.

[52] McManus, P., Walmsley, J., Argent, N., Baum, S., Bourke, L., Martin, J., Pritchard, B. and Sorensen, T., 2012. Rural Community and Rural Resilience: What is important to farmers in keeping their country towns alive? *Journal of Rural Studies*, 28(1), p.20-29.

[53] In the 1990s and early 2000s, it was assumed that these shifts corresponded to a physical flow of people leaving small towns and villages to follow jobs to larger regional cities, however subsequent research discarded that theory (known as the 'sponge city hypothesis'). Large regional cities like Dubbo, Orange and Wagga Wagga gain their population from diverse origins, notably including capital cities and international migration. It is simplistic to assume that the growth of (say) Dubbo is fuelled by people migrating from smaller towns in the local region. See: Neil Argent, Fran Rolley & Jim Walmsley (2008) The Sponge City Hypothesis: does it hold water? *Australian Geographer*, 39:2, 109-130, Doi: 10.1080/00049180802056807

[54] Smailes, P.J., Griffin, T., Argent, N. (2019) *Regional Cities and City Regions in Rural Australia: A Long-Term Demographic Perspective*, Springer, p.3.

Two important policy concerns emerge from these transformations. First is the plight of residents in small settlements who are still reliant on the local provision of services because of mobility constraints due to health or income. With an ageing population, responding to these needs may become an increasing concern. Policy in this area distinguishes between *access strategies* (getting people to services, for example, enhanced public transport links to larger towns) and *provision strategies* (getting services to people, for example, enhancing services available in place).[55] For instance, in the health sector, servicing dispersed populations through access strategies may involve investment in ambulances and wheelchair-accessible taxis to transport patients to medical facilities, whereas provision strategies may involve mobile healthcare units (such as mobile breast screening vans) that deliver services to patients. Some combination of access and provision is typically required, however investments in the latter strengthen small settlement resilience and quality of life by furnishing residents with in-place access to services. When small populations may not justify individualised provision of services, the bundling of services through rural service hub arrangements (in which various public and commercial services are co-located) can assist small settlements by providing a point of connection with critical mass.

Second, the shrinking of traditional commercial services in small settlements releases properties, often with heritage values, to alternative uses. These patterns point to a functional repurposing of small settlements. Rather than replicate the range of services found in larger centres at a smaller scale, these can be places for destination goods and services. Arts, culture and artisanal food figure prominently in the functional repurposing of commerce in small settlements. Evidently, not all small settlements are equally placed to benefit from this agenda. And for those that do, it may not be sufficient to swim against the tide of smalltown decline driven by larger economic forces. Policymakers need to take care when appraising the potential for smalltown turnaround based on arts, culture and heritage. However, as evidenced in a number of inland NSW small settlements (including Canowindra, Jugiong, Silverton, and Gulgong) these strategies have arrested decline and arguably offered a sense of pride and purpose to residents.

[55] Goodwin-Hawkins, B., Oedl-Wieser, T., Ovaska, U. and Morse, A., 2021. Rural service hubs and socially innovative rural-urban linkages: A conceptual framework for nexogenous development. *Local Economy*, *36*(7-8), p.551-568.

3. Some key policy challenges

3.1 Overview

The demographic trends of the post-pandemic period present important regional development dilemmas for rural and regional NSW. The agenda for some parts of the state will be to manage growth; in others it will be to address decline. In this process, the policy landscape will increasingly confront difficult trade-offs to balance settlement needs, environmental assets and amenity, agricultural resources, and climate/disaster resilience. These trade-offs are wicked problems because different stakeholders approach these issues from varying positions and ideologies. Gaining consensus on regional development priorities can be difficult because of webs of vested interests and alternate visions of regional futures, mitigating shared understandings of the purpose of regional development. What is seen as 'green tape' restricting investment from one perspective, may be seen as a precautionary check-and-balance from another.

These challenges are refracted through a myriad of policy areas. In the discussion that follows, 3 key policy debates are highlighted as being critical to the future of rural and regional NSW. The first relates to promoting policy coherence at a time of rapid economic and technological change. This is important because of the centrality of harnessing technology for regional development. The rapid pace of technological and economic change generates considerable uncertainty about how regional assets will be valued in the global economy. The second concerns the shifting role of food and agribusiness as a driver of jobs and income in rural and regional Australia. For many NSW rural regions, the food and agribusiness sector is a major contributor to regional income and jobs. However, the ways this sector connects with regional economies is changing, with important ramifications for agriculture-dependent regional economies. Third, it is clear that sustainability, resilience and climate adaptation agendas are inseparable from economic development. Rural and regional NSW faces aggravated climatic and environmental challenges, evidenced most starkly in the bushfire emergencies of 2019–20 and the flood emergencies of 2022.

The focus on these 3 policy concerns is intended to reinforce the wider theme of this report: that demographic shifts are triggering increasingly complex interconnections of economic, social and environmental processes. In turn, this underlines the importance of holistic approaches to strategic regional development thinking and planning. The specific focus on these 3 areas however is not meant to diminish the relevance of other demographic shifts in other arenas, especially social policy. Trends of population growth and decline in different parts of the state present important challenges for health, education and housing policies, amongst others. The complexities of these issues, however, warrants their consideration separately.

It is also acknowledged that this report does not have an explicit focus on Indigenous affairs. Indigenous people comprise an important demographic segment of rural and regional NSW. The history of Indigenous dispossession and inequality presents vital policy challenges. The premise of the Closing the Gap strategy is that 'when Aboriginal and Torres Strait Islander people have a genuine say in the design and delivery of policies, programs and services that affect them, better life outcomes are achieved.'[56] Regional economic strategies and environmental and social policies need to be inclusive of Indigenous voices to work towards this outcome.

3.2 Ensuring policy coherence in the context of rapid economic and technological change

Governments have an array of tools and mechanisms to encourage regional development. At its crudest, initiatives under the banner of 'regional development' have sometimes taken the form of direct handouts or commercial incentives to firms to relocate or invest to a specific region. These approaches, pejoratively labelled 'picking winners' or 'chasing smokestacks' by regional development researchers,[57] are seen as problematic when one-off deals to a single investor are detached from any wider regional economic logic, and when commercial details are shrouded in a lack of transparency.[58]

Regional development theory provides lessons that move beyond 'chasing smokestacks' via the concepts of *new regionalism* and *strategic coupling*.[59] These concepts emphasise the need for policy interventions to leverage existing regional assets and capabilities. Rather than subsidise new investors directly, they suggest investing in infrastructure and skills development for sectors in which a region already has a competitive advantage to further enhance its attractiveness for investors. *New regionalism* focuses on the endogenous (internal) qualities of the region: what are the existing assets already in a region that can be leveraged for regional development goals. The concept of *strategic coupling* focuses on how those assets can be linked into global production networks.

The principles behind new regionalism and strategic coupling are embedded within the regional economic development strategies (REDS) developed by the NSW Government, which have as their purpose to 'build on existing strengths (endowments) in the region and enhance those strengths.'[60] As the NSW Government argued in a submission to the

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[56] Australian Government, Closing the Gap.

[57] Black, D. A., & Chandra, A. (1996). Chasing smokestacks: An analysis of economic development incentives. *Kentucky Annual Economic Report*, *14*(2), 31-37.

[58] Conza, S. (2020). Chasing Smokestacks in the Dark: The Amazon HQ2 Quest Revives Debate Over Economic Development Secrecy. *The Journal of Civic Information*, *2*(3), 1-28.

[59] For example, see: Daniels, J., Douglas, D. J., Vodden, K., & Markey, S. (2019). What is new regionalism?. In *The Theory, Practice, and Potential of Regional Development* p.30-55, Routledge; Coe, N. M., & Hess, M. (2010). Local and regional development: A global production network approach. *Handbook of local and regional development* p.128-138, Routledge.

[60] NSW Government, Regional Development Strategies.

Productivity Commission: 'efforts to retain or establish industries that do not align with regional endowments are unlikely to achieve the best possible economic outcomes.'[61]

A specific example of this thinking in action is special activation precinct (SAP) policy. SAPs aim for policy coherence in making suitable land available for investment, in tandem with relevant investments in skill development and ancillary infrastructure, such as energy. The Moree SAP, for example, involves development of a regional enterprise zone that facilitates efficiencies and opportunities for value-addition with a focus on local cropping.[62] The approach seeks to 'nudge' private sector market behaviour in line with wider regional and social contexts. It is premised on the assumption that governments cannot (and should not) act independently of market forces but can act as facilitators in constructing environments that assist competitive advantage to be built.

Although the new regionalist/strategic coupling approach may be considered best practice theory for regional development, its effective implementation is tested by rapid technological and economic change, which can dramatically shift competitive advantage and hence render impotent strategies premised on outmoded principles. The energy sector provides a case in point. Energy is a major cost for many economic activities, but the current energy landscape is highly uncertain as the economy transitions from dependence on fossil fuels. With relative costs and reliability of different energy sources in flux, the competitive position of businesses dependent on specific sources of energy can change dramatically.

The provision of energy security and certainty therefore has a major role for regional development in the post-pandemic period. In these contexts, in 2020 the NSW Government announced that 5 renewable energy zones (REZs) would be developed. REZs combine power generation, storage and transmission infrastructure, thereby facilitating private sector investment in solar and wind energy that can be captured, stored and transmitted into the grid.[63] This will encourage greater renewables within the state's total energy mix, but from a regional development perspective, also has the capacity to underpin business investment in surrounding rural and regional areas. Therefore, this can be understood as a *new regionalist* development policy that seeks to secure competitive advantage in an uncertain world by using infrastructure to generate an enabling environment that facilitates private investment.

The transitions in the energy sector are just one manifestation of wider techno-economic disruption. Regional development in Australia takes place in the context of an open

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[61] NSW Government [Department of Premier and Cabinet, Regional Policy and Analytics Branch] (2017) Submission to the Productivity Commission Inquiry into Transitioning Regional Economies.
[62] Pritchard, B., Welch, E., Umana Restrepo, G., Stone, C., Mitchell, L. (2023). *Land Ownership Change in Rural NSW: Northern Transect Report*. Australia: University of Sydney & NSW Department of Primary Industries. p.59-60.
[63] The 5 REZs are: South West, Central-West Orana, New England, Illawarra and Hunter-Central Coast. See: https://www.energyco.nsw.gov.au/renewable-energy-zones

economy with minimal border protection and a highly liberalised regulatory regime for foreign investment. This means that trade-exposed economic activities in regional NSW are highly sensitive to shifts in international competitiveness. Across rural and regional NSW there are many examples of production facilities that were closed or repurposed in response to the winds of changing competition. The food canning industry is a case in point, especially towns and regional cities such as Leeton, Bathurst and Cowra that traditionally housed factories that processed local farmers' product. The relatively small scale of many of these facilities meant they could not effectively compete against imports sourced from larger processing facilities.

The reverberations of shifts in competitiveness can have major regional economic effects, because regional economies have tended to become more specialised. As the NSW Government argued in its submission to the 2017 Productivity Commission inquiry into transitioning regional economies: 'Just like the rest of the world, the industrial bases of NSW's regions are becoming increasingly specialized – their economic activities are "narrowing and deepening", meaning that regions produce fewer types of goods and services for export outside of their region but employ a larger proportion of the workforce in their sectors of specialization.'[64]

There is a paradox for regional development policies, therefore. The drive to efficiency in an open economy has generated increasing levels of regional specialisation, but in a world of heightened techno-economic disruption, there is increased scope for rapid decoupling of a specialised industry from its customers if its competitive situation changes.

3.3 Strengthening food and agribusiness as a driver of jobs and growth

The local economies of many parts of rural and regional NSW remain heavily dependent on food and agribusiness as a driver of local incomes, jobs and growth. The recent boom in agricultural production and prices, stemming from good climatic conditions and healthy global commodity prices, has fuelled large increases in farm incomes[65] and furthered the importance of this sector as a driver of regional development. Nevertheless, changes to the ways that land and labour are incorporated within farm-based enterprises are altering the role of this sector within regional economies. The key to understanding these processes is to appreciate the changed circumstances of family farms.

In a strict legal sense, 99% of Australian farms are owned by family-based units.[66] However, this statistic fails to convey the widening differentiation in farming. The drive to efficiency in Australian agriculture has generated strong incentives for farm owners to build larger

[64] NSW Government Department of Premier and Cabinet, Regional Policy and Analytics Branch (2017) Submission to the Productivity Commission Inquiry into Transitioning Regional Economies.
[65] Cameron, A & Greenville, J (2022), *Agriculture in Australia – understanding the recent success*, ABARES Insights, Canberra, November. Doi:10.25814/9j44-d476
[66] National Farmers' Federation (2023) Farm Facts.

businesses that capture economies of scale advantages. This has meant that many businesses nominally owned and operated through family-based arrangements 'closely resemble medium-sized businesses; with assets valued at between $20 and $50 million, annual turnovers in the $5 million to $10 million range, and many operating with formal board and administrative structures and employed staff.'[67]

Such large enterprises may have family ownership at their core but are far removed from the ideal-typical conception of a family farm that resonates through policy and public imaginations. That conception sees family farms as integrated 3-way coalitions of a business (the family owns and operates the farm), household (most farm labour is family-based), and property (the farm business takes place on land owned by the family).[68]

Pressures for change are fragmenting this coalition. The drive to economies of scale in farming means that access to capital is an increasingly important ingredient for operating a successful farm business. Traditionally, bank borrowings have been the primary means by which Australian farmers have sourced capital.[69] In recent years however farmers have opted for a wider range of sources to acquire capital, including investment, joint venture and partnership arrangements that may dilute family equity.[70] Hard data on the expansion of these types of arrangements is virtually impossible to capture, but in the rural media there has been heightened discussion of high net-worth individuals, superannuation and pension funds, and foreign investors as non-controlling equity investors in family-centric farm enterprises.[71] Efficient farming operations are attractive to these entities because they represent what has been termed 'gold with yield' (the 'gold' being the (appreciating) value of the land).[72] This is especially the case for pension and mutual funds as the appreciating value of farmland assets is a book entry signifying capital growth.[73]

Increased size can also stretch abilities to operate farms using family members as the major sources of labour. Overall, the share of labour to total farm inputs is steadily declining, and when labour is used it is increasingly in the form of wages and salaries, not family members. This shift is due to ongoing capital intensity through continued

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[67] Australian Farm Institute (2015) The family farm is becoming less family.
[68] Johnsen, S., 2004. The redefinition of family farming: agricultural restructuring and farm adjustment in Waihemo, New Zealand. *Journal of Rural Studies*, *20*(4), p.419-432.
[69] Average levels of debt in the Australian farming sector have increased steadily over time. See: Department of Agriculture, Water and the Environment (2021) *Agricultural lending data 2019–20*, Canberra, November.
[70] Larder, N., Sippel, S. & Argent, N. (2018). The redefined role of finance in Australian agriculture, *Australian Geographer*, 49:3, 397-418, Doi: 10.1080/00049182.2017.1388555.
[71] Pritchard, B., Welch, E., Umana Restrepo, G., Mitchell, L. (2023) How do financialized agri-corporate investors acquire farmland? Analyzing land investment in an Australian agricultural region, 2004-19, *Journal of Economic Geography* Doi:10.1093/jeg/lbad008.
[72] Fairbairn M. (2014) 'Like gold with yield': evolving Intersections between farmland and finance. *The Journal of Peasant Studies*, 41: 777–795.
[73] Langford, A. (2021) A 'Rule of Thumb' and the Return on Investment: The role of valuation devices in the financialization of Northern Australian pastoral land, *Valuation Studies*, 8(2), 37-60.

mechanisation.[74] The share of agricultural labour undertaken by farm owners and their family members fell from 67% of total agricultural labour in NSW in 2011, to 59% in 2016 and 56% in 2021.[75]

A further element of these shifts is demand for agricultural land by large institutional, corporate and foreign investors. Documenting the magnitude of these investments is difficult because of legal complexities in ownership structures. The Foreign Investment Review Board estimated that in 2021 approximately 2.7 million hectares of agricultural land in NSW was owned wholly or partially by foreign entities, representing 5.2% of the agricultural area of the state and an increase of 300,000 hectares since 2016.[76] A recent analysis of the New England North West region of NSW found that during the period 2004–19, corporate entities using pooled-capital from mutual and pension funds (both foreign and domestic) acquired 200,000 hectares, of which one-third was acquired from family farm enterprises.[77] These developments reflect how large Australian farms have been identified as a strategic asset class by institutional and foreign entrants. [78]

These changes within the socio-economic base of agriculture have important policy ramifications for the farm sector's role as a driver of regional development. During the twentieth century, the cyclical economic fortunes of regional towns and cities were tied closely to farm conditions. When seasons were good, strong economic multipliers flowed into local towns through farm spending. By 1990, research identified a weakening of these linkages, labelled the 'uncoupling thesis', as farmers used the benefits of improved transport to source their supplies from further afield.[79] These tendencies have intensified in the current century, aided and abetted by e-commerce and ongoing centralisation of retail and professional services, as discussed earlier in this report.

Farm sector restructuring into fewer and larger enterprises further diminishes the strength of local economic ties, as many large farming enterprises are multi-locational and deploy purchase pooling over a wider geographical area. Although farmers may still try to support local suppliers through *local-if-possible* preferences,[80] the scope for employing this principle becomes problematic as farm enterprises become larger and multi-locational.

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[74] Australian Farm Institute (2015) The family farm is becoming less family.

[75] Data from ABS 2011, 2016 and 2021 Census Tablebuilder. Calculations by the author.

[76] Foreign Investment Review Board (2022) Register of Foreign Ownership of Agricultural Land.

[77] Pritchard, B., Welch, E., Umana Restrepo, G., Mitchell, L. (2023) How to financialized agri-corporate investors acquire farmland? Analyzing land investment in an Australian agricultural region, 2004-19, *Journal of Economic Geography* Doi:10.1093/jeg/lbad008.

[78] Smith K., Langford A., Lawrence G. (2022) Tracking farmland investment in Australia: institutional finance and the politics of data mapping, *Journal of Agrarian Change*. Doi:10.1111/joac.12531.

[79] Stayner, R. & Reeve, I. (1990) *Uncoupling: Relationships between Agriculture and the Local Economies of New South Wales*. Rural Development Centre, University of New England, Armidale.

[80] Pritchard, B., Argent, N., Baum, S., Bourke, L., Martin, J., McManus, P., Sorensen, A., & Walmsley, J. (2012) Local-if-possible: How the spatial networking of economic relations amongst farm enterprises aids small town survival in rural Australia, *Regional Studies*, 46(4), p.539-58.

Local links can be further attenuated when those entities may be owned by interests outside the local region (contributing to an outflow of profits and dividends) and where family labour is replaced by hired labour (without permanent attachments to the region, less inclined to invest locally in housing and more inclined to take savings to their next job).

A second important impact is the effect of heightened demand for agricultural land on the future of family farming. The price of agricultural land has increased sharply over recent years, and this represents a major historical shift. Until 2015, annual change in the median price per hectare of agricultural land was closely associated with trends in commodity prices, reflecting its immediate profit-making potential. However, since 2015 this association has decoupled, with land prices increasing at a much faster rate than commodity prices.[81] Economists have identified a process of 'assetisation' as a key driver of this trend, meaning that at a time of unsettled equity markets, investors have favoured real property and this has driven up prices.[82] This rupture signifies a bidding up of the price of land in expectation of long-term capital gain above and beyond current commodity price and seasonal conditions. The increased price of agricultural land exacerbates barriers to entry for young farmers. The median age of farmers in NSW is 59, and inter-generational succession is widely acknowledged as a major issue in the industry.[83]

3.4 Mainstreaming enhanced sustainability, resilience and climate adaptation in regional development

Rural and regional NSW has been buffeted by major climate-related disasters during recent years. The El Niño period that commenced in 2017–18 generated severe drought and set the stage for the Black Summer bushfires of 2019–20. This weather cycle then flipped rapidly and dramatically to La Niña. The three-year La Niña cycle from February 2020 to January 2023 saw record rainfall in eastern Australia, especially coastal NSW, with associated flooding being the costliest natural disaster in Australian history.[84] The severity of the drought, bushfires and floods generated political urgency to the challenges of regional recovery and mainstreamed sustainability, resilience, and climate adaptation squarely within regional development policy.

These crises led to the addition of a Regional Recovery programs area within the NSW Department of Regional NSW[85] and specific initiatives such as the creation of the Northern Rivers Reconstruction Corporation under the aegis of the *Growth Centres (Development Corporations) Act 1974*. A core principle of these efforts is that recovery and reconstruction efforts should 'build back better' by incorporating all hazards risk assessments into

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[81] Rural Bank (2022) Australian Farmland Values

[82] Birch, K., & Ward, C. (2022). Assetization and the 'new asset geographies.' *Dialogues in Human Geography*, *0*(0). Doi:10.1177/20438206221130807

[83] Australian Bureau of Statistics, Agricultural Commodities, Australia.

[84] Australian Financial Review, 30 November 2022, East coast floods were Australia's most costly natural disaster.

[85] NSW Government, Regional Development Programs.

planning. This represents an aim to futureproof recovery and reconstruction efforts in light of anticipated heightened vulnerabilities because of climate change.

The Northern Rivers floods of February 2022 provide key insights into this imperative. The immediate trigger for the floods was unprecedented rainfall in catchments. The 7-day average rainfalls in the Tweed, Brunswick, Richmond, and Wilsons River catchments preceding the February 2022 floods were 37% to 61% above previous records.[86] Crucially, this rainfall occurred in catchments that were already saturated from the prolonged La Niña cycle with record soil moisture levels and near-capacity water storage infrastructure. Direct attribution of the rainfall events to climate change is difficult, however the CSIRO argues that '[i]t is expected that long-term climate change will result in greater climate variability with more intense, extreme events than in the past. Various research studies have shown a relationship between increasing greenhouse gas concentrations in the atmosphere and more frequent, strong El Niño and La Niña events.'[87] Applied to flood hazards, this suggests a more accelerated and intense hydrological cycle with a greater likelihood of repeated high rainfall events. The 2022 NSW Flood Inquiry argued that 'there is evidence slowly emerging that major dynamic systems are stalling or becoming "stuck" in place. What this means for the future is that, regardless of rainfall intensity, systems may stall and affect a location for a longer period, dumping rain over the same spot for days.'[88]

Incorporating anticipated vulnerabilities from climate change into regional development planning presents a spate of challenges. The immediate challenge highlighted by the Black Summer bushfires and the Northern Rivers floods was the imperative for further investment in improved knowledge systems, especially digital technologies, that more accurately identified early-warnings and enabled mobilisation of responses. Evidence presented to NSW inquiries into the bushfires and floods highlighted the importance of smart sensing digital technologies for the Rural Fire Service, State Emergency Service, and other agencies.[89]

However, the bigger challenges revealed by the bushfires and floods concern planning decisions in an increasingly climate-vulnerable future. International research identifies 'adaptation in place', and 'managed retreat' as the two key strategies for dealing with climate-related threats.[90] For bushfires, adaptation in place has been a primary response. Amendments to the *Environmental Planning and Assessment Act 1979*[91] now require all

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[86] NSW Flood Inquiry (2022) Volume Two: Full Report, p.27.
[87] CSIRO, Understanding the causes and impacts of flooding.
[88] NSW Flood Inquiry (2022) Volume Two: Full Report, p.62.
[89] NSW Independent Bushfire Inquiry. (2020). Final Report of the NSW Bushfire Inquiry. NSW Flood Inquiry (2022) Volume Two: Full Report.
[90] Dundon, L. A., & Abkowitz, M. (2021). Climate-induced managed retreat in the US: A review of current research. *Climate Risk Management*, 33, Doi:100337.
[91] Section 4.14, Environmental Planning and Assessment Act 1979.

new developments on bush fire prone land to comply with 'Planning for Bush Fire Protection' obligations,[92] with the effect that the Rural Fire Service has become a de facto consent authority on this matter.[93] The effect has been not to prevent development in areas of bushfire risk outright but to mandate a higher set of requirements that developments need to meet.

For floods, key current debates centre on managed retreat, and specifically, future permissibility of development on flood-prone land and the fate of development that lies currently on floodplains. In the Northern Rivers, managed retreat is a key component of the $700m *Resilient Homes Program*,[94] which covers the 7 LGAs of Ballina, Byron, Clarence Valley, Kyogle, Lismore, Richmond Valley and Tweed. Through this program, funding has been made available for house buybacks, thereby executing a managed de-population of floodplains. Nevertheless, the policy does not anticipate an entire erasure of floodplain settlement, as it also provides funding for adaptation in place via house raising and retrofitting. The counterpart to the buyback provisions of the *Resilient Homes Program* is the *Resilient Lands Program*,[95] which seeks to identify flood-safe land suitable for residential development. The draft consultation report of the Resilient Lands Expert Panel, released in May 2023, identifies 22 potential sites for residential development with capacity for over 10,000 dwellings.[96] Fifteen of these sites are nominated for immediate detailed investigation, mainly within existing urban growth boundaries and zoned residential. Accordingly, their release for residential development will minimally detract from other potential alternative uses, such as agriculture or conservation. Nevertheless, long-term population growth in the region coupled with a managed retreat of populations from flood-prone land may place further pressures on land used for farming and conservation purposes. Hence, there may be looming tensions and trade-offs in the attempt to create a more climate-resilient future for this region.

These issues arising from recent programs of the Northern Rivers Reconstruction Corporation highlight the need for integrative planning. With reference to flood threats, the 2022 NSW Flood Inquiry called for a more proactive approach to floodplain planning that better accommodated change and uncertainty: 'change by way of urbanisation, development and shifting exposure, and uncertainty around the impact of climate change on flood producing events.'[97] A problem noted by the inquiry was that activities on floodplains all-too-often owed their existence to legacy decisions relevant to outmoded

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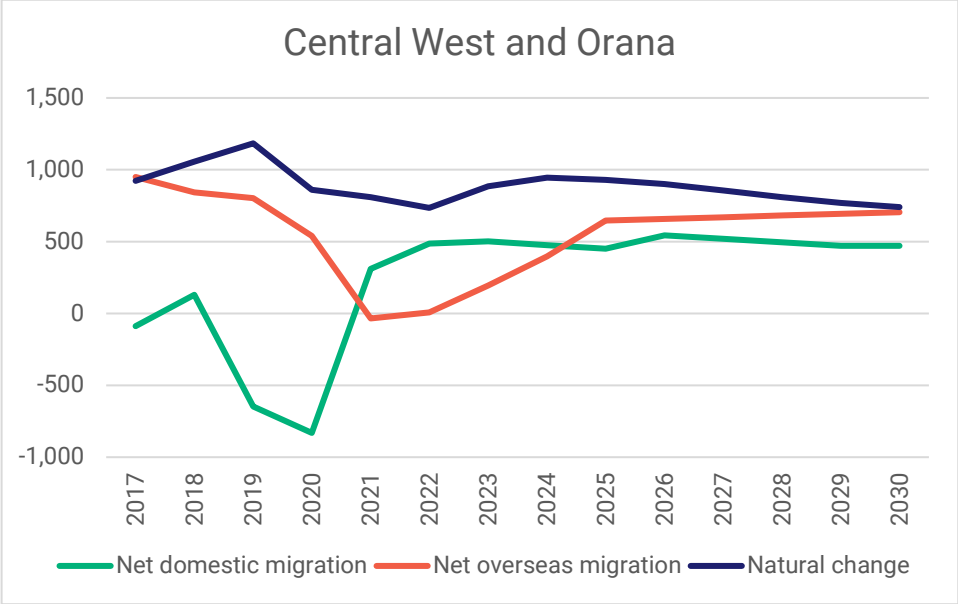
[92] NSW Rural Fire Service, Building in Bush Fire Prone Areas Single Dwelling Application Kit.
[93] Bell, N. (2019) Development in Australian bushfire prone areas, *Environment (Australian Institute of Architects)* p.5.
[94] NSW Government, Resilient Land Program.
[95] NSW Government, Resilient Land Program.
[96] Resilient Lands Expert Panel (2023) Northern Rivers Resilient Lands Strategy – Summary Report, Draft for Consultation.
[97] NSW Flood Inquiry (2022) Volume Two: Full Report, p.278.

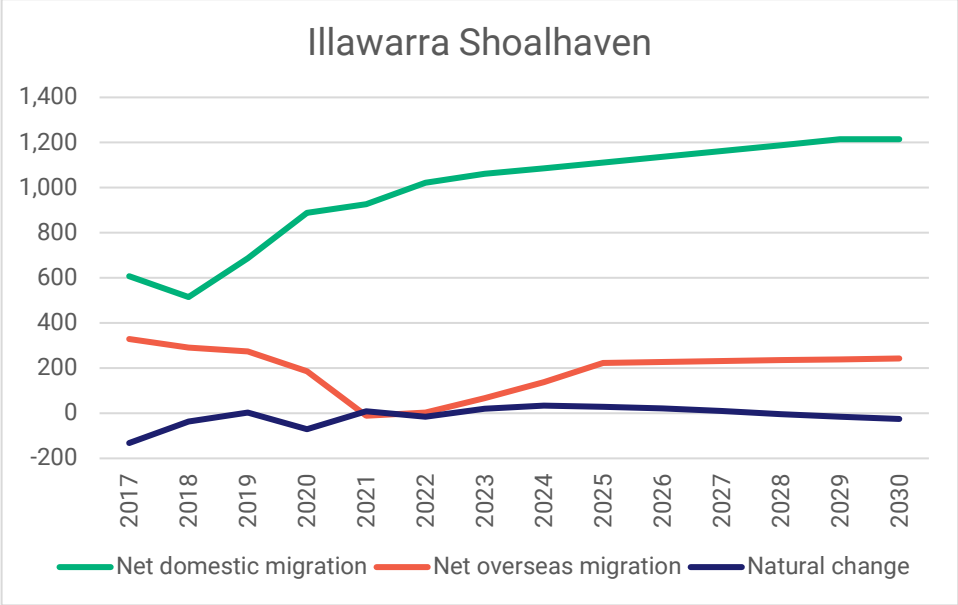
circumstances. To instigate greater flexibility in land use decision-making on floodplains, the inquiry recommended: 'commencement of a process for taking them [floodplain lands] back into public ownership and re-purposing them to more appropriate uses. Government should progressively move floodplain ownership to government leasehold, with lessees using the land under appropriately specified conditions.'[98]

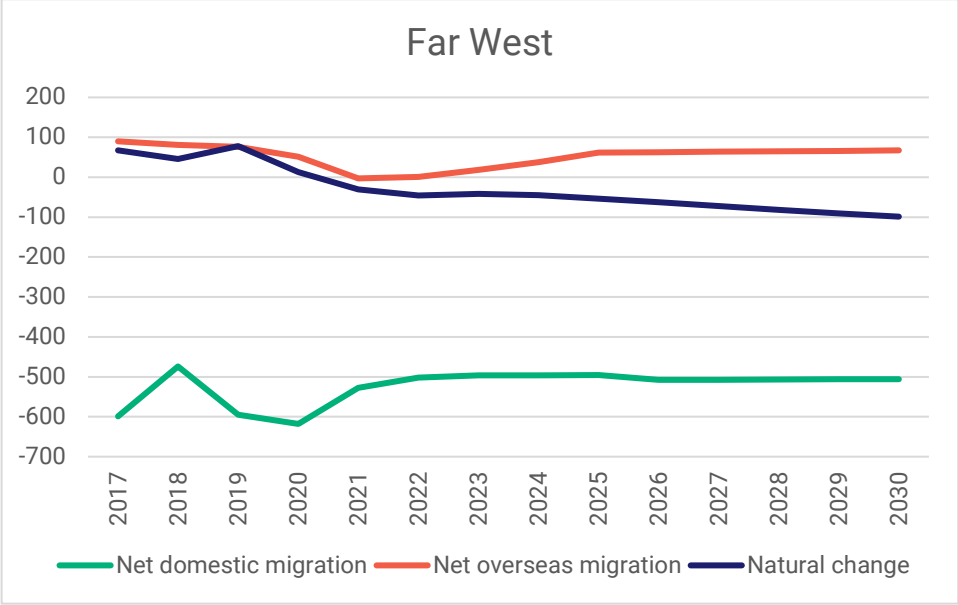
There is a final implication from advocacy of proactive planning for climate resilience. The population segments typically most vulnerable to climate risks are those facing social and economic disadvantage. In Lismore, highly flood-prone land is populated by a relatively high proportion of people in the lowest socio-economic quintile.[99] When people in floodplains are bearers of cumulative disadvantage, for example, poor health in addition to low socio-economic status, their vulnerability is significantly heightened. Hence, there are strong arguments relating to justice and equity in climate resilient regional development.

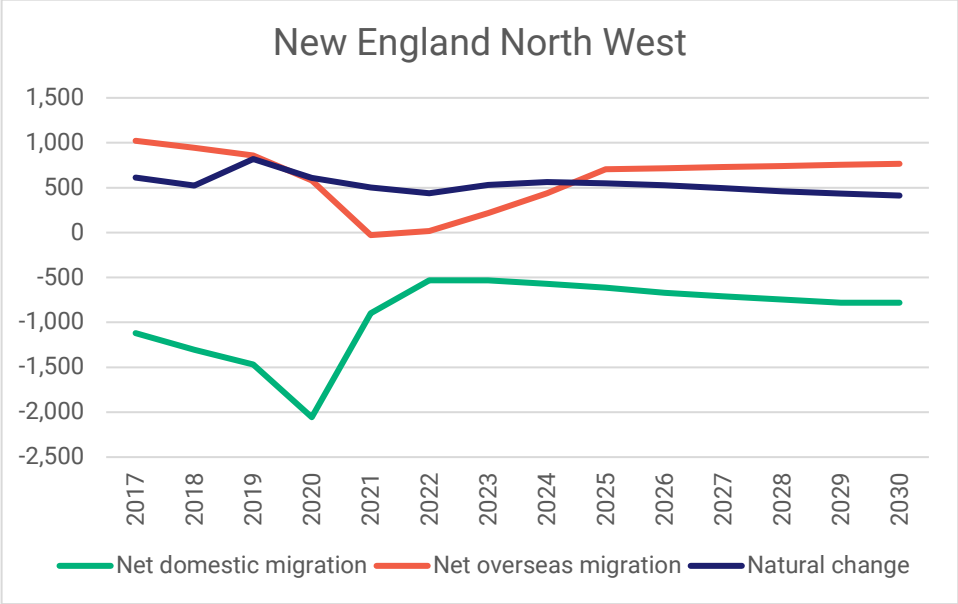
[98] NSW Flood Inquiry (2022) Volume Two: Full Report, p.287.
[99] Rolfe, M.I., Pit, S.W., McKenzie, J.W. *et al.* (2020) Social vulnerability in a high-risk flood-affected rural region of NSW, Australia. *Natural Hazards* 101, 631–650. Doi:10.1007/s11069-020-03887-z

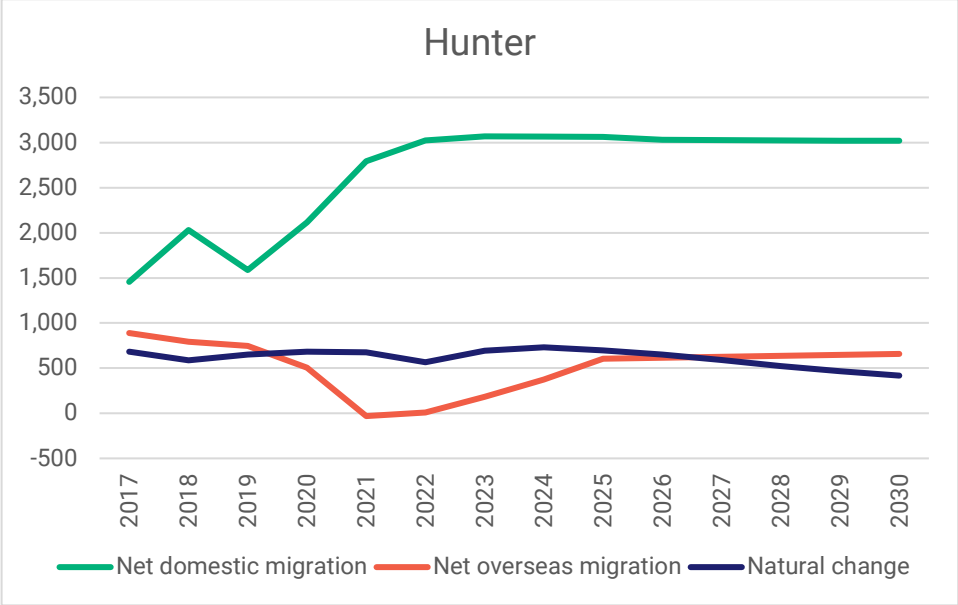
Appendix A: Components of population change by region 2017-30

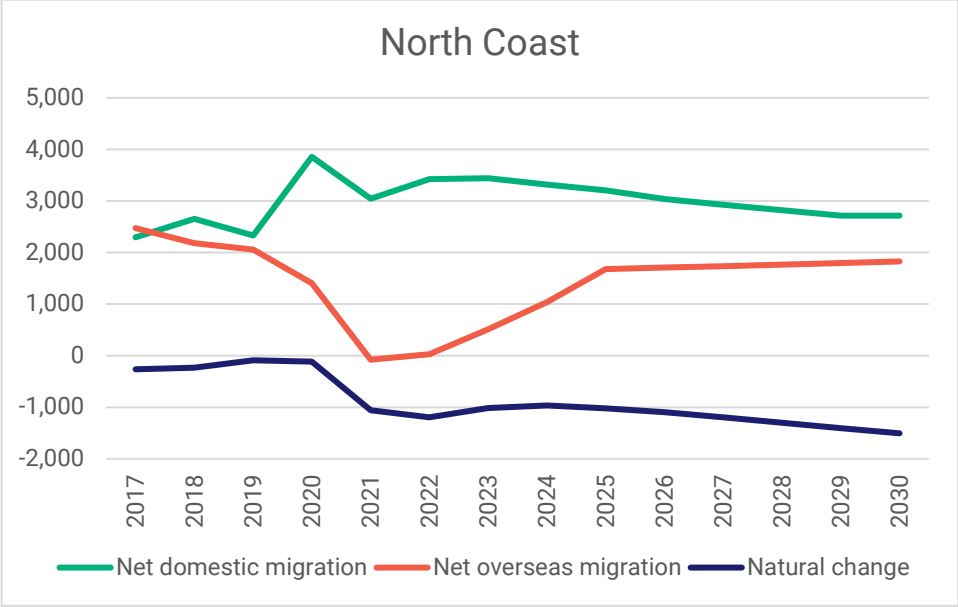


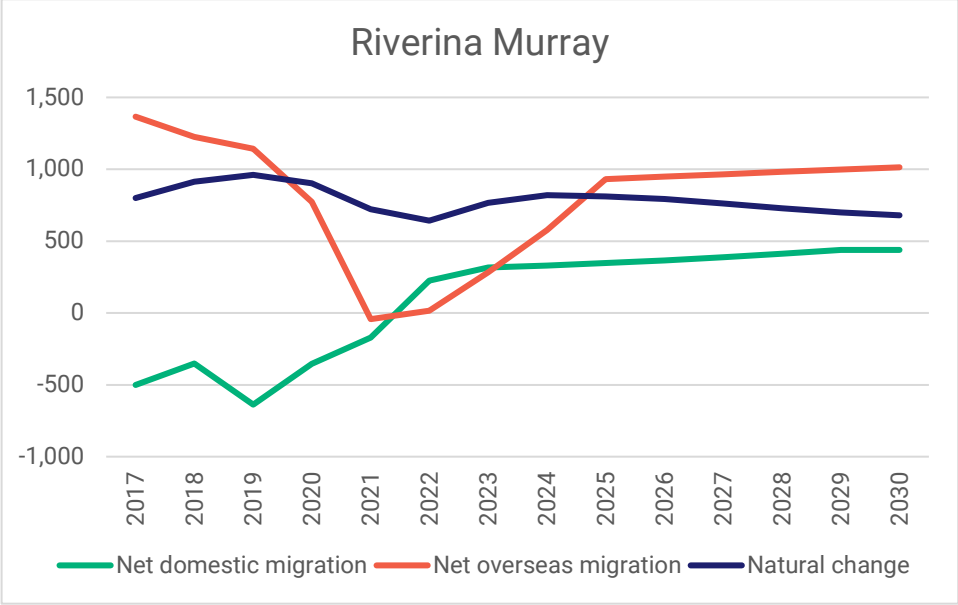


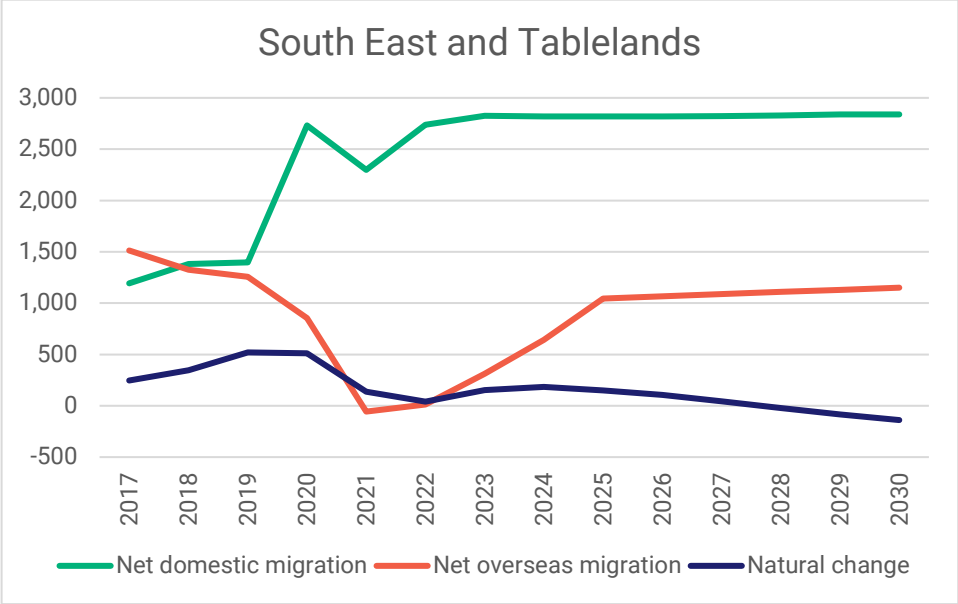

Far West
200
100
0
-100
-200
-300
-400
-500
-600
-700
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030
Net domestic migration
Net overseas migration
Natural change


New England North West
1,500
1,000
500
0
-500
-1,000
-1,500
-2,000
-2,500
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030
Net domestic migration
Net overseas migration
Natural change


Hunter
3,500
3,000
2,500
2,000
1,500
1,000
500
0
-500
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030
Net domestic migration
Net overseas migration
Natural change

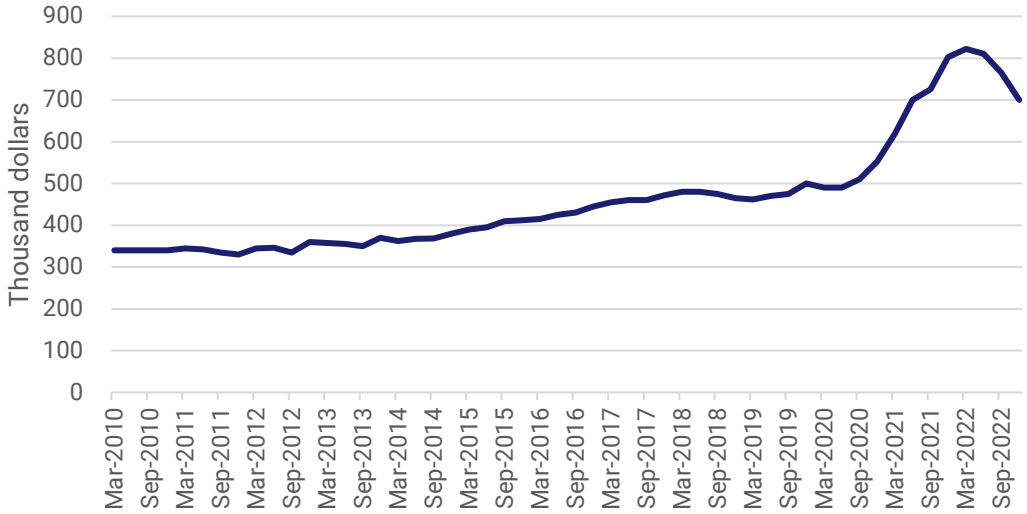

North Coast
5,000
4,000
3,000
2,000
1,000
0
-1,000
-2,000
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030
Net domestic migration
Net overseas migration
Natural change


Riverina Murray
1,500
1,000
500
0
-500
-1,000
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030
Net domestic migration
Net overseas migration
Natural change


South East and Tablelands
3,000
2,500
2,000
1,500
1,000
500
0
-500
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030
Net domestic migration
Net overseas migration
Natural change

Appendix B: Time series of land and housing price changes, before and during the COVID-19 pandemic

Figure 4. Median established house prices, rest of NSW



Source: Australian Bureau of Statistics Dec-quarter-2022, Total Value of Dwellings, ABS, viewed 17 May 2023.

Note: the ABS definition of 'rest of NSW' excludes Greater Sydney, but includes urban areas in the Hunter and Illawarra, so is a slightly different geography to 'rural and regional NSW' used elsewhere in this report.

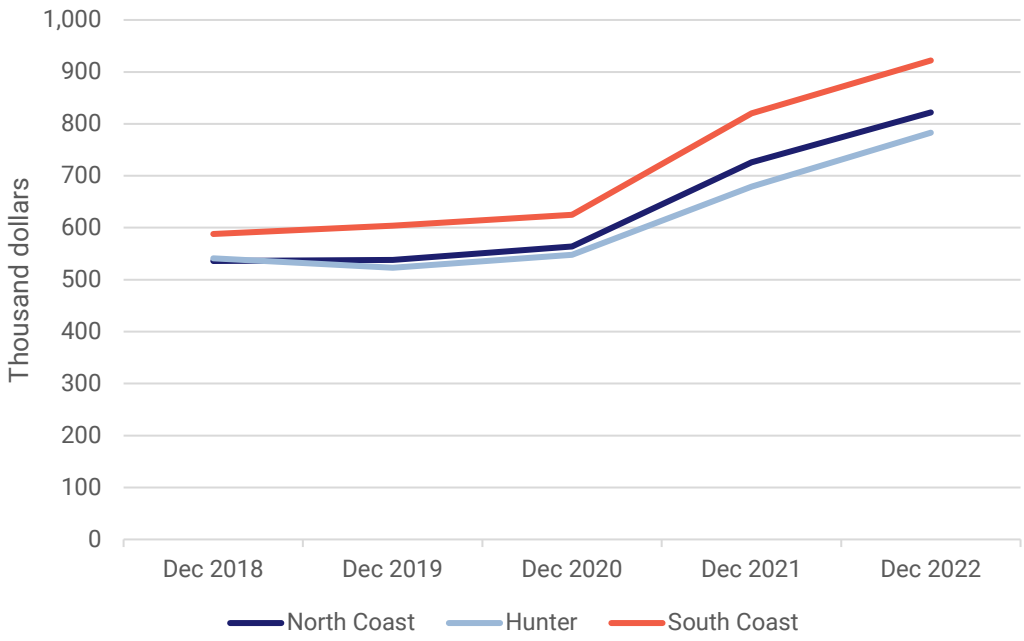
Table 4. Change in total land value

	1 July 2019 to 1 July 2020	1 July 2020 to 1 July 2021	1 July 2021 to 1 July 2022
Central Tablelands	+4.1%	+21.8%	+44.5%
Central West	+7.0%	+14.5%	+21.8%
Hunter	+2.3%	+30.2%	+66.0%
Hunter Coast	+1.9%	+36.6%	+18.5%
Murray	+3.4%	+28.9%	+52.8%
North Coast	+2.5%	+28.7%	+35.9%
North West	+7.4%	+13.0%	+38.7%
Northern Tablelands	+8.3%	+14.2%	+46.7%
Riverina	+5.9%	+19.5%	+45.7%
South Coast	+2.3%	+30.0%	+38.2%
South East Regional	+4.5%	+22.6%	+40.6%
Western NSW	+7.8%	+30.9%	+33.1%

Source: NSW Valuer-General[100]

[100] NSW Valuer-General (2021) Report on NSW land values at 1 July 2020; NSW Valuer-General (2022) Report on NSW land values at 1 July 2021; NSW Valuer-General (2023) Report on NSW land values at 1 July 2022. Note that the regions used by the NSW Valuer-General are not consistent with the NSW Regions used elsewhere in this report.

Figure 5. Weekly asking prices (Combined average, houses and units)



Source: SQM Research.[101]

[101] SQM Research, Weekly asking property prices North Coast NSW and SQM Research, Weekly asking property prices, Hunter region NSW and SQM Research, Weekly asking property prices South Coast NSW

Parliament of New South Wales

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Bill Pritchard

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The Parliament of New South Wales acknowledges and respects the traditional lands of all Aboriginal people and pays respects to all Elders past and present. We acknowledge the Gadigal people as the traditional custodians of the land on which the Parliament of New South Wales stands.