Queensland 2024/25 Chickpea Transportation: issues and solutions

September, 2024



1.	Summary & Recommendations2			
2.	Background			
2	.1	Unique aspects of Chickpeas	4	
2.2		Trade time-sensitive Considerations	4	
2.3		Shipping Vessel Availability	4	
2	.4	Season 2024/24 Forecasts, Value & Timing	5	
2	.5	Historical trends, background and issues	5	
3.	. Harvest transportation issues, significance & recommendation			
4.	Appendices			
	Chickpea Port Heat Map (forecast estimate, QDAF), September 2024			
	QR Track Maintenance Schedules			
	CRR Extended Possessions 2024/25			

1. Summary & Recommendations

A substantial and unique opportunity for the Queensland economy has arisen due to a temporary suspension of Indian trade tariffs on chickpeas received into Indian ports by 31 March. As a result of the temporary tariff suspension, agricultural producers have undertaken significant plantings of chickpeas due for harvest from October 2024 to January 2025. As the season has developed and growing ideal conditions have continued the industry is set to deliver a bumper crop of up to 900,000 tonnes with a further 800,000 tonnes predicted from NSW.

Assuming the best-case price scenario, combined with an assumption of an ability to maximise exports to previous peak volumes, total national Gross Value of Production is expected to be \$1.53 billion; \$840 million from Queensland and \$690 million from NSW, much of which should pass through Queensland ports (QDAF).

However, the size of this opportunistic crop along with various limitations of current transport infrastructure, a lack of 20' containers and a range of other factors indicates the transport from farmgate to port and export to meet the 31 March 2025 deadline will prove challenging – and a failure to prepare and proactively plan accordingly may mean this economic opportunity is lost.

QTLC has worked with the supply chain to understand and share knowledge on the issues faced. With industry, we have articulated a range of proactive productivity levers and collaborative solutions to ensure we capitalise on, and all share in the associated economic opportunity. The following table has been derived from a workshop and subsequent discussions with supply chain participants over August and September 2025 in response to the many issues tabled. It contains a list of priority recommendations for urgent consideration.

	Recommendation	Responsibility
1	Investigate a temporary permit with appropriate conditions to allow AB Triples into Fisherman Islands.	TMR, NHVR
2	Allow PBS A doubles into Gladstone and Mackay Ports under notice.	TMR, NHVR
3	Increase 11 Axle A doubles from 85.0 tonnes to 85.5 tonnes and provide length relaxations for safe combinations >30m.	TMR, NHVR
4	Increase 12 Axle A doubles to 91.0 tonnes into Fisherman Islands.	TMR, NHVR
5	Ports to investigate flexible options to provide efficient bulk and container handling.	Qld Ports
6	Work with industry and ports to scope and implement trials to enable harvest to reach export.	All
7	Investigate A-double access from the Bruce Highway to the Port of Bundaberg	TMR, NHVR
8	Port of Bundaberg to work with Bundaberg Port Trade Facilitation Group to work on improving efficiency with sampling, weighing and storage.	Port of Bundaberg

9	QTLC to work with Bundaberg Port to confirm Bundaberg storage and facilities and communicate options to industry.	QTLC, Port of Bundaberg
10	Publicise CRR extended possessions asap.	CRRA, TMR
11	QTLC and QR to communicate track maintenance schedules to industry to allow forward planning.	QTLC, QR
12	QR is requested to consider a 'grace' from WILD use such that where industry can prove the chickpea density is sufficiently and reliably lower than 74kg/hl, chickpea trains wouldn't have the loading detection system applied to them.	QR
13	Ports to investigate hub and spoke models to maximise throughput on rail to closest possible point.	Qld Ports, industry

2. Background

2.1 Unique aspects of Chickpeas

There are a range of unique aspects to chickpeas that are useful to understand when considering how to approach their transportation:

- <u>They're incredibly lucrative.</u> Prices currently are >A\$1000/ton. This can be compared to a grain crop which might return \$A\$250/ton.
- <u>They're heavy</u>. As such, if containerised, they need to go in 20" TEUs, rather than 40" TEUs which are now the shipping-industry norm.
- <u>They will split if handled too much</u>. This will result in price downgrades.
- <u>The crop creates its own nitrogen supply</u>. With the help of a group of soil bacteria called rhizobia, chickpeas can actually take nitrogen from the air, transform it into a usable form (ammonia) which is used by the plant, and which can be returned to the soil to act as a natural fertilizer. Even once a chickpea is dead its positive impact and N bounty remains on the crop site. This decreases the need for added nitrogen fertilisers.

2.2 Trade time-sensitive Considerations

India initially imposed tariffs on Australian chickpeas and lentils in 2017, effectively eliminating any significant Australian chickpea export to India since this time. Prior to the tariff introduction in 2017, Australia was the world's largest exporter of chickpeas, according to the US Department of Agriculture, having exported over 2 million tonnes of the legume in 2017. India is the world's biggest consumer of chickpeas.

In early 2024, the Indian Government suspended a tariff on Desi chickpeas following a poor local harvest. The tariff, which was initially equivalent to around 33 per cent and then rose to around 66 per cent, have recently been withdrawn until March 31, 2025. There is no indication this tariff withdrawal will be extended. <u>Chickpeas need to be received at Indian ports by 31 March 2025 as it is likely that a 33% tariff will resume after this date, leading to a projected price correction of \$346 per metric ton from the current \$1,050 delivered price at Queensland ports.</u>

2.3 Shipping Vessel Availability

Advice received from the Freight and Trade Alliance (FTA) has highlighted concerns that many members (exporters) of the Australian Peak Shippers Association (APSA) are struggling to obtain confirmation that likely demand for export containerised shipments to India may be adequately obtained. This is due to a lack of the required capacity of container vessels available to service the route.

FTA reported that many carriers have moved vessels to other more lucrative trade lanes to cover increased demand following the Red Sea and Suez Canal issues. The reduction in service availability has reduced capacity and competitive options, and inflating ocean freight rates. Political issues in the Indian Sub-continent region (specifically Bangladesh) have also affected some exporter's ability to contract goods to that region. These issues are further exasperated by

the main transshipment port of Singapore and others currently struggling with severe congestion and an on-going general shortage of 20' "food quality" rated containers.

Given all these issues, much of this year's harvest has been designated for shipping in bulk.

2.4 Season 2024/24 Forecasts, Value & Timing

The 2024-25 Queensland chickpea crop was initially forecast at \$700 million by the Department of Agriculture and Fisheries, a 180 per cent increase from the previous year and 115 per cent above the five-year average. As the season has developed and growing ideal conditions have continued the industry is set to deliver a bumper crop of between 1.5 and 1.8 million metric tons across Queensland and NSW, with a consensus of at least 900,000 metric tons available in the Queensland port zones. Assuming the best-case price scenario, combined with an assumption of an ability to maximise exports to previous peak volumes, total national Gross Value of Production is expected to be \$1.53 billion; \$840 million from Queensland and \$690 million from NSW.

While it may be impacted by weather, it is expected that harvest times will be staggered as follows:

- North Queensland: August-September
- Central Queensland: September-October
- Southern Qld & NSW: November-December.

On this basis the Queensland Department of Agriculture and Fisheries (QDAF) believes that peak export capacity will be in Q4, depending on how much can be transported to the ports during the harvest period. From 2015-2017, average Q4 export volumes from Queensland ports were 555,000 metric tons, with a peak of 749,000 metric tons achieved in 2016.

QDAF has put together a heatmap showing the regional spread of forecast chickpea production by port zone for the 2024 crop. This forecast, while informative, is not definitive; it is based on trade sources and has been cross-checked with DataFarm for the 2023, 2024, and current 2025 chickpea estimates. Currently, there is no spatial mapping data available for chickpea acreage.

Supply chain disruption could limit Queensland's ability to capitalise on the current opportunity to gain a price premium into the Indian market. Such issues would risk the capture of a premium of over \$260 million nationally.

2.5 Historical trends, background and issues

QDAF have provided a summary of historical export volumes and trends for context of this season's harvest in the graph below.



Queensland's peak chickpea shipment capacity is around 370,000 metric tons per month, a level last achieved in November 2015 and December 2016 before the Indian tariff was introduced. Chart 1 above illustrates Queensland chickpea exports to all destinations from 2013-2024, highlighting significant demand peaks prior to the December 2017 tariff introduction.

Historically, when India is an active buyer, they typically purchase two-thirds of our crop, with peak demand occurring from October to January, aligning with our chickpea harvest.

The graph below shows Queensland chickpea exports to India from 2013-2024, with demand peaks aligned to our harvest period and a halt in trade following the tariff introduction.



3. Harvest transportation issues, significance & recommendation

A workshop held by QTLC and the Port of Brisbane on 19 August, 2024 asked a range of industry representatives across the supply chain to list the short, medium and long term issues in the grain supply chain in Queensland, noting that only the short-term ones are likely to impact chickpea transportation if they can be solved. The following table captures these points as well some subsequent discussions.

Issue & area	Timing	Recommendation & context
	(short,	
	medium,	
	long term)	
Road	Short	Brisbane Port/Fisherman Islands
		Port of Brisbane is likely to handle the biggest volume of chickpea export. In 2017, with a pilot, 85.0
The most efficient export		tonnes as allowed onto the network and now this is the main workhorse moving grain to port. When
pathway is from the farm		this happened, these trucks drove down the Toowoomba range through Toowoomba. Now we have
gate directly to the port.		the new, improved road down from Toowoomba range to the Gatton pads. AB triples can get to Port
		of Brisbane at 113.6t gross.
With GrainCorp only		Recommendation: Investigate a temporary permit with appropriate conditions to allow AB Triples
handling an expected		into Fisherman Islands.
40pc of volumes, this path		
will also be most probable		Gladstone & Mackay Ports
as individual producers		PBS A Doubles are currently allowed under notice into Gladstone and Mackay ports under permit.
won't have access to rail.		Allowing PBS A doubles into Mackay and Gladstone would mean a significant reduction in truck
		movements (approx. a third as well as reduce transport costs and carbon emissions.
Industry stressed a need		Recommendation: Allow PBS A doubles into Gladstone and Mackay under notice.
to:		
- Maximise		11 Axle A Double tonnage and length
productivity		PBS 2B vehicles are traditionally limited by 30m length and 85t mass in Queensland – 2 numbers
 Ensuring safety 		that are prescriptive and run counter to underlying PBS scheme philosophy. PBS vehicles have been
- Minimising truck		embraced to improve productivity, safety and sustainability, particularly for containerised freight.
numbers		30m PBS 2B vehicles can transport 4xTEU containers per trip, compared to B-doubles at 3 TEUs. In
		southern states, these vehicles can operate at 85.5t for 11 axle PBS A-doubles, and in specific

cases may be approved to be longer than 30m. In Queensland, mass limits are currently capped at 85.0 tonnes for 11 and 12 axle PBS A doubles. There is an opportunity for Queensland to also take a wider view on productivity improvements, particularly given the chickpea harvest – length alone should not be a reason for rejection of more productive but longer 2B complying vehicles (complying in every respect except for length), particularly given the reduction in truck numbers, improved safety, emissions and productivity.
Under current arrangements, tri dolly tipping A doubles that currently come to Brisbane every day are limited to 85t when they could be running at 91 tonnes. For every transit, the trucks run 6t lighter than what they could achieve. So for every 11 trucks that make the trip to Brisbane, 1 should not have made the trip if its full productivity was utilised (a potential 9% improvement in productivity).
Industry has confirmed that they are in a much better situation in 2024 with their A-Double fleet to manage those high-volume seasonal fluctuations than we were back in 2017. GrainCorp have also adjusted their county to port delivery schedules to cater for driver hours/fatigue when operating at higher volumes into the Terminals (lesson learned from 2017). <i>Recommendation: Increase 11 Axle A doubles from 85.0 tonnes to 85.5 tonnes and provide length relaxations for safe combinations >30m.</i>
<u>12 Axle A Double tonnage</u> In Victoria 12 axles get 91.0 tonnes under notices and NSW trucks get the same under permit. <i>Recommendation: Increase 12 Axle A doubles with 91.0 tonnes into Fisherman Islands</i> .
Flexible port handling Ports discussed that terminals have the potential to be more flexible and offer extended R&D where required to service trucks ex country. Recommendation: Ports to investigate flexible options to provide efficient bulk and container handling.
Implementation of harvest transportation trials In 2017 the large chickpea season presented issues for exporters as there was a limited number of PBS vehicles and a large crop to move. At industry's request, QTA and DTMR facilitated an interim

			and limited term approval for road train vehicles meeting certain criteria to 32.5m to travel to the
			port to support the containerised chickpea export effort.
			Recommendation: Work with industry and ports to scope and implement trials to enable harvest to reach export.
			Utilise the new Bundaberg Multi-user Conveyer
			There is an opportunity to utilise the newly commissioned multi-user conveyor at the Port of Bundaberg for bulk shipments. The Multi-Use Conveyor is designed to manage grains and pulses at an average loading rate of around 1,150tph. A-Double Road access from the Bruce Highway to the Port of Bundaberg (currently only B-Doubles permitted) is very important to providing the grain and pulses industry with another viable port option in Central Oueensland.
			Recommendation: Investigate A-double access from the Bruce Highway to the Port of Bundaberg.
			Chickpeas could be stored in the Bundaberg Bulk Sugar Terminal sheds, although this is still to be confirmed with Sugar Terminals Ltd. The Bundaberg Bulk Sugar Terminal is a registered establishment for Grains and Seeds, has a 24/7 weighbridge and is set-up to manage sampling on ship loading. Port of Bundaberg has also advised that there may be an option to store up to 15,000 tonnes in a concrete bunker using tarp coverage with Okara who operate the concrete bunker bulk
			storage in the process of obtaining registered establishment status for grains and seeds.
			Recommendation: Port of Bundaberg to work with Bundaberg Port Trade Facilitation Group to work on improving efficiency with sampling, weighing and storage.
			Recommendation: QTLC to work with Bundaberg Port to confirm Bundaberg storage and facilities and communicate options to industry.
Rail		Short -Med-	Pathing
		Long	Agriculture was noted as being the poor cousin to coal when it comes to pathing, particularly in CQ
-	Rail pathing		where coal takes priority (and pays for it). GrainCorp discussed a need to get legislation to grant
-	Available train		powers on pathing however this is obviously a long-term solution. Watco expressed a desire to get
	slots		contractual pathing agreements in place, or even reserved pathing. The grain industry seeks 7
-	Small axle load		days/week pathing however QR noted that coal can contract paths all year round rather than
	limits compared to		seeking pathing for seasonal fluctuations, nor does coal receive State rebates, thereby making the
			case for any short-term solution on rail pathing possible.

	other parts of	
	Australia	Track Closures
-	Limited access	Industry discussed the extensive rail closures over Christmas with maintenance and restricted
	beyond	freight paths due to Cross River Rail (CRR) extended possessions. QTLC has obtained a copy of the
	Toowoomba	maintenance schedules from QR (which are public and included in the appendix) and also the CRR
-	Many track	ones which were only provided commercial-in-confidence. CRR confirmed to QTLC that only
	closures over	September and October are confirmed and closures from December onwards are still subject to
	December/January	change (noting that they are regulated by the Queensland Competition Authority which includes a
	holiday period that	mandatory requirement to consult with freight operators). Clearly this notice provides insufficient
	reduce train	notice for industry to plan freight during what is likely to be the critical time for chickpea
	utilisation,	transportation.
	including track	Recommendation: Publicise CRR extended possessions asap.
	temperature limits	Recommendation: QTLC and QR to communicate track maintenance schedules to industry to allow
-	Lack of an Inland	forward planning.
	rail option in Qld	
	means southern	Track-heat Restrictions
	ports and markets	As the track heats up it expands and moves, and the risk of derailment increases. As such we limit /
	have improved	management movements (depending on the heat) by reducing speed or in some cases stopping
	flexibility	trains. QR has a procedure (conditions affecting the network) it uses to make these decisions.
		Typically, this means that rail is not able to be used when temperatures >32°C. Unfortunately, the
		neat restriction issue is not simple or cheap. To reduce the number of restrictions on the network,
		you basically need neavier rail / concrete sleepers and full depth ballast (giving greater track
		stability.) The fail track issue and narvest timing is likely to place further limitations on transporting
		the chickpea crop by rait.
		Wagon Weight Sampling
		Industry have expressed concerned with the use of Queensland Bail's (OB) WILD devices which
		madely have expressed concerned with the dec of Queenciand hat e (Qn) will be deviced which
		means wagons used by GramCorp are currently being undertoaded by To percent of 4 tonnes to
		avoid false overloads with QR. QR use WILD devices (wheel impact load detector) as a part of their
		asset protection system for maintain track life/wear & tear however the secondary use for a WILD is
		to detect the weight of each wheel on the track, but with huge imprecision and inaccuracy. This is
		the usage industry is having a problem with as some grains (such as chickpeas) are low enough that

it is physically impossible to overload the rail wagons. WILD's inaccuracy means operators are
significantly underloading trains to avoid getting stopped and adjusting loads (at significant cost
and schedule impact).
Recommendation: QR is requested to consider a 'grace' from WILD use such that where industry can prove the density is sufficiently and reliably lower than 74kg/hl, chickpea trains wouldn't have the loading detection system applied to them.
The need for Inland Rail
Industry outlined the benefit of getting Inland rail to port given it would substantially increase the axle load limits (currently 15.75t), even if restricted by train length past Acacia Ridge. Whilst the absence of inland rail in Queensland is not a short-term issue to be resolved, industry were keen to stress the value and redundancy that it could offer in these special circumstances.
Opportunity for Hub and Spoke Deliveries
Given limitations of rail per above and road combinations, there is a need to boost hub and spoke model including potential for rail shuttles to boost volume. It was noted that ACFS utilised Kmart Lytton facility in 2017 to do this successfully.
Recommendation: Ports to investigate hub and spoke models to maximise throughput on rail to closest possible point.

4. Appendices



Chickpea Port Heat Map (forecast estimate, QDAF), September 2024

QR Track Maintenance Schedules

Western Corridors:

<u>Western Corridor Alignment Calendar 2024 - Last Updated 270824.pdf</u> (queenslandrail.com.au)

Western Corridor Alignment Calendar 2025 up to 160325 then DRAFT CRR and SEQ closures only - Last Updated 270824.pdf (queenslandrail.com.au)

Metropolitan Network

Planned track closures - 12 month calendar (queenslandrail.com.au)

North Coast Line

Possessions Dashboard - Brisbane Track Possessions - 27_08_2024 - 27_08_2026.pdf (queenslandrail.com.au)

Possessions Dashboard - Townsville Track Possessions - 27.08.2024 - 27.08.2026.pdf (queenslandrail.com.au)

Mount Isa Line

Master train plans (queenslandrail.com.au)

CRR Extended Possessions 2024/25

As these were provided as commercial-in-confidence they have not been included.