# GRDC PODCAST TRANSCRIPT

**UREA SUPPLY AND NITROGEN DECISION MAKING**

[00:00:05] **Intro** This is a GRDC podcast.

[00:00:12] **Sally Maguire** As many growers in the south-east of the country are experiencing - urea is in high demand but low supply, largely due to the weather and issues with the supply chain. Hello, I'm Sally Maguire. Nitrogen decision making is something that growers undertake ahead of every season. But if unforeseen circumstances mean you've been caught short, what then? Joining me to discuss how to make the most out of your available nitrogen will be agronomist Matthew Sparke from Spark Agricultural and Associates. But before we hear from Matthew, let's find out what factors contributed to the urea shortage and what growers can do better next season. Joining me now is Robert Dawes from Robert Dawes Consulting. Robert, talk us through the factors that contributed to the current urea shortage.

[00:01:03] **Robert Dawes - Robert Dawes Consulting** Sally three really major factors and then a couple of minor ones that have had a minor impact as well, in terms of the three major factors, we've had the global urea price falling since September 22 and on a falling market, the Australian importers, there's five or six importers, they're very hesitant to bring product in early because they'll potentially have to sell that product at a lower price. So they wait till the last minute to bring product in on a falling market. The second major factor was the BoM forecast, and I think we're all well aware of the BoM forecast for winter and into spring, but certainly for winter was that the vast majority of south-east Australia was going to have an incredibly dry winter. So again, the importers would have been looking at that factor and saying we would expect low demand due to the BoM forecast. So again, they potentially looked at bringing less volume of urea in because of that forecast, I think the third thing was, in reasonable chunks of south-east Australia, we got reasonably late rainfall. Certainly I did a phone business update in Clare a couple of weeks ago and a farmer there said on the first of June they had no intention of using urea, but by mid to late June that had enough rain to really kick things off and therefore demand was pretty late. So farmers were not ordering urea basically because of those two factors, dry start to the season and a falling price. So most farmers were not aware that we were potentially heading into a shortage. Pretty much all farmers think were not aware because the market wasn't aware, we were heading into a period of short urea supply. So farmers weren't busily ordering product because they thought, I won't need it till next month and next month it's going to be cheaper than this month. So those orders weren't getting to retailers and retailers were therefore not ordering urea on the importers. So there's three factors, falling market, dry BoM forecast and farmers not ordering product till the last minute, saw pretty much no demand getting to the importers. So they weren't getting the message to bring a large volume. Of those, probably the three major factors sally, there's a couple of others I think that have also impacted. We saw IPL pull out of manufacturing urea in Australia last season at Gibson Island up in Brisbane. So we are fully reliant on imported product. When the importers did realise that there was going to be significant demand about the third week in June that occurred, and we realised there was a shortage happening very quickly. Really, the beginning of the third week in June it all looked okay, by the end of the third week of June it was very apparent that we're heading for a period of shortage of supply. They scrambled off to the closest manufacturing site, which was Malaysia, but Malaysia had very limited supply due to a reasonable sized Indian tender that had come out and some maintenance work that was happening at Malaysia. So even the closest urea to Australia was not available either. So they're I think the main factors Sally and they all acted very, very quickly in that sort of third to fourth week in June.

[00:03:41] **Sally Maguire** Sounds like it. So how did we see this play out on the ground for growers that you've spoken to?

[00:03:47] **Robert Dawes - Robert Dawes Consulting** So most growers, once they realised there was a problem or just in their standard ordering, I think when they got to a point in that sort of second, third week in June when large numbers of growers saw that they were going to have a pretty good crop and certainly where worthwhile putting winter top dressing on of urea, they all went to their retailers, retailers went to the importers all around the same time. It just happened around that third week of June. Growers were starting to order in early June, but I think the upswing in volume didn't happen until quite late in June. So then very, very quickly, the limited volumes that were here sold out. We saw the price move up from sort of low six hundreds to seven to 750 almost immediately. So the importers thought if there's going to be a shortage of supply, will push the price up. So there was a price impact, but it was more about the availability and that's going to flow right through, it looks like, into well into September, possibly to the end of September before we catch up because of that lead time. It's about a six week lead time to sell urea into Australia. So by the time the importers realised that there were significant demand and then turn those orders on and started getting ships heading towards Australia, we're seeing a shortage of supply right through July, well into August, all of August. We believe they'll continue to be a shortage of supply, and on top of that we're seeing delivery times or port slots, the slots that trucks could book into each of the ports, the southern ports or south-eastern ports are very, very challenging to get at the moment because there's just significant demand on that limited availability. So we've seen the fertiliser that is getting into the country. It's taking probably an extra five days to get out of port back to farm than what it would normally take because of that sort of condensed demand that we're seeing. At this stage, we don't see much light at the end of the tunnel until mid to late September and by then I think agronomically we're probably going to be way past the peak time for winter top dressing, so we're probably looking at more like urea for the next summer crop at that stage.

[00:05:33] **Sally Maguire** Is this an unprecedented kind of situation and what do growers need to be thinking about for the seasons ahead to make sure it doesn't happen again?

[00:05:41] **Robert Dawes - Robert Dawes Consulting** Sally We encourage all of our clients have forward forecasts, not forward order, but forward forecasts, their requirements the minute they're aware of anything, whether it's crop chemical or fertiliser. So in this case fertiliser to be talking to the retailers well in advance of requiring anything that they need for their farm and that's due to the supply chain challenges we've had right through COVID. Although most of those supply chain challenges from a urea point of view have now ceased, the three major drivers for urea price are the global gas price, and the global gas price is now back to pretty much pre-COVID. The global shipping or Panamax cost, the cost to hire or ship that is back to pre-COVID level and the third factor's the Aussie dollar. So those three things really say that we shouldn't be having challenges with urea in Australia and globally there is ample supply of urea. It's an Australian challenge that we have, where just not enough boats with sailing towards Australia because those importers weren't getting the right messages to bring product in. So if farmers were forward forecasting with their retailers and those retailers, the Elders and Nutrien, the Deltas or whoever they deal with of the world, if they were going to the importers, IPL, Impact, Wang Foo etc. and giving those forward forecasts to those importers, then they would have got the message to bring additional volume in, and that's the trigger that they really need. If they can't pre-sell part of their boat for a boat comes, then they're very hesitant to line the next ship out after that one that's on its way to Australia. So forward forecasting with your retailer and certainly large numbers of farmers are talking to us about the fact that this impact will see them look at putting additional storage on farm and bringing product onto farm much earlier. That's challenging on a falling price, which we had this year where farmers were seeing that the price was falling, but those that didn't move early got all of the urea they required, and they probably paid maybe $50 a tonne more than what urea bottomed out and it bottomed out at just over $600 ex sea port this time around. And now it's sort of 750. So there's times like this when supply trumps price in our view and making sure you've got product on the farm or well and truly forward forecast with your retailer very, very early, they're the two things that we advise our clients to do more so than what they used to pre-COVID.

[00:07:47] **Sally Maguire** That was Robert Dawes from Robert Dawes Consulting talking about the current urea shortage. And now I'm joined by agronomist Matthew Sparke to discuss nitrogen decision making and what growers can do now if they have been caught short.

[00:08:02] **Matthew Sparke - Sparke Agricultural & Associates** They've got to use it in a timely manner, depending on the crops they're growing, whether it's canola, wheat, barley, etc., to get the most effectiveness out of it and hopefully catch up later in August or early September with another significant top dress of urea or spray of UAN to get them close to potential yield.

[00:08:26] **Sally Maguire** So let's talk about some of the crops specifically and I guess timings in the different regions we're sort of dealing with different regions of Australia and different crops.

[00:08:36] **Matthew Sparke - Sparke Agricultural & Associates** You know, I can certainly talk for, say, the Wimmera, Southern Mallee where we're starting to run up with canola and we've probably got 10% flower on some of the early crops, maybe 20. They could still be top dressed to get them to maximum potential and they probably will have had a fair bit of nitrogen already. As you go south, 100 to 150 kilos of urea additional, but you'd have to make sure that those crops hadn't been severely waterlogged and that would limit potential at the moment. Horsham's running about decile six for the year on the back of a pretty full profile and so crops south of Horsham have suffered and they won't have the yield potential that they may have had, while I think canola crops around Horsham should be three tonne plus with a good nitrogen strategy, good weed control and they've gone in timely and good variety selection.

[00:09:28] **Sally Maguire** Matthew, in your area as an agronomist, what are you hearing from growers on the ground about the issue of nitrogen?

[00:09:36] **Matthew Sparke - Sparke Agricultural & Associates** It's tight and it's challenging for them, so they're having to come up with plans where they've never really been in the situation where they're this tight for nitrogen, it's usually been making a phone call and you can have a truck the next day or certainly within a week. And so that's been challenging mentally for them to have the conversation that they're not going to get nitrogen when they want it.

[00:10:01] **Sally Maguire** So walking it back a bit, nitrogen decision making, what are the factors that growers should be looking at and what are the critical timings?

[00:10:09] **Matthew Sparke - Sparke Agricultural & Associates** We have a number of tools nowadays to help us make nitrogen decisions and that would start probably with your protein maps from last harvest, zoning paddocks out or soil testing them either across the paddock in a transect or zoning them and doing two to three different zones across paddocks to estimate nitrogen requirements. We do a lot of soil testing nowadays to do that and from then on it's around rainfall and getting a plan on when you're going to put nitrogen on. So canola, a lot of it's pre flowering and it's probably two to three applications of urea depending on where you are and the risk associated with it turning dry. So that's how we did works. Cereals, barley, we want a reasonable amount of nitrogen upfront in the first eight to ten weeks to get tillering, because barley only ever fills two rows wide for two row barley. And that's predominantly what we grow. While wheat, we can have a later application to adjust yield because we can fill the head wider in wheat. So we need to put some on, hold tillers, but then have good nitrate levels at flowering, and early grain fill. So there's slightly different strategies for the three crops.

[00:11:25] **Sally Maguire** So do you think this urea supply issue has highlighted to growers just how important that planning is?

[00:11:31] **Matthew Sparke - Sparke Agricultural & Associates** Yes, it is, but it's also probably a seasonal attribute as well. But having a good plan and probably having some urea or UAN locked in obviously will be important, I think, for them in their minds going forward because the world has changed, and resellers and suppliers just don’t hold large stocks of these sorts of things and make forecasts on seasons like they used to where they'll hold additional stock.

[00:12:04] **Sally Maguire** And so what can growers expect if they don't get their N budgets right? What are the consequences for these season and future seasons of this supply issue?

[00:12:14] **Matthew Sparke - Sparke Agricultural & Associates** Well, I think the things that would be in my mind now, are you going to have a yield penalty for not getting your nitrogen on and right. And in a timely manner and I think we'll be chasing ourselves into nitrogen will go late. So we may have either lower yields, but maybe higher proteins. Generally, across most of Victoria that I deal with was specifically Wimmera, southern Mallee and just into the south west. We've got fantastic reserves of moisture in the soil and I still think we're going to have above average yield expectations, so in saying that we may leave some moisture, we may leave a little bit of nitrogen for next year if we're applying nitrogen late and we may have higher grain proteins.

[00:12:58] **Sally Maguire** So what's your key message to growers as you go around your region who might be suffering from undersupply of nitrogen?

[00:13:06] **Matthew Sparke - Sparke Agricultural & Associates** It's sort of pick your target, know what crops are low. If you've done some testing, at least you know what paddocks are low and what needs a little bit more. While some paddocks will need a little bit less and probably do a loaves and fishes and see if you can spread it around enough to get through the next three or four weeks till urea supply comes back online to some extent.

[00:13:28] **Sally Maguire** What do you really want growers to take away so that they're not put in this situation again?

[00:13:33] **Matthew Sparke - Sparke Agricultural & Associates** I think that they should be soil testing either by zone or across whole paddock, but they should probably have tentative orders with resellers so they know what's there. But it's very, very hard when you get told that we're going to have a very dry winter, to forecast exactly what you're going to need because we thought would be a particularly dry winter, while looking back, we've actually had a very wet winter, so it's hard to predict like that. I think the only thing we know is that certainly if we've got good moisture in the soil profile that we can top up relatively late and still make yield gains. And I'd encourage growers to work with their agronomists to go through that and see where they can get to if they're short with urea.

[00:14:25] **Sally Maguire** That was agronomist Matthew Sparke from Sparke Agricultural and Associates and earlier I spoke to Robert Dawes from Robert Dawes Consulting. And you can find a range of resources on nitrogen decision making, including other podcasts and videos on the GRDC website grdc.com.au. I'm Sally Maguire. This has been a GRDC podcast. Thanks for listening.