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FEED AVAILABILITY

RESULTS FROM A SURVEY OF DAIRY FARMERS IN MAY 2007

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- » *Based on a telephone survey of dairy farmers in south eastern Australia conducted by ABARE in May 2007, 86 per cent of dairy farms were experiencing drought or below average seasonal conditions.*
- » *Pasture availability was extremely limited or below average on 84 per cent of dairy farms in the region. As a result, producers became increasingly dependent on purchased or stored fodder.*
- » *In May, producers had, on average, just three weeks of grain and one week of concentrates stored on farm, although stores of hay were sufficient to last close to seven weeks of demand.*
- » *Producers indicated that, during the drought, their main management goals were to maintain milking cow numbers and milk production.*

In May 2007, ABARE conducted a telephone survey of dairy producers in south eastern Australia to gauge the severity of the 2006-07 drought and its impact on the availability of fodder on farms. The survey also collected information on changes in livestock management practices.

Of the dairy producers surveyed, 86 per cent indicated that they were experiencing drought or below average seasonal conditions (table 1). Drought conditions were particularly prevalent in the Murray Victoria, Eastern Victoria, Western Victoria and New South Wales Murray and Central regions. In contrast, 70 per cent of dairy producers in South Australia rated seasonal conditions as average or above average, reflecting good late summer and autumn rainfall.

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availability of feed

In south eastern Australia, 84 per cent of producers indicated that pasture availability was either extremely limited or below average (table 1), reflecting the impact of the drought on pasture growth. While producers in South Australia are experiencing relatively favourable seasonal conditions, this has yet to be fully reflected in pasture growth, with only 32 per cent of producers indicating that pasture availability was average to above average.

Reflecting the poor condition of pastures on many farms, producers have increasingly become dependent on purchased or stored fodder. In May 2007, producers in south eastern Australia on average had just three weeks of grain and one week of concentrates stored on farm (table 1). However, on-farm stores of hay were sufficient to meet close to seven weeks of demand.

1 feed availability, dairy industry, May 2007

proportion of farms

| | | NSW Murray and central | western Victoria | Murray Victoria | eastern Victoria | South Australia | all south eastern Tasmania | | Australia |
|--|-----|---------------------------|---------------------|--------------------|---------------------|--------------------|-------------------------------|---------|-----------|
| producers' assessment of seasonal conditions indicate that they are experiencing | | | | | | | | | |
| - drought | % | 42 (20) | 51 (22) | 74 (19) | 79 (13) | 0 (0) | 7 (75) | 59 (10) | |
| - below average conditions | % | 16 (46) | 40 (27) | 21 (65) | 12 (72) | 30 (39) | 83 (10) | 27 (20) | |
| - average or above average conditions | % | 42 (21) | 9 (54) | 5 (107) | 9 (76) | 70 (17) | 11 (63) | 14 (20) | |
| pasture availability | | | | | | | | | |
| - none/extremely limited | % | 36 (22) | 26 (34) | 40 (38) | 35 (41) | 22 (39) | 22 (66) | 33 (19) | |
| - below average | % | 33 (28) | 65 (15) | 50 (33) | 44 (34) | 46 (28) | 62 (23) | 51 (13) | |
| - average or above average | % | 31 (24) | 9 (53) | 11 (75) | 21 (52) | 32 (29) | 16 (50) | 17 (24) | |
| supply held on farm, at 30 april 2007 ^a | | | | | | | | | |
| - grain | wks | 3 (19) | 2 (28) | 2 (37) | 4 (33) | 4 (32) | 3 (24) | 3 (17) | |
| - concentrates | wks | 1 (21) | 1 (29) | 1 (40) | 1 (46) | 1 (26) | 1 (51) | 1 (18) | |
| - hay | wks | 7 (15) | 7 (16) | 6 (17) | 7 (21) | 9 (13) | 8 (25) | 7 (8) | |
| - silage | wks | 4 (21) | 2 (35) | 1 (54) | 4 (53) | 4 (32) | 6 (41) | 3 (21) | |
| - straw | wks | 2 (24) | 1 (44) | 3 (37) | 0 (0) | 2 (52) | 1 (45) | 1 (26) | |
| availability of hay and roughage for purchase | | | | | | | | | |
| - none/extremely limited | % | 25 (33) | 11 (47) | 19 (74) | 20 (52) | 22 (36) | 4 (105) | 17 (31) | |
| - below average | % | 61 (14) | 79 (9) | 68 (24) | 62 (23) | 75 (11) | 89 (8) | 70 (9) | |
| - average | % | 9 (42) | 7 (66) | 0 (0) | 18 (73) | 3 (78) | 3 (106) | 7 (48) | |
| - above average | % | 6 (69) | 3 (85) | 13 (98) | 0 (0) | 0 (0) | 4 (105) | 5 (72) | |
| - plentiful | % | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 1 (108) | 0 (0) | 0 (108) | |
| availability of grain and concentrates for purchase | | | | | | | | | |
| - none/extremely limited | % | 15 (26) | 2 (82) | 11 (100) | 12 (75) | 11 (43) | 20 (60) | 10 (40) | |
| - below average | % | 23 (33) | 12 (51) | 29 (50) | 5 (104) | 1 (107) | 8 (74) | 15 (31) | |
| - average | % | 52 (17) | 83 (8) | 48 (33) | 82 (13) | 87 (6) | 25 (43) | 66 (9) | |
| - above average | % | 9 (53) | 3 (85) | 13 (98) | 0 (0) | 0 (0) | 29 (49) | 7 (54) | |
| - plentiful | % | 3 (82) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 24 (48) | 2 (43) | |

^a Average per farm.

Note: Figures in parentheses are relative standard errors (rse) and provide a guide to the reliability of the survey estimates. A guide to interpreting these is in box 1.



In May 2007, dairy farmers indicated that there was a shortage of hay and roughage for purchase: 87 per cent of producers indicated that there was extremely limited or below average purchasable supplies of hay and roughage available for purchase. In contrast, most regions had a relatively good supply of grain, with 75 per cent of producers indicating the availability of grain and concentrates being average to above average (table 1).

management practices

Producers have responded to the drought by using a range of management practices. Nearly 55 per cent of producers indicated that their key drought goal was to maintain milk production; 45 per cent aimed to maintain milking cow numbers (table 2). A high proportion of producers in South Australia (56 per cent) indicated that they wanted to maintain the number of young cows in their herd. Producers culled milking cows and dried cows off early in order to focus the available feed on the core milking herd in 2006-07. Producers have also purchased more fodder and water and refinanced or extended their debt.

In the event that the drought persists for an extended period, a higher proportion of producers indicated that they would be required to cull milking cows further, rely more heavily on purchased grain and fodder and refinance their debt (table 3). Around 10 per cent of producers indicated that, at this stage, they are unsure of what changes they would implement should this occur.

2 producers' changes to management due to the drought, dairy industry, May 2007

proportion of farms

| | | NSW Murray and central | western Victoria | Murray Victoria | eastern Victoria | South Australia | Tasmania | all south eastern Australia |
|--|---|---------------------------|---------------------|--------------------|---------------------|--------------------|----------|--------------------------------|
| ability to source supplies from within the region | | | | | | | | |
| - grain and concentrates | % | 57 (15) | 89 (6) | 73 (19) | 45 (33) | 56 (22) | 68 (18) | 67 (9) |
| - hay and roughage | % | 40 (23) | 40 (26) | 45 (36) | 84 (12) | 45 (28) | 42 (34) | 53 (12) |
| key drought management objective to | | | | | | | | |
| - maintain milk production | % | 64 (13) | 66 (17) | 54 (29) | 40 (37) | 63 (19) | 46 (32) | 54 (12) |
| - maintain milking cow numbers | % | 37 (23) | 39 (26) | 50 (32) | 48 (32) | 34 (28) | 50 (29) | 45 (15) |
| - maintain young cow numbers' | % | 31 (27) | 22 (30) | 27 (46) | 34 (39) | 56 (22) | 15 (61) | 29 (19) |
| - limit cost increases | % | 44 (20) | 31 (34) | 23 (59) | 33 (40) | 48 (25) | 27 (40) | 31 (19) |
| producers have responded to the drought by | | | | | | | | |
| - culling milking cows | % | 64 (12) | 68 (16) | 88 (8) | 57 (27) | 50 (25) | 47 (31) | 68 (8) |
| - drying cows off early | % | 40 (22) | 46 (25) | 59 (27) | 29 (48) | 39 (31) | 47 (30) | 45 (15) |
| - increasing grain feeding | % | 27 (22) | 24 (30) | 30 (42) | 58 (25) | 23 (34) | 57 (24) | 37 (16) |
| - purchasing more fodder | % | 73 (11) | 34 (32) | 43 (36) | 42 (35) | 46 (26) | 39 (38) | 43 (15) |
| - agisting young stock and dry cows | % | 13 (37) | 7 (49) | 15 (95) | 15 (70) | 4 (64) | 0 (0) | 11 (45) |
| - selling young stock | % | 16 (31) | 0 (0) | 8 (71) | 3 (106) | 28 (45) | 3 (106) | 7 (33) |
| - purchasing irrigation water | % | 8 (32) | 11 (41) | 40 (39) | 25 (55) | 4 (64) | 18 (58) | 23 (26) |
| - reducing hired labour | % | 24 (26) | 0 (106) | 6 (78) | 9 (76) | 22 (34) | 32 (49) | 10 (26) |
| - refinancing or extending debt | % | 43 (20) | 14 (39) | 53 (30) | 61 (24) | 39 (28) | 17 (55) | 42 (15) |
| - doing nothing | % | 6 (58) | 14 (51) | 0 (0) | 0 (0) | 9 (55) | 5 (104) | 5 (38) |

Note: Figures in parentheses are relative standard errors (rse) and provide a guide to the reliability of the survey estimates. A guide to interpreting these is in box 1.



Around two-thirds of producers indicated that they needed financial assistance in managing the impact of the drought and in gaining access to fodder supplies (table 3).

nontraditional feed

As a result of the poor condition of pastures on many farms and higher feed prices, dairy producers across south eastern Australia have increasingly used nontraditional feeds, such as palm kernels, grape marc, fruit waste and byproducts, almond hulls and brewers grain (table 4). Over 40 per cent of producers indicated that they have used or heard of producers using palm kernels to feed dairy cattle.

Prior to using nontraditional feeds, producers indicated that they would seek nutritional advice. The major sources of advice on such feeds would be from other dairy farmers, nutritionists, departments of agriculture or dairy company field officers (table 4).

3 producers' intended changes to management if the drought persists, dairy industry, May 2007

proportion of farms

| | | NSW Murray and central | western Victoria | Murray Victoria | eastern Victoria | South Australia | Tasmania | all south eastern Australia |
|--|---|---------------------------|---------------------|--------------------|---------------------|--------------------|----------|--------------------------------|
| producers' intended to respond to an extended drought by : | | | | | | | | |
| - reducing milking cow numbers | % | 34 (22) | 60 (18) | 70 (21) | 46 (32) | 56 (22) | 59 (22) | 56 (11) |
| - increasing grain feeding | % | 10 (31) | 29 (31) | 25 (48) | 48 (31) | 23 (34) | 36 (36) | 31 (19) |
| - purchasing more fodder | % | 20 (30) | 17 (44) | 37 (41) | 44 (34) | 51 (24) | 40 (35) | 33 (19) |
| - agisting young stock or dry cows | % | 9 (33) | 11 (47) | 19 (68) | 15 (70) | 4 (64) | 0 (0) | 13 (37) |
| - selling young stock | % | 21 (36) | 3 (81) | 3 (107) | 11 (77) | 44 (28) | 5 (77) | 9 (30) |
| - sourcing stock water | % | 3 (53) | 3 (86) | 3 (109) | 9 (74) | 8 (51) | 19 (75) | 6 (40) |
| - reducing hired labour | % | 17 (45) | 6 (54) | 1 (104) | 0 (0) | 16 (38) | 5 (104) | 4 (26) |
| - refinancing or extending debt | % | 24 (33) | 21 (33) | 37 (43) | 42 (35) | 28 (33) | 11 (72) | 31 (20) |
| sources of information or advice prior to implementing these changes are: | | | | | | | | |
| - other dairy farmers | % | 49 (18) | 45 (25) | 30 (45) | 18 (53) | 38 (31) | 12 (80) | 31 (18) |
| - farm consultant | % | 21 (27) | 15 (36) | 18 (63) | 26 (45) | 69 (13) | 41 (35) | 24 (21) |
| - veterinarian | % | 14 (31) | 2 (76) | 2 (110) | 4 (106) | 7 (57) | 4 (105) | 4 (35) |
| - nutritionist | % | 30 (21) | 7 (52) | 27 (50) | 21 (52) | 27 (34) | 15 (56) | 20 (25) |
| - agronomist | % | 17 (28) | 2 (63) | 4 (82) | 7 (75) | 36 (35) | 24 (52) | 9 (24) |
| - department of agriculture | % | 29 (23) | 16 (41) | 25 (51) | 23 (50) | 0 (0) | 4 (105) | 20 (25) |
| - dairy companies | % | 43 (20) | 16 (35) | 40 (38) | 52 (29) | 19 (36) | 3 (106) | 34 (18) |
| - financial advisor | % | 66 (13) | 8 (54) | 49 (33) | 37 (40) | 48 (25) | 5 (104) | 35 (18) |
| - none | % | 20 (39) | 32 (35) | 15 (95) | 24 (57) | 16 (39) | 25 (42) | 22 (28) |
| producers need support in the following areas | | | | | | | | |
| - income or financial support | % | 68 (12) | 50 (23) | 80 (17) | 64 (22) | 53 (23) | 55 (25) | 65 (9) |
| - access to feed | % | 53 (17) | 54 (20) | 78 (17) | 77 (15) | 52 (23) | 62 (21) | 67 (8) |
| - agistment | % | 42 (21) | 12 (48) | 33 (44) | 25 (46) | 28 (45) | 49 (29) | 28 (20) |
| - social services | % | 46 (19) | 5 (57) | 28 (47) | 32 (46) | 25 (36) | 9 (75) | 24 (23) |
| - general farm management | % | 15 (28) | 5 (62) | 31 (49) | 8 (75) | 32 (31) | 25 (58) | 17 (29) |
| - don't know | % | 20 (43) | 7 (55) | 0 (0) | 5 (104) | 7 (64) | 10 (99) | 6 (34) |

Note: Figures in parentheses are relative standard errors (rse) and provide a guide to the reliability of the survey estimates. A guide to interpreting these is in box 1.



box 1 estimates and reliability

Only a small number of farms out of the total number of farms in a particular industry are surveyed. The data collected from each sample farm are weighted to calculate population estimates. Estimates derived from these farms are likely to be different from those that would have been obtained if information had been collected from a census of all farms. Any such differences are called 'sampling errors'.

The size of the sampling error is most influenced by the survey design and the estimation procedures, as well as the sample size and the variability of farms in the population. The larger the sample size, the lower the sampling error is likely to be. For example, region estimates are likely to have greater sampling errors than state estimates.

As a guide to the reliability of the survey estimates, standard errors have been calculated for all estimates in this report. These estimated errors, expressed as percentages of the survey estimates and termed 'relative standard errors', are provided next to each estimate (in parentheses).

To obtain the standard error from the relative standard error, multiply the relative standard error by the survey estimate and divided by 100. For example, if the average farm in south eastern Australia is estimated to be holding three weeks of grain on farm and the relative standard error is 17 per cent, the standard error is 0.51 (3 x 17/100) weeks. There is roughly a two in three chance that a 'census value' is within one standard error of the survey estimate; and there is roughly a nineteen in twenty chance that the census value is within two standard errors of the survey estimate. Thus, in the above example, there is an approximately two in three chance that the census value is between 2.49 weeks and 3.51 weeks, and an approximately nineteen in twenty chance that the census value is between 1.98 weeks and 4.02 weeks.

Due to the relatively small sample of farms surveyed in May, particularly in some of the regions, the relative standard errors themselves may not be a sufficient guide to the reliability of presented estimates. Consequently, the estimates and relative standard errors should be viewed as being indicative for the population.

4 use of nontraditional feed, dairy industry, May 2007

proportion of farms

| | | NSW Murray and central | | western Victoria | | Murray Victoria | | eastern Victoria | | South Australia | | Tasmania | | all south eastern Australia | |
|--|---|---------------------------|-------|---------------------|-------|--------------------|-------|---------------------|-------|--------------------|-------|----------|-------|--------------------------------|-------|
| proportion of producers who have used, or heard of producers using nontraditional feeds: | | | | | | | | | | | | | | | |
| - almond hulls/shells | % | 3.6 | (65) | 2.4 | (76) | 0.0 | (0) | 10.6 | (74) | 1.5 | (107) | 0.0 | (0) | 3.7 | (56) |
| - bread | % | 1.8 | (74) | 0.0 | (0) | 0.0 | (0) | 0.0 | (0) | 0.0 | (0) | 0.0 | (0) | 0.2 | (74) |
| - brewers grain | % | 3.7 | (54) | 0.0 | (0) | 12.8 | (98) | 0.0 | (0) | 0.0 | (0) | 0.0 | (0) | 4.2 | (90) |
| - canola meal | % | 3.7 | (62) | 2.2 | (104) | 3.1 | (109) | 3.4 | (106) | 1.1 | (108) | 0.0 | (0) | 2.7 | (55) |
| - coconut husks | % | 0.0 | (0) | 6.8 | (78) | 0.0 | (0) | 0.0 | (0) | 0.0 | (0) | 0.0 | (0) | 1.5 | (78) |
| - cotton seed | % | 0.7 | (102) | 1.0 | (106) | 0.0 | (0) | 0.0 | (0) | 0.0 | (0) | 0.0 | (0) | 0.3 | (85) |
| - fruit waste/byproduct | % | 0.0 | (0) | 7.5 | (72) | 3.1 | (109) | 0.0 | (0) | 2.9 | (77) | 0.0 | (0) | 2.8 | (57) |
| - grape marc | % | 1.3 | (77) | 10.3 | (57) | 0.0 | (0) | 14.6 | (70) | 9.4 | (47) | 0.0 | (0) | 6.7 | (44) |
| - palm kernel | % | 12.5 | (28) | 78.5 | (9) | 57.3 | (28) | 28.1 | (42) | 3.4 | (81) | 5.1 | (78) | 43.9 | (13) |
| - pasta waste | % | 0.0 | (0) | 0.7 | (106) | 0.0 | (0) | 0.0 | (0) | 0.0 | (0) | 0.0 | (0) | 0.2 | (106) |
| - potato peel | % | 0.0 | (0) | 0.0 | (0) | 0.0 | (0) | 0.0 | (0) | 1.6 | (107) | 0.0 | (0) | 0.1 | (107) |
| - potato slivers | % | 0.0 | (0) | 0.0 | (0) | 0.0 | (0) | 0.0 | (0) | 4.2 | (84) | 3.1 | (106) | 0.4 | (67) |
| - vegetable waste | % | 0.4 | (103) | 0.9 | (106) | 0.0 | (0) | 0.0 | (0) | 0.0 | (0) | 6.7 | (102) | 0.7 | (73) |
| prior to using (or considering using) nontraditional feeds, producers would seek nutritional advice from: | | | | | | | | | | | | | | | |
| - other dairy farmers | % | 33 | (24) | 33 | (27) | 38 | (43) | 26 | (49) | 3 | (76) | 0 | (0) | 29 | (22) |
| - farm consultant | % | 12 | (30) | 10 | (60) | 10 | (64) | 15 | (60) | 28 | (42) | 66 | (19) | 16 | (21) |
| - veterinarian | % | 10 | (33) | 2 | (76) | 2 | (110) | 7 | (102) | 7 | (63) | 3 | (106) | 4 | (48) |
| - nutritionist | % | 46 | (18) | 27 | (41) | 45 | (36) | 20 | (53) | 93 | (4) | 47 | (30) | 37 | (17) |
| - agronomist | % | 5 | (44) | 5 | (62) | 15 | (84) | 0 | (0) | 6 | (65) | 11 | (97) | 7 | (55) |
| - department of agriculture | % | 22 | (25) | 15 | (44) | 35 | (43) | 26 | (48) | 3 | (77) | 13 | (61) | 24 | (24) |
| - grain supplier/feed company salesperson | % | 22 | (34) | 23 | (30) | 9 | (62) | 25 | (49) | 5 | (56) | 21 | (64) | 18 | (22) |
| - dairy company field officer | % | 24 | (25) | 41 | (28) | 15 | (53) | 42 | (36) | 3 | (77) | 5 | (104) | 27 | (19) |
| - other | % | 0 | (0) | 0 | (0) | 0 | (0) | 0 | (0) | 2 | (107) | 0 | (0) | 0 | (107) |
| - rely on self, past knowledge | % | 40 | (23) | 2 | (76) | 9 | (83) | 13 | (96) | 17 | (71) | 5 | (76) | 11 | (35) |

Note: Figures in parentheses are relative standard errors (rse) and provide a guide to the reliability of the survey estimates. A guide to interpreting these is in box 1.

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