

**LIVESTOCK GROSS MARGIN (LGM)  
INDEMNITY CALCULATIONS**  
Edit Description

**Livestock Gross Margin (LGM)  
(Insurance Plan Code 82)  
(Cattle and Swine)**

**TOTAL GROSS MARGIN (ACTUAL)**

$$\begin{aligned}
 \text{TOT\_GROSS\_MARGIN} &= ((\text{TARGET MARKET 2} * \text{ACT\_GROSS\_MARGIN\_2}) + \\
 &\quad (\text{field 23}) \qquad \qquad \qquad (\text{Internal}) \qquad \qquad \qquad (\text{field 13}) \\
 &\quad (\text{TARGET MARKET 3} * \text{ACT\_GROSS\_MARGIN\_3}) + (\text{TARGET MARKET 4} * \\
 &\quad \quad (\text{Internal}) \qquad \qquad \quad (\text{field 14}) \qquad \qquad \quad (\text{Internal}) \\
 &\quad \text{ACT\_GROSS\_MARGIN\_4}) + (\text{TARGET MARKET 5} * \text{ACT\_GROSS\_MARGIN\_5}) + \\
 &\quad \quad (\text{field 15}) \qquad \qquad \quad (\text{Internal}) \qquad \qquad \quad (\text{field 16}) \\
 &\quad (\text{TARGET MARKET 6} * \text{ACT\_GROSS\_MARGIN\_6}) + (\text{TARGET MARKET 7} * \\
 &\quad \quad (\text{Internal}) \qquad \qquad \quad (\text{field 17}) \qquad \qquad \quad (\text{Internal}) \\
 &\quad \text{ACT\_GROSS\_MARGIN\_7}) + (\text{TARGET MARKET 8} * \text{ACT\_GROSS\_MARGIN\_8}) + \\
 &\quad \quad (\text{field 18}) \qquad \qquad \quad (\text{Internal}) \qquad \qquad \quad (\text{field 19}) \\
 &\quad (\text{TARGET MARKET 9} * \text{ACT\_GROSS\_MARGIN\_9}) + (\text{TARGET MARKET 10} * \\
 &\quad \quad (\text{Internal}) \qquad \qquad \quad (\text{field 20}) \qquad \qquad \quad (\text{Internal}) \\
 &\quad \text{ACT\_GROSS\_MARGIN\_10}) + (\text{TARGET MARKET 11} * \text{ACT\_GROSS\_MARGIN\_11})) \\
 &\quad \quad (\text{field 21}) \qquad \qquad \quad (\text{Internal}) \qquad \qquad \quad (\text{field 22})
 \end{aligned}$$

**MARKET FACTOR and ADJUSTED INDEMNITY FLAG**

$$\begin{aligned}
 \text{MARKET FACTOR} &= \text{TOT\_ACTUAL\_MARKET} / \text{TOT TARGET MARKET} \\
 &\quad (\text{Internal}) \qquad \qquad \quad (\text{field 12}) \qquad \qquad \quad (\text{Internal}) \\
 &\quad (\text{Note})
 \end{aligned}$$

**Note: If Market Factor < .750 set Adjusted Indemnity Flag (field 24) to 'Y'; else, default Market Factor to 1.000 and set Adjusted Indemnity Flag to 'N'.**

**INDEMNITY**

$$\begin{aligned}
 \text{INDEMNITY\_AMOUNT} &= (\text{GROSS MARGIN GUAR} - \text{TOT\_GROSS\_MARGIN}) * \text{MARKET FACTOR} \\
 &\quad (\text{field 25}) \qquad \qquad \quad (\text{Internal}) \qquad \qquad \quad (\text{field 23}) \qquad \qquad \quad (\text{Internal})
 \end{aligned}$$

$$\begin{aligned}
 \text{INDEMNITY\_REDUCT} &= 1.000 - \text{MARKET FACTOR} \\
 &\quad (\text{field 26})
 \end{aligned}$$

**Note: An indemnity is calculated and payable if Total Gross Margin is less than Gross Margin Guarantee.**

**LIVESTOCK GROSS MARGIN (LGM)  
INDEMNITY CALCULATIONS**  
Edit Description

| <b>Tag</b>           | <b>No.</b> | <b>Picture</b>          | <b>Rounding</b> | <b>Description</b>  |
|----------------------|------------|-------------------------|-----------------|---|
| TARGET MARKET 2      | Internal   | 9(06)                   | whole number    | Target Marketings for Second Month reported on premium for swine or cattle.   |
| <ACT_GROSS_MARGIN_2> | 13         | ( + / - )<br>9(08).9999 | per ADM         | Actual Gross Margin per swine or cattle for Second Month from A00600. Only the negative symbol ( - ) will appear if applicable.                   |
| TARGET MARKET 3      | Internal   | 9(06)                   | whole number    | Target Marketings for Third Month reported on premium for swine or cattle.  |
| <ACT_GROSS_MARGIN_3> | 14         | ( + / - )<br>9(08).9999 | per ADM         | Actual Gross Margin per swine or cattle for Third Month from A00600. Only the negative symbol ( - ) will appear if applicable.                    |
| TARGET MARKET 4      | Internal   | 9(06)                   | whole number    | Target Marketings for Fourth Month reported on premium for swine or cattle.   |
| <ACT_GROSS_MARGIN_4> | 15         | ( + / - )<br>9(08).9999 | per ADM         | Actual Gross Margin per swine or cattle for Fourth Month from A00600. Only the negative symbol ( - ) will appear if applicable.                   |
| TARGET MARKET 5      | Internal   | 9(06)                   | whole number    | Target Marketings for Fifth Month reported on premium for swine or cattle.  |
| <ACT_GROSS_MARGIN_5> | 16         | ( + / - )<br>9(08).9999 | per ADM         | Actual Gross Margin per swine or cattle for Fifth Month from A00600. Only the negative symbol ( - ) will appear if applicable.                    |
| TARGET MARKET 6      | Internal   | 9(06)                   | whole number    | Target Marketings for Sixth Month reported on premium for swine or cattle.  |
| <ACT_GROSS_MARGIN_6> | 17         | ( + / - )<br>9(08).9999 | per ADM         | Actual Gross Margin per swine or cattle for Sixth Month from A00600. Only the negative symbol ( - ) will appear if applicable.                    |
| TARGET MARKET 7      | Internal   | 9(06)                   | whole number    | Target Marketings for Seventh Month reported on premium for cattle. Not applicable for swine.   |
| <ACT_GROSS_MARGIN_7> | 18         | ( + / - )<br>9(08).9999 | per ADM         | Actual Gross Margin per cattle for Seventh Month from A00600. Only the negative symbol ( - ) will appear if applicable. Not applicable for swine. |

**LIVESTOCK GROSS MARGIN (LGM)  
INDEMNITY CALCULATIONS**  
Edit Description

| <b>Tag</b>            | <b>No.</b> | <b>Picture</b>          | <b>Rounding</b> | <b>Description</b>   |
|-----------------------|------------|-------------------------|-----------------|--|
| TARGET MARKET 8       | Internal   | 9(06)                   | whole number    | Target Marketings for Eighth Month reported on premium for cattle. Not applicable for swine.   |
| <ACT_GROSS_MARGIN_8>  | 19         | ( + / - )<br>9(08).9999 | per ADM         | Actual Gross Margin per cattle for Eighth Month from A00600. Only the negative symbol ( - ) will appear if applicable. Not applicable for swine.           |
| TARGET MARKET 9       | Internal   | 9(06)                   | whole number    | Target Marketings for Ninth Month reported on premium for cattle. Not applicable for swine.  |
| <ACT_GROSS_MARGIN_9>  | 20         | ( + / - )<br>9(08).9999 | per ADM         | Actual Gross Margin per cattle for Ninth Month from A00600. Only the negative symbol ( - ) will appear if applicable. Not applicable for swine.            |
| TARGET MARKET 10      | Internal   | 9(06)                   | whole number    | Target Marketings for Tenth Month reported on premium for cattle. Not applicable for swine.  |
| <ACT_GROSS_MARGIN_10> | 21         | ( + / - )<br>9(08).9999 | per ADM         | Actual Gross Margin per cattle for Tenth Month from A00600. Only the negative symbol ( - ) will appear if applicable. Not applicable for swine.            |
| TARGET MARKET 11      | Internal   | 9(06)                   | whole number    | Target Marketings for Eleventh Month reported on premium for cattle. Not applicable for swine.   |
| <ACT_GROSS_MARGIN_11> | 22         | ( + / - )<br>9(08).9999 | per ADM         | Actual Gross Margin per cattle for Eleventh Month from A00600. Only the negative symbol ( - ) will appear if applicable. Not applicable for swine.         |
| <TOT_GROSS_MARGIN>    | 23         | ( + / - )<br>9(10)      | whole number    | Sum of (Target Marketings by month times Actual Gross Margin by month) for the insurance period. Only the negative symbol ( - ) will appear if applicable. |
| <TOT_ACTUAL_MARKET>   | 12         | 9(06)                   | whole number    | Total of Actual Marketings for insurance period.   |
| TOT TARGET MARKET     | Internal   | 9(06)                   | whole number    | Total of Target Marketings for insurance period reported on premium.   |

**LIVESTOCK GROSS MARGIN (LGM)  
INDEMNITY CALCULATIONS**  
Edit Description

| <b>Tag</b>         | <b>No.</b> | <b>Picture</b> | <b>Rounding</b>  | <b>Description</b>   |
|--------------------|------------|----------------|------------------|--|
| MARKET FACTOR      | Internal   | 9.999          | 3 decimal places | Result of (Total Actual Marketings divided by Total Target Marketings) if less than .750, else default to 1.000.                               |
| GROSS MARGIN GUAR  | Internal   | 9(10)          | whole number     | Gross Margin Guarantee for insurance period reported on premium.   |
| <INDEMNITY_AMOUNT> | 25         | 9(10)          | whole number     | Indemnity is the result of (Gross Margin Guarantee – Total Gross Margin) times Market Factor. Will be zero if total actual marketings is zero. |
| <INDEMNITY_REDUCT> | 26         | 9.999          | 3 decimal places | Indemnity Reduction factor is the result of (1.000 – Market Factor).   |

**Note: An indemnity is calculated and payable if Total Gross Margin is less than Gross Margin Guarantee.**

**LIVESTOCK GROSS MARGIN (LGM)  
INDEMNITY CALCULATIONS**  
Edit Description

**Livestock Gross Margin (LGM)  
(Insurance Plan Code 82)  
(Dairy)**

**ACTUAL FEED COST**

ACTUAL FEED COST 2 = (CORN EQUIVALENT 2 \* (2000/56) \* CORN PRICE 2)  
(Internal) (Internal) (Internal)

+ (SOYBEAN MEAL EQUIVALENT 2 \* SOYBEAN MEAL PRICE 2)  
(Internal) (Internal)

ACTUAL FEED COST 3 = (CORN EQUIVALENT 3 \* (2000/56) \* CORN PRICE 3)  
(Internal) (Internal) (Internal)

+ (SOYBEAN MEAL EQUIVALENT 3 \* SOYBEAN MEAL PRICE 3)  
(Internal) (Internal)

ACTUAL FEED COST 4 = (CORN EQUIVALENT 4 \* (2000/56) \* CORN PRICE 4)  
(Internal) (Internal) (Internal)

+ (SOYBEAN MEAL EQUIVALENT 4 \* SOYBEAN MEAL PRICE 4)  
(Internal) (Internal)

ACTUAL FEED COST 5 = (CORN EQUIVALENT 5 \* (2000/56) \* CORN PRICE 5)  
(Internal) (Internal) (Internal)

+ (SOYBEAN MEAL EQUIVALENT 5 \* SOYBEAN MEAL PRICE 5)  
(Internal) (Internal)

ACTUAL FEED COST 6 = (CORN EQUIVALENT 6 \* (2000/56) \* CORN PRICE 6)  
(Internal) (Internal) (Internal)

+ (SOYBEAN MEAL EQUIVALENT 6 \* SOYBEAN MEAL PRICE 6)  
(Internal) (Internal)

ACTUAL FEED COST 7 = (CORN EQUIVALENT 7 \* (2000/56) \* CORN PRICE 7)  
(Internal) (Internal) (Internal)

+ (SOYBEAN MEAL EQUIVALENT 7 \* SOYBEAN MEAL PRICE 7)  
(Internal) (Internal)

ACTUAL FEED COST 8 = (CORN EQUIVALENT 8 \* (2000/56) \* CORN PRICE 8)  
(Internal) (Internal) (Internal)

+ (SOYBEAN MEAL EQUIVALENT 8 \* SOYBEAN MEAL PRICE 8)  
(Internal) (Internal)

**LIVESTOCK GROSS MARGIN (LGM)  
INDEMNITY CALCULATIONS**  
Edit Description

ACTUAL FEED COST 9 = (CORN EQUIVALENT 9 \* (2000/56) \* CORN PRICE 9)  
(Internal) (Internal) (Internal)

+ (SOYBEAN MEAL EQUIVALENT 9 \* SOYBEAN MEAL PRICE 9)  
(Internal) (Internal)

ACTUAL FEED COST 10 = (CORN EQUIVALENT 10 \* (2000/56) \* CORN PRICE 10)  
(Internal) (Internal) (Internal)

+ (SOYBEAN MEAL EQUIVALENT 10 \* SOYBEAN MEAL PRICE 10)  
(Internal) (Internal)

ACTUAL FEED COST 11 = (CORN EQUIVALENT 11 \* (2000/56) \* CORN PRICE 11)  
(Internal) (Internal) (Internal)

+ (SOYBEAN MEAL EQUIVALENT 11 \* SOYBEAN MEAL PRICE 11)  
(Internal) (Internal)

**GROSS MARGIN GUARANTEE**

ACT\_GROSS\_MARGIN\_2 = TARGET MARKET 2 \* MILK PRICE - ACTUAL FEED COST 2  
(field 13) (Internal) (Internal) (Internal)

ACT\_GROSS\_MARGIN\_3 = TARGET MARKET 3 \* MILK PRICE 3 - ACTUAL FEED COST 3  
(field 14) (Internal) (Internal) (Internal)

ACT\_GROSS\_MARGIN\_4 = TARGET MARKET 4 \* MILK PRICE 4 - ACTUAL FEED COST 4  
(field 15) (Internal) (Internal) (Internal)

ACT\_GROSS\_MARGIN\_5 = TARGET MARKET 5 \* MILK PRICE 5 - ACTUAL FEED COST 5  
(field 16) (Internal) (Internal) (Internal)

ACT\_GROSS\_MARGIN\_6 = TARGET MARKET 6 \* MILK PRICE 6 - ACTUAL FEED COST 6  
(field 17) (Internal) (Internal) (Internal)

ACT\_GROSS\_MARGIN\_7 = TARGET MARKET 7 \* MILK PRICE 7 - ACTUAL FEED COST 7  
(field 18) (Internal) (Internal) (Internal)

- ACTUAL FEED COST 7  
(Internal)

ACT\_GROSS\_MARGIN\_8 = TARGET MARKET 8 \* MILK PRICE 8 - ACTUAL FEED COST 8  
(field 19) (Internal) (Internal) (Internal)

**LIVESTOCK GROSS MARGIN (LGM)  
INDEMNITY CALCULATIONS**  
Edit Description

$$\text{ACT\_GROSS\_MARGIN\_9} = \text{TARGET MARKET 9} * \text{MILK PRICE 9} - \text{ACTUAL FEED COST 9}$$

(field 20)                      (Internal)                      (Internal)                      (Internal)

$$\text{ACT\_GROSS\_MARGIN\_10} = \text{TARGET MARKET 10} * \text{MILK PRICE 10} - \text{ACTUAL FEED COST 10}$$

(field 21)                      (Internal)                      (Internal)                      (Internal)

$$\text{ACT\_GROSS\_MARGIN\_11} = \text{TARGET MARKET 11} * \text{MILK PRICE 11} - \text{ACTUAL FEED COST 11}$$

(field 22)                      (Internal)                      (Internal)                      (Internal)

$$\text{TOT\_GROSS\_MARGIN} = \sum (\text{ACT\_GROSS\_MARGIN 2 thru 11})$$

(field 23)

**MARKET FACTOR and ADJUSTED INDEMNITY FLAG**

$$\text{MARKET FACTOR} = \text{TOT\_ACTUAL\_MARKET} / \text{TOT TARGET MARKET}$$

(Internal)                      (field 12)                      (Internal)  
(Note)

**Note: If Market Factor < .750 set Adjusted Indemnity Flag (field 24) to 'Y'; else, default Market Factor to 1.000 and set Adjusted Indemnity Flag to 'N'.**

**INDEMNITY**

$$\text{INDEMNITY\_AMOUNT} = (\text{GROSS MARGIN GUAR} - \text{TOT\_GROSS\_MARGIN}) * \text{MARKET FACTOR}$$

(field 25)                      (Internal)                      (field 23)                      (Internal)

$$\text{INDEMNITY\_REDUCT} = 1.000 - \text{MARKET FACTOR}$$

(field 26)

**Note: An indemnity is calculated and payable if Total Gross Margin is less than Gross Margin Guarantee.**

**LIVESTOCK GROSS MARGIN (LGM)  
INDEMNITY CALCULATIONS**  
Edit Description

| <b>Tag</b>                          | <b>No.</b> | <b>Picture</b>          | <b>Rounding</b>   | <b>Description</b>   |
|-------------------------------------|------------|-------------------------|-------------------|--|
| CORN PRICE<br>(2 thru 11)           | Internal   | 999.99                  | per ADM           | From A00600.   |
| SOYBEAN MEAL PRICE<br>(2 thru 11)   | Internal   | 999.99                  | per ADM           | From A00600.   |
| CORN EQUIVALENT<br>(2 thru 11)      | Internal   | 9999.9(06)              | NA                | Corn or corn equivalent in tons that was reported for premium by month for the insurance period.   |
| SOYBEAN MEAL EQUIVALENT (2 thru 11) | Internal   | 9999.9(06)              | NA                | Soybean meal or soybean meal equivalent in tons that was reported for premium by month for the insurance period.   |
| ACTUAL FEED COST<br>(2 thru 11)     | Internal   | ( + / - )<br>9999.99    | dollars and cents | Actual Feed Cost is the result of (corn equivalent times (2000/56) times corn price) plus (soybean meal equivalent times soybean meal price) by month.                                   |
| MILK PRICE (2 thru 11)              | Internal   | 999.99                  | per ADM           | From A00600.   |
| TARGET MARKET 2                     | Internal   | 9(06)                   | whole number      | Target Marketings for Second Month reported on premium for dairy.  |
| <ACT_GROSS_MARGIN_2>                | 13         | ( + / - )<br>9(08).9999 | dollars and cents | Actual Gross Margin for dairy is the result of target marketings times milk price minus actual feed cost for the second month. Only the negative symbol ( - ) will appear if applicable. |
| TARGET MARKET 3                     | Internal   | 9(06)                   | whole number      | Target Marketings for Third Month reported on premium for dairy.   |
| <ACT_GROSS_MARGIN_3>                | 14         | ( + / - )<br>9(08).9999 | dollars and cents | Actual Gross Margin for dairy is the result of target marketings times milk price minus actual feed cost for the third month. Only the negative symbol ( - ) will appear if applicable.  |
| TARGET MARKET 4                     | Internal   | 9(06)                   | whole number      | Target Marketings for Fourth Month reported on premium for dairy.  |
| <ACT_GROSS_MARGIN_4>                | 15         | ( + / - )<br>9(08).9999 | dollars and cents | Actual Gross Margin for dairy is the result of target marketings times milk price minus actual feed cost for the fourth month. Only the negative symbol ( - ) will appear if applicable. |



**LIVESTOCK GROSS MARGIN (LGM)  
INDEMNITY CALCULATIONS**  
Edit Description

| <b>Tag</b>           | <b>No.</b> | <b>Picture</b>          | <b>Rounding</b>   | <b>Description</b>  |
|----------------------|------------|-------------------------|-------------------|---|
| TARGET MARKET 5      | Internal   | 9(06)                   | whole number      | Target Marketings for Fifth Month reported on premium for dairy.  |
| <ACT_GROSS_MARGIN_5> | 16         | ( + / - )<br>9(08).9999 | dollars and cents | Actual Gross Margin for dairy is the result of target marketings times milk price minus actual feed cost for the fifth month. Only the negative symbol ( - ) will appear if applicable.   |
| TARGET MARKET 6      | Internal   | 9(06)                   | whole number      | Target Marketings for Sixth Month reported on premium for dairy.  |
| <ACT_GROSS_MARGIN_6> | 17         | ( + / - )<br>9(08).9999 | dollars and cents | Actual Gross Margin for dairy is the result of target marketings times milk price minus actual feed cost for the sixth month. Only the negative symbol ( - ) will appear if applicable.   |
| TARGET MARKET 7      | Internal   | 9(06)                   | whole number      | Target Marketings for Seventh Month reported on premium for dairy.  |
| <ACT_GROSS_MARGIN_7> | 18         | ( + / - )<br>9(08).9999 | dollars and cents | Actual Gross Margin for dairy is the result of target marketings times milk price minus actual feed cost for the seventh month. Only the negative symbol ( - ) will appear if applicable. |
| TARGET MARKET 8      | -Internal  | 9(06)                   | whole number      | Target Marketings for Eighth Month reported on premium for dairy.   |
| <ACT_GROSS_MARGIN_8> | 19         | ( + / - )<br>9(08).9999 | dollars and cents | Actual Gross Margin for dairy is the result of target marketings times milk price minus actual feed cost for the eighth month. Only the negative symbol ( - ) will appear if applicable.  |
| TARGET MARKET 9      | -Internal  | 9(06)                   | whole number      | Target Marketings for Ninth Month reported on premium for dairy.  |
| <ACT_GROSS_MARGIN_9> | 20         | ( + / - )<br>9(08).9999 | dollars and cents | Actual Gross Margin for dairy is the result of target marketings times milk price minus actual feed cost for the ninth month. Only the negative symbol ( - ) will appear if applicable.   |

**LIVESTOCK GROSS MARGIN (LGM)  
INDEMNITY CALCULATIONS**  
Edit Description

| Tag                   | No.       | Picture                 | Rounding          | Description  |
|-----------------------|-----------|-------------------------|-------------------|--|
| TARGET MARKET 10      | Internal  | 9(06)                   | whole number      | Target Marketings for Tenth Month reported on premium for dairy.   |
| <ACT_GROSS_MARGIN_10> | 21        | ( + / - )<br>9(08).9999 | dollars and cents | Actual Gross Margin for dairy is the result of target marketings times milk price minus actual feed cost for the tenth month. Only the negative symbol ( - ) will appear if applicable.    |
| TARGET MARKET 11      | -Internal | 9(06)                   | whole number      | Target Marketings for Eleventh Month reported on premium for dairy.  |
| <ACT_GROSS_MARGIN_11> | 22        | ( + / - )<br>9(08).9999 | dollars and cents | Actual Gross Margin for dairy is the result of target marketings times milk price minus actual feed cost for the eleventh month. Only the negative symbol ( - ) will appear if applicable. |
| <TOT_GROSS_MARGIN>    | 23        | ( + / - )<br>9(10)      | whole number      | Sum of actual gross margin by month for the insurance period. Only the negative symbol ( - ) will appear if applicable.  |
| <TOT_ACTUAL_MARKET>   | 12        | 9(06)                   | whole number      | Total of Actual Marketings for insurance period.   |
| TOT TARGET MARKET     | Internal  | 9(06)                   | whole number      | Total of Target Marketings for insurance period reported on premium.   |
| MARKET FACTOR         | Internal  | 9.999                   | 3 decimal places  | Result of (Total Actual Marketings divided by Total Target Marketings) if less than .750, else default to 1.000.   |
| GROSS MARGIN GUAR     | Internal  | 9(10)                   | whole number      | Gross Margin Guarantee for insurance period reported on premium.   |
| <INDEMNITY_AMOUNT>    | 25        | 9(10)                   | whole number      | Indemnity is the result of (Gross Margin Guarantee – Total Gross Margin) times Market Factor. Will be zero if total actual marketings is zero.   |
| <INDEMNITY_REDUCT>    | 26        | 9.999                   | 3 decimal places  | Indemnity Reduction factor is the result of (1.000 – Market Factor).   |

**Note: An indemnity is calculated and payable if Total Gross Margin is less than Gross Margin Guarantee.**