Compreendendo o modelo matemático

#tarefa

Premissas:

- Cortes com 5, 6, 7 ou 8 anos.
- Taxa de interesse de 10% a.a.
- Horizonte de 10 anos.
- Cortar todo o talhão (BIN)

max: 8442.97 FZ1_1_IC5 + 10704.52 FZ1_1_IC6 + 11825.8 FZ1_1_IC7 + 11654.1 FZ1_1_IC8 + 8442.97 FZ1_2_IC5 + 10704.52 FZ1_2_IC6 + 11825.8 FZ1_2_IC7 + 11654.1 FZ1_2_IC8 + 8442.97 FZ1_3_IC5 + 10704.52 FZ1_3_IC6 + 11825.8 FZ1_3_IC7 + 11654.1 FZ1_3_IC8 + 8442.97 FZ1_4_IC5 + 10704.52 FZ1_4_IC6 + 11825.8 FZ1_4_IC7 + 11654.1 FZ1_4_IC8 + 8442.97 FZ1_6_IC5 + 10704.52 FZ1_6_IC6 + 11825.8 FZ1_6_IC7 + 11654.1 FZ1_6_IC8 + 8442.97 FZ1_7_IC5 + 10704.52 FZ1_7_IC6 + 11825.8 FZ1_7_IC7 + 11654.1 FZ1_7_IC8 + 8442.97 FZ1_8_IC5 + 10704.52 FZ1_8_IC6 + 11825.8 FZ1_8_IC7 + 11654.1 FZ1_8_IC8 + 8442.97 FZ2_10_IC5 + 10704.52 FZ2_10_IC6 + 11825.8 FZ2_10_IC7 + 11654.1 FZ2_10_IC8 + 8442.97 FZ2_11_IC5 + 10704.52 FZ2_11_IC6 + 11825.8 FZ2_11_IC7 + 11654.1 FZ2_11_IC8 + 8442.97 FZ2_12_IC5 + 10704.52 FZ2_12_IC6 + 11825.8 FZ2_12_IC7 + 11654.1 FZ2_12_IC8 + 8442.97 FZ2_13_IC5 + 10704.52 FZ2_13_IC6 + 11825.8 FZ2_13_IC7 + 11654.1 FZ2_13_IC8 + 8442.97 FZ2_14_IC5 + 10704.52 FZ2_14_IC6 + 11825.8 FZ2_14_IC7 + 11654.1 FZ2_14_IC8 + 8442.97 FZ2_15_IC5 + 10704.52 FZ2_15_IC6 + 11825.8 FZ2_15_IC7 + 11654.1 FZ2_15_IC8 + 9818.87 FZ6_01_IC5 + 12156.13 FZ6_01_IC6 + 13301.48 FZ6_01_IC7 + 12633.47 FZ6_01_IC8 + 9818.87 FZ6_02_IC5 + 12156.13 FZ6_02_IC6 + 13301.48 FZ6_02_IC7 + 12633.47 FZ6_02_IC8 + 9818.87 FZ6_03_IC5 + 12156.13 FZ6_03_IC6 + 13301.48 FZ6_03_IC7 + 12633.47 FZ6_03_IC8 + 9818.87 FZ6_04_IC5 + 12156.13 FZ6_04_IC6 + 13301.48 FZ6_04_IC7 + 12633.47 FZ6_04_IC8 + 9818.87 FZ6_05_IC5 + 12156.13 FZ6_05_IC6 + 13301.48 FZ6_05_IC7 + 12633.47 FZ6_05_IC8 + 9818.87 FZ6_06_IC5 + 12156.13 FZ6_06_IC6 + 13301.48 FZ6_06_IC7 + 12633.47 FZ6_06_IC8 + 9818.87 FZ6_07_IC5 + 12156.13 FZ6_07_IC6 + 13301.48 FZ6_07_IC7 + 12633.47 FZ6_07_IC8 + 9818.87 FZ6_08_IC5 + 12156.13 FZ6_08_IC6 + 13301.48 FZ6_08_IC7 + 12633.47 FZ6_08_IC8 + 9818.87 FZ6_09_IC5 + 12156.13 FZ6_09_IC6 + 13301.48 FZ6_09_IC7 + 12633.47 FZ6_09_IC8 + 9818.87 FZ6_10_IC5 + 12156.13 FZ6_10_IC6 + 13301.48 FZ6_10_IC7 + 12633.47 FZ6_10_IC8 + 9818.87 FZ6_11_IC5 + 12156.13 FZ6_11_IC6 + 13301.48 FZ6_11_IC7 + 12633.47 FZ6_11_IC8 + 9818.87 FZ6_12_IC5 + 12156.13 FZ6_12_IC6 + 13301.48 FZ6_12_IC7 + 12633.47 FZ6_12_IC8 + 9818.87 FZ6_13_IC5 + 12156.13 FZ6_13_IC6 + 13301.48 FZ6_13_IC7 + 12633.47 FZ6_13_IC8 + 9818.87 FZ6_14_IC5 + 12156.13 FZ6_14_IC6 + 13301.48 FZ6_14_IC7 + 12633.47 FZ6_14_IC8 + 1563.47 FZ6_15_IC5 + 3355.79 FZ6_15_IC6 + 4447.41 FZ6_15_IC7 + 4982.12 FZ6_15_IC8 + 1563.47 FZ6_16_IC5 + 3355.79 FZ6_16_IC6 + 4447.41 FZ6_16_IC7 + 4982.12 FZ6_16_IC8 + 1563.47

FZ6_17_IC5 + 3355.79 FZ6_17_IC6 + 4447.41 FZ6_17_IC7 + 4982.12 FZ6_17_IC8 + 1563.47 FZ6_18_IC5 + 3355.79 FZ6_18_IC6 + 4447.41 FZ6_18_IC7 + 4982.12 FZ6_18_IC8 + 1563.47 FZ6_19_IC5 + 3355.79 FZ6_19_IC6 + 4447.41 FZ6_19_IC7 + 4982.12 FZ6_19_IC8;

Prod2022: 18505.014 FZ1_1_IC6 + 13471.398 FZ1_2_IC6 + 9770.523 FZ1_3_IC6 + 4533.705 FZ1_4_IC6 + 9658.272 FZ1_6_IC6 + 11839.392 FZ1_7_IC6 + 9783.942 FZ1_8_IC6 + 3787.576 FZ2_10_IC5 + 4592.112 FZ2_11_IC5 + 7824.792 FZ2_12_IC5 + 8092.444 FZ2_13_IC5 + 8152.958 FZ2_14_IC5 + 3125.714 FZ2_15_IC5 + 5508.85 FZ6_05_IC5 + 14042.17 FZ6_06_IC5 + 5244.16 FZ6_13_IC5 + 5085.72 FZ6_14_IC5 >= 20000 ;
Prod2023: 23196.426 FZ1_1_IC7 + 16886.682 FZ1_2_IC7 + 12247.557 FZ1_3_IC7 + 5683.095 FZ1_4_IC7 + 12106.848 FZ1_6_IC7 + 14840.928 FZ1_7_IC7 + 12264.378 FZ1_8_IC7 + 5106.036 FZ2_10_IC6 + 6190.632 FZ2_11_IC6 + 10548.612 FZ2_12_IC6 + 10909.434 FZ2_13_IC6 + 10991.013 FZ2_14_IC6 + 4213.779 FZ2_15_IC6 + 7420.745 FZ6_05_IC6 + 18915.629 FZ6_06_IC6 + 7064.192 FZ6_13_IC6 + 6850.764 FZ6_14_IC6 + 7628.614 FZ6_15_IC5 + 3087.588 FZ6_16_IC5 + 2837.492 FZ6_17_IC5 + 2532.908 FZ6_18_IC5 + 2274.874 FZ6_19_IC5 >= 20000 ;
Prod2024: 26932.18 FZ1_1_IC8 + 19606.26 FZ1_2_IC8 + 14220.01 FZ1_3_IC8 + 6598.35 FZ1_4_IC8 + 14056.64 FZ1_6_IC8 + 17231.04 FZ1_7_IC8 + 14239.54 FZ1_8_IC8 + 6400.524 FZ2_10_IC7 + 7760.088 FZ2_11_IC7 + 13222.908 FZ2_12_IC7 + 13675.206 FZ2_13_IC7 + 13777.467 FZ2_14_IC7 + 5282.061 FZ2_15_IC7 + 9300.235 FZ6_05_IC7 + 23706.487 FZ6_06_IC7 + 8288.35 FZ6_07_IC5 + 7382.93 FZ6_08_IC5 + 5983.15 FZ6_09_IC5 + 5742.09 FZ6_10_IC5 + 5641.11 FZ6_11_IC5 + 5524.32 FZ6_12_IC5 + 8853.376 FZ6_13_IC7 + 8585.892 FZ6_14_IC7 + 10275.276 FZ6_15_IC6 + 4158.792 FZ6_16_IC6 + 3821.928 FZ6_17_IC6 + 3411.672 FZ6_18_IC6 + 3064.116 FZ6_19_IC6 >= 20000 ;
Prod2025: 7431.32 FZ2_10_IC8 + 9009.84 FZ2_11_IC8 + 15352.44 FZ2_12_IC8 + 15877.58 FZ2_13_IC8 + 15996.31 FZ2_14_IC8 + 6132.73 FZ2_15_IC8 + 10208.67 FZ6_01_IC5 + 9243.75 FZ6_02_IC5 + 7346.89 FZ6_03_IC5 + 5863.13 FZ6_04_IC5 + 10564.03 FZ6_05_IC8 + 26927.926 FZ6_06_IC8 + 11164.895 FZ6_07_IC6 + 9945.241 FZ6_08_IC6 + 8059.655 FZ6_09_IC6 + 7734.933 FZ6_10_IC6 + 7598.907 FZ6_11_IC6 + 7441.584 FZ6_12_IC6 + 10056.448 FZ6_13_IC8 + 9752.616 FZ6_14_IC8 + 12999.781 FZ6_15_IC7 + 5261.502 FZ6_16_IC7 + 4835.318 FZ6_17_IC7 + 4316.282 FZ6_18_IC7 + 3876.571 FZ6_19_IC7 >= 20000 ;
Prod2026: 13726.724 FZ1_1_IC5 + 9992.868 FZ1_2_IC5 + 7247.618 FZ1_3_IC5 + 3363.03 FZ1_4_IC5 + 7164.352 FZ1_6_IC5 + 8782.272 FZ1_7_IC5 + 7257.572 FZ1_8_IC5 + 13751.679 FZ6_01_IC6 + 12451.875 FZ6_02_IC6 + 9896.693 FZ6_03_IC6 + 7897.981 FZ6_04_IC6 + 13992.685 FZ6_07_IC7 + 12464.123 FZ6_08_IC7 + 10100.965 FZ6_09_IC7 + 9693.999 FZ6_10_IC7 + 9523.521 FZ6_11_IC7 + 9326.352 FZ6_12_IC7 + 15646.443 FZ6_15_IC8 + 6332.706 FZ6_16_IC8 + 5819.754 FZ6_17_IC8 + 5195.046 FZ6_18_IC8 + 4665.813 FZ6_19_IC8 >= 20000 ;
Prod2027: 3787.576 FZ2_10_IC5 + 4592.112 FZ2_11_IC5 + 7824.792 FZ2_12_IC5 +

8092.444 FZ2_13_IC5 + 8152.958 FZ2_14_IC5 + 3125.714 FZ2_15_IC5 + 17234.637 FZ6_01_IC7 + 15605.625 FZ6_02_IC7 + 12403.279 FZ6_03_IC7 + 9898.343 FZ6_04_IC7 + 5508.85 FZ6_05_IC5 + 14042.17 FZ6_06_IC5 + 15894.13 FZ6_07_IC8 + 14157.854 FZ6_08_IC8 + 11473.57 FZ6_09_IC8 + 11011.302 FZ6_10_IC8 + 10817.658 FZ6_11_IC8 + 10593.696 FZ6_12_IC8 + 5244.16 FZ6_13_IC5 + 5085.72 FZ6_14_IC5 >= 20000 ;
Prod2028: 18505.014 FZ1_1_IC6 + 13471.398 FZ1_2_IC6 + 9770.523 FZ1_3_IC6 + 4533.705 FZ1_4_IC6 + 9658.272 FZ1_6_IC6 + 11839.392 FZ1_7_IC6 + 9783.942 FZ1_8_IC6 + 19576.626 FZ6_01_IC8 + 17726.25 FZ6_02_IC8 + 14088.742 FZ6_03_IC8 + 11243.414 FZ6_04_IC8 + 7628.614 FZ6_15_IC5 + 3087.588 FZ6_16_IC5 + 2837.492 FZ6_17_IC5 + 2532.908 FZ6_18_IC5 + 2274.874 FZ6_19_IC5 >= 20000 ;
Prod2029: 5106.036 FZ2_10_IC6 + 6190.632 FZ2_11_IC6 + 10548.612 FZ2_12_IC6 + 10909.434 FZ2_13_IC6 + 10991.013 FZ2_14_IC6 + 4213.779 FZ2_15_IC6 + 7420.745 FZ6_05_IC6 + 18915.629 FZ6_06_IC6 + 8288.35 FZ6_07_IC5 + 7382.93 FZ6_08_IC5 + 5983.15 FZ6_09_IC5 + 5742.09 FZ6_10_IC5 + 5641.11 FZ6_11_IC5 + 5524.32 FZ6_12_IC5 + 7064.192 FZ6_13_IC6 + 6850.764 FZ6_14_IC6 >= 20000 ;
Prod2030: 23196.426 FZ1_1_IC7 + 16886.682 FZ1_2_IC7 + 12247.557 FZ1_3_IC7 + 5683.095 FZ1_4_IC7 + 12106.848 FZ1_6_IC7 + 14840.928 FZ1_7_IC7 + 12264.378 FZ1_8_IC7 + 10208.67 FZ6_01_IC5 + 9243.75 FZ6_02_IC5 + 7346.89 FZ6_03_IC5 + 5863.13 FZ6_04_IC5 + 10275.276 FZ6_15_IC6 + 4158.792 FZ6_16_IC6 + 3821.928 FZ6_17_IC6 + 3411.672 FZ6_18_IC6 + 3064.116 FZ6_19_IC6 >= 20000 ;
Prod2031: 13726.724 FZ1_1_IC5 + 9992.868 FZ1_2_IC5 + 7247.618 FZ1_3_IC5 + 3363.03 FZ1_4_IC5 + 7164.352 FZ1_6_IC5 + 8782.272 FZ1_7_IC5 + 7257.572 FZ1_8_IC5 + 6400.524 FZ2_10_IC7 + 7760.088 FZ2_11_IC7 + 13222.908 FZ2_12_IC7 + 13675.206 FZ2_13_IC7 + 13777.467 FZ2_14_IC7 + 5282.061 FZ2_15_IC7 + 9300.235 FZ6_05_IC7 + 23706.487 FZ6_06_IC7 + 11164.895 FZ6_07_IC6 + 9945.241 FZ6_08_IC6 + 8059.655 FZ6_09_IC6 + 7734.933 FZ6_10_IC6 + 7598.907 FZ6_11_IC6 + 7441.584 FZ6_12_IC6 + 8853.376 FZ6_13_IC7 + 8585.892 FZ6_14_IC7 >= 20000 ;

AREA_FZ1_1: FZ1_1_IC5 + FZ1_1_IC6 + FZ1_1_IC7 + FZ1_1_IC8 = 1 ;
AREA_FZ1_2: FZ1_2_IC5 + FZ1_2_IC6 + FZ1_2_IC7 + FZ1_2_IC8 = 1 ;
AREA_FZ1_3: FZ1_3_IC5 + FZ1_3_IC6 + FZ1_3_IC7 + FZ1_3_IC8 = 1 ;
AREA_FZ1_4: FZ1_4_IC5 + FZ1_4_IC6 + FZ1_4_IC7 + FZ1_4_IC8 = 1 ;
AREA_FZ1_6: FZ1_6_IC5 + FZ1_6_IC6 + FZ1_6_IC7 + FZ1_6_IC8 = 1 ;
AREA_FZ1_7: FZ1_7_IC5 + FZ1_7_IC6 + FZ1_7_IC7 + FZ1_7_IC8 = 1 ;
AREA_FZ1_8: FZ1_8_IC5 + FZ1_8_IC6 + FZ1_8_IC7 + FZ1_8_IC8 = 1 ;
AREA_FZ2_10: FZ2_10_IC5 + FZ2_10_IC6 + FZ2_10_IC7 + FZ2_10_IC8 = 1 ;
AREA_FZ2_11: FZ2_11_IC5 + FZ2_11_IC6 + FZ2_11_IC7 + FZ2_11_IC8 = 1 ;
AREA_FZ2_12: FZ2_12_IC5 + FZ2_12_IC6 + FZ2_12_IC7 + FZ2_12_IC8 = 1 ;
AREA_FZ2_13: FZ2_13_IC5 + FZ2_13_IC6 + FZ2_13_IC7 + FZ2_13_IC8 = 1 ;
AREA_FZ2_14: FZ2_14_IC5 + FZ2_14_IC6 + FZ2_14_IC7 + FZ2_14_IC8 = 1 ;
AREA_FZ2_15: FZ2_15_IC5 + FZ2_15_IC6 + FZ2_15_IC7 + FZ2_15_IC8 = 1 ;
AREA_FZ6_01: FZ6_01_IC5 + FZ6_01_IC6 + FZ6_01_IC7 + FZ6_01_IC8 = 1 ;
AREA_FZ6_02: FZ6_02_IC5 + FZ6_02_IC6 + FZ6_02_IC7 + FZ6_02_IC8 = 1 ;

AREA_FZ6_03: FZ6_03_IC5 + FZ6_03_IC6 + FZ6_03_IC7 + FZ6_03_IC8 = 1 ;
AREA_FZ6_04: FZ6_04_IC5 + FZ6_04_IC6 + FZ6_04_IC7 + FZ6_04_IC8 = 1 ;
AREA_FZ6_05: FZ6_05_IC5 + FZ6_05_IC6 + FZ6_05_IC7 + FZ6_05_IC8 = 1 ;
AREA_FZ6_06: FZ6_06_IC5 + FZ6_06_IC6 + FZ6_06_IC7 + FZ6_06_IC8 = 1 ;
AREA_FZ6_07: FZ6_07_IC5 + FZ6_07_IC6 + FZ6_07_IC7 + FZ6_07_IC8 = 1 ;
AREA_FZ6_08: FZ6_08_IC5 + FZ6_08_IC6 + FZ6_08_IC7 + FZ6_08_IC8 = 1 ;
AREA_FZ6_09: FZ6_09_IC5 + FZ6_09_IC6 + FZ6_09_IC7 + FZ6_09_IC8 = 1 ;
AREA_FZ6_10: FZ6_10_IC5 + FZ6_10_IC6 + FZ6_10_IC7 + FZ6_10_IC8 = 1 ;
AREA_FZ6_11: FZ6_11_IC5 + FZ6_11_IC6 + FZ6_11_IC7 + FZ6_11_IC8 = 1 ;
AREA_FZ6_12: FZ6_12_IC5 + FZ6_12_IC6 + FZ6_12_IC7 + FZ6_12_IC8 = 1 ;
AREA_FZ6_13: FZ6_13_IC5 + FZ6_13_IC6 + FZ6_13_IC7 + FZ6_13_IC8 = 1 ;
AREA_FZ6_14: FZ6_14_IC5 + FZ6_14_IC6 + FZ6_14_IC7 + FZ6_14_IC8 = 1 ;
AREA_FZ6_15: FZ6_15_IC5 + FZ6_15_IC6 + FZ6_15_IC7 + FZ6_15_IC8 = 1 ;
AREA_FZ6_16: FZ6_16_IC5 + FZ6_16_IC6 + FZ6_16_IC7 + FZ6_16_IC8 = 1 ;
AREA_FZ6_17: FZ6_17_IC5 + FZ6_17_IC6 + FZ6_17_IC7 + FZ6_17_IC8 = 1 ;
AREA_FZ6_18: FZ6_18_IC5 + FZ6_18_IC6 + FZ6_18_IC7 + FZ6_18_IC8 = 1 ;
AREA_FZ6_19: FZ6_19_IC5 + FZ6_19_IC6 + FZ6_19_IC7 + FZ6_19_IC8 = 1 ;

BIN FZ1_1_IC5 FZ1_1_IC6 FZ1_1_IC7 FZ1_1_IC8 FZ1_2_IC5 FZ1_2_IC6 FZ1_2_IC7
FZ1_2_IC8 FZ1_3_IC5 FZ1_3_IC6 FZ1_3_IC7 FZ1_3_IC8 FZ1_4_IC5 FZ1_4_IC6 FZ1_4_IC7
FZ1_4_IC8 FZ1_6_IC5 FZ1_6_IC6 FZ1_6_IC7 FZ1_6_IC8 FZ1_7_IC5 FZ1_7_IC6 FZ1_7_IC7
FZ1_7_IC8 FZ1_8_IC5 FZ1_8_IC6 FZ1_8_IC7 FZ1_8_IC8 FZ2_10_IC5 FZ2_10_IC6
FZ2_10_IC7 FZ2_10_IC8 FZ2_11_IC5 FZ2_11_IC6 FZ2_11_IC7 FZ2_11_IC8 FZ2_12_IC5
FZ2_12_IC6 FZ2_12_IC7 FZ2_12_IC8 FZ2_13_IC5 FZ2_13_IC6 FZ2_13_IC7 FZ2_13_IC8
FZ2_14_IC5 FZ2_14_IC6 FZ2_14_IC7 FZ2_14_IC8 FZ2_15_IC5 FZ2_15_IC6 FZ2_15_IC7
FZ2_15_IC8 FZ6_01_IC5 FZ6_01_IC6 FZ6_01_IC7 FZ6_01_IC8 FZ6_02_IC5 FZ6_02_IC6
FZ6_02_IC7 FZ6_02_IC8 FZ6_03_IC5 FZ6_03_IC6 FZ6_03_IC7 FZ6_03_IC8 FZ6_04_IC5
FZ6_04_IC6 FZ6_04_IC7 FZ6_04_IC8 FZ6_05_IC5 FZ6_05_IC6 FZ6_05_IC7 FZ6_05_IC8
FZ6_06_IC5 FZ6_06_IC6 FZ6_06_IC7 FZ6_06_IC8 FZ6_07_IC5 FZ6_07_IC6 FZ6_07_IC7
FZ6_07_IC8 FZ6_08_IC5 FZ6_08_IC6 FZ6_08_IC7 FZ6_08_IC8 FZ6_09_IC5 FZ6_09_IC6
FZ6_09_IC7 FZ6_09_IC8 FZ6_10_IC5 FZ6_10_IC6 FZ6_10_IC7 FZ6_10_IC8 FZ6_11_IC5
FZ6_11_IC6 FZ6_11_IC7 FZ6_11_IC8 FZ6_12_IC5 FZ6_12_IC6 FZ6_12_IC7 FZ6_12_IC8
FZ6_13_IC5 FZ6_13_IC6 FZ6_13_IC7 FZ6_13_IC8 FZ6_14_IC5 FZ6_14_IC6 FZ6_14_IC7
FZ6_14_IC8 FZ6_15_IC5 FZ6_15_IC6 FZ6_15_IC7 FZ6_15_IC8 FZ6_16_IC5 FZ6_16_IC6
FZ6_16_IC7 FZ6_16_IC8 FZ6_17_IC5 FZ6_17_IC6 FZ6_17_IC7 FZ6_17_IC8 FZ6_18_IC5
FZ6_18_IC6 FZ6_18_IC7 FZ6_18_IC8 FZ6_19_IC5 FZ6_19_IC6 FZ6_19_IC7 FZ6_19_IC8;