

# Gascoyne Horticulture Processing Prefeasibility

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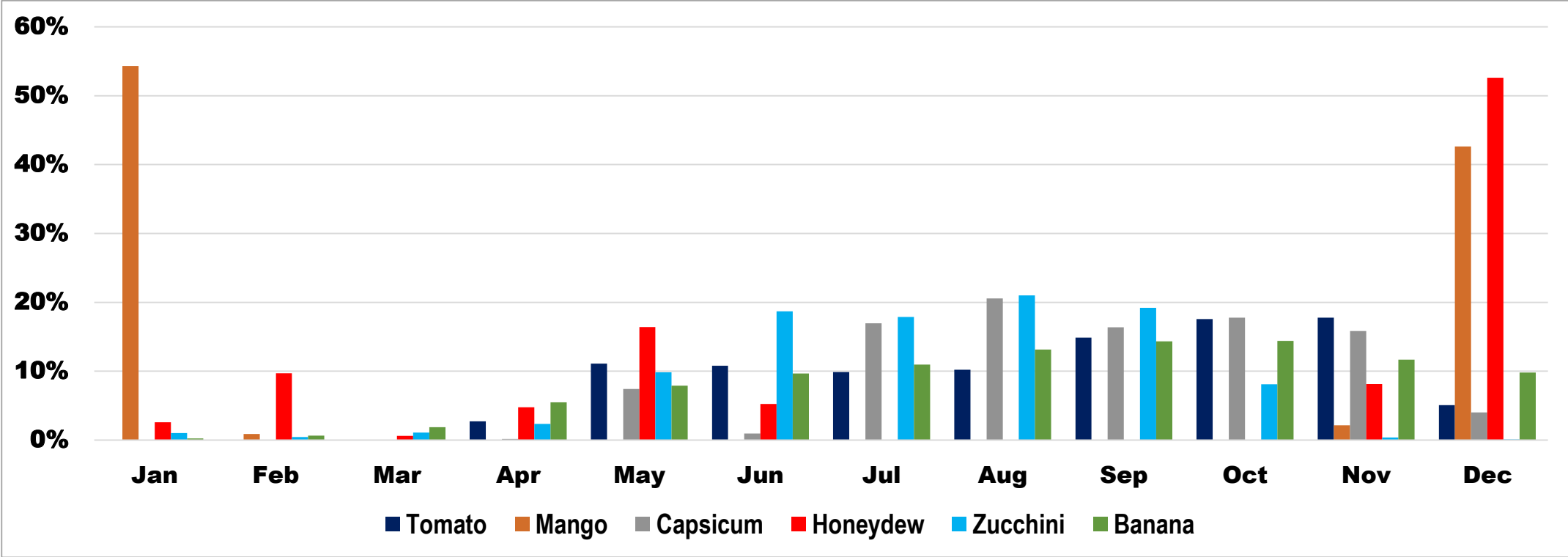
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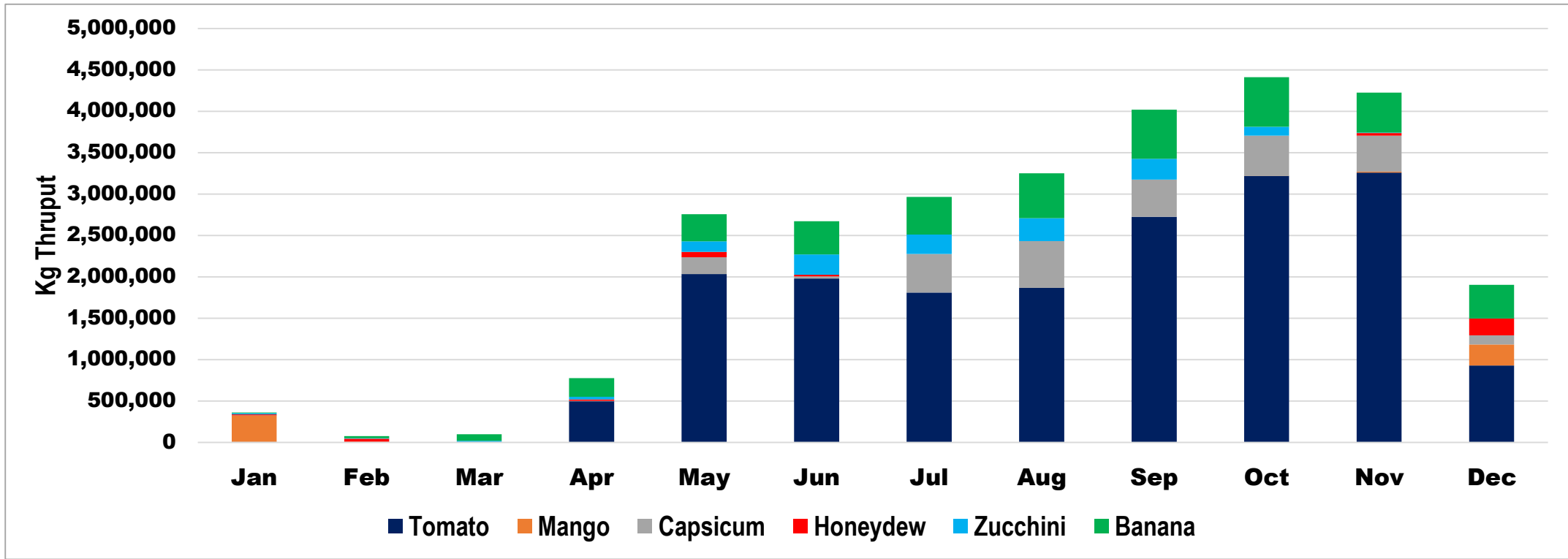
# Approach

|            |   |
|------------|---|
| 1. Engage  | Engage Carnarvon producers                                |
| 2. Scope   | Scope out Horticulture Processing options                 |
| 3. Collate | Collate data and ground-truth                             |
| 4. Model   | Build a prefeasibility model                              |
| 5. Consult | Discuss and refine assumptions with producers and experts |
| 6. Assess  | Assess Investment Performance Scenarios                   |

# % of Crop Volume Supply Seasonality



# Kg Thruput Seasonality



## GASCOYNE REGION

Annual Farm Yield

**44,000 t Yield**

Tomato 32,218 t  
Mango 826 t  
Capsicum 3,820 t  
Honeydew 688 t  
Zucchini 2,081 t  
Banana 4,370 t

## HARVESTED

~73% of Farm Yield

**32,119 t Graded**

**\$86 million GVP**

Tomato 21,812 t  
Mango 661 t  
Capsicum 2,888 t  
Honeydew 516 t  
Zucchini 1,873 t  
Banana 4,370 t

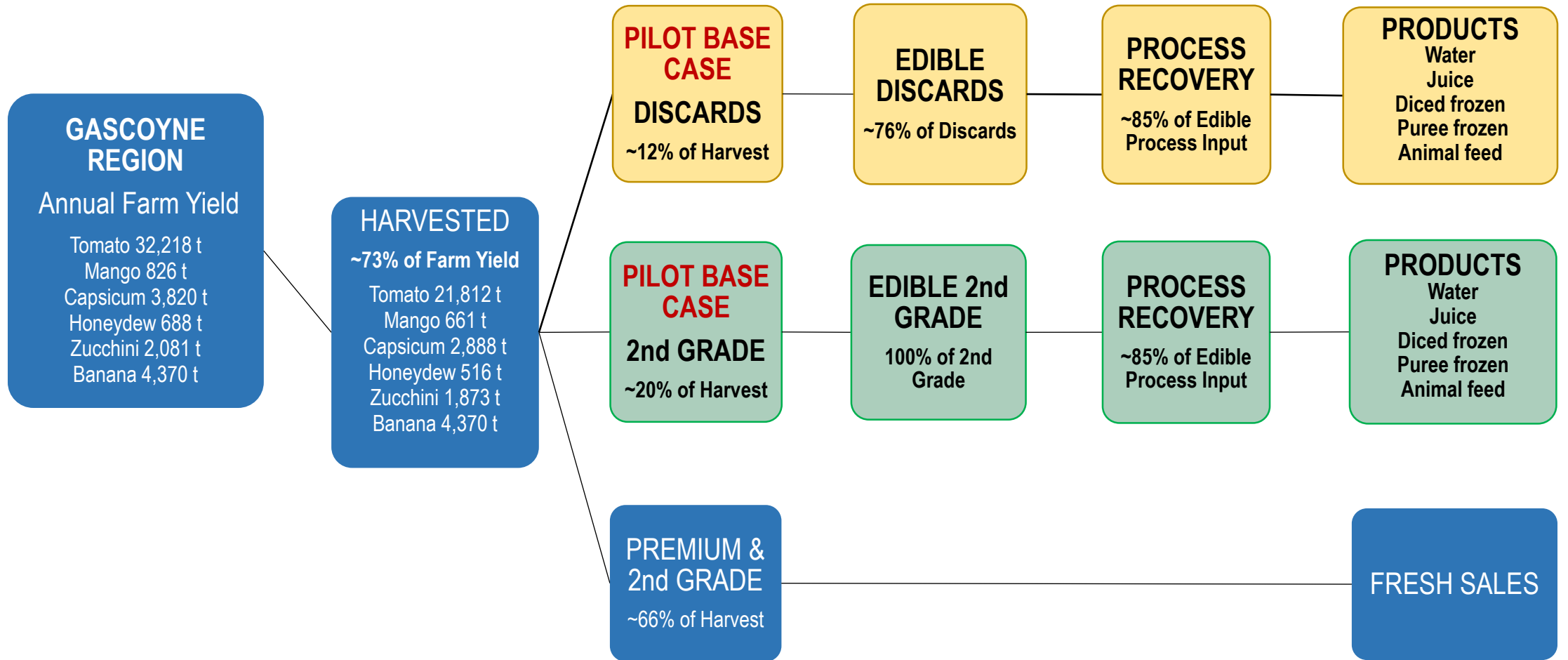
## PREMIUM & 2nd GRADE

**27,500 t Sold**

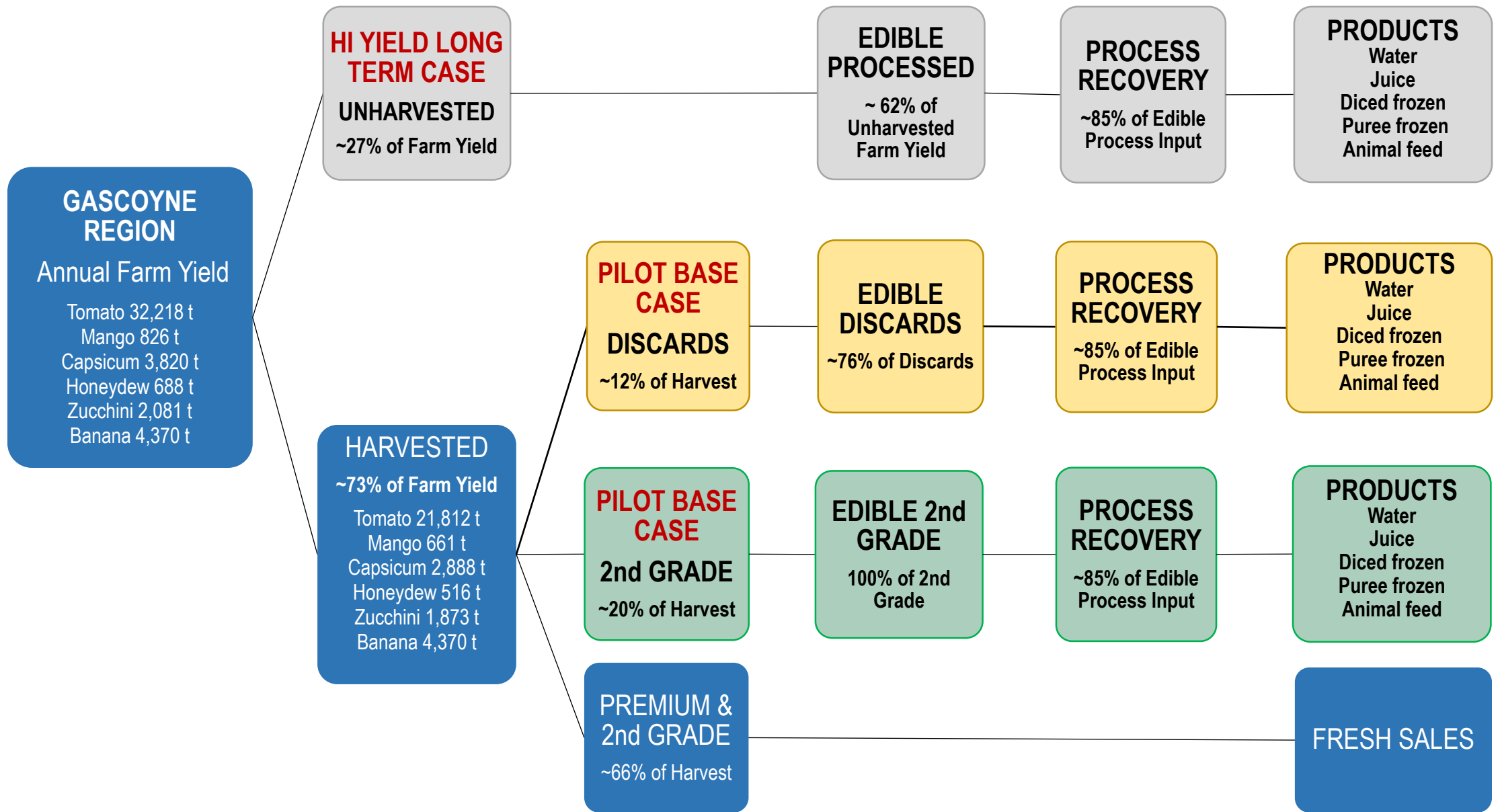
~66% of Harvest

FRESH SALES

# Current Product Flow



# Proposed Product Flow



# Proposed Product Flow

# Pilot Base Case Assumptions (% of harvest volume)

| <b>Sector</b>    | <b>% of 2nds available as waste</b><br>(all edible) | <b>% grading waste</b><br>(discards following grading) | <b>% of graded waste that is edible</b> | <b>Breakeven price</b><br>(\$/kg) | <b>Packaging</b><br>(kg/carton) |
|------------------|---|--|---|-----------------------------------|---------------------------------|
| <b>Tomato</b>    | 22%   | 10%  | 85%                                     | 0.58                              | 10 kg carton                    |
| <b>Mangos</b>    | 30%   | 15%  | 50%                                     | 1.21                              | 6.5 kg tray                     |
| <b>Capsicums</b> | 20%   | 5%   | 50%                                     | 1.66                              | 10 kg carton                    |
| <b>Honey Dew</b> | No 2nds market                                      | 25%  | 85%                                     | 0.16                              | 16 kg carton                    |
| <b>Zucchini</b>  | 10%   | 80%  | 90%                                     | 0.58                              | 10 kg carton                    |
| <b>Bananas</b>   | 15%   | 5%   | 50%                                     | 0.86                              | 13 kg carton                    |



# Hi-Yield Case Assumptions (% of harvest volume)

| <b>Sector</b>    | <b>% of yield left on ground unharvested</b> | <b>% of graded waste that is edible</b> |
|------------------|--|---|
| <b>Tomato</b>    | 32.3 %                                       | 72.5%                                   |
| <b>Mangos</b>    | 20%  | 75%                                     |
| <b>Capsicums</b> | 24.4%  | 48.5%                                   |
| <b>Honey Dew</b> | 25%  | 50%                                     |
| <b>Zucchini</b>  | 10%  | 50%                                     |
| <b>Bananas</b>   | 0%   | 0%                                      |

# GRADING

|                          |  |    | Tomato            | Mango          | Capsicum         | Honeydew       | Zucchini         | Banana           | Total             |
|--------------------------|--|----|-------------------|----------------|------------------|----------------|------------------|------------------|-------------------|
| <b>1A. Market Volume</b> |  | kg | <b>18,321,980</b> | <b>594,711</b> | <b>2,743,480</b> | <b>387,240</b> | <b>1,310,830</b> | <b>4,151,330</b> | <b>27,509,571</b> |
| <b>1B. Farm Yield</b>    | Est. Total Farm Yield                                      | kg | 32,218,436        | 825,988        | 3,819,939        | 688,427        | 2,080,683        | 4,369,821        | 44,003,292        |
|                          | Unharvested Yield - left on farms                          | %  | 32.3%             | 20.0%          | 24.4%            | 25.0%          | 10.0%            | 0.0%             | Wt.Avg. 27.0%     |
|                          | % of product left on farms that is edible                  | %  | 72.5%             | 75.0%          | 48.5%            | 50.0%          | 50.0%            | 0.0%             | Wt.Avg. 61.8%     |
|                          | Edible Volume left on farms                                | kg | 7,544,752         | 123,898        | 452,052          | 86,053         | 104,034          | -                | 8,310,789         |
|                          | Total Harvest volume for grading                           | kg | 21,811,881        | 660,790        | 2,887,874        | 516,320        | 1,872,614        | 4,369,821        | 32,119,300        |
| <b>1C. Grading</b>       | Premium Grade to fresh market                              | %  | <b>50.0%</b>      | <b>29.0%</b>   | <b>55.0%</b>     | <b>75.0%</b>   | <b>55.0%</b>     | <b>65.0%</b>     | Wt.Avg. 52.8%     |
|                          | <i>(All 2nd grade is edible)</i> 2nd Grade to fresh market | %  | <b>12.0%</b>      | <b>31.0%</b>   | <b>20.0%</b>     | <b>0.0%</b>    | <b>5.0%</b>      | <b>15.0%</b>     | Wt.Avg. 12.9%     |
|                          | 2nd Grade to processing                                    | %  | <b>22.0%</b>      | <b>30.0%</b>   | <b>20.0%</b>     | <b>0.0%</b>    | <b>10.0%</b>     | <b>15.0%</b>     | Wt.Avg. 20.0%     |
|                          | Total Grading Discards                                     | %  | <b>16.0%</b>      | <b>10.0%</b>   | <b>5.0%</b>      | <b>25.0%</b>   | <b>30.0%</b>     | <b>5.0%</b>      | Wt.Avg. 14.4%     |
|                          | % Discards that are edible                                 | %  | <b>85.0%</b>      | <b>50.0%</b>   | <b>50.0%</b>     | <b>85.0%</b>   | <b>90.0%</b>     | <b>50.0%</b>     | Wt.Avg. 76.7%     |
|                          | Premium Grade fresh  | kg | 10,905,940        | 191,629        | 1,588,331        | 387,240        | 1,029,938        | 2,840,384        | 16,943,462        |
|                          | 2nd Grade fresh  | kg | 2,617,426         | 204,845        | 577,575          | -              | 93,631           | 655,473          | 4,148,949         |
|                          | Available for processing                                   | kg | 8,288,515         | 264,316        | 721,968          | 129,080        | 749,046          | 873,964          | 11,026,889        |
|                          | 1. 2nd Grade processing                                    | kg | 4,798,614         | 198,237        | 577,575          | -              | 187,261          | 655,473          | 6,417,160         |
|                          | 2. Edible Discards   | kg | 2,966,416         | 33,040         | 72,197           | 109,718        | 505,606          | 109,246          | 3,796,222         |
|                          | Inedible Discards  | kg | 523,485           | 33,040         | 72,197           | 19,362         | 56,178           | 109,246          | 813,507           |
|                          | Total Product graded                                       | kg | 21,811,881        | 660,790        | 2,887,874        | 516,320        | 1,872,614        | 4,369,821        | 32,119,300        |

# PROCESSING OPTIONS

| 1D. Available for Processing |                             |        |            |         |           |         |         |         |            |
|------------------------------|-----------------------------|--------|------------|---------|-----------|---------|---------|---------|------------|
| 1. Base Case                 | 2nd Grade processing        | kg     | 4,798,614  | 198,237 | 577,575   | -       | 187,261 | 655,473 | 6,417,160  |
|                              | Edible Discards             | kg     | 2,966,416  | 33,040  | 72,197    | 109,718 | 505,606 | 109,246 | 3,796,222  |
|                              | Total for Base Case         | kg     | 7,765,030  | 231,277 | 649,772   | 109,718 | 692,867 | 764,719 | 10,213,382 |
|                              | Max thruput limit           | 62% kg | 4,814,318  | 143,391 | 402,858   | 68,025  | 429,578 | 474,126 | 6,332,297  |
| 2. Hi Yield Case             | 2nd Grade processing        | kg     | 4,798,614  | 198,237 | 577,575   | -       | 187,261 | 655,473 | 6,417,160  |
|                              | Edible Discards             | kg     | 2,966,416  | 33,040  | 72,197    | 109,718 | 505,606 | 109,246 | 3,796,222  |
|                              | Edible volume left on farms | kg     | 7,544,752  | 123,898 | 452,052   | 86,053  | 104,034 | -       | 8,310,789  |
|                              | Total for Hi-Yield Case     | kg     | 15,309,782 | 355,175 | 1,101,823 | 195,771 | 796,901 | 764,719 | 18,524,171 |
|                              | Max thruput limit           | 62% kg | 9,492,065  | 220,208 | 683,130   | 121,378 | 494,079 | 474,126 | 11,484,986 |

Base Case is very conservative – only the 2<sup>nd</sup> grade input is processed



# Pilot BASE CASE Performance - 62% Thruput

| Discount Rate 12%, \$7.9m CAPEX, 5.5 FTEs<br>62% of available input<br>Nil Government subsidy |         | Revenue Confidence Level |       |      |
|---|---------|--------------------------|-------|------|
|   | NPV \$m | 50%                      | 75%   | 100% |
| <b>Breakeven<br/>Premium</b>  | 5%      | \$-33                    | \$-11 | \$12 |
|   | 10%     | \$-35                    | \$-12 | \$11 |
|   | 15%     | \$-37                    | \$-14 | \$9  |

Conclusion: Investment is viable at above ~90% confidence

# Pilot BASE CASE Performance – 100% Thruput

| Discount Rate 12%, \$7.9m CAPEX, 5.5 FTEs         |         | Revenue Confidence Level |       |      |
|---|---------|--------------------------|-------|------|
| 100% of available input<br>Nil Government subsidy | NPV \$m | 50%                      | 75%   | 100% |
| <b>Breakeven<br/>Premium</b>                      | 5%      | \$-48                    | \$-14 | \$21 |
|   | 10%     | \$-51                    | \$-16 | \$18 |
|   | 15%     | \$-53                    | \$-19 | \$16 |

Conclusion: Investment is viable at above ~85% confidence

# Hi yield case performance

| Discount Rate 12%, \$7.9m CAPEX, 5.5 FTEs          |     | Revenue Confidence Level |       |      |
|--|-----|--------------------------|-------|------|
| 62% of available input<br>\$Nil Government subsidy | \$m | 50%                      | 75%   | 100% |
| <b>Breakeven<br/>Premium</b>                       | 5%  | \$-53                    | \$-15 | \$23 |
|  | 10% | \$-56                    | \$-18 | \$20 |
|  | 15% | \$-59                    | \$-21 | \$17 |

# Summary

- Assumptions are conservative
- \$7.9m Investment in Pilot Plant BASE CASE processing is viable at 90% confidence & 62% throughput
- \$7.9m Investment in Hi-Yield CASE processing is viable at 90% confidence & 62% throughput
- Governance and Ownership structure will be important to enable returns.