With the recent increase in beef prices and the drop in the milk pay-out, it is worth reviewing the merits and the likely financial returns that could be achieved for a farm running either a beef fattening or dairy grazing operation.

**General comparison**

The following table lists the main differences between running a dairy grazing operation from that of a beef fattening one.

<table>
<thead>
<tr>
<th>Dairy Grazing</th>
<th>Beef fattening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good cash flow</td>
<td>Poor cash flow</td>
</tr>
<tr>
<td>No capital outlay</td>
<td>Capital outlay</td>
</tr>
<tr>
<td>Minimal risk</td>
<td>More risk</td>
</tr>
<tr>
<td>Contract obligations</td>
<td>No obligations</td>
</tr>
<tr>
<td>Lack of flexibility</td>
<td>More flexible</td>
</tr>
<tr>
<td>Need better communication</td>
<td>Communication doesn’t matter</td>
</tr>
<tr>
<td>Better systems and facilities</td>
<td>Less perceived need for good systems and facilities</td>
</tr>
</tbody>
</table>

*Table 1. General comparison for the two farming systems*

None of these physical differences would be sufficient reason for a farmer to change his farming operation unless the financial returns are significantly different.

**The farming operation**

The best way to compare the two systems is to look at a real farm which is already running a dairy grazing operation and then compare this to a computer model of the same farm running a beef fattening system. The computer modeling program we have used is Farmax. This is a commercially available farm modeling program which was produced by Agresearch and is used extensively by farm consultants in New Zealand for modeling sheep, beef and deer farms.

The farm being modeled is a 238ha North Island hill country property located in the central King Country. The property runs 400 yearling (R1) Frisian dairy grazers which arrive on the property at the beginning of May (180kg) and leave the following May (456kg). The majority of the heifers are mated to Jersey bulls which are also provided by the dairy farmers as yearlings and raised on the property.

The property also runs 150 mixed age ewes which are purchased in December. Mated on the 14 February (average lambing date 11 Aug) to terminal sire rams. They lamb 145% and the lambs are weaned in late November. At weaning all the ewes are sold and about 80% of the lambs go straight to the works fat (17–18kg carcass weight). The remaining lambs are fattened.

Fifty Ha of grass is cut for Baleage. Some of this may be fed out in April but the majority is fed out from June to mid-September. The potential pasture growth rates are outlined in Figure 1.
Farmax analysis of the dairy grazing operation

The predicted pasture cover analysis (Figure 2) shows us both the monthly predicted pasture covers and the minimum pasture cover required to feed the stock to the level we have stated within the model. The key limitation to this farming model is the lack of feed quality in autumn, which is restricting stock growth.

![Figure 2. Predicted pasture cover for the dairy grazing operation](image)

The financial analysis is given in Table 2. The dairy grazers are on a fixed rate contract of $10 per head a week. This generates an income of 19 cents per kgDM for the dairy grazers. The total revenue for the farm is $1,030/ha with a gross margin of $921/ha.

![Table 2. Financial analysis for dairy grazing](image)
Beef fattening operation

For the beef fattening operation I have chosen a heifer fattening system with yearling beef heifers being purchased in May (180kg) at $2.79/kg live weight and sold 12 months later at $4.81/kg carcass weight. From a feeding perspective the two systems will be the same but financially the differences can be seen in Table 3.

![Table 3. Financial comparison of the dairy grazing and heifer fattening systems](image)

The key findings are:

1. The total revenue generated from the heifer fattening is higher by $19,690.
2. With the heifer fattening the farmer must pay his own animal health cost.
3. The interest on capital for the heifer fattening is higher by $14,503.
4. Heifer fattening produces a slightly better gross margin of $1,720, or $7/ha.

The difference in gross margin is probably not sufficient to warrant a change from dairy grazing on this property. It is important to note that all farms are different and you need to consider each farm separately when doing this type of analysis, rather than making assumptions based on a general farm.