VALACTA – Dairy Production Centre of Expertise

Get the most out of your quota

Here is an example of how a Potential Gain analysis of the quota management sector could help you improve the profitability of your farm. For the purpose in hand, let's examine the situation of the imaginary Friendly Farm.

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Aim

The producers at Friendly Farm would like to improve the farm's productivity and ensure good quality of life for themselves and their staff.

They agree that this is the best way to ensure the continuity of their farm: establish conditions that promote continual progress for the existing team as well as interesting long-term prospects to attract the next generation of producers.

Priorities

The producers at Friendly Farm wonder how best to achieve their aim. As is the case for all farms, there are so many possibilities for improvement that it's hard to decide what to focus on first. Their Valacta advisor recommends they use the Potential Gain tool (see chart below) to get a clear picture of the possibilities for gains in productivity.

In the Potential Gain Summary Analysis, the heights of the different bars indicate that there are a number of good opportunities to improve the farm's margin:

- nearly $48,000 in the labour efficiency sector,
- nearly $36,000 in feeding,
- and around $10 000 in the other sectors, with the exception of udder health, where the farm is already doing well, which explains why the bar for that sector doesn't appear in the graph.

Before looking at labour efficiency or replacements, we need to understand why the farm isn't making the most of the quota it holds and what impact a change in that area would have on the workload or the herd.

The table detailing the calculation of the potential gain for the quota management sector (Figure 2) tells us that the farm shipped 833 kg of over-quota butterfat, which is equivalent to the milk yield of 2.2 cows. Curiously, the farm only made use of 6.4 of the 10 additional production days available in the fall. Overall, it's clear that total production for the past year largely exceeded the volume allowed by the farm's quota.

Goal

So the challenge for 2014 is to shift part of the milk production to the fall months in order to ship as much milk as possible within quota and reduce the volume shipped during the rest of the year, so as to cease "paying to work".

The idea is to stop using the overproduction tolerance margin this winter so as to have more leeway in the fall should production or butterfat content be higher than expected. Hence Friendly Farm has set itself the following target:

"Bring production back to 800 litres per day during the winter and spring months of 2014 and increase production to 900 litres per day as of August."

Diagnosis

After analyzing the table of Friendly Farm's shipments in 2013, the Valacta advisor notes that production was very high over the winter and spring months of 2013, leading to an overproduction credit equivalent to 24 days. Production levels then dropped however, and the additional production days available in August and September were not used to the full. Production rose thereafter and above-quota shipments were again made in November and December.

Since it's impossible to buy large quantities of quota, Friendly Farm's producers will have to cut their average herd size by at least two cows even if they manage to shift part of production to the month of August. Good milk production planning and close monitoring will be needed for them to achieve their goal without destabilizing annual production. Well-planned culling will be key: while production over the next few months must be reduced to minimize over-quota shipments, it is also important to ensure that there are enough cows in early lactation at the beginning of the summer and early fall to make use of the additional production days. Moreover, if they want to avoid the decrease in butterfat that they saw last summer, they will also need to respond more quickly to changes in feeding associated with the arrival of fresh forages. Implementing a short dry period could help increase fall production.

Follow-up

All projections, however accurate they may be, are subject to change. By following up on their action plan with their Valacta advisor, Friendly Farm producers will be able to make adjustments as needed to get back on course and limit the damage. Imagine what a ploughed field would look like if the tractor operator didn't adjust his steering continually. That doesn't mean it isn't important to look ahead however and anticipate the obstacles. The same logic applies to your action plan: you need to refer to it regularly and assess your progress in relation to your goal.

Action plan

Friendly Farm Action Plan

Goal: Bring production back to 800 litres per day during the winter and spring months of 2014 and increase production to 900 litres per day as of August. **Target Date:** 12 months

Actions	Person in charge	When
Plan milk production, determine a strategy to reduce over-quota production and capitalize on fall milk	Advisor and producer	Immediately
Reconsider the replacement strategy; Select heifers to keep and sell the surplus	CIAQ advisor, Valacta advisor and producer	Within the next 2 months
Monitor heifer growth and target animals for breeding so as to increase calvings between April and August (impact as of 2015)	Producer and advisor	Monthly
Do new forage analyses and then quickly adjust the ration	Producer and advisor	July, August, September
Identify cows that are good candidates for a short dry period and implement the technique	Advisor and producer	Immediately and every 3 months thereafter
Update milk production planning	Advisor and producer	Monthly

What are we monitoring?
- Services, confirmed pregnancies and predicted dry periods (Lac-T).
- Cumulative tolerance margin used (milk payment) vs projected production (Plani-Lacta)
- FPLQ announcements that may change available quota

FIGURE 1

FIGURE 2

Quota Management - Percentile 90

Herd: Name: FRIENDLY FARM Number:

Parameters: Analysis Date: 2014-02-04 Test date: 2014-01-07

Results 12 months	Herd	Benchmark	Difference
Outside quota fat production (kg)	833	0	833
Fat production per cow (kg/cow/year)			379
Production outside quota (cow/year)			2.20
Cost per cow + marketing costs ($/cow)			3,708 $
Difference for herd ($)			8,158 $
Production additional days (d)	6.4	10.0	3.6
Milk difference (kg)			3255
Margin without the addition of cow ($/kg)			0.52 $
Difference for herd ($)			1,693 $