## ADAPTING NEW ZEALAND LIFE QUALITY IN DAIRY FARMING TO ARGENTINIAN FARMS

## Luis & Maru Peluffo Argentine Dairy Farmers

## **Abstract**

In our opinion the great efficiency of NZ Dairy industry is based on capable and motivated people working in it. This is achieved because these people can see there the possibility to build equity, while enjoying good living & working conditions in a normally (sometimes it rains too much) very attractive environment. First, studying about NZ style of dairy farming and then, having had the possibility to go around in several visits from 1992 to 2007, we adapted these conditions as much as possible to Argentina, with good results, progressing from 4 dairy farms, 2.400 cows in milk to 11 dairy farms, 6.500 cows in milk.

I began reading "From Grass to Milk" by C.P.McMeekan, in 1966 (my wife some 20 years after) and followed with the different editions of our "bible", "Milk Production from Pasture" by Colin Holmes et al.

My first visit to NZ in 1992, guided by our friend dairy farmer Jock Campbell, convinced me that this was the quality of living we dreamed for ourselves, associates and staff. We have been working on that with the help from many friends from there; Professor Colin Holmes, Barbara & Louis Kuriger, Nicola Shadbolt & Shane Maxwell, Kevin McDonald, Ross Wrenn and many other farmers & consultants. - My son Matias, a Bch.An.Sci, had the opportunity to attend a two-year postgraduate study at Massey and, as a team, we feel we could do a "more a less" average job in managing a dairy farm somewhere at North or South Island.

Much more difficult has been adapting that way of farming to Argentina, we are sorry to say that Argentina is placed 109 in The International Corruption Ranking, from 180 countries, (NZ is at the moment placed nº 1, as the least corrupted country and always has been between the first three best). This situation produces a lack of faith of the people in everything. Example: Cooperatives in most farmers opinion fail in our country; it is typical that they are managed by a very intelligent contract manager with a "not so well prepared" & non paid farmers council, resulting they go bankrupt or are managed for the benefit of the manager personal goals and sometimes of a small number of associates a well. Loans from Banks are not available to people who really know how to dairy farm, but do not have at least two times equity than the amount of money they are asking for. In this social & political environment, with climate in which ryegrass and white clover will not survive unless you can irrigate well, the tools we have adapted from New Zealand successfully to grow in ten years from 4 dairy farms, 2.400 cows in milk to 10 dairy farms, 6.500 cows on milk, most of them managed by sharemilkers are the following:

Building a good quality of living & working environment so the be able to offer it to young, well prepared and motivated people with a feeling for dairying.- To achieve that:

We upgraded our sheds to the same standard we have seen at NZ, so to be able to milk comfortably in no more than 2:30 hours in the morning milking and 2 in the afternoon one.

We upgraded the living commodities for sharemilkers and staff to the standard we would like for ourselves, TV and internet included.

We changed our milking schedules from 3am to 6am morning milking and kept the 3pm afternoon milking. At the end of the season we may go to OAD for the last 2 months.

We have been using New Zealand genetics since 1986 so that we had herds that could go seasonal: we did that.

We began with summer-autumn (S-A) calving (Feb-March-April) since our farms it may be possible to produce milk from just only pasture in the second half of the cow production cycle, being that in our Spring time. Most of our 11 farms are S-A calving, but some of them are autumn-winter (A-W) (May-June-July) so we can give a second opportunity to the cows that don't come in calf in the normal breeding season (May-June-July). These cows will change from a S-A farm to an A-W farm.

Instead of the typical milk routine that advisers thrive for here (wash teats, dry teats, take first skirts, put cups on, milk, cups off, teat-dip, out) we changed to just put cups on, milk, cups off, teat dip, out. That gave us the possibility to milk 850 cows in a 44 bail shed in 2:00 to 2:30 hours with four people as much doing the job. Al only for 42 days and then bulls come in.

Instead of each calve tied to a stick with two buckets (one, milk-water, other meal) or in individual cages for 60 days, we use a 22 portable milk-bar and 50 x 50 meter pens for every 20-22 heifers calves as in NZ, with much less work and much more nicer to see. Male calves are given away free as they are born.

Heifers are bred at 13-15 months old 10 day before the cows and calve 2 years old so only three herds in the farm: heifer calves – heifers in AI o pregnant – cows in milk.

We normally don't shut the farm once a year as in NZ, as it is profitable to milk the cows 305 days but still our people get good rest & holydays after "bulls in" and at the end of the season when only 15-20% of the cows are in milk.

With all these tools, we have the right people to manage the farms, mostly couples of young Vets or Bch.An.Sci just out from the University with a strong feeling for living in a farm & dairying. They are offered one year training as milkers and then, a sharemilker contract with freedom to manage the farm, and the possibility to buy cows with their savings. They receive a monthly salary and a small cut of the milk check minus feed costs, other than grass, and we divide net profit 50/50 with them at the end of the season.-

The farms work with agent for every 100 cows, so an 850 cow farm normally has 8 people, sharemilkers included, with a trainee helping on the first 4-6 months of the season (Argentina average dairy farm has agent for every 50 cows). This permits us to pay double wages to staff than is normally paid in the country, so we have no trouble of staff going away. We try to provide fool free situations as possible, achieving win-win relations with the best contractors we can find for repairs and maintenance (RR&MM).

Last, but not least, we practice and try to teach all the team the vision that everyone around us deserves to be well treated, as no one as a person is better than any another.

All this has resulted in having some 40 heifers to calve for each 100 total cows, so that with a 20% replacement rate, we can grow to one more dairy farm a year, if we have the land and people required for that.

Let's see something about land, land value, costs & production results.

Dry mater production on family farm is placed in the best part of the "West Buenos Aires-North La Pampa Province" area , where most of the new big dairies have being built ; the area has an average rainfall of 700-850mms (420mms 1960 drough-1.701mms 1987 flood), with 40-60 frosts per year (in 2007, 91 frosts, last one 4th of November) and summers of 20-21°C average temperature ; soils are of the free-draining-low water retention - sandy type , with 1,5-3% organic matter in the first 20 cms and most of them now have a P. Olsen of 25. Pastures can give some 5-7 tons of usable DM/year,

with fescue, white clover and lucerne, and may last 3-5 years. Oats and rye as winter annuals, maize and sorghum for summer annuals and silage (12-15 tons dry matter from maize-sorghum is consider good). - Actual value of land without dairy conversion: @ 6.000 U\$S/ha.

We are also farming since 2004 in two rented farms, at Pergamino, Buenos Aires Province, one of the best lands & climates of the country, with silt & clay soils, about 3-4% of Org.Mat., upgraded by us to 25 P- Rain average is 980mms (in 2006 we had 683mms, in 2008 only 590 mms); summers with 22-23°C medium temperature and 20-25 frosts/year. Pastures will give some 6-9 tns of usable DM/year, with fescue, white clover and lucerne & may last for 3-5 years. Oats and ryegrass as winter annuals, maize and sorghum for summer annuals and silage (14-18 tons of dry matter is considered good).-Actual value of land without dairy conversion is @ 15.000 U\$S/ha.

Then, we rented for 7 years a 1.750 has farm in Cordoba Province, soils with drainage problems and low fertility because of long years of cropping with little fertilizer. About 1,8-2,5% of Org.Mat., very well provided with P, now still 20-25% P. - Rain average is 780-900 mms, summers of 23-24°C medium temperature and 15-20 frosts/year. Pastures will give you some 5-7 tns of usable DM/year, mostly with lucerne that may last for 2-4 years, (C4 grass kikuyu type is being tried) oats and wheat as winter annuals, maize and sorghum for summer annuals and silage (12-16 tons of dry matter is considered good). We established two transportable dairy 22 bail sheds, milking some 500 cows each and planning two more similar sheds by 2011. Land value in this area is @ 5.500 U\$S/hectare.

## Our Feeding system:

We feed the cows only grass when:

- \* It is growing more than 30 kgDM/day;
- \* Cows can manage to harvest every day over 3% Body Weight;
- \* and that what they harvest is over 10 MjME/kgDM.-

In the average year, this ideal situation may happen for about 50 days a year, divided in spring & autumn; we usually have a summer drought as in most parts of NZ, but we also have a dry winter and, what I think is crucial, in many years, September and October receive less than the necessary rain so we have a short spring. "Magic day" (grass grows more than the needs of the cows) in our West of Buenos Aires farms, stocked with 21 cows/ha, is not usually before November.-

Many times a year, we face the situation that if we wait until grass has enough volume (DM/ha) for the cows to harvest over 3% BW per day, the quality has already fallen below 10 MjME so it is not possible to produce more than 1 kgMS/day without supplements.— Also, in summer, temperature may be so hot (35-40°C) that cows will not graze for more than 4-5 hours, so concentrates are needed to fulfil the cows' requirements, even if a lot of grass is available.

This may explain why, although many NZ consultants and farmers have come to help us how to manage grass the NZ way (beginning with Dr.McMeekan visit more than fifty years ago), in fact, in Argentina's best areas, top farmers seldom produce more than 500 kgsLWmeat/ha/year or 270 kgMS/ha/year on grass alone, reaching two o three times more production with feed coming from outside the farm.-

As a system, in autumn, we supplement strongly with grain and by-products the first 5-6 months (about 5500 kgsDM/ha) and produce mostly on grass the other 5-6 months. Taking out part of the farm area for summer crops (maize-soya-sunflower), we expect to harvest nearly all the grass we can produce in a normal season (from 5.500 to 7500 kgDM/ha) and achieve a stocking rate of 2.2-2.3 cows/ha. to produce some 750-800 kgMS/ha.-

It may seem that our Management system should be imitated by other fellow farmers, however after some 100 visits from discussion groups or individual farmers in 10 years, no imitators have appeared until now, because of:

- \* Most farms would need to invest strongly in better sheds and better houses, representing important long-term investments of uncertain profit (because the farm may definitely stop dairying and go to crops, as has happened over the last years with less efficient dairy farms).
- \* Experienced and educated managers/sharemilkers means more rational use of products and less need for consultants; it is understandable that this level of farm staff may be of little interest for some advisers and the very strong agro-industry that funds most of the paid publicity in papers and technical magazines.

Up to now, Argentine dairy production is still in trouble, but where's trouble, in NZ they say we may find opportunities.

- As dairy farmers, we have not only survived, but also grown with this NZ style dairy system, with fair play for all the people we are related to, and, of course, because of the efficiency level these people put back on the farm.-
- We think there are opportunities in Argentina for joint-ventures in dairy farming with Kiwi people; we are always willing to learn more about how to produce and harvest grass, we can progress much in this subject if we have more dairy farmers really involved in motivating research.