

The Pelletier Column

Changing economics to overcome future challenges

by Christophe Pelletier



For a change, this month's column will be about a personal story that in some way is an illustration of what is necessary to foster sustainable practices. The parallel is obvious with some of the global challenges that the world is currently facing

and will continue to face in the future.

Late last year, I moved away from Vancouver to the Okanagan Valley Region some 300 miles east from Vancouver. There, I bought a property with a decent yard where I will have a garden and with a small vineyard. For eight months of the year, the area looks and feels quite similar to the Mediterranean.

Precipitations are not abundant with an annual quantity of only 337 mm. Clearly, water is scarce and needs to be preserved, even though an extensive system of lakes fed by mountain snow ensures an adequate supply of water. The region is quite agricultural with many orchards and vineyards, all thanks to irrigation. There are also many lawns in the area and the estimate is that about 25 percent of the water consumed in the region is just to keep the lawns green.

The economics of sustainability

My plan is to install barrels to collect the water from rain and snow and use it for the yard. This is where the economics do not go in parallel with all the talk from politicians about sustainability. Around the house I would need five rain barrels in total. The lowest and best retail price I can find is of about Can\$80 for a 200 litre barrel. To set up my water collection system, it will cost me Can\$400 to provide me with a one cubic metre storage capacity. In comparison, the price for a cubic meter that the municipality charges for water is Can\$0.30 per cubic meter.

In the most ideal situation, that is if I were able to collect all the rain and snow through my five barrels, I would at most collect about 30 cubic metres per year. In money, it comes down to a saving of roughly Can\$10 per year. To break even, I'd better hope that the barrels will last 40 years, which they might, but considering my current age, there is a fair chance I may have moved to a much smaller underground dwelling by then. Of course, my example is about quite a small investment and if the return is lousy, it will not change my life. At least, the barrels will help me save water.

The comparison between cost and benefit

The point of my story is that the comparison between cost and benefit would deter most people to consider buying rain barrels. It just does not make financial sense, if money is what matters. I always say that money talks and what it says here is to forget about being sustainable. One of my neighbours also considered installing solar panels on the roof of their house. After comparing the price of the panels plus installation and maintenance with the electricity savings, they discovered that it would last twice the life of the panels to break even. In terms of money, solar panels are a different kettle of fish than my five rain barrels. I can understand they decided to not pursue the solar option. The economics of water and energy savings that I just described can be extrapolated to the much larger picture. All through the food and agriculture value chains, many changes for more sustainable systems face the same kind of dilemma. What makes sense from an environmental point of view often does not make sense financially in the current economic environment. Demanding a more sustainable production system is quite legitimate and sensible, but the conditions must also be there to make it happen. The numbers have to add up for farmers and businesses to make the switch. As usual, money is of the essence and it can come from different sides.

Subsidies must be set up properly and be effective

First, the purchase price and the cost of operation of alternatives have to come down and be competitive; either suppliers are able to drop their prices or offer more efficient systems. Governments can also help through subsidies to ease the pain, but of course the must be set up properly and be effective.

Second, the customers, which in a fair value chain, would be eventually the consumers, have to pay for extra cost of the better production systems, simply because our consumption societies with their sense of entitlement have to understand that there is no such thing as a free lunch. Such a realisation also means that producers also understand that mass production that only deplete resources do not fit in the long-term picture and that value will have to replace volume.

Christophe Pelletier is a food and agriculture strategist and futurist from Canada. He works internationally. He has published two books on feeding the world's growing population. His blog is called "The Food Futurist".