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The Global Agricultural Market: Argentina

By Alex Wells

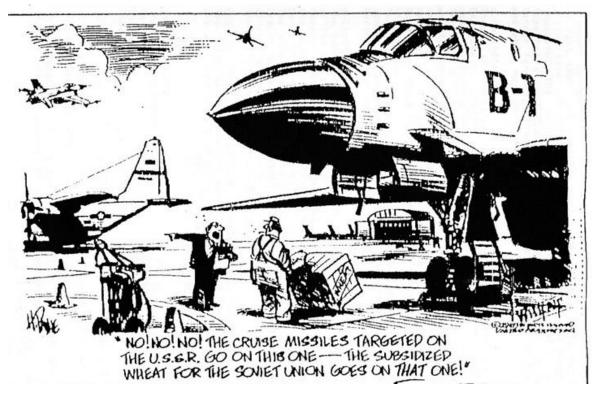
For any country, agriculture is a "strategic" sector.

Subsidized at times, agriculture has also been associated with geopolitical goals, donating goods or giving soft loans to consuming countries.

States have thus used public resources in order to implement those goals, and it has fallen mainly on urban society to foot the bill.

We need not look too far for examples: You may recall that during the Cold War the US had the Export Enhancement Program that allowed to sell wheat with subsidies in order to compete with the European subsidy program-

Here is my favorite cartoon representing the situation at the time:



I bring here however an unusual case:

- In Argentina, agriculture is a very important source of foreign currency.
- 30 pct of GDP is directly or indirectly dependent on agriculture.
- Agriculture finances industry and thus urban lifestyle.
- But above all , agriculture finances the government through export taxes

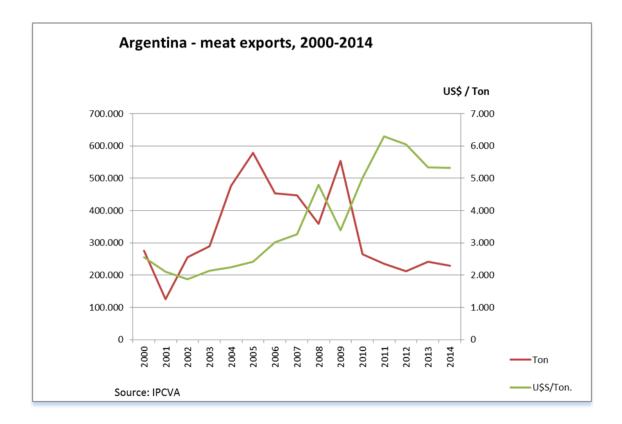
So to the government the policy looks something like this:



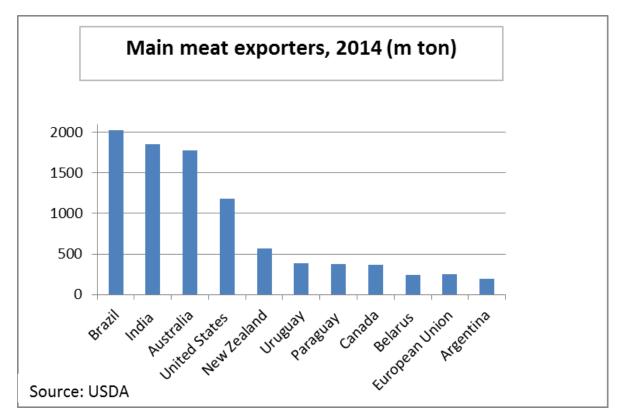
During the recent commodity boom, the difficulty was how to make sure the need for revenue from exports did not impact domestic prices.

So wage goods, those that impact the cost of living of the population in general, were restricted through quotas- Wheat, corn and meat fell into this category, and Argentina saw exports of all these goods collapse-

It is incredible to see that, whilst export prices for meat exploded, trebling in price, exports actually fell.

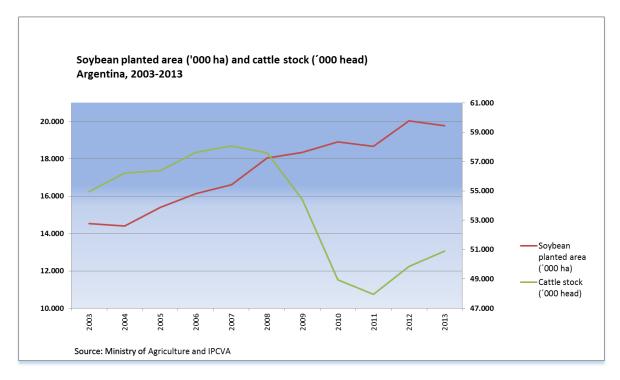


So Argentina, once known worldwide for its meat, has now been relegated to the bottom of the exporters list:



Even Uruguay, with area one sixth of Argentina, is way ahead.

The net result was an increase in soybean area to the detriment in area dedicated to cattle.



So, the first take away is that in Argentina the government -and not the markethas an overriding role in agricultural, because agriculture has been an irreplaceable source of tax revenue and foreign currency.

But how much is the government actually extracting from the farmers?

This is important to determine what the perspectives are going forward if nothing changes:

Price of beans to the farmer:

Chicago board of trade price: 9.80 dollars per bushel

Premium for Argentine FOB beans at Rosario 25 cts bu

Less elevation/fobbing costs (30) cts bu

Export taxes (effective rate) 37.5 pct on FOB (3.75) doll bu

Exchange rate differential 50 pct spread (3.00) doll bu

Net to the farmer 3.00 doll bu vs 9.80 in Chicago.

Maybe I need to explain a little bit about this exchange rate differential-

Argentina has no free exchange, but an official rate, which is close to 50 pct below actual free market price, or if you want black market rate.

A farmer in Argentina who sells his crop, gets pesos and not dollars, as it is forbidden to get foreign exchange. However, with 40 pct inflation year over year, nobody wants to keep pesos. If he wants instead hard currency, he has to go to the black market to buy dollars at a 50 pct higher price.

Summarizing:

Price of beans at Rosario	9.75 dollars per bushel
Government takes	6.75 dollars per bushel
Net to the farmer	3.00 doll per bushel

Government takes 70 pct of income without any risk.

If we add income tax and real estate tax, the government takes 85 pct.

So in essence, the Argentine farmer needs to look at the price of corn in the CME, then take away 25 pct to get a better idea of price than that of beans.

Now bear in mind, in spite of all the above, soybean is the most profitable crop in Argentina. It does tell you what the prospects are for corn and wheat.

Around 65 pct of the land is rented, so those who pay rent have to allocate ard 30 pct of yield as rent, leaving them with 2/3 of the crop at 3.00 dollars per bu to meet actual planting and harvesting costs:

This means yield to most farmers is and 29 bu/acre, or 87 dollars per acre gross revenue.

This compares with a US farmer pocketing 400 plus dollars per acre.

Planting costs are above, so today those farmers that pay rent are at best break even. And if there is anything left, just in case, the government has a 33 pct income tax!

The unprofitability of farming today in Argentina and the melting value of the peso explain why farmers are residual holders of world stocks and not the US farmers. They keep beans in silo bags as an alternative to the banking system, hoping for the government to devalue currency and give them a break.



(Government in the meantime has ordered banks not to give any financing to farmers holding beans and accuses farmers of being speculators)

This means that the only agricultural policy implemented by the government is essentially via the exchange rate (export taxes, once introduced, are difficult to pare back, and they are needed to finance the urban society as mentioned above).

What are the chances of this changing in the future?

The only way for Argentina's state to wean away from agriculture is to develop other sources of income, and that could take place in essentially 2 areas:

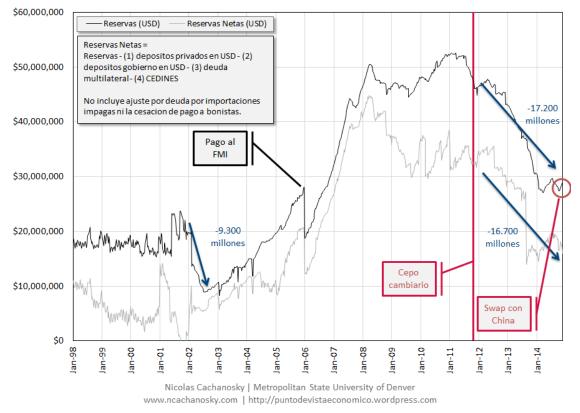
1-Energy: Argentina has vast reserves of non-conventional oil and gas, but with present collapse in oil prices it has become a mute item. China, however, has vowed to invest in this crucial sector.

2-Mining: Here again, commodity prices have plummeted, large investments are needed, exchange rate distortions and restrictions in repatriation of profits mean investments are very risky. Furthermore, there is widespread disapproval from the population in general against open sky mining activities.

Even assuming the best of incentives, both mining and energy sectors require decades until projects get off the ground and start adding to the economy and government coffers.

So Argentina will remain dependent on soybean exports for at least another decade, if not more.

Even though the government is essentially expropriating the dollars resulting from agriculture, Central bank reserves over time have continues to decline:



Net reserves are basically al levels not seen since default in 2001.

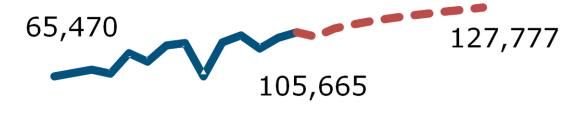
The Central Bank is broke when considering the service of debt this year equals the net reserves.

Let's get to the crunch now and take a look at prospects for Argentina's agriculture and exports.

There are several studies in this respect. I have chosen the INAI baseline scenarios for the near to medium term.

A quick chart summarizes their findings:

Argentina - Grains and oilseeds production



00/01 05/06 10/11 15/16 20/21

In essence a 21 pct growth in production over a 10 year period.

1. Table 1: Agricultural trade volume growth

Billion USD, 2013 prices

Crop year	2013	2018	2023	Δ 10 year	Δ annual [#]
Grains	102.9	106.6	115.8	12.6%	1.2%
Oilseeds	66.6	71.7	78.9	18.5%	1.6%
Cotton	17.0	17.2	18.7	10.2%	1.3%
Sugar	21.5	22.5	24.9	15.6%	1.4%
Vegetable oils	56.7	62.2	69.2	21.9%	2.0%
Meals Oilseeds	34.4	38.6	42.6	23.7%	2.1%
Meats	91.1	96.3	106.5	16.8%	1.5%
Dairy	28.7	31.5	35.5	24.0%	2.2%
Total	418.9	446.5	492.1	17.5%	1.6%

Source: ERAMA 2023 (September 2014) - INAI Foundation

[#] Least squares average growth rate.



т	housand tons an	d thousand	hectares		
Crop year	2013 / 2014	2018 / 2019	2023 / 2024	∆ 10 year	∆ annual#
Production	105,665	118,008	127,777	20.9%	2.2%
Harvested area	30,831	32,998	34,147	10.8%	1.2%
Exports	33,874	45,020	46,493	37.3%	2.7%

Here we see land is expected to grow 10 pct over 10 years, whilst production is expected to grow 20 pct. So half of production increase is on account of land, and another half through productivity.

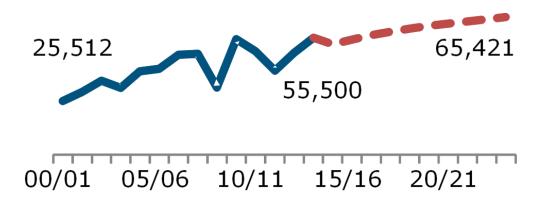
The breakdown is as follows:

Table 3: Harvested area Thousand hectares							
	2013 / 2014	2018 / 2019	2023 / 2024	∆ 10 year	∆ annual#		
Grains	9,547	10,277	10,352	8.4%	0.9%		
Rice	243	250	252	3.9%	0.4%		
Wheat	3,400	3,928	3,984	17.2%	1.2%		
Corn	3,373	3,675	3,694	9.5%	1.1%		
Barley	1,219	1,125	1,097	-10.0%	0.0%		
Sorghum	1,080	1,058	1,076	-0.4%	0.0%		
Other Grains	232	242	248	6.8%	0.6%		
Oilseeds	21,284	22,721	23,795	11.8%	1.4%		
Soybean	19,490	20,727	21,754	11.6%	1.4%		
Sunflower	1,411	1,597	1,635	15.8%	1.8%		
Peanut	383	397	406	6.1%	0.5%		
Cotton	554	501	501	-9.6%	-1.0%		
Sugar	215	221	219	1.6%	0.0%		
Total	31,600	33,720	34,866	10.3%	1.2%		

Source: ERAMA 2023 (September 2014) - INAI Foundation

Tons per hectare						
	2013 / 2014	2018 / 2019	2023 / 2024	∆ 10 year	∆ annual‡	
Rice	6.6	6.9	7.2	9.5%	0.9%	
Wheat	3.0	3.3	3.5	17.2%	1.4%	
Corn	7.5	7.7	8.3	10.7%	1.3%	
Barley	3.9	4.3	4.6	17.7%	1.5%	
Sorghum	4.0	4.6	4.9	22.5%	1.6%	
Soybean	2.8	2.9	3.0	5.6%	0.7%	
Sunflower	1.6	2.0	2.2	33.6%	2.2%	
Peanut	2.6	2.9	3.1	20.7%	1.7%	
Cotton	0.6	0.5	0.6	-3.2%	0.3%	
Sugar	8.3	9.6	10.2	22.5%	1.7%	

Argentina - Soybean production



Thousand Tons								
Crop year	2013 / 2014	2018 / 2019	2023 / 2024	∆ 10 year	∆ annual#			
Oilseed								
Production	55,500	59,860	65,421	17.9%	2.1%			
Crushing	40,056	45,988	50,890	27.0%	2.3%			
Exports	8,500	12,080	12,190	43.4%	2.9%			
oil								
Production	7,609	8,738	9,670	27.1%	2.3%			
Biofuel	2,533	2,907	2,930	15.7%	1.3%			
Exports	4,420	5,418	6,317	42.9%	3.3%			
Meals								
Production	29,603	33,990	37,613	27.1%	2.3%			
Feed use	2,606	3,313	3,966	52.2%	4.2%			
Exports	25,928	30,503	33,444	29.0%	2.3%			

Argentina - Wheat production

16,044 13,876

00/01 05/06 10/11 15/16 20/21

Crop year	2013 / 2014	2018 / 2019	2023 / 2024	∆ 10 year	∆ annual#
Wheat					
Production	10,100	12,947	13,876	37.4%	2.6%
Consumption	6,800	7,202	7,645	12.4%	1.2%
Exports	1,500	5,740	6,203	313.6%	8.7%

Argentina - Corn production

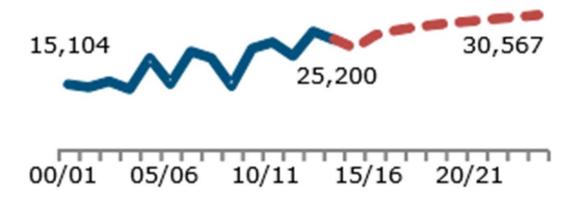


Table 9: Corn

Thousand Tons

Crop year	2013 / 2014	2018 / 2019	2023 / 2024	∆ 10 year	∆ annual#
Corn					
Production	25,200	28,409	30,567	21.3%	2.4%
Exports	16,000	18,748	19,048	19.0%	1.9%
Domestic uses					
Food use	1,674	1,695	1,766	5.5%	0.4%
Feed use*	10,576	12,608	14,150	33.8%	3.0%
Biofuel	826	999	1,162	40.7%	3.4%

* Feed use figures include corn for in farm self-consumption. Source: ERAMA 2023 (September 2014) - INAI Foundation

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Thousand Tons								
Crop year	2013 / 2014	2018 / 2019	2023 / 2024	∆ 10 year	∆ annual#			
Biodiesel								
Production	2,472	2,837	2,860	15.7%	1.3%			
Consumption	971	1,246	1,480	52.5%	3.9%			
Exports	1,502	1,589	1,376	-8.4%	-0.7%			
Ethanol								
Production	498	596	693	39.2%	3.4%			
Sugar cane ethanol	234	277	321	37.4%	3.5%			
Corn ethanol	264	320	372	40.7%	3.4%			

		Thousan	d Tons		
	2013	2018	2023	Δ 10 year	∆ annual#
Beef and veal					
Production	2,850	2,985	3,081	8.1%	0.7%
Consumption	2,664	2,747	2,835	6.4%	0.6%
Exports	186	239	246	32.5%	2.5%
Poultry					
Production	2,060	2,337	2,693	30.7%	2.8%
Consumption	1,738	1,820	1,930	11.0%	1.1%
Exports	324	521	767	136.8%	9.0%
Pork					
Production	402	481	518	29.0%	2.1%
Consumption	419	479	515	22.9%	1.7%
Exports	1	2	3	236.5%	14.8%

Coming back to grains, other sources seem to be more optimistic, believing actual production could actually increase by 50 pct over 10 years, but mainly through a higher input of technology. New land would have to come from investments in infrastructure that would allow exports to the Pacific Ocean through Chile and Peru, essentially via railroads financed by the Chinese.

I have talked about production, but not impact in world trade.

INAI outlook expects Argentina's participation in world trade to remain quite the same in coming years.

However need to take into consideration the study was prepared when commodity prices were higher, and therefore within a more friendly environment for agriculture. Today these parameters have changed noticeably.

Table 16:

Argentine exports

Share of world trade

	2013	2023	∆ 10 year
Total	7.4%	8.1%	0.7 pp
Grains	5.0%	6.7%	1.7 pp
Rice	1.9%	1.5%	-0.4 pp
Wheat	0.9%	3.4%	2.5 pp
Corn	12.5%	13.7%	1.2 pp
Barley	15.8%	14.4%	-1.4 pp
Sorghum	23.5%	33.4%	9.9 pp
Oilseeds	7.7%	8.8%	1.0 pp
Soybean	7.6%	9.0%	1.4 pp
Sunflower	4.1%	3.7%	-0.4 pp
Peanut	28.7%	27.8%	-1.0 pp
Other crops			
Cotton	0.4%	0.9%	0.5 pp
Sugar	0.4%	0.4%	0.0 pp
Vegetable oils	7.2%	8.1%	0.9 pp
Soybean oil	46.5%	52.2%	5.7 pp
Sunflower oil	5.0%	8.2%	3.2 pp
Peanut oil	34.5%	31.8%	-2.6 pp
Meals	36.8%	38.4%	1.6 pp
Meats	1.9%	2.9%	1.0 pp
Beef and veal	2.1%	2.2%	0.1 pp
Pork	0.0%	0.0%	0.0 pp
Poultry	3.0%	6.0%	3.0 pp
Dairy products	4.0%	6.0%	2.0 pp
Butter	2.2%	2.8%	0.6 pp
Cheese	3.2%	6.5%	3.3 pp
Skimmed dry milk	0.5%	1.3%	0.7 pp
Whole dry milk	8.3%	11.0%	2.7 pp
Biodiesel	50.9%	43.1%	-7.7 pp

Source: ERAMA 2023 (September 2014) - INAI Foundation

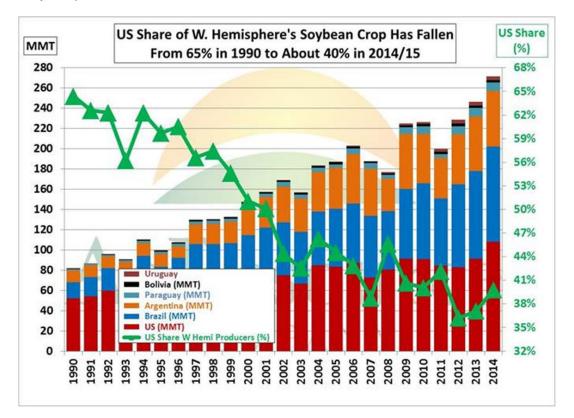
pp: Percentage points

So essentially Argentina will strive hard to maintain its ranking as exporter of ag products, but it seems difficult to be more optimistic than that. And even then, a lot depends on world prices, government policies and investment in infrastructure.

Personally, I feel participation in world trade will drop as we have seen in the case of cattle unless confiscatory policies are changed, or world prices explode once again.

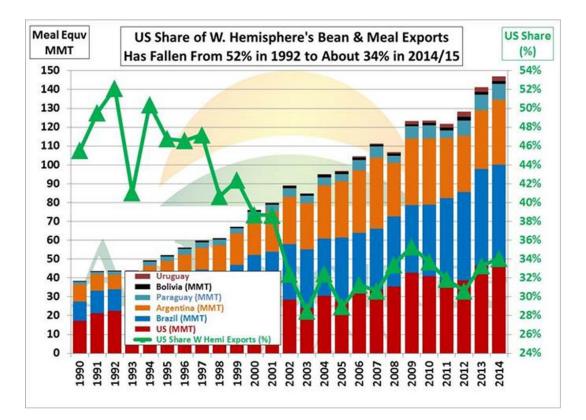
In January we have seen vineyards and apple and pear growers threaten to abandon their crops as fiscal pressure, increase in cost and an unrealistic dollar rate has pushed many to bankruptcy. And this has also been felt across the industrial sector.

But the picture of Argentina would be incomplete without putting in perspective its weight within the region and the US:



As a percentage of bean production, the US has fallen from 65 pct in 1990 to only 40 pct in 2014/15

Exports have fallen from 52 pct in 1992 to 34 pct now.

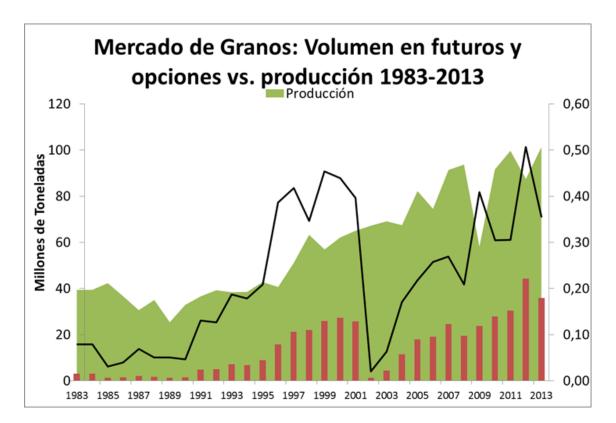


I think it is worth noting that whilst in the past decades the US share of bean production and exports has been going down significantly, the world is still using Chicago as the market of reference. The CME is no longer representative of world values, and indeed has had very negative impact on world consumers and farmers that used it as a hedging tool. CME has become a domestic market that at times does indeed reflect world values, but when stocks are tight, in view of the difficulty of importing beans and products, it tries to ration through higher prices whilst the world adjusts via discounts to Chicago.

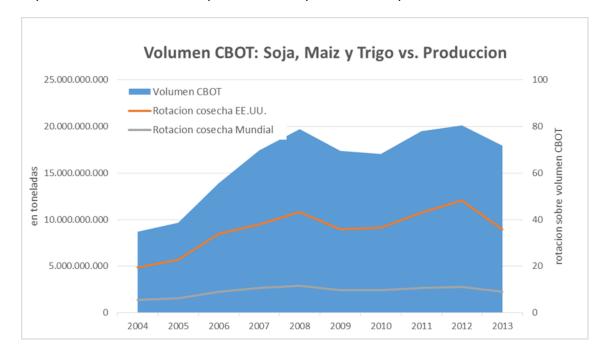
So a farmer in South America who hedges his crop in the US, may find upon harvest that his beans are worth no more than when he hedged in the international market, but prices in the CBOT have exploded, causing him a big loss. Similarly, end users who buy beans on a premium basis in S America, expecting a bearish market, may find their purchases increase in a disproportional way as Chicago rallies-

The South American farmer and the world need a South American contract, in a South American exchange.

In Argentina there is an exchange, but due to the factors discussed previously, a dollar is not a dollar, prices are distorted by export taxes, the volume traded is practically nonexistent:



Out of 100 mio tons of overall crops which trade on the exchange, only less than 40 pct in volume finds its way to the futures market.



In the US the percentage volume is 100 times bigger, meaning futures represent 40 times the crop, and not 40 pct of the crop.

I believe it is time for South America to create its own exchange, probably in Uruguay, to be freely traded in dollars, without government intervention.

This would benefit not only Argentine farmers, but those of Uruguay, Paraguay, Bolivia and Brazil- Also consumers would benefit from a more transparent price.

And this need not be to the detriment of US futures, as it would open the opportunity to arbitrage between exchanges, and even give funds added space in an already overcrowded market.

That, ladies and gentlemen, is the challenge I have set for myself and the team of the Uruguayan Futures Exchange, or UFEX, and backed by different state and private agents, farm community organizations, traders and investors in the hope of bringing the proper tool to local and international players.



My very special thanks to:

Agustin Tejeda Rodriguez, chief economist of INAI (Instituto para las Negociaciones Agricolas Internacionales) Email <u>atejeda@inai.org.ar</u>

Dan Basse –AgResource Email <u>basse@agresource.com</u>

Sergio Berensztein- Poliarquia Consultores

Lorena r D'Angelo- Consultora comercial- Fundacion Libertad

Ethel Terreno- Socióloga y consultora de mercado-

Email <u>eterreno@fibertel.com.ar</u>