



International Farm Management Association Country Reports May 2020



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South America:	Dr. Mariana de Aragão Pereira	Brazil
UK and Ireland	Tim Brigstocke	UK
22 nd Congress 2019:	David Armstrong	Tasmania

IFMA May 2020 Country Report

IFMA members represent a varied range of agricultural expertise, working in diverse economic, environmental and climatic landscapes. Our common interest is the management of the agriculture business and what we can learn from each other by sharing our knowledge.

Our academics like to keep grounded with the practicalities of the front-line decision makers who in return like to sharpen their skills. Our economists like to understand the drivers of the decision makers who in return like to know their position in the jigsaw of big data. Our subsidised farmers want to understand those who have none and those who have none, want to understand those whose output is taxed. Our researchers like to test their findings and theories with advisors and farmers, who take comfort from keeping one step ahead. Our older generation like to find youthful and energetic homes for their hard-earned experience, whilst these next generations like an inspirational beer as they network and find new vision to develop back home.

We share our diverse backgrounds by way of these country reports, giving you an insight into agriculture around the world. Whilst we share our knowledge as you read, in return we would like you to exchange your knowledge with us in Copenhagen next year where we have a program of speakers, field trips, socials, study tours, strategic workshops, next generation programmes and perhaps even time for a beer (Pilsner)!

Trevor Atkinson – IFMA President



For further details and to register go to www.ifma23.org



International Farm Management Association (IFMA)

IFMA is a society for people who are involved directly or indirectly in the agricultural process and who have an interest in the agriculture of parts of the world other than their own, exchange of knowledge and best practice.

This includes the whole spectrum of individual and corporate producers, farmers, managers, advisors, researchers, teachers, policy-makers, suppliers, farming and marketing organizations and agribusiness companies associated with agriculture, horticulture and rural enterprise.

IFMA has members in over 50 countries is organised and co-ordinated by a Council, with members drawn from around the world.

The objective of the Association is to further the knowledge and understanding of farming and farm business management and to exchange ideas and information about farm management theory and practice throughout the world.

- **IFMA International Congresses:**

These are organised every other year in countries around the world. They are organised locally, usually last for 6 days, which together with additional pre- and post-congress tours, provide not only an occasion to discuss farm management and agriculture in a global context, but also to learn a great deal about the host country's farming structure and its people. They are a totally unique experience.

The 2021 IFMA Congress which is the 23rd International Farm Management Conference will be hosted by the University of Copenhagen.

- **20th to the 26th June 2021 - Pre tour** http://ifma23.org/download/pretour_web.pdf

The pre congress tour covers Norway and Sweden starting in and arriving in Copenhagen ready for the Congress on the 26th of June 2021 which is midsummer day.

- **26th to the 27th June 2020 – Next Gen Program**

This is a special programme which is being developed by the congress organisers for the next generation of farm managers and professionals and builds on the very successful one that took place in Tasmania in 2019.

- **27th June to the 2nd July 2021 – Congress** <http://ifma23.org/index.html>

This will be the 23rd IFMA Congress whilst it follows a well proven format allowing delegates and speakers to exchange best practice its also allows the organisers to bring a flavour of the host country Agriculture management style and culture.

- **2nd to the 10th July 2021 – Post Congress Tour** http://ifma23.org/files/20200409_Post-Congress_hjemmeside_compress.pdf

The post congress will allow the participants to gain a full understanding of modern farming practices in Denmark whilst taking in the culture and history of the country

- **Country Reports:**

Each year members of Council who represent different countries produce a report covering agriculture which provides a good snapshot of agriculture around the world.

Note:

All the authors of the Country reports are resident within the relevant Country and involved with Agricultural Management

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Argentina

Weather:

Overall, the weather has been good for the summer crops being harvested at this moment. We had a rather dry February, but some areas got enough rainfall to have a very good harvest.

Autumn has been cold and with good rainfall, providing the soil with good moisture to induce an increase in wheat planting, it will probably grow again, although by small amounts.

Economic Climate

August of 2019, we had primaries, and the opposition won handsomely, then in October 2019 we had elections, and although the opposition won, it was with a narrower margin, 48% to 41%. The current president took office on December 10th.

Our current president was put in the ticket by our ex-president and current vice president, Cristina Kirschner, who are both Peronists, but they never got on together...so we shall see who ends up leading the country...

After the primaries the value of our bonds dropped to a third of their value, and the exchange rate with the US dollar had a hefty change, from approximately 45 \$Ar per USD to 57 \$Ar per USD, then our currency kept on devaluing till close to 59 \$Ar per USD in December.

Meanwhile we had export taxes of 4 \$Ar on exports of grain, except soybean which had an 18% export tax, on December 14th the export tax was modified to 30% for soybean, and 12% for the rest of the grains. And an official dollar rate was regulated, plus a tourist dollar, which added a surcharge of 30% on purchases in other countries, but paid for locally (i.e. credit card purchases), and an allowance of 200 USD to be purchased by people, not business, per month at the official rate. Business had to purchase argentine bonds denominated in US dollars with local currency, the sell these bonds in US dollars, and that way legally purchase dollar bills (called CCL dollar). So, we have a "tourist" dollar, an official dollar, and a CCL dollar.

May finds us with an official dollar for grain sales and dollar quoted inputs of 65 \$Ar per USD, and a CCL dollar of 120 \$Ar per USD. So far, we still purchase our dollar quoted inputs (chemicals and fertilizers) at the official rate.

Anyway, last year our inflation rate was close to 45%, and we are not sure what this year will end up with, April was about 2%.

The country was put in a lockdown on March 20th, all agriculture and ag industry related business as well as health workers were excepted, so we were able to harvest and truck grain to port and industry.



The government is by practical standards in default, printing money so fast the people on the bill are dishevelled! So economic analysts are expecting a -10% change in GDP. Unemployment will rise, although we are not allowed to get rid of employees, and if we do, we need to pay 2 full month wages per year we have had the person, this is twice the usual rate. The government is preparing for the worst from a pandemic point of view, but we have close to 30/40% of our population under the “poverty level” and expect it to rise to +50%.

The ag industry sector is one of a few that is competitive, has not stopped, and can generate investments, and foreign currency through exports. We shall see if our government works with us or against us.

Argentina									
How price is formed for the farmer (May 11th, 2020)					Dollar value:		69		
	CORN			WHEAT			SOYBEAN		
F.O.B.*		147 USD/ton	100%		242 USD/ton	100%	F.O.B. Beans	330 USD/ton	100%
Export Tax	12%	18 USD/ton		12%	29 USD/ton		33%	109 USD/ton	
Other costs**		9 USD/ton			12 USD/ton			6 USD/ton	
F.A.S.***		121 USD/ton	82%		201 USD/ton	83%		215 USD/ton	65%
Price which could be paid for export		8,319 \$A/ton			13,901 \$A/ton			14,814 \$A/ton	
Market Price		8,556 \$A/ton	84%		14,697 \$A/ton	88%		14,973 \$A/ton	66%
Difference between Market Price and Expected Market Price									
		237 \$A/ton			796 \$A/ton			159 \$A/ton	
Long distance trucking costs	450 km	1,829 \$A/ton		450 km	1,829 \$A/ton		450 km	1,829 \$A/ton	27 USD/ton
	180 km	966 \$A/ton		180 km	966 \$A/ton		180 km	966 \$A/ton	14 USD/ton
Marketing costs									
Comission	2%	171.1 \$A/ton		2%	293.9 \$A/ton		2%	299.5 \$A/ton	
Gross Income Tax	1%	85.6 \$A/ton		1%	147.0 \$A/ton		1%	149.7 \$A/ton	
Price at farm gate	450 km	6,470.8 \$A/ton		450 km	12,427.6 \$A/ton		450 km	12,695.3 \$A/ton	
	180 km	7,333.3 \$A/ton		180 km	13,290.1 \$A/ton		180 km	13,557.8 \$A/ton	
	450 km	94 USD/ton	64%	450 km	180 USD/ton	74%	450 km	184 USD/ton	56%
	180 km	106 USD/ton	72%	180 km	193 USD/ton	80%	180 km	196 USD/ton	60%
F.O.B.* = Free On Board (on the ship)									
Other costs** = Fobbing costs, i.e. port costs, loading the ship, other costs									
F.A.S.*** = Free Aside Ship (on the port next to the ship)									

Livestock:

The dairy industry is still in a bad shape, dairies are consolidating, and the industry is not in good shape, this is not new, there has not been a clear dairy policy for many years.

The beef industry was hard hit when China stopped purchasing beef from Argentina, prices did not increase, so in real terms it has dropped. Argentina has a 51 kgs annual consumption of beef per capita, and as our economy is in bad shape, demand is down. So, both exports and consumption have not pressured demand. A 400 kg liveweight steer would sell at approximately 1,45 USD/kg liveweight



Argentina has had a large increase in pork consumption and production, but still lag European and north American consumption. It is close to 14 kgs of annual consumption per year per capita. Pork prices are approx. 1,09 USD/kg liveweight for a 109-kilogram pig.

Poultry consumption is strong, and so far, has not been hit by the virus, nor the lockdown. Poultry consumption has increased slightly to 43 kgs/year/capita.

We are harvesting corn and soybean, overall good yields. We have had a couple of good rains, so soil moisture is excellent, and we are looking forward to a good winter crop!

Argentina is looking at having a slight increase in wheat acreage, and a smaller barley acreage. Corn and soybean shall be analyzed further down the road, corn planting starts in August, and soybean planting end of September.

David Hughes – May 2020

Australia

Weather

Parts of Australia have been ravaged by drought, bushfire and floods in recent months. Weather continues to be highly variable across Australian agricultural areas, with April 2020 being the fifth warmest April on record for the continent as a whole.

Rainfall deficiencies leading to drought conditions have affected large parts of eastern Australia for the past three years, while rainfall in Western Australia during this period has been largely satisfactory for agriculture.

However significant rainfall events over much of eastern Australia during 2020 to date, has improved the outlook for a better winter cropping season in many regions. Unfortunately, this has not been the case in southern Western Australia, where grain growers are still waiting for a break in the season. Much of the pastoral zone of northern Australia, continues to experience rainfall deficiencies.

Water resources are still very low, with the Murray-Darling basin's rainfall for the 36 months from April 2017 to March 2020, being the lowest for such period on record. Water storage levels in major dams in the northern Murray-Darling Basin have increased lately, but are still below 20% full, while storages in the southern Basin have been steady at 37% of capacity. Preliminary irrigation water allocations for 2020/21, from two of the major rivers in southern Australia, the Murray and Murrumbidgee Rivers, are at zero and 6% respectively of entitlements.

Australia's Bureau of Meteorology (BOM) is predicting a wetter and warmer winter, over most of the agricultural areas of southern Australia.



Agriculture Economic Climate

Market conditions for most agricultural commodities remain positive, largely because of the imbalance between demand and available supply, coupled more recently with a reduction in the A\$/US\$ exchange rate from around 71 cents twelve months ago, to the low 60s cents at present.

While the lower A\$/US\$ exchange also leads to higher input costs, particularly fertiliser and farm machinery, the overall impact for agriculture is positive. Lower diesel fuel costs will help offset gains in the cost of other imported inputs.

African Swine Fever in China has depleted internal pork supply, leading to protein substitution as pork becomes too expensive relative to other protein sources. Australian beef and mutton exports, have been able to take advantage of this situation.

Despite drought conditions prevailing over many agricultural areas, farmland values have continued to increase over the last twelve months, at above average rates. Farmland in uncertain economic times is seen as a safe haven for capital, with record low interest rates also driving this market. These market conditions have assisted structural adjustment, by creating an environment for retiring farmers to sell, while also providing strong family farming operations, the opportunity to expand to achieve economies of scale.

COVID-19 is presenting some challenges for certain sectors of rural industries, including supply chains. Australian exports of fresh seafood to China was an early casualty of the pandemic. Most of these supply chain issues are expected to be relatively short lived.

Labour-intensive industries such as horticulture which have a strong reliance on backpacker labour for harvesting, will be particularly hard hit. Dairy processing and abattoirs, parts of which are also labour-intensive, may also be affected by COVID-19 induced space restrictions on workers.

The demand from consumers for fibres such as cotton and wool, has fallen with decreasing disposable incomes plus restrictions on travel and socialising.

The changes in peoples eating habits, reflected by a shift from eating out to eating more home prepared meals, will impact on some producers, particularly those boutique operators supplying higher end restaurants. However, this also creates opportunities to change business models, such as supplying farm produce direct to the consumer's home.

Livestock

National sheep and cattle numbers continue to decline below long-term average levels. Flock and herd rebuilding have been impeded by poor seasonal conditions throughout most production areas.

While challenging market fundamentals caused by a global recession, may put downward pressure on sheepmeat and beef prices, this will be strongly counteracted by strong restocker demand for both flock and herd rebuilding, facilitated by improved seasonal conditions. An increase in livestock

numbers carried at the expense of cropping area, continues to occur in mixed farming areas, due to improved livestock returns, plus the lower financial risk of running livestock compared with cropping during droughts.

Lamb and mutton prices are expected to remain historically strong or even increase slightly, due to restricted supply and strong export demand.

Cattle prices are expected to remain stable at relatively high levels, due to strong export demand, plus a tightening of supply of slaughter cattle, particularly if improved seasonal conditions occur in the pastoral zone of northern Australia.

Wool production is expected to continue to decrease in the short term due to lower numbers being shorn, plus lower average cut per head resulting from drought conditions. Wool quality has also been negatively affected by poor seasonal conditions. The clean price of typical Merino wool has plummeted to be around 60% of the level of one year ago. This is due to ongoing international trade tensions, resulting in lack of confidence of Chinese wool buyers. The greasy wool price has in many cases suffered even larger falls, due to lower clean/greasy yields caused by the higher dust and vegetable matter content of wool produced during a drought.

A lower trend for feed grain prices due to improved seasonal conditions in eastern Australia, will be beneficial to the dairy industry. Strong farm gate milk prices are expected to remain stable, due to drought induced herd reductions, coupled with strong export demand. However, the demand and price for manufacturing milk is linked strongly to COVID-19 influenced economic conditions.

Arable

Australian grain yields for the 2019 crop in eastern Australia, were very low relative to long term averages. Grain prices well above export parity due to the demand for feed grains, helped compensate some growers for lower yields. High protein wheat was also in very short supply, leading to very strong prices being paid by flourmillers. Financial returns were also boosted by significant areas of crops being cut for hay in some areas, to meet the demand from graziers unable to sustain grazing livestock on pastures. New South Wales which had a very poor season, has quite a high domestic market for grain for both livestock production and human consumption.

Large areas of fodder or dual-purpose grazing/grain crops have been sown due to early rain, many of which are now being grazed. This has reduced the demand for feed grains in the short term, although on-farm stocks are generally low. This will temper old-crop grain prices in the short to medium term, with the expectation that grain prices will drop later in the year as the 2020 grain harvest approaches.

Confidence amongst graingrowers in eastern Australia is high at present, following the best start to the cropping season for many years. While the high domestic price premiums for grain over export parity experienced over the last two seasons are expected to disappear, Australian export grain



prices may not retreat as much as originally expected, due to some stockpiling and export restrictions of other countries, plus a lower A\$/US\$ exchange rate.

Horticulture

The demand for fruit, vegetables and nuts remains strong and is expected to do so in the future, from both domestic and export markets. However, horticulture potentially faces the largest risk from COVID-19 as any agricultural sector.

The demand for processing vegetables, particularly potatoes used by Fast Food outlets and higher end restaurants, is expected to drop as processors' stocks of frozen chips from the 2020 harvest accumulate.

Environmental

During the recent drought, it has become apparent that there has been much greater awareness by land managers to preserve groundcover compared with previously. While there have still been some massive dust storms, the number of totally bare paddocks at the local and regional level has been much lower.

Containment feeding areas where sheep are confined to relatively small areas akin to a feedlot, have been constructed by many graziers on poorer, less productive areas of their properties, where sheep can be sustained on a purely grain and hay diet. This not only preserves ground cover and reduces wind erosion of valuable topsoil, but also gives perennial pasture species a necessary rest-period, to ensure survival through extremely tough climatic conditions.

Current Research Issues

Australian agriculture requires research, to investigate more resilient production systems requiring less chemical and fertiliser inputs, to be more harmonious with the harsh and variable climate. These systems would carry less financial risk for the farm business, than recent trends towards high input farming practices.

It is expected that there will be increasing emphasis on exploring ways in which to substitute capital for labour, in more labour-intensive industries and supply chains, to reduce the business risk of labour unavailability due to future pandemics.

Other comments

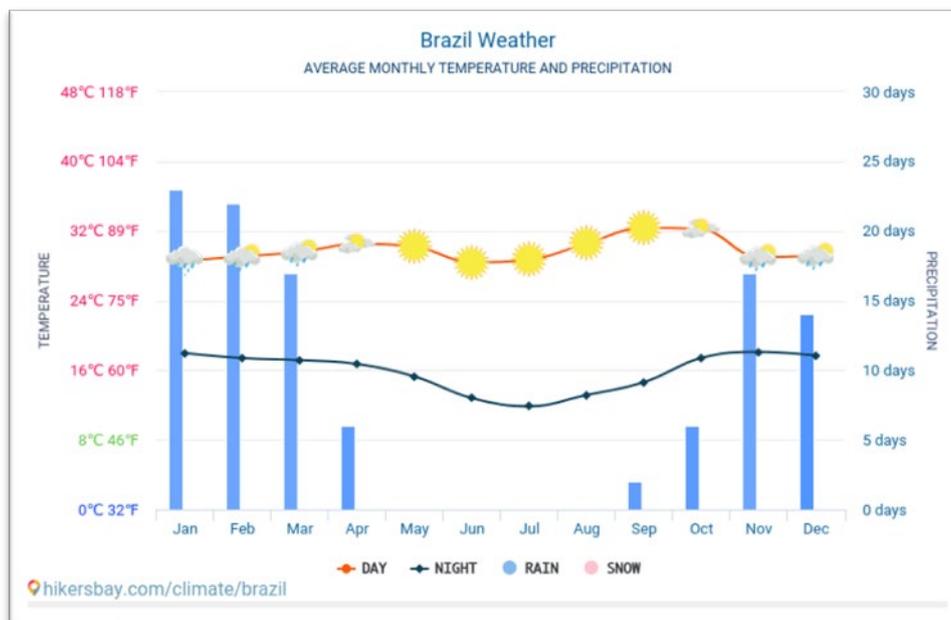
African Swine Fever has the potential to decimate Australia's pork industry, although a positive may be a significant reduction of feral pigs which negatively impact the environment.

Australia's relatively high post-farmgate supply chain costs by world standards, continue to limit the price farmers receive for their produce in markets where they are effectively price takers.

Robert Patterson – May 2020

Brazil

Weather



Climates that occur in Brazil

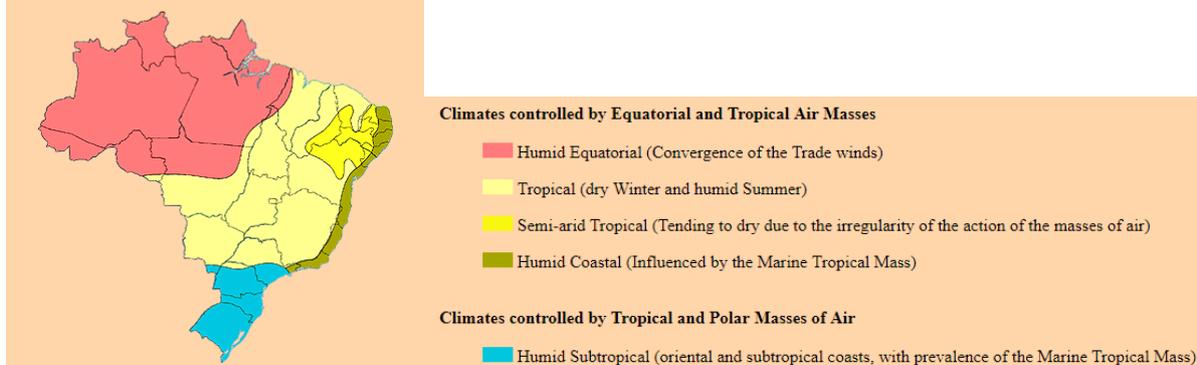


Figure 1. Climates occurring in Brazil.

Brazil continental dimensions result in great variability of weather conditions, spanning from Equatorial to Subtropical climate. Most Brazilian agricultural production comes from the regions highlighted in light yellow and blue, on the map above (Fig. 1). Bioeconomy is growing, given the biodiversity found in the country.

Agriculture Economic Climate

1. Brazilian agriculture remains as one of the most important sectors for the economy, representing 21.4% of GDP. In 2019, Brazil's Trade Balance was US\$ 46.7 billion, the lowest in the last five years. Agriculture, however, presented a trade surplus of US\$ 83 billion. The country is top five producer and exporter of several agricultural commodities (Fig. 2).

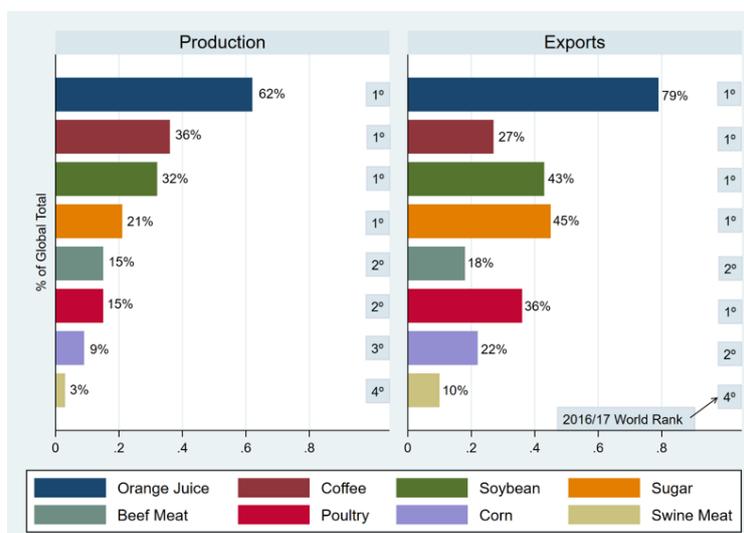


Figure 2. Brazil's Share and Performance in Global Markets, 2016/2017

Source: USDA (2018)

2. Brazilian Minister of Agriculture, Mrs. Tereza Cristina, organized a series of trade missions throughout the first year of the current Government, visiting several countries with the aim of opening new markets to Brazil. China, Russia, Egypt, United States, Kuwait, Indonesia, United Arab Emirates and Morocco are some examples that either increased imports or import quotas, or opened new doors for Brazilian agricultural products.
3. China is now Brazilian main food importer, led by the meat sector. In 2019, dozens of new meatpackers were accredited to export to China. Chinese demands for pork and alternative proteins increased as the country was hit by an outbreak of African swine pest.
4. The Brazilian currency, in 2020, continued to devalue (1 USD = 5,46 BRL, April average), boosting agricultural exports.
5. Production costs also increased due to weaker Brazilian currency, which led to higher price for imported inputs, such as fertilizers.

Livestock

Meat exports in value increased 12,5% between 2018 and 2019, growing from US\$ 14,7 billion to US\$ 16,5, respectively. China overpassed Hong Kong becoming the main meat importer.

1. Beef

a. Intensification of beef systems through the incorporation of technologies and management systems resulted in significant productivity between 1990 and 2017, as follows (Fig. 3*):



*@ stands for “arroba”, a standard measure for beef production in Brazil. 1@ equals 15 kilos of carcass, which is converted back to live weight by considering the carcass yield (usually around 50%). In the example, productivity increased from 48.9 kilos to 120.3 kilos of live weight/hectare/year.

Figure 3: Productivity increase of Brazilian beef cattle (1990 – 2017)

Source: ABIEC.

b. Increase in productivity is also evidenced by the reduction of pasture land while beef production continues to grow (Fig. 4).

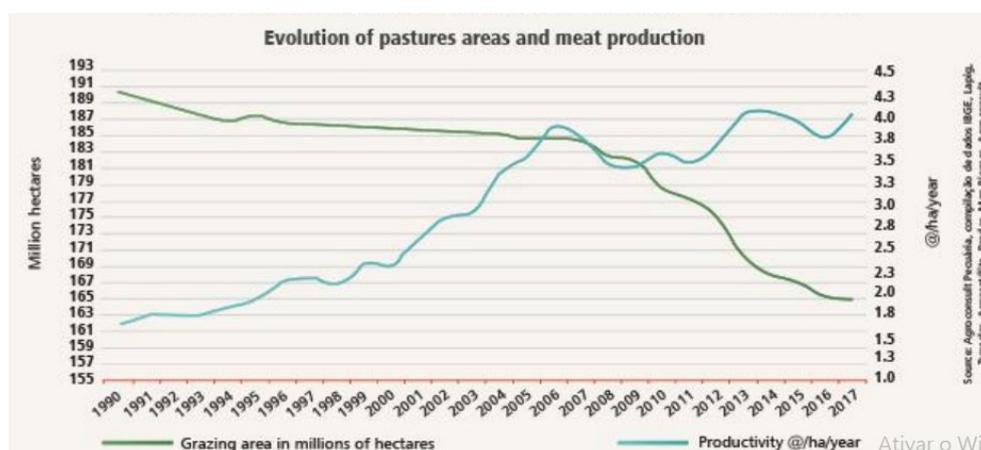


Figure 4: Evolution of pasture area versus meat production (1990-2017).

Source: ABIEC.

c. Domestic consumption has been negatively impacted by the economic crisis since 2014. In 2019, the economy started to recover, but was interrupted by the coronavirus pandemic. Unemployment levels, which were around 12% (very high already), are expected to grow and the average family income will reduce, with strong impact in domestic beef consumption, specially of prime cuts.

d. Fed steers and beef prices increased significantly last year, with gains for farmers in real terms. The beef price index in São Paulo, a reference for beef market in Brazil, hit a historical R\$ 231.35/@ (US\$ 1.41/kg LW), since the start of the series in 1994.

e. Beef exports were record in 2019, both in value and volume, reaching US\$ 7,6 billion (+15,6%) and 1,8 million ton, respectively. The country exported an average of over 100,000 tons throughout the year. Prospects remain positive (see Fig. 5), although unknown if at the same levels estimated previously.

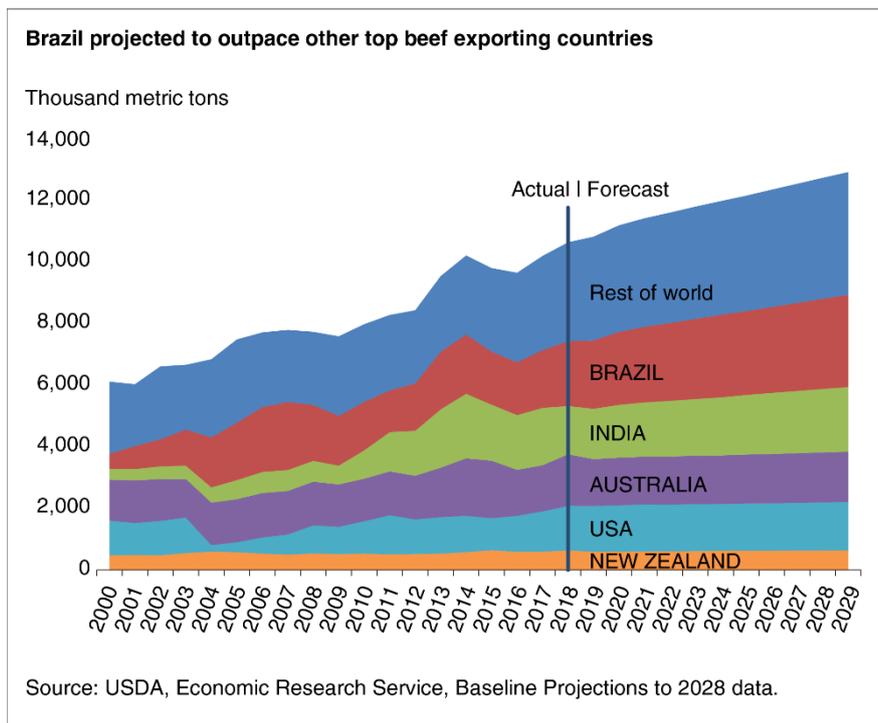


Figure 5: Main beef exporters projection (2029).

2. Pigs

a. After losses in 2018, the swine sector recovered in 2019, with prices increasing 30%, hitting nominal records, according to CEPEA. Higher domestic demand, due to consumers' purchase swift from beef to cheaper meats, and increased world demand for pork, given the outbreak of African Swine Fever in Asia, contributed to the recovery.

b. Farmers enjoyed an increase in their purchase power, even though corn and soybean meals moved up sharply this season.

3. Poultry

Brazil's poultry sector represents 24% of livestock GDP "indoor farms" and 8% of labour market in the country.

a. Layers

Brazil is one of the top 10 egg producers in the world. According to official data (IBGE), there were 171 million hens in 2019, and the total production of eggs amounted to 3.8 billion dozens. The eggs per capita consumption in the country is of 191 units a year.

b. Meat

The poultry sector recovered from a poor performance in 2018, when live animals and chicken meat prices were low, exports were limited and costs were high. Exports improved and domestic

consumption underpinned prices, since consumers also changed purchase preference towards chicken cuts, given beef high prices. Feeding costs, however, continued high, limiting the improvements of farmers' purchase power.

Between January and November, chicken exports to China rose by 28 percent to 513,000 tonnes.

4. Dairy sector

a. The milk production reduced in 2019 due to prolonged drought in most regions, except in the south of Brazil where the drop was caused by excessive rainfall. Despite increases in production costs, producer prices also increased by 6.6%. Low demand for dairy due to Brazilian economic situation resulted in 7% reduction of dairy imports. Production is expected to grow in this season, as rain arrived in December, allowing for pasture recovery.

b. The annual domestic milk consumption was 169 litres/inhabitant in 2019, lower than the average of 176 litres in 2013-2014, when an economic crisis hit Brazil.

Arable

a. Land prices in Brazil have been growing between 0.5% to 3% a year, depending on the region. Prices are closely associated with soil fertility and aptitude (livestock or crop land), infrastructure available, proximity to ports, among other factors. In Centre-West, the main Brazilian agricultural belt, pastureland costs R\$ 7,626 per hectare (US\$ 565 per acre) while agricultural land reaches R\$ 16,525 per hectare (US\$ 1,225 per acre).

b. In April, the production of cereals, legumes and oilseeds for 2020 was estimated at 247 million tonnes, 2.3% above the 2019 crops (241.5 million tonnes), while the estimated harvested area is 64.5 million hectares (+ 2.0% from 2019). Rice, corn and soybeans are the three main products in this group, representing 92.6% and 87.4% of the production and area to be harvested, respectively. Compared to 2019, the area increased 4.1% for corn – 1st crop, 0.4% for corn – 2nd crop, 2.5% for soybeans, 0.9% for upland cotton, but declined 1.9% for rice.

c. Soybean production alone was estimated at more than 122 million metric tonnes in crop year 2019/2020, up from approximately 115 million tons in the previous crop year. This crop's annual production in the country has been increasing overall since the crop year 2011/12, when it amounted to 66.4 million tonnes.

d. In 2018-19, corn output in Brazil totalled 100 million tonnes and should repeat this production in this season. Corn area is estimated at 18 million hectares in 2019/2020 season. Corn prices rose R\$ 37.69/60 kg bag (\$8.72/60 kg) in February/2020, in Mato Grosso the largest producer state. In April, prices reached

e. Sugar cane production in Brazil is forecasted to amount to nearly 643 million metric tonnes in crop year 2019/2020, with 65% for ethanol production and 35% for sugar. In 2018, the crop accounted for more than 15 percent of the agricultural production value in the country. There are concerns

however about ethanol consumption due to the current low domestic demand for fuel as a result of Covid-19 pandemic.

f. Farming integrated systems, including crop-livestock rotation and succession, are growing fast in Brazil, occupying over 15 million hectares to date and allowing for up to three harvests in the same area within one year.

Horticulture

Brazil is one of the major horticulture producers with annual average production of 20 million tons almost fully consumed domestically. Nonetheless, the average per capita intake of 57 kg/inhabitant is far below recommendations from the World Health Organization (WHO). The sector employs 13 million people, directly and indirectly.

a. Soft Fruit

The most successful case is the orange sector, with Brazil ranked first in production and exports. Production increased over 34% in season 2019/2020 in the citrus belt (São Paulo and Triângulo Mineiro regions) due to record productivities as a result of favourable weather and trees recovery after lower productivity in the last season. Brazil shipped 861,7 thousand tons of Frozen Concentrate Orange Juice (FCOJ), in the first nine months of the 2019/2020 harvest. It represents 18% more compared to the same period in 2018, with an increase of 6% in revenue totalling 1.45 billion USD. Main importers are the European Union and United States. Shipments to China and Japan have increased significantly in the same period (46% and 38%, respectively).

Regarding fresh fruits, the main exported types are mango, melon and grape, while the main imported fruits are apple, pear and kiwifruit, according to HF Annual Report.

b. Vegetables

Brazil is a traditional importer of legumes such as lentils, peas and chickpeas, and also garlic. The country imports 55% of garlic demand, particularly from China and Chile, totalling 165 thousand tons and US\$ 225 million last year. Pre-fried potato is also imported, mainly from Argentina, but also from Belgium and the Netherlands. In 2019, the imports of 340 thousand tons of processed potato reached US\$ 321 million, supplying 60% of the demand.

The cost of vegetables and fruits for Brazilian consumers increased 16% in 2019, while the minimum wage raised only 4,6%, reducing their purchase power.

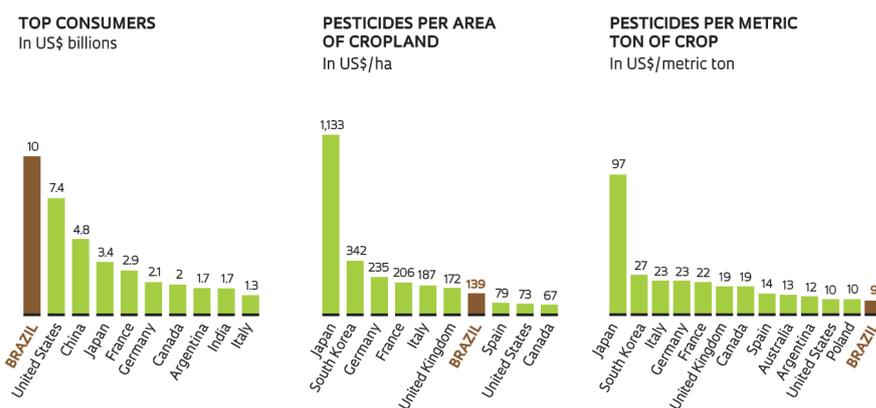
Environmental

a. Heated discussions in 2019 involved a new piece of legislation aiming to modernize the “current” regulation (1989) on the approval and use of pesticides in Brazil. The House committee approved the Draft Bill 6299/02 last June, but it still needs to be voted at the Brazilian House and the Senate to come into force. On average, it takes eight years to get approval for a new product by several Government stances. Supporters argue that this inhibits innovation in this sector and reduces the

chances of releasing viable products due to obsolescence, actually posing more risks to the environment and people’s health. The bill not only proposes to reduce this processing time, but also changes in the labelling, replacing hazard-based with risk-based assessments (accounts for potential toxicity, methods of application, amount of exposure to the pesticide etc.). Critics of the bill defend expedite approvals without high quality due diligence would threaten the environment and workers even more. It is fact, that Brazil’s consumption of pesticide grew closely to agricultural production increase. Brazil tropical conditions and no severe winter (which disrupts pests life cycle naturally) impose the need of agrochemicals to control pests and diseases, without which production could drop from 20 to 40%, according to specialists. Despite being a top consumer worldwide, in absolute terms, with a US\$ 10 billion annual market (2013), Brazil falls below other developed countries in terms of relative consumption per acre or tonnes of production (Fig. 6).

Global pesticide usage ▲

A comparison of pesticide use in Brazil and the largest global markets, 2013



SOURCES EDIVALDO VELINI AND CAIO CARBONARI, UNESP, BASED ON DATA FROM FAO AND PHILLIPS MCDUGALL

Figure 6: Use of pesticide in Brazil and other countries (2013).

b. Amazon deforestation is always on the spotlight. Last year, fires in the Amazon were 30% higher than 2018 levels, and reached the highest level over the last decade, with more than 80 thousand fires detected. Land tenure issues have been underlying this situation for decades, although it remains overlooked. Land grabbing is a serious problem in the Amazon, with people exploring forest products illegally, mining, clearing the rainforest to sell the land using false ownership documents. Several studies have shown a close relationship between land tenure problems and deforestation in the Amazon. It is necessary to take serious actions to resolve land conflicts in the Amazon in the first place, to make it a safer place for local communities, farmers already established in border areas and other stakeholders. Additionally, environmental licensing, which regulates allowed production and conservation



activities, requires legal land ownership. The Government is studying a proposal to legalize landownership following a series of criteria still under debate.

c. The Carbon Neutral Brazilian Beef (CNBB) is moving forward with a market alliance between the Brazilian Agricultural Research Corporation (EMBRAPA), the concept-developer of CNBB, and the meatpacker Marfrig, and the newly formed Brazilian Association of Carbon Neutral Beef Producers (ABCCN, in Portuguese). In 2019, several accreditation companies were registered to start CNBB certification. Production on commercial scale are on the way and the first consumers' tests will be launched soon.

Current Research Issues

a. Bioeconomy is the “word of order” in R&D and much interest has arisen lately from governments and the private sector to explore the opportunities for innovation in this area.

b. Sustainability is a strong focus of Brazilian Agricultural Research, concerned with efficacy and efficiency in the use of inputs and natural resources, carbon emissions, water use, reuse and conservation, land-saving technologies, nitrogen fixation on the soils, plants resilience to biotic and abiotic factors among others.

c. Automation, internet of things, precision agriculture and livestock are current research lines that tend to get more attention and funding.

d. Research of integrated farming systems (crops-livestock-forestry) has been showing promising results in terms of production, productivity, sustainability, animal welfare and economic performance. It should be at the centre of future funding and public policies.

Impacts of Covid-19 on Brazilian Agriculture

The post-pandemic future is still unclear and so are the impacts of Covid-19 on the Brazilian Agricultural production and international trade. Given its large population, a great part of production is consumed domestically. However, the high unemployment level in Brazil, before the pandemic, is getting higher and families' income reducing significantly. Consumption is likely, therefore, to be constrained.

The primary sector is proudly stating “Agro never stops” and continuing to produce, almost unaffected directly by the virus outbreak. The government has released several aids to farmers, including credit with more favourable repayment conditions, insurance and other public policies. Concerns though started growing about processors, whose collaborators are more susceptible to getting Covid-19, like meatpackers.

There has been changes in the channels of food distribution and consumption from restaurants, bars and hotels, to home-cooking and food delivery. This, in turn, has also impacted the logistics and the packaging of the products, towards ready-to-use, easy to prepare and low-cost options.



The consumption of dairy products has already been affected in Brazil, particularly the cheese sector, since many selling stores and restaurants closed. Producer prices for milk have fallen and put many small farmers at social risk.

On the fruit sector, main risks relate to competitors, with now limited exports to China. Competition for new markets are then anticipated. A possible reduction in fruit demand by Europeans is also a major concern given the EU is the main destination for Brazilian fruits. Soft fruits and flowers seem more likely to take a hit because of their short shelf-life and limited freight worldwide.

Regarding agricultural exports, Brazil seems to have benefited, so far, from higher demand of previously affected countries, whose capacity to produce and trade has been affected by their strict social distancing measures. This seems to be the case of the meat sector, which is still performing well. Many countries have reached Brazil to ensure their protein supply. However, the near future is unknown. If in one hand, Brazil may benefit from meatpackers closing down in US, on the other hand it runs the risk of having to face the same issue domestically.

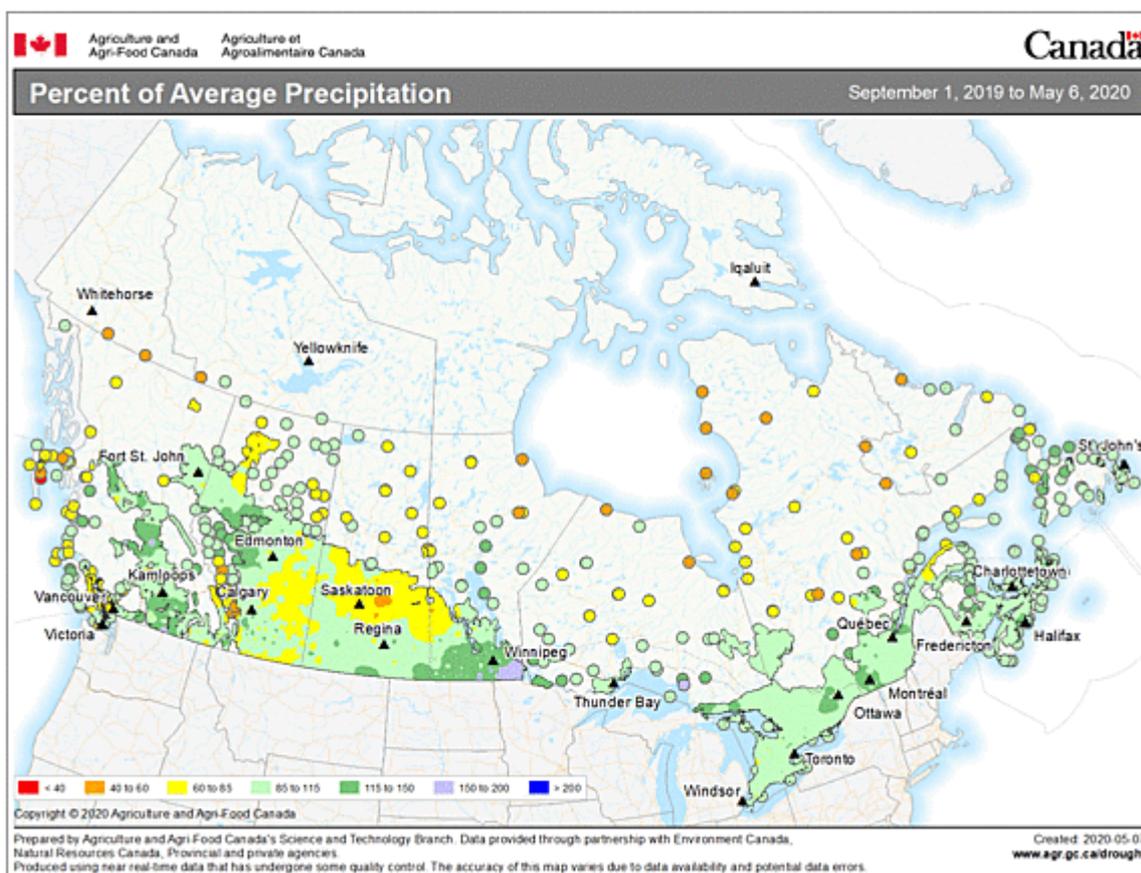
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Canada

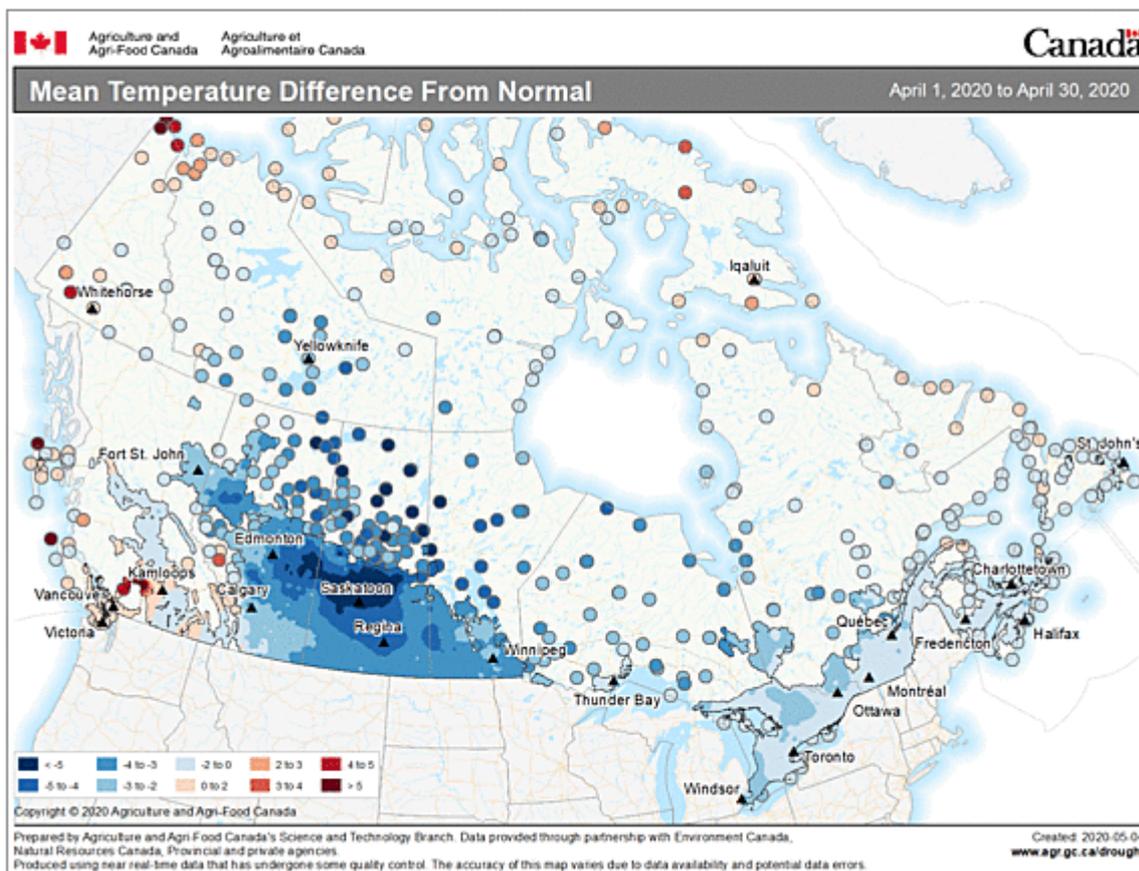
Weather

Most areas of Eastern Canada have had reasonable precipitation heading into seeding. The major production areas of Ontario and Quebec look to have had average precipitation levels. On the prairies, the area around Saskatoon and eastern Alberta has been a bit on the dry side, with the remaining areas also experiencing approximately normal amounts of precipitation.



Source: Agriculture and Agri-Food Canada

Temperature levels for the month of April have been a bit below normal. In Saskatoon, we've only recently (last 3 weeks) lost all of our snow and frost. The southern part of the province has further ahead with respect to the spring melt and seeding is now in full swing across much of the Canadian prairies.



Source: Agriculture and Agri-Food Canada

Agriculture Economic Climate

The federal government has recently promoted a \$252 Million aid package aimed at farmers, which is approximately 10% of what has been requested by the Canadian Federation of Agriculture. There have been several shocks to the agricultural economy due to COVID-19, particularly in demand destruction at the institutional and restaurant level and uncertainty surrounding foreign workers given recently imposed travel restrictions.

The other key issue relates to the number of cases of COVID-19 that are tied to meatpacking plants in Canada. Canada's beef processing industry is highly concentrated, with the three largest firms accounting for 85% of production. Recent outbreaks of COVID-19 at plants in Brooks, AB and High Level, AB have caused backups in the beef supply chain that has left cattle producers and feedlots worried.

Livestock

1. Dairy



- a. Demand destruction due to COVID-19 has led to an oversupply of fluid milk in Canada. Some farms have therefore been asked to dump milk as the supply chain works to transition to a temporary normal.
 - b. The recently negotiated trade deal between Canada, the United States, and Mexico brings with it more uncertainty for the Canadian dairy industry. The issue revolves around the start of the agreement. If the agreement comes into force before August 1, then the cap on skim milk powder and protein concentrates would decline by 35% for the coming year.
2. Beef
- a. According to the Alberta Beef Producers, April 2020 saw the largest feedlot losses in recent history.
 - b. There may be a backlog of approximately 100,000 fed cattle set for slaughter due to idle and/or reduced capacity at processing plants.
3. Pigs
- a. Slowdowns in processing has led to a drop in hog prices of approximately 50%.
 - b. Euthanasia is being considered on farms where there is no room to store finished animals awaiting slaughter.
 - c. The number of pigs on farms on January 1, 2020 was down slightly from 2019.
4. Sheep
- a. The Canadian sheep herd dropped to 802,000 at the start of 2020. This represents the lowest number of sheep and lambs on farms since 2016. This follows a period of steady growth from 2017-2019.
 - b. Demand for lamb during the Easter season was off from prior years' due to COVID-19 and physical distancing which limited holiday get-togethers.
5. Poultry
- a. Canada's chicken farmers will reduce flock by 12% due to changes in the market caused by the novel coronavirus.

Arable

1. As of May 4, Seven percent of all crops have been seeded in Saskatchewan. This is just above the 10-year average of 5% and well below the 15% number observed in 2016. Seeding is just beginning in Manitoba, with less than 1% of acres being seeded. Last year at this time, approximately 5% of acres were seeded.
2. It is estimated that around 50% of the corn has been planted in Ontario. Much of the spring canola has been seeded in southern Ontario.



Horticulture

1. Soft Fruit
 - a. Fruit and vegetable sales were up over 1% in 2019.
 - b. Production of many fruits including apples, strawberries, sweet cherries, peaches, raspberries, and Saskatoon berries were down from last year.
2. Vegetables
 - a. Asparagus production in Ontario increased by nearly 15%.
 - b. Prices were higher for many vegetables, including celery, radishes, rutabagas and parsnips. Tomato prices were also higher.

Environmental

1. There are discussions around diverting water from Lake Diefenbaker in Saskatchewan to control flooding and increase irrigation in Saskatchewan.
2. A recent report commissioned by CAPI (The Canadian Agri-Food Policy Institute) estimates the impact agriculture has on many environmental components, including air and water quality, soil health, and wildlife habitat.
<https://capi-icpa.ca/explore/resources/measuring-externalities-in-canadian-agriculture-understanding-the-impact-of-agricultural-production-on-the-environment/>

Current Research Issues

1. A recent special issue of the Canadian Journal of Agricultural Economics contained articles on the impact of COVID-19 across a range of food and agricultural sectors.
<https://onlinelibrary.wiley.com/toc/17447976/0/ja>

Other comments

Government & Policy:

We continue to operate under the new 5-year agricultural policy framework – the Canadian Agricultural Partnership – which has committed \$3 billion until March 2023.

- The program is cost-shared between the Federal, provincial and territorial governments
- Federal programs include AgriInnovate, AgriScience, AgriMarketing, AgriCompetitiveness, AgriDiversity, AgriRisk and AgriAssurance to stimulate growth and development for agriculture and agri-food, and the Business Risk Management (BRM) suite for crisis response including AgriStability, AgriInvest and AgriInsurance
- The BRM programs remain under review (a review that began at least 2 years ago). Although the government has made small changes to the program, farmers are seeking increased access to the program and coverage in terms of expanded farm types eligible for the program and considerations for multi-enterprise farms. The House of Commons Standing Committee on Agriculture & Agri-Food recently began its own review of the BRM suite, seeking testimony from all industry players. Farm



Management Canada testified for a comprehensive approach to managing risk in agriculture whereby the BRM programs are just one tool farmers can use, and investing in business skills development will help equip farmers with the tools to better manage risk, including a risk management plan as a necessary part of managing the business. We find in Canada, risk management seems to be limited to weather, price and yield concerns addressed through insurance programs and some marketing tools.

- Processing times remain a challenge for farmers seeking compensation under the BRM programs
- For organizations and private industry applying for funds, the timelines for approval also remain challenging with most approvals taking around 9 months. Most funding programs require a 50/50 cost-share between government and the applicant, which is also challenging. And, most projects are limited to 3 years

While the Federal government has shown strong support for fostering farm business development, many of the Provinces and Territories are decreasing such support in favour of investing in environmental initiatives. The Agri-Food Management Institute operating out of Ontario (and considered Farm Management Canada’s sister organization) lost its funding last May and closed its doors.

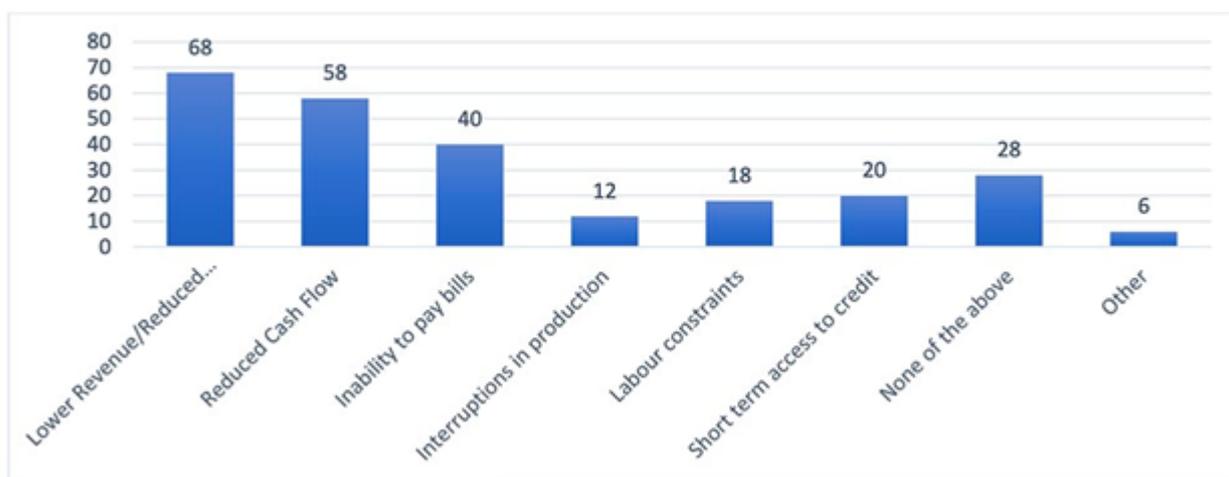
The Federal government recently established a Youth Advisory Council to ensure policy is taking into the consideration the challenges and opportunities that our future agricultural leaders are facing

COVID-19:

The Canadian Federation of Agriculture (our national general farm organization representing Canada’s farmers) has been conducting a weekly survey on the impacts of COVID at the farm level, and last week asked the Federal government to provide an Agriculture and Agri-Food Emergency Fund of \$2.6 billion to help maintain food security in Canada in response to COVID-19.

A survey was conducted in Saskatchewan on the business concerns of farmers as a result of COVID-19. Here are the results:

When asked about business concerns experienced because of COVID-19, most respondents anticipate the following: Lower Revenues/Reduced Commodity Prices (55%); Reduced Cash Flow (47%); and an Inability to Pay Bills (32%).





- The Federal government has established an advisory council to help inform the programs and policies to help us through the current crisis
- Challenges include access to labour and access to a reliable supply chain for processing, storage and sales. Dairy farmers are having to dump milk, hog farmers are having to cull pigs and vegetable and greenhouse farmers are having to dump product as well.
- The Federal government has created an incentive program to get people who are currently out of work because of COVID-19 to work on farms. However, there is a concern about farm safety and skill requirements. Special provisions have also been made to allow Temporary Foreign Workers to enter Canada to work on farms after a 14-day quarantine.
- In general, the Federal Government has created a number of programs to assist:
 - o Tax filing deadlines have been extended
 - o Canadians can ask to freeze mortgage payments and bank payments
 - o 10% wage subsidy up to \$25,000 per employer
 - o 75% wage subsidy (Canada Emergency Wage Subsidy) up to \$847/employee/week if the business can demonstrate a 30% decrease in revenues
 - o \$2,000 per month for up to four months for those who have been laid off
 - o Producers who have an outstanding loan through the Advance Payments Program (\$100,000 interest-free loan) will receive a stay of default, allowing them an additional six months to repay the loan, and be able to apply for an additional \$100,000 interest-free portion for 2020-21, as long as their total APP advances remain less than \$1 million.
- On a positive note, with concerns over the social license to farm and public trust, there seems to be a new appreciation towards farming emerging – over course we’re struggling with the headlines about dumping milk and other products that cannot get to the consumer, however there’s a renewed appreciation for food and farmers for keeping everyone fed.
- While the farmers markets are shut, many farmers are turning to online retail and safe delivery or pick-up. Ontario has recently invested \$2.5 million in support for farmers to enhance their online retail capacity

Mental Health

- Mental health continues to be a priority in the agricultural space with organizations like the Do More Ag Foundation working with the University of Guelph to develop mental health first aid for farmers workshops
- At Farm Management Canada, we have just completed a study exploring the connection between mental health and farm business management. The results will be published soon, however there is a definite correlation between business planning, effective coping mechanisms and reduced stress.

Farm Business Management

- Our research shows the adoption of business management practices on farms including business planning, skills development and HR planning and financial planning remain relatively low with 21% of Canada’s farmers reporting a written business plan they review at least annually

- We are wondering if the crisis we currently find ourselves in today is an opportunity to show how adopting business management practices can help in the short-term through contingency and emergency planning, while also helping in the long-term by taking a proactive approach to managing risk and being positioned to pivot the business and seize opportunity

Eric Micheels and Heather Watson – May 2020

Denmark

Weather conditions

The year 2019 was for many a good crop year with good weather conditions and a good harvest for most crops. The yields were up from 2018 (dry year). The yield in barley and wheat was around the same as 2015 and 2017, with two low yield years in-between.

Agriculture Economic Climate

The barley and wheat prices at the farm gate were around 154 €/ton last year, which is relatively low. The pork prices were very high due to the increased export to China following the African swine fever. At the beginning of 2019 the prices were around €1,34/kg, but they rose over the year to around €2/kg. This is just about the highest for 20 years! The price in the first quarter of 2020 has not decreased significantly, but have since dropped to €1,6/kg in May. The export of piglets to Germany in 2019 set a new record of over 14 million, whereas the number of pigs slaughtered in Denmark has decreased by 1 million or 8%. The milk price decreased at the beginning of 2019, but the price has since been around 33 cent per kg, and the organic milk is at 43 cent per kg for the best quality. The milk price has decreased one 1 cent/kg in May 2020 partly due to the uncertainty following the corona virus. The organic milk is now 12% of the total production, whilst over 30% of the milk bought in supermarkets is organic.

The overall average farm income was double the level in 2018, which was a draught year in the arable sector. There were improvement for dairy, pig and arable farms, however the prices for mink is very low and so some are expected to leave the business (lower export to Russia and China).

Environmental

The Danish farmers were asked to increase the area with catch crops in 2020 by 320,000 ha (12% of the total agricultural area). Farmers had other options (e.g. lower N-application or set a side). The catch crops are used as the exchange rate in the scheme and farmers have done very well as the level required has now been reached. The subsidy given is around 67 €/ha of catch crop. In the case farmers do not enter enough area under the scheme,



compulsory measures without subsidy will be implemented so hopefully only the carrot will be used this time.

Current Research Issues

Following on from the aim of reducing the CO₂ emissions a lot of focus has been on research related to analyse technologies which can help to reduce CO₂ emissions from agriculture.

Other issues

Denmark was locked down on the 11th of March due to the Covid19, but the restrictions in Denmark were not as hard as later imposed in e.g. Spain and the UK. The restrictions have so far helped to keep the numbers at a reasonable level, whereas Sweden has been hit harder probably mainly due to the implementation of fewer measures. This has on the other hand kept more businesses going. In Denmark the Primary Schools came back in mid April (Phase 1) and the “new normal” conditions were back from Mid May (phase 2). We will know more about the economic impact in the time to come. The food supply during the Corona crises has been excellent and so the Danish consumers have been able to get all the food they normally get. As 2/3 of the agricultural production is exported, it has also been important that this has worked well, despite the closed borders.

A key issue in Danish Agricultural policies is still Brexit. Even though Brexit has been pushed to the back of the agenda due to the corona virus, the transition period is soon running out. It seems as if it will be difficult to get a comprehensive agreement between EU and the UK in a short space of time. A deal within fisheries could move the negotiations, but an agreement is not likely. A key issue is still to get an agreement in order to reduce loss of income in Denmark and the UK.

Brian H. Jacobsen – May 2020

Kenya

Weather

The period June 2019-May 2020 witnessed a regular onset of rains both in the short rain season (September- November 2019) and long rain season (February-May). This led to timely planting of crops for the two seasons. The early part of the year 2020 has experienced very heavy rains resulting in landslides, and flooding because of overflow of rivers, dams, lakes, and the Indian Ocean which has already resulted in more devastation in terms of displacement of families, submerging of farmlands and deaths (>236) than Covid-19 pandemic(40) in the country. As crops establish there is a huge threat of locust invasion which were spotted in the early part of 2020 when most of the farms did not have crops. There is need to be on high alert to avoid facing a double tragedy of Covid-19



pandemic followed by a serious food crisis emanating from locust invasion. The average temperature reported in the Kenyan grain basket ranged between 16⁰ C and 18⁰ C with the lowest and highest recorded being 9⁰ C and 26⁰ C respectively. The country experienced relatively good distribution of sunshine throughout the year.

Agriculture Economic Climate

Even though the weather outlook looks bright, the disruptive nature of flooding and the Covid-19 pandemic has interfered with a lot of farming activities, messed up with farm input supply chains and the distribution of goods and services across the country. The lockdown and cessation of movement across counties and border points has resulted in loss of jobs for many Kenyans who derive their livelihoods from various agribusiness value chains. Unfortunately this comes at a time when the cost of farm inputs continues to rise while farm gate prices decline. Even though the price of petroleum products which affect the cost of living in one way or the other has been on a downward trend, this has not translated into better prices for farmers and consumers in Kenya because of the oligopolistic structure of the local oil industry. Restriction of cross border movement of people in east African region because of the Covid-19 pandemic has slowed down trade resulted in shortages of supplies of imported goods. Exportable commodities such as coffee, tea, fresh vegetables and cut flowers have had to go to waste due to lockdown in major export markets in Europe and thus significantly affecting foreign currency reserves. The country is faced by a debt burden of Kshs. 6 trillion which accounts for 63 % the GDP estimated at 9.5 trillion thus lowering the credit rating by global financial institutions.

Livestock

Pastoral communities in Kenya experienced drought in dry months making it difficult not only to provide for their animals, but also sustain themselves. Government, both international and local NGOs normally stepped in to support vulnerable communities when faced with vagaries of nature.

In non-pastoral communities small scale dairy farmers who are the majority continued to take advantage of the lush pasture and conserved silage to sustain milk production. Private dairies control milk processing\distribution and the industry is dominated by few firms which dictate the industry behaviour thus not being fair to farmers. Quite a number of small scale farmers rear indigenous zebu cattle, pigs, goats and poultry on mixed farms. The extent of commercialization and application of high level technology is relatively low among small scale farmers thus compromising the productivity of livestock.

With rising population demand for meat, eggs and dairy products continues to increase. Commercial layers and broiler production has continued to grow over the years in different parts of the country, but still falls short of demand. To meet the rising demand, there is need to improve productivity by applying some of the latest technologies in livestock production and widening the scope of value addition.

Arable

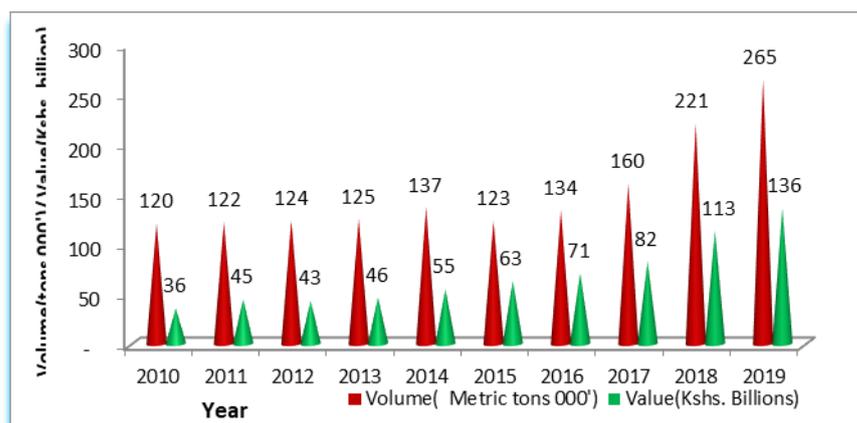
About 60 % of arable agricultural production is undertaken by small-scale farmers in Kenya. The Kenyan grain basket is composed of Trans Nzoia and Uasin Gishu Counties which have very good soils and conducive climate for production of maize (main staple), wheat, rice, potatoes and various

legumes and produce more than 60 % of the major cereals. The rest of the country produce a range of produce in small amounts scattered across the country. The farm gate price for maize is relatively stable because of shortage of maize in the local market. The National cereals and Produce board is in the process of importing maize to replenish the maize grain reserve for food security reasons.

Horticulture

Cut flowers

The cut flower industry is an important foreign exchange earner for the Kenya. Kenya accounts for 38% of cut flower imports by the EU. Cut flowers are exported to the auction market in Holland before being redistributed to United Kingdom, Germany, France and Switzerland. Apart from the indigenous producers, the major producers of cut flowers are multinational companies based in Kenya with extensive global networks taking advantage of cheap local labour and conducive environment to stay ahead of competition. The flower industry was seriously affected by the outbreak of the Covid-19 pandemic resulting in closure of many flower farms which led to job losses and millions of money in terms of spoilage of harvested flowers.



The value of Kenyan cut flower exports to European Union rose from Kshs. 36 billion in 2010 to more than 136 billion in 2019. The disruptions of the Covid-19 pandemic are expected to slow down the growth of cut flower exports in 2020.

Vegetables

Vegetable earnings rose by 5.3% from US\$165 million in 2017 to US\$277 million in 2018 before dropping slightly to US\$254 billion in 2019, representing an 8 percent decrease. The main export vegetable is French beans. Other vegetables both exotic and indigenous are produced and consumed locally with characteristic low prices in surplus periods and high prices in deficit periods.

Environmental

The impact of climate change is already being witnessed in Kenya. The early part of this year has witnessed higher than normal rains which has resulting in swelling of rivers, dams overflowing and lake Victoria and the Indian Ocean in Mombasa rising to the extent of displacing thousands of families from their homes, ravaging farmlands, drawing both human beings and livestock. There is need to plan for future preventive and mitigating measures that will reduce the impact on property and human life. The National Environment Management



Authority (NEMA) has continued to plan and execute measures that encourage sustainable management utilization and conservation of natural resources. All projects implemented in the country must secure environmental impact assessment approval from NEMA.

Other Comments

- Due to uncertainties brought about by the Covid-19 pandemic, the African Chapter of IFMA which had scheduled to hold the AFMA12 Congress in Nairobi Kenya on 16 November 2020 has postponed the conference to November 2021.
- I attended an International meeting Africa exhibition in Johannesburg for 3 days in February 2020, before touring Durban for another 3 days and interacted with national convention centres for Cape Town, Johannesburg, Durban and Rwanda who were very impressive in their willingness to support hosting of IFMA in Africa. They provided incentives for visiting the site, promotion and other financial packages which sounded attractive. They were even willing to come and make a presentation if invited to our next conference.

Philip Nyangweso – May 2020

The Netherlands

Agriculture Economic Climate

Background

The Netherlands with a population of 17 million has a sea climate, although the temperature rises gradually and dealing with dry periods becomes more and more a common practice in agriculture. Typically for this country is the high amount of agricultural export. Therefore, in this report the agricultural trade from last year will be shortly described. Most remarkable is the so-called Nitrogen Crisis which overwhelmed the country from last fall onwards. This spring it developed into two crises, the N-crisis and the Corona crises. Moreover, the ongoing Brexit negotiations are of utmost importance for Dutch agriculture and Fisheries as well in relation to the trade position.

Trade in Agricultural Products (Food Economic Report 2019 of the Netherlands; cited from Jukema et al., 2020, Wageningen Economic Research)

The agricultural goods exports from the Netherlands reached a new record level in 2019. The volume of agricultural exports for 2019 is estimated at 94.5 billion euros. This is 4.6% more than the final figure for 2018 (€90.4 billion). The growth in export value is mainly due to an increase in export prices and, to a lesser extent, to growth in export volume. In 2018, the Netherlands was the second largest agricultural exporter in the world, after the United States of America (USA). Germany, Brazil and China also belong to the top 5 of the most important export countries. A striking difference between these countries is that Brazil and the Netherlands are net exporters, while the United



States, Germany, and especially China import more than they export. Brazil is actually the largest net agricultural exporter in the world, followed by the Netherlands and Argentina. Thailand and New Zealand completed the top 5 of the most important net agricultural exporter countries.

In 2019, about 77% of Dutch agricultural exports went to EU countries. This percentage has remained fairly constant in recent years. Germany, Belgium, the United Kingdom and France accounted for approximately 54% of the exports. The most important export products are flowers and plants, live animals and meat, dairy and eggs, vegetables and fruit.

Imports in 2019 are estimated at 64.1 billion euros, which is 3.7% higher than the final figure of 2018 (61.8 billion euros). The share of imports from EU countries has remained fairly stable at around 60%. The most important source countries for imports from within the EU are Germany, Belgium, France and Spain. The main import source countries outside the EU are Brazil, the United States (soy), and Ukraine (grain).

Nitrogen Crisis

The Nitrogen Crisis erupted in 2019 when the licenses to build of about 18.000 building and infrastructure projects were coming to a stand-still / were withdrawn. This concerned the opening of a new airport (and still does), house building plans, road projects, animal barn enlargements, etc. The crisis emerged when in May 2019 the Council of State at complaint of two environmental action groups judged that the National Program Nitrogen Management did not adequately operate. It lacked a proper ecological check of causing a too high deposition of nitrogen compounds on the so called Natura-2000 areas. The Netherlands has 162 nationally assigned (small) nature areas. The RIVM (National Institute for Public Health and the Environment) reports that 45% of the nitrogen deposition comes from animal husbandry (especially ammonia from manure), 35% by air from outside the country, 6% by traffic (especially nitrogen-oxide from car motors), 6% by households and 8% by other activities, including industry. Each building activity produces some nitrogen emission, although sometimes at a very low level.

This situation resulted in huge unemployment in the construction branches. For the first time since 25 years farmers went in large numbers to the streets in their tractors to protest against the focus in the discussions on agriculture and against the negative atmosphere surrounding the political debate. For instance one party in government proposed to cut the intensive animal sector number of animals by half.

Recently government measures which were announced to deal with the nitrogen crisis and make building and infrastructure projects gradually possible again (already partly implemented):

- Maximum speed on the main roads during the day will be lowered to 100 km per hour. Till now it was allowed to drive at a speed of 130 km per hour;
- Buying out animal farms in the neighbourhood of Natura2000 areas;

- Adjusting cattle feed; force feed companies to lower the protein content of the feeds; farmers can also choose to add artificial or natural additives or enzymes to significantly reduce the nitrogen content in or nitrogen efficiency of the feed; and
- More policies to follow.

Current Research issues

As can be expected agricultural research focusses these days on reducing ammonia emission from animal husbandry (manure handling and application and barn construction) and on dealing with climate change, e.g. reducing methane output from the cow herds. Ways of improving soil quality receives more and more attention in research as well (EU wide).

Other Comments



Dutch Farmers on the road to the political arena

Thousands of Dutch farmers took to the motorways and drove their tractors to The Hague to protest to the Government against the “negative image” of farming in the Netherlands. This caused chaos on the roads with 1,136km (700 miles) of traffic jams at the morning peak rush hour

Abele Kuipers - May 2020

New Zealand

Weather

Considering our usually benign climate, we have had some extremes this season. The south had a cold, wet spring, followed by a reasonable summer, but faces a long winter as a result of lower winter feed yields from late sowing of feed crops. Canterbury has had a great year, but it has forgotten to rain since Christmas. Luckily, our irrigated systems have compensated. The North Island has probably had its worst drought since 1989, has used all available supplement, and will be more reliant on imported feed this winter. Most areas except Hawkes Bay have had a drought breaking rain in the last week.

An unusual occurrence in early January was heavy smoke from Australian bushfires blocking sun over NZ. A few days later, we received red dust from windstorms in South Australia. It underlined the reality that the westerly trade winds blowing across from Australia, which are typically from further south, can carry all sorts of particulate, pests, and disease if the timing is right.

Economic Climate

No discussion on economics can be exclusive of Covid 19. As we write this, NZ has had multiple days of 2 or less new cases. Global learnings, especially from Asia, show we can not be overconfident of avoiding a second wave, but we now face a delicate balance between getting the economy going again, and taking health risks heading into winter. Hindsight shows we locked down just in time, but the pressure is now on unwinding the lockdown, which started a week ago, and will hopefully be complete to manageable levels in 3 weeks. We have managed to avoid more than a handful of cases (none internal) at our primary processing plants (milk, meat, kiwifruit, apples being the major ones over autumn). Strict social distancing protocols in plants have resulted in lost productivity and delays in stock processing during a drought, but no ceasing of operations. Had that occurred, we would have had a major economic calamity. In the public debate about whether the lockdown was too tough, or too long, or not, the ability to continue primary product processing was lost.

On farm, social distancing rules have also applied which has proven difficult in some situations, but as an "Essential Service" farming has continued with day to day tasks, albeit with no on farm development allowed to continue.

Some parts of the NZ economy are taking a battering, notably tourism (almost dead in the short term) retail (all shops likely to be closed to anything other than on line trade for 6 weeks) and hospitality. Once NZ moved from 4 weeks of "Level 4" (complete lockdown) to "Level 3" last week, fast food outlets were allowed to reopen as long as contactless service could apply. Of note, McDonalds had their largest day ever in NZ, all via drive through, as fast food starved New Zealanders had a catch up burger!!



Like the rest of the world, demand for food and beverage has been more robust than other sectors, but the form in which it is consumed, the outlets through which it is sold, and the form it is sold in has changed quickly. With global food service impacted most heavily, and retail business turnover increased, processing flexibility to change product mix and distribution form has been critical. While food producers feel better about the world “needing food”, the reality will be affordability, and ability to supply in affordable forms.

Of concern, politicians are reverting to playing to voters in talking about food security and being self sufficient. The reality is that since 1965, the proportion of the global population suffering from food insufficiency has reduced from 52% to 3%, and a quarter of all food consumed crosses a border.

Cross border trade has been the key contributor, as various countries have learned to do what they do best, rather than try to do everything in a less efficient manner. To avoid political unrest with high unemployment globally, we will need to get nutrition to the right place at the right time, produced economically, with minimum environmental footprint.

As global influencers in the food and trade space, we will need to keep our eyes on the long game, and call out short term political thinking that could result from the current economic crisis.

Livestock

1. Dairy.

NZ is fortunate in that we are heading into our off season for milk production, and with demand to date holding better than expected in China for dairy products in the form NZ produces to date, the average season price (June to June) will be robust. The outlook for the 20-21 season has a number of headwinds that are hard to read, and most NZ farmers are budgeting conservatively given our milk price is a global one, with significant uncertainty and potential volatility, and no Government support. Processing of milk has been uninterrupted from Covid, as a result of strict and early protocols with staff and factories. Fonterra has 20,000 employees globally, with only a handful infected with Covid.

NZs milk production for the 2019-20 season is likely to be slightly down on the 2018-19 season.

2. Meat.

As the white meat sector is very small in NZ, our comments are restricted to red meat, other than a reference to the impact of African Swine Fever on the balance of meat supply and demand globally. The advance of ASF has been overlooked recently, as Covid 19 has taken all the headlines. Clearly the food service cuts of meat have been impacted more than other total demand. From NZs perspective, we had an almost complete close of China as they dealt with Covid earlier in the year, but the reopening of trade to China over the past month has enabled exports to resume. With NZs second largest market for beef being the USA, where we fill gaps for lean meat not available via USA feedlots, and selected prime cuts of grass fed, the lean beef for grinding has been impacted less. Lamb has also been challenging as global food service demand reduced, supermarkets required more, and China came back on stream in April. Processing has been at 50% to 70% of capacity for lamb and beef respectively since mid March as social distancing protocols (2m minimum spacing) inside people intensive plants has been

observed. The delay in kill has eroded feed positions on farm, especially in dry weather conditions. We expect kill delays to be eliminated by June. Venison production is also heading into the offseason which is fortunate given its higher exposure to the food service sector.

Arable

We have just had our best arable harvest for a decade, unlike our Australian cousins, which is fortunate given NZs dependence on grain from Australia. Our small seeds (grasses, clovers etc) and vegetable seed harvest has also been good , with the dry autumn resulting in good harvest conditions . The outlook for next season feels stable, but as everyone knows, a year is a long time in the arable sector! The processing vegetable harvest has also been good for the temperate crops we grow here (mainly potatoes, sweetcorn, peas, carrots, and some beans and red beet)

Horticulture

NZ's key horticulture exports are apples and kiwifruit and wine, all of which have benefited from a high UV summer. Quality of fruit is very high, with no rain approaching harvest. Demand for Kiwifruit remains high. Consumer demand for healthy, high vitamin fruit seems robust during Covid , and anything with a skin seems to be attracting more consumer buying power. The quality of the 2020 wine vintage is exciting wine growers, so look out for that Sauvignon Blanc, Pinot Noir or Chardonnay from NZ. Retail demand for wine seems to have spiked as we all drink and eat more in lockdown, but food service demand has been temporarily destroyed.

Environmental

While Covid is taking all the oxygen at present, we do not think the government ambitions around environmental footprint have gone away. Tough legislation may be delayed a year, which gives farmers more time to adjust to how they can reduce footprints. Ignoring the underlying trend will, most likely, lead to grief in future , but the debate has definitely migrated a little to how we take all water ways to be swimmable , including those in urban areas . Farmers are feeling a little less "picked on "than a year ago, given the pressure is on all parts of society.

Research issues

NZs decision to try to eliminate the Mycoplasma Bovis incursion had already alerted us to our deficiencies around contact tracing, so some lessons from the animal world have been transferred to humans with the Covid crisis. Priority research and innovation outcomes seem to be around biosecurity, food safety, environmental footprints (maintaining production at a lower footprint), rather than higher production. Genetic selection in animals and plants for genetic diversity, robustness, a lower footprint and lower input needs are continuing at pace. The genetic modification debate looks set to move to a higher level given that synthetic foods are mainly reliant on GM. Of



course, many opponents of animal based food also dislike genetically modified food, so an interesting debate awaits!

Other Issues and Summary

The enforced lockdown, which has resulted in more work for the food and fibre production sector, and its servicing industry, but less for many New Zealanders, has taken many families back to basics. As parents have spent more time at home, home crafts (knitting, for example) home baking, and imaginative back yards sports games have spiked in popularity. Some of these habits may remain.

Further, the forced use of Zoom, Skype, Microsoft Teams, google hangouts, Facetime etc has upgraded connectivity without contact. While many New Zealanders crave contact, we are likely to see the use of such technology maintained at much higher levels than in 2019. Ironically, the ability to connect around the world will probably reduce geopolitical boundaries further, as another iteration of globalisation. Conversely, we are seeing a rise in the power of the state, as governments inject liquidity in economies, substantially with quantitative easing (printed money) and have still to work out how to get that back. That paradox of increased state influence vs higher personal knowledge and decision making power will play out over the next decade, but has just been intensified over the past two months. Our collective challenge is how to balance short term human health outcomes with health issues resulting from poor economic outcomes.

Andy and Tricia Macfarlane, May 2020

Poland

Weather

The climate in Poland is continental, with cold winters, often below 0 °C (32 °F), and warm summers. The climate is milder along the northern coast, overlooking the Baltic Sea, while it becomes progressively more continental going to the south, near Tatra Mountains.

Winter, from December to February, is cold throughout the country. The average temperatures in January is -1 °C (30 °F) in the north-western area to -4 °C (25 °F) in the easternmost area. Summer, from June to August, is pleasantly warm: the average daily temperatures are around 17/18 °C (63/64 °F). The Baltic sea coast, is the coolest in summer, around 20/21 °C (68/70 °F), while the temperature gradually increases towards the south, reaching 23/24 °C (73/75 °F) in the center and south of the country. Precipitation in Poland amounts to about 600 mm per year; the driest seasons are winter and spring, while the rainiest is summer.

The weather in 2019 was extremely warm, even more than 2018. The national average temperature anomaly calculated in relation to the reference period 1981-2010 reached +



2.02K in 2019 and was definitely the **highest in the entire history of measurements in Poland** (since 1781). Annual sums of precipitation in 2019 were usually below the norm. Significantly higher than normal air temperature and significant deficiencies of precipitation **caused drought in many regions of the country.**

Agriculture Economic Climate

General importance of agricultural sector in Poland. Rural areas in Poland cover 93% of the country's territory. The total area of agricultural land is about 14.7 mln hectares (2018), which places Poland in the 5th place in the European Union. Polish agriculture absorbs around 14,3% of the work force of the country (EU average 5,5%, EUROSTAT). The share of the agricultural sector in Gross Value Added in 2018 amounted to 2.6% (Statistical yearbooks, Polish Statistical Office).

The main agricultural products in Poland¹ are cereals (15.3% of Gross Agricultural Output in 2018, GAO), animals for slaughter 29,3% of GAO (mainly pork 11% and poultry 11.8%), cow's milk (16.4%), vegetables (9.2%) and fruits (5.4%) and Industrial crops (6.2%). Poland is the net-exporter of agricultural produce and the first-largest in the EU producer of poultry, apples, black currants, raspberries, white cabbage, carrots and triticale. It is also on the 2nd or 3rd place with strawberries, onion, cauliflower, oats, rye, wheat, sugar beets and rapeseed (Statistical yearbooks for Agriculture, Polish Statistical Office, 2020).

Polish agriculture is characterized by a large number of farms and strong fragmentation of the farming sector. In 2018 there were 352 thousand farms with agricultural land over 10 ha, which utilized 72% of agricultural land in Poland. The lion share of the remaining number of farms (around one million) with lower area than 10 ha have rather small contribution to the market production.

New EU Agricultural Policy after 2020. The implementation of the Common Agricultural Policy (CAP) after accession to the EU in 2004 has been a milestone for most of CEE countries (Poland, Czech Republic, Slovakia, Slovenia, Estonia, Latvia, Lithuania, Hungary). Easier access to EU markets, the introduction of direct payments, continuing positive price/cost relationship trends and subsidies from the Rural Development Program (RDP) had a significant impact on the economic situation of the farming sector.

In June 2018 **EU published new proposals for regulations modernizing and simplifying the Common Agricultural Policy (CAP).** Member States will be able to tailor the tools to their own specific needs in a comprehensive CAP Strategic Plan. These CAP Strategic Plans will set out how each country proposes to meet the overall CAP objectives, mindful of its own

¹ last available data are for 2018 (*Statistical Yearbook for Agriculture, May 2020*).



specific needs. Three out of the nine specific objectives in the future CAP will concern the environment and climate – covering the issues of climate change, natural resources, biodiversity, habitats and landscapes. A new system of "conditionality" will link all farmers' income support (and other area- and animal-based payments) to the application of environment- and climate-friendly farming practices.

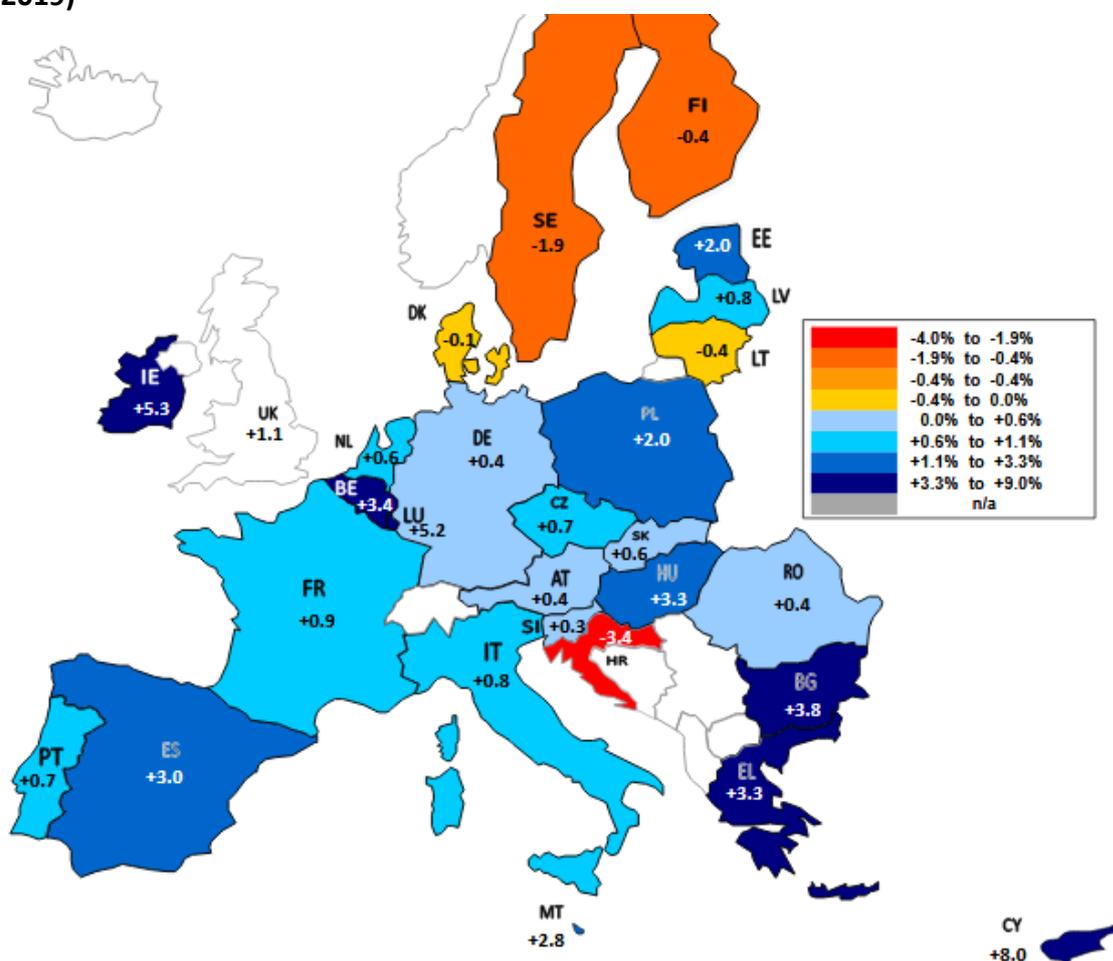
Economic results in CEE countries are still much lower than the in Western European countries. Most of CEE countries hardly ever obtain 10 thousand euro of yearly family farm income per annual farm working unit, in Poland an average farm income was around 6 thousand euro per person, per year (Polish FADN, in 2018).

Livestock

Dairy sector. Poland is 6th largest milk producer in Europe (after Germany, France, United Kingdom, Netherlands and Italy). Together with the CAP liberalization process, especially abolishment of the EU milk quota system in 2015 and reducing export subsidies, dairy market is more exposed to the world market dynamics. Taking an advantage of the cost competitiveness of dairy production in Poland, large investments done in the past years at the farm level, high demand for milk expressed by processing industry, resulting from investments in processing powers, and growing demand for dairy products, dairy farmers continued development towards increased specialization and production scale.

In 2019 drought resulted in the smaller supply and lower quality of feedstuffs. Despite worse production conditions, in June 2019 comparing to June 2018, the population of cows increased by 1.3% to 2,461 thousand head, but the population of dairy cows decreased by 0.5% to 2,221 thousand head. Progressive concentration and modernisation of the milk production in medium-sized and large farms resulted in the increased average milk yield of dairy cows to about 6,350 litres/head. In 2019 the production of cow's milk increased by 2% to ca 14.1 billion litres (14.5 million tonnes). The growth rate of the production was slightly lower than the year before.

Figure 1. EU Milk deliveries compared to last 12 months period (III2019-II2020 to III2018-II2019)



Source: MS' Communications to Eurostat, FEAGA, AGEA, Reg.479/2010.1(a)1

Pig sector: The pig sector in CEE countries was in 2019, and is still seriously **affected by African Swine Fever (ASF)** which since 2014/15 continues to spread across areas of Europe. Within the EU, ASF is present throughout the territory of Poland (eastern part), Estonia, Latvia, and there has been limited ASF circulation in Lithuania, Czech Republic, Romania. ASFV spread continued in a number of third countries, including Moldova, Georgia (South Ossetia), Russia, Belarus and Ukraine. In Poland within protection zones and surveillance zones, producers are prohibited from moving pigs from the holding. Pig producers suffer from low prices and limited possibilities of sale.

In June 2019, pig livestock in Poland amounted to 10.8 million heads and was lower than in June 2018 by 1,047 thousand heads, i.e. **by 8.9%**. The decreased pig population in the entire EU and ASF crisis in Asian countries, caused increase in the pork prices. The EU28 average price of class E livestock amounted to EUR 172.2 per 100 kg of slaughter weight, while in

Poland to EUR 177.2 per 100 kg. Compared to the prices recorded in the first half of 2018, the **EU-28 prices increased by 19.9%** and **in Poland by 25.5%**.

Arable and horticulture

In 2019, the harvest of **grains** in the EU-28 increased by 10.3% to 151 ca. million tonnes – so to the level of production in 2017. According to the Central Statistical Office (GUS) estimates, the total cereal crops in Poland (28.9 million tonnes in 2019) increased by 8% comparing to very weak year 2018 (due to draught). In 2019, the harvest of rape in the EU-28 decreased by 15.1% to 17.0 million tonnes, as a result of a large decrease in the cultivation area, with a slight increase in yields. In the group of major producers, the harvest of **rape** decreased in France, Germany and the United Kingdom and increased in Poland. According to the IAFE-NRI estimates, in 2019 the harvest of rape in Poland increased in 2019 by about 10% to 2.4 million tonnes, as a result of the increased cultivation area and yields (IERIGZ 2019). Due to the drought harvesting of **potatoes** in 2019 is estimated at a level lower by 8,5% than year before, which already was lower than 2017 by 19%.

Fruit production in Poland was in 2019, lower than the record production in 2018 year by 24% and amounted to 3,850 thousand tonnes. In 2019, compared the very high harvest in 2018, the production of **apples** decreased by 25%. The decrease in the harvest of most fruit species resulted mainly from spring frost and the decreased physiological activity of fruit plants after their high yeilds in 2018. The soil water deficit, observed since spring, and very high air temperatures in June resulted in the strong decrease in the harvest of early field **vegetables**. Owing to the improved weather conditions in September and October, the harvest of late vegetables was not lower than in 2018. The total harvest of field vegetables decreased by 4-6% (IERIGŻ 2019).

Environmental

The implementation of EU legal regulations after accession in 2004 to the EU, imposing farming practices which reduce externalities (e.g. Nitrate Directive, greening of the CAP), as well as different support measures, have played an important role in promoting activities that provide environmental public goods and other environmental benefits.

The modernisation of agricultural production and technological advancements might also be beneficial for the environment due to the use of safer, better quality means of production applied with a greater precision.

There are concerns that concentration in the agricultural sector and intensification of production, which have taken place in Poland, may have created threats to the natural

environment. This might possibly be true on a **relatively small number of farms with a very high concentration of livestock**, because of increased emissions of greenhouse gases and problems with manure management.

Increasing intensity of production and on-going concentration processes have had no harmful effects on the natural environment until now. However it is estimated that **agriculture** in 2017 **contributed to 30% of Methane emissions** in Poland (compared to 53% in the Eu28), and to **82% of Nitrous oxide emission** (compared to 72% in EU 28).

It is estimated that agricultural land areas in Poland are characterized by high biodiversity in comparison with other countries (Parris, 2007). In Poland, biodiversity is shaped by a relatively large area of forests (ca 9 million hectares), of wetlands (1.8 million hectares), including 455 thousand hectares of inland waters.

Agriculture contributes to **the biodiversity** of the country due to its diverse production structure and fragmented farm structure. On the other hand, some of the indicators worsened after accession to the EU in 2004, resulting from a shock-type decline in the intensity of agricultural production in the preceding years. For example the average **nitrogen balance** of in Poland increased from 41.7 kg of nitrogen per ha of agricultural land in 2004 to 47.7 kg/ha in 2015. This is a much lower value, however, in comparison to the average Nitrogen balance in other EU countries.

Agata Malak-Rawlikowska – May 2020

Slovenia (Europe)

Weather

In 2019 changing weather conditions continued as well as the occurrence of extreme weather events, which again influenced the extent of crop production in Slovenia. In 2019 there were slightly less extreme weather events than in previous years. Beginning of the year was extremely wet, but the weather conditions quickly improved, allowing sowing of winter cereals and other winter crops in optimal sowing times. During the same period, air temperatures were above average, with intermediate cold periods falling below average rainfall. The drought conditions that made it impossible to fertilize winter cereals in February and March resulted also in lower yields at the beginning of the growing season. May was extremely cold and wet, which made agricultural production worse and slowed the phenological development of plants. Extremely wet conditions were also favourable for the spread of plant diseases and pests. There was a problem also with late frost, especially in fruit production.

In the summer, the temperature was again above the average, with many hot days. Precipitation was unequally distributed across the territory of Slovenia. After negative water balance in the beginning lots of rain, especially in May compensate, the surplus however there were some regions

with insufficient water supply. Therefore, also weather conditions in various parts of the County within growing season differently influenced the agricultural production.

Agriculture Economic Climate

- Population of Slovenia is 2,095,861 inhabitants
- Average monthly gross earnings is 1,799.66 EUR
- Unemployment rate as a percentage of the labour force 4.0 %
- Volume growth of GDP is + 1.7 %
- Farms and Agriculture:
 - The gross value added of agriculture in GDP is 1,4%;
 - 69,902 agricultural holdings with an average of 6.9 ha of utilised agricultural area and 6.0 large livestock units;
 - 1.1 annual working unit per average agricultural holding, with 57 years of an average age of the manager of the agricultural holding;
 - Average economic size per agricultural holding (standard output) is 16,600 EUR;
 - Factor income per employee in agriculture is 7,634 EUR;

Economic results of Agriculture in 2019

The first estimates of the indicators of economic accounts for agriculture, prepared by Agricultural institute of Slovenia, show that agricultural incomes in 2019 will be significantly lower than in the year before, which was very favourable for agriculture. It is estimated that the deterioration in economic results is likely to be due to a decrease in the physical volume of agricultural production by less than a tenth, mainly due to the extremely modest harvests in fruit and wine growing at approximately the same prices at the aggregate level.

In comparison with the year 2018, the volume of production will decline (crop production -13%, livestock production -3%), while the prices of crop products will remain close to the previous year and will be slightly higher in livestock production. The value of intermediate consumption will be slightly lower than in the previous year (2018), mainly due to the lower values of feed and energy, with the increase in the value of seeds and seedlings, fertilizers, plant protection products and overall agricultural services. According to initial estimates, the factor income of agriculture will decrease (by about a fifth) compared to the previous year and will be slightly lower than the last five-year average.

Impact of COVID-19 for agriculture

Situation in Slovenia is similar as in other EU countries. At the moment is agricultural production affected mainly by the loss of demand and also with loss of export on foreign markets. At the moment there are much less or in some cases no sales to standard customers such as catering, restaurants, schools, canteens. Also export of agricultural products is also almost stopped. On the other side there are noticed some, for our Country, relatively new practices at the farm level. One of such is on-line sell and on-line marketing (e.g. using Facebook). This is a case especially in vegetable

production and also on many small family farms, with mixed production activities. At the moment the most affected sectors in our Agriculture are dairy, beef and vine. Important challenge is of course Covid-19 disease itself, if it affects farmers and producers. Further I will briefly describe the situation in these three sectors.

Milk

In milk production sector there is the biggest challenge at the moment due to the problems with export of milk, mainly to Italy. Milk surpluses affect all dairies in the region. For our dairies, this is a tremendous amount of surplus, of course, their capacity to receive milk is limited, at the same time, they are struggling with lower demand for dairy products in export. There are also some problems with packaging delivery.

At the farm level this is especially important issue for those farms and cooperatives that were oriented on export to Italy. There is significant challenge in logistic and also that more and more such purchases are occasional, which means that one week they buy milk, next they don't and the third week they would like to buy it again and even more. This is a significant challenge for milk producers. At the moment there is luckily an increased demand for raw milk at the market in Croatia, but nobody knows for how long.

Beef

Another sector with significant challenges due to COVID-19 is beef fattening. Namely also in this sector significant share, even up to one third of production, was delivered on Austrian and Italian markets. Due to pandemic, exports stopped and these cattle has remained in Slovenia. Slaughterhouses are not ready and capable to accept this beef because they have problems with sales, storage, and now there is a strong pressure - as in dairies - to reduce prices. Problem is especially with selling higher value meat cuts (like back for roast-beef) that were before pandemic COVID-19 mainly sold to the restaurants. The situation is more or less similar in other EU countries in this region.

Wine

Significant challenges due to COVID-19 have also affected winemakers. They are mostly affected by the closure of restaurants, pubs and also due to tourism that has stopped. However, if the crisis ends relatively soon, they will be able to compensate at least a part of loss generated.

Additional problem in Agriculture is loss of manpower that is needed already in this period of time. Big challenges are especially in permanent crops, where seasonal workers from abroad are not able to come. At the moment from that perspective the biggest challenge have hope producers, however if the situation does not improve, significant problems would be also in fruit production and vineyards. However, foreign labour is a significantly bigger challenge in some other countries in this part of EU. For example, southern Italy is at a great risk of harvesting its first crops. Similar situation is also in France.

Livestock

For the livestock production, based on the estimates of the available data show that the total production volume declined slightly in 2019. Also in this year there is an increase in the production volumes in the production of pigs and cattle and further decrease in poultry and small ruminants. Regarding to previous year there is also slightly decrease in the cows milk production and eggs. Compared to the good harvest of 2018, honey production has fallen sharply and is with about 700 tonnes close to the 2014-2018 average.

According to available data, the prices of animals and animal products will increase (+3.8% in nominal terms) over the previous year and will be above the level of the prices of the last five-year period. Higher prices are expected for all major animal products, with the exception of a slight decrease in cattle prices (-1.1%). The prices of pigs (+14.6%) and cow's milk (+ 5.9%) will increase the most, while the prices of poultry (+2.8%) and eggs (+2.1%) will also slightly increase.

Arable

Even though weather conditions were not optimal in 2019, the yields of cereals were significantly higher than in 2018 and mostly above the average of the last five years (2014-2018). Corn yields were, due to the rainy weather at the time of sowing, slightly worse than in the year before, but still above average (+3%). Lower yields were in the production of silage maize, potatoes and hops.

Due to mostly sufficient rainfall, grassland fodder production was quantitatively similar to very good year 2018. On the other hand the quality of the fodder produced was worse on average than usual. This is mainly due to excessive rainfall in May and late first grass mowing as a consequence of the weather.

According to the first statistics estimates, the prices of crop products in 2019 are at a similar level to the previous year. The forecasts show that prices of crop products will be slightly higher in nominal terms (by 0.9%) at the average annual level, and given the projected inflation, prices are expected to be slightly lower than in the previous year. Lower prices are expected mainly in the case of cereals (-7.6%), which is mainly due to the expected lower prices of maize for grain (-15.8%). For other major crop products, similar or higher prices are expected at the level of the 2019. The most significant increase was in the prices of potatoes (+41.5%), hops (+27.2%) and vegetables (+9.1%).

Horticulture

a. Soft Fruit

Fruit production was very modest in 2019 after an extremely good year in 2018. In intensive and extensive orchards, regarding to the data in 2019, there was about only a half of fruit harvested regarding to the previous year.

According to the available data grape yield was also significantly lower than in previous year. In red varieties yield was decreased by 19 % and the yield of white varieties by 13%, however quality of the harvested grapes was very good.

Lower prices are expected also for fruits. On average by -17.1%. Lower prices are also expected for wine (-5.0%).

b. Vegetables

Unfavourable weather conditions in May also hindered the production of vegetables. In some parts of Slovenia later in the growing season there were problems with storms and hail. Consequentially on average the harvest of vegetables was worse than in 2018, when it was slightly above average.

In vegetable production prices were according to available date in nominal terms 9% higher.

Current Research Issues

- Developing the system of typical farms for all sectors in Slovenian agriculture, that best reflect their situation
- Developing micro-simulation tools that enable different impact assessment of policies at the level of agricultural holdings
- CAP reform and impact assessment (IA) with farm level modelling
- Developing “Farm manager”, an on-line system for preparing calculations for different production activities

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Jaka Zgajnar – May 2020

South Africa

Weather

- South Africa was struggling with severe drought conditions affecting most provinces in the country. This was a lingering drought where some areas received as little as 25mm rain over the past 4 years.
- The summer rainfall of 2020 was closer to normal than during the past 4 years, but the sad news is that most of the areas that were severely affected by the drought, still received below normal rainfall this year.
- The summer crop area did receive sufficient rain in most areas and we expect a record crop of more than 15 mil ton of maize.

Agriculture Economic Climate

- The economic condition in agriculture is not at a good place due to factors like the lingering drought.
- Debt levels in agriculture are on its highest ever and are still increasing.
- Policy uncertainty about the final outcomes of land expropriation without compensation limits investment in agriculture.
- Almost yearly increases in the minimum wage place a strain on employment in agriculture.
- The agricultural trade balance was negatively impacted this year with another outbreak of FMD at the end of 2019 and the closing of red meat exports.
- The current Corona virus outbreak and the lockdown of South Africa (with some of the strictest lockdown measures in the world) have devastating effects on the economy with an associated drop in demand and prices for luxury food items like red meat.

Livestock

- Red Meat
 - Red meat prices in 2019 was basically on par with 2018.
 - The FMD outbreak at the end of 2019 continued into 2020 with the a national ban on auctions as result.
 - The prices for 2020 were expected to increase from 2019, until the economic damage of Covid-19 reduced demand and prices.
- Poultry
 - Poultry farmers are suffering due to low priced imports and high current feed cost. Higher import levies was proposed and should help to protect local farmers.
- Pork
 - The pork market is currently under a lot of pressure with a sharp decline in the price of pork while feed prices are relatively high.

Arable

- **Summer crops**

- Initially the season started poorly due to dry conditions that delayed plantings in some areas
- Producers were able to plant late December / early January
- Good follow up rains
- No reports of frost to date
- The following data was obtained from the latest crop estimates:

Crop	Final crop (Tons)		change
	2019	2020	
White maize	5 545 000	8 779 470	58%
Yellow maize	5 730 000	6 442 050	12%
Sunflower	678 000	731 210	8%
Soybeans	1 170 345	1 290 750	10%

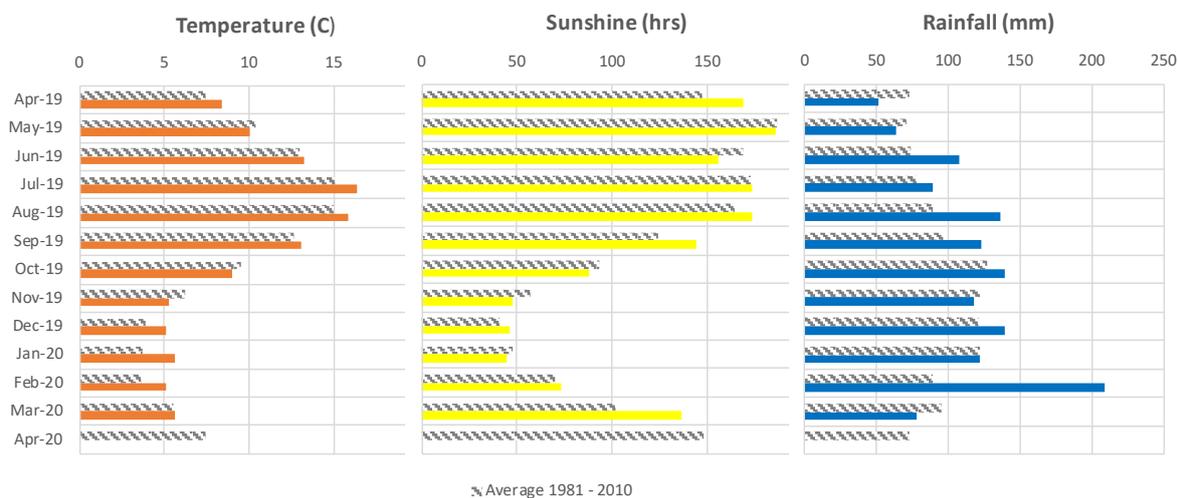
- **Winter crops**

- Wheat: In the 2020 production season producers intend to plant 495 000 ha of wheat, which is a 8.33% less compared to the 2019 season
- The largest production area, the Western Cape is expected to plant 320 000 ha of wheat in the 2020 season, which is 5 000 ha less than the 2019 season.

Frikkie Maré – May 2020

United Kingdom

UK Weather



Agriculture Economic Climate

1. Farm Profitability increased by 16% in 2019 on the previous year. Cropping farms were up by 11% compared to Livestock farms at 1%
2. Farm Business tenancy rents have risen on average by 2.7% per year from 2016 to 2018
3. Brexit - UK government is pushing for a standalone Free Trade Agreement, similar to the EU – Canada deal. It is looking to complete the Brexit Transition Period by December 31st, 2020. Should this view change, it has until the end of June to request an extension

Covid -19 Issues

1. Job retention Scheme- Open to employers and will cover the cost (80% & max £2,500 per month) of any worker that is furloughed (workers who have been laid off). This is to encourage companies not to sack their workforce.
2. Generally reduced consumption of expensive cuts of meat, top end cheeses and beer.
3. Main issues are in the supply chain rather than at farm level. Abattoirs, packing sheds, mills tend to be more labour intensive and preclude working from home.
4. The Ag industry remains hopeful that empty shelves may lead to greater emphasis on home produced food
5. The working world we knew will return; but it will have different consumer demands. Supply will respond, but there will be casualties with business that fail to adjust quickly going bankrupt.

6. Farmers are benefiting from the fall in prices for kerosene (down 50% since December) and red diesel (down 15 ppl in last two months), with some stocking up on these supplies at these lower prices. Some farmers are having difficulty obtaining spare parts for machinery due to factories being shut down. On-farm mechanics are still travelling to farms to repair machines in some regions, but in the South, there are reports of farmers being unable to access machinery repairs as some agricultural engineers are closed.
7. Seasonal labour continues to be a concern. A Cambridgeshire firm which usually employs about 2500 seasonal staff, has chartered their own flights to bring in workers from Romania. Some farmers have reported that having family at home has helped with labour – either due to school closures or family unable to work off-farm, which has increased help at lambing, milking and for spring cultivation work in particular
8. An East Yorkshire farmer who runs a home-grown vegetable stall in their village could not keep up with demand as villagers purchase produce on their one-hour exercise when walking past the farm.
9. Diversified farm businesses in the tourism sector are struggling, with farmers returning deposits on bookings over the next three months, but payment from the government's small business scheme has helped. Some diversified businesses in the South West have reported an upswing in September/October/November bookings as holiday agents have allowed guests to change bookings to other dates without losing their deposit or payments; albeit that autumn holiday let properties make significantly less per week than April/May.
10. There have been several incidences of increased fly tipping due to closure of local authority recycling centres.
11. Food redistribution organisations across England will benefit from £3.25 million of government funding to help them cut food waste and redistribute up to 14,000 tonnes of surplus stock during the coronavirus outbreak.
12. Farm shops across the country report an increase in trade of fresh meat, eggs and vegetables. Increases in milk from vending machines, and from dairy farmers supplying bottled milk direct to customers has been reported in the North. Many are now successfully operating order and collect services.

Livestock

1. Dairy sector

- a. Dairy herd numbers have fallen by 0.6% over the last year. With the forecast 'cost of production' in excess of the milk price received, this reduction is likely to continue.
- b. The closure of pubs, restaurants, coffee shops etc in the UK and the guidance to stay at home will see a shift in demand from the food service sector to the retail sector.
- c. Covid-19 has seen some producers having to discard their milk as increased demand from the retail sector has not made up for volumes usually consumed in the food



service sector. Estimated 800,000-900,000 litres of milk which was not collected during the week ending 11th April was thrown away.

- d. Government support for businesses that have lost 25% of their income equal to 70% of the loss up to £10k plus relaxation of some elements of competition law to make it easier for processors to be able to work together.
- e. AHDB forecast milk output for 2019/20 to be down 2.3% on last year

2. Beef

- a. Beef breeding numbers have fallen by 2.2% over the last year, largely in response to poor beef prices.
- b. In the UK, about one-third of beef product sales in monetary terms are to the food service sector which has largely dried up
- c. Increased retail sales have been largely for lower value products – mince and burgers which is about 43% of the carcass volume. If a higher percentage of the carcass becomes mince for a prolonged period, then the retail value of the carcass will be devalued.
- d. If the Covid-19 Crisis continues for a sustained period, further declines in farm prices are likely.

3. Pigs

- a. Improved productivity has given rise to a 2% increase in total pig numbers despite the breeding herd numbers falling by 0.3% over the last year.
- b. Convenience products such as sausages and bacon have seen sales increases whilst roasting cuts have decreased.
- c. Short-term, the deficit of pork in China should help European prices recover from Covid-19.

4. Sheep

- a. Breeding flock numbers have decreased by 0.4% over the last year.
- b. Demand for lamb from France is currently very low.
- c. As most lamb is eaten outside of the home, the closure of restaurants at home and in export markets, has hit prices hard. When they do re-open, they are unlikely to be at full capacity for a while which will put pressure on prices.

5. Poultry

- a. UK chick placings March 20 v March 10
 - i. Commercial Laying chicks down 15%
 - ii. UK Broiler chicks up 3%
 - iii. Turkey chicks up 3%
- b. UK Farmgate egg price, Q1 2020 £0.75/dozen 9% increase over Q1 2019 and 4% increase over Q4 2019
- c. COVID-19 and Avian Influenza, has driven a significant upturn in demand within the egg sector and therefore increased prices, with many producers selling from the farmgate causing a shortfall through the packers
- d. Whilst many smaller conventional producers (units <6,000 birds) were possibly looking to exit, they have been rejuvenated due to farmgate sales and village shops (who like to sell local produce)

- e. Covid-19 will inevitably lead to an economic downturn not only in the UK but globally, history has demonstrated that eggs and poultry meat are the least vulnerable animal protein in an economic downturn. Due to the trading down from fish, red meat etc. as they best value animal protein source
- f. Many UK Supermarkets have announced they will be removing colony eggs from the shelves in 2025, this will see a downturn within this sector and therefore removing the value option which is likely to be replaced by a possible upturn in Barn egg production

Arable

1. Lockdown saw demand for bread increase significantly although this has now dropped back to an increase of 15%. Flour having become a secondary product, has now become more sort after as people with more time revert to home baking. This has given rise to good demand for Bread Wheat.
2. Feed wheat demand for Ethanol has stopped resulting in prices easing.
3. Oilseed Rape prices have fallen as consumers in lockdown have had to forgo the greasy take-aways and pizzas. Equally there is no demand for Biodiesel.
4. New crop wheat prices are relatively high given that wet planting conditions have reduced the area sown by 27%. We are now faced with what looks like being a dry spring.
5. Oilseed Rape crops have been hit hard by flea beetle damage. Many crops have failed as a direct result of the pesticide (neonicotinoid) bans giving rise to a 32% fall in acreage
6. The sugar beet crop averaged 77.7 tonnes per ha this last year which is slightly above average. Acreage is expected to be up by 4% this next year.
7. Spring crops have established poorly due to dry conditions, with many farms resorting to irrigation to get germination started. Recent rains are helping but still very dry.
8. Drilling of vining peas in the East has been significantly delayed due to the dry and cold spring which has pushed back the schedule significantly.

Horticulture

1. Soft Fruit & Vegetables
 - a. Industry concerns over the estimated 80,000 seasonal fruit and veg vacancies that exist through the summer months. Despite Government promotion to encourage furloughed people to help, employers seem concerned about the skills and motivation of UK staff and would prefer their traditional East-European workers.
2. Potatoes
 - a. Average yields were up 9.4% to 46.5 t/ha
 - b. A relatively dry January allowed some of the remaining crop to be lifted but reported to be of very variable quality
 - c. Storage chemical CIPC is effectively now banned for the 20/21 season



- d. Covid -19 Potato values has fallen dramatically, mainly because of outlets such as McDonald's closing, forcing McCain and others to reduce contracted areas; this despite the difficult and short harvest in 2019 with some farmers unable to market current potato stocks.
 - e. Consequently, the potato market is in disarray for both current crop and going forward, largely due to fall in demand from processors, fish and chip shops, and retailers. Some growers are re-considering planting areas for 2020 harvest, even though planting conditions are good, as a well-known processor has reduced their 2020 contracts by 40%.
3. Plant Nurseries
- a. An East Yorkshire nursery who supplies 'B&Q' is struggling to survive after the stores were shut. They are throwing bedding plants away and have had to lay 30 staff off. In the South, there are reports of plant and tree nurseries giving away plants for free/with honesty boxes on the roadside. Horticultural businesses without contracts with supermarkets (both edible and ornamental) are most affected. There is however, some level of business which is continuing between nurseries and landscape contractors who had already ordered plants, and are able to stay working. There are also reports of mail orders from the general public with high uptake; however, many of these small nursery businesses are too small and not geared up to operate a large-scale delivery service.

Environmental

1. Environmental Land Management plans will be the main funding stream that replace the BPS payments from Europe. The scheme is based on paying land managers for 'Public Goods' on a 3-tier system (Tier 1 - farm level, Tier 2 local level, Tier 3 landscape level). Whilst exact details are still to be released, the key categories are:
 - a. Clean Air – reduced ammonia and particulates.
 - b. Clean and plentiful water – reduced nitrogen and phosphate run off, less sediment in water course, better quality ground and surface water.
 - c. Plants and wildlife - habitats, species, protected sites.
 - d. Hazard Protection - flooding, coastal erosion, droughts.
 - e. Beauty, heritage and engagement, landscapes, public access, education, health, cultural heritage.
 - f. Climate Change – reduced GHG emissions, carbon capture, resilience to climate change.
2. The government report on Climate Change has made recommendations to meet its target of Net Zero emissions by 2050. Key points include:
 - a. Low carbon Farming Practices – controlled release fertilisers, improved livestock health and slurry management.
 - b. Afforestation and Agro-Forestry – increasing from 13% to 17% (30,000 ha more trees) plus 2% Agro-forestry (trees + agricultural use).
 - c. Peatlands – restoration of 50% of upland peat and 25% of lowland peat (7% of UK land area).



- d. Bio Energy Crops – Increase to 3% of total land use.
 - e. Reducing Meat and Milk consumption – 20% reduction per person consumption which equates to a 10% reduction in cattle and sheep numbers.
 - f. Reducing Food waste – 20% reduction in the 13.6 m tonnes annually wasted.
3. A new round of the Woodland Carbon scheme worth £10m has been announced to allow the sale of carbon credits.

Other Issues

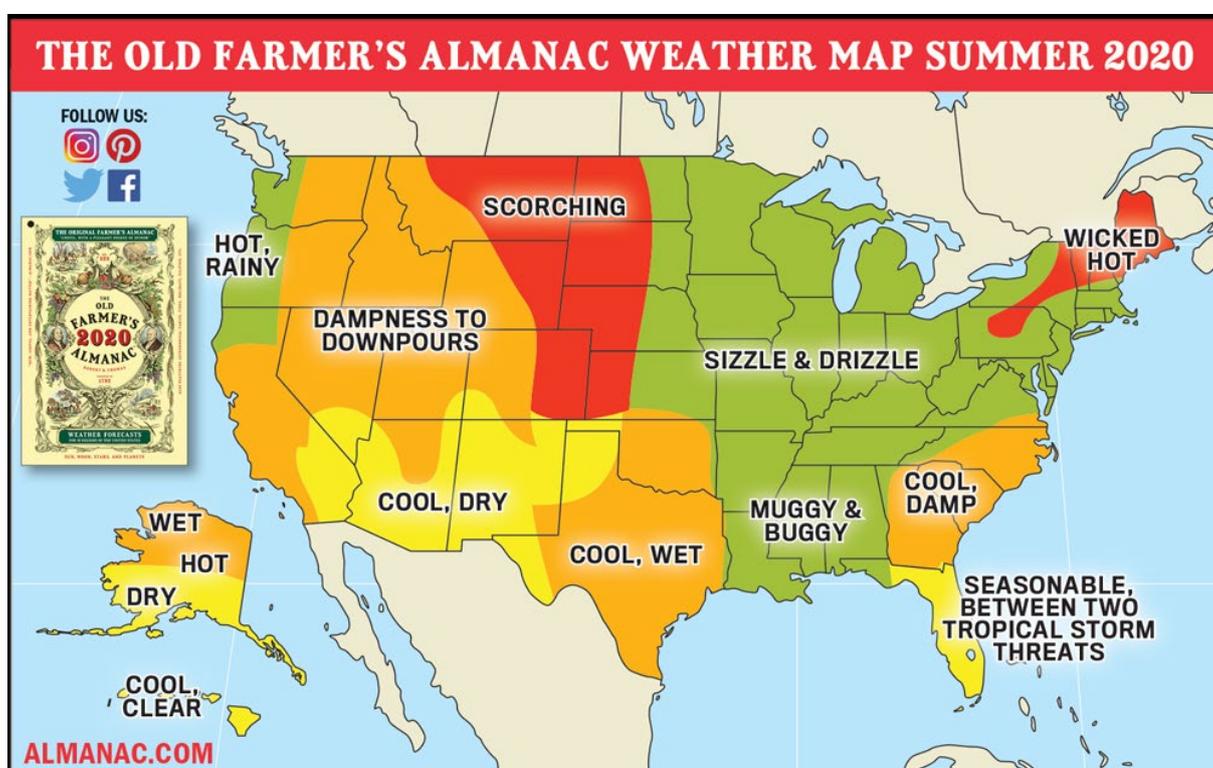
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 - f. Reducing Food waste – 20% reduction in the 13.6 m tonnes annually wasted.
2. Statutory levies have been agreed to continue to fund the Agricultural and Horticultural Development Board (AHDB). The government suggests that its focus should be on Market Development and Improving Farm Performance whilst farmer preference is for more market development.
3. Rural Business Research and Askham Bryan College produced a report on 'Education and Farm Performance'. It concluded that agriculturally specific education is essential for good farm performance. Moreover, the continual professional development of the knowledge and skills needed for modern farming practice is also essential.

Trevor Atkinson – May 2020

United States

Weather

Based on general trends, weather has been conducive to spring planting in the United States. Tractors and equipment are moving south to north as the weather improves and opens for the spring season. Reports of severe weather in the South-eastern US over the past four weeks have had isolated impacts with tornado activity. *The Old Farmer's Almanac* weather predictions for summer 2020 is below; over time the almanac has been correct ~ 80 percent of the time.



Agricultural Economic Climate

- As with rest of the world, the United States is dealing with the COVID-19 pandemic. Reports are now beginning to emerge that the novel corona virus was present in the United States as early as December 2019 as unexplained illnesses and deaths are revisited and additional testing and research provides confirmation. It is speculative to try to say anything definitive about long-term impacts. Unemployment claims are at record levels. The number of business failures is unknown. Economic aid packages continue to be introduced at the federal level and the deficit continues to balloon. States are individually managing health policy, business closures, and reopenings; some are more restrictive than others. COVID cases continue to increase nationally. However, for the ag sector short term, here are some notes:



- Supply chains have been disrupted for a variety of reasons. On average, the US eats away from home 50 percent of the time and the restaurant businesses consumption of agricultural output came to a near halt. Livestock harvest facilities are sometimes dedicated to the restaurant trade or export, so it is a challenge if not impossible to quickly retrofit them to package differently. And increasing number of plants are being closed as large percentages of employees are testing positive for COVID. Milk dumping, killing of baby pigs and vegetable crops being destroyed have all been reported. This is a near-term impact which affects the structure of the supply chain and may return to a “new normal” given time. But possible future social distancing requirements in livestock harvest facilities may reduce efficiencies longer term. Demand for home use along with consumer panic led to increasing demand for staple goods and supplies for “at home” food preparation. Guido observed local groceries having flour, sugar and other cooking/baking supply shelves being empty (as were the paper good aisles); Damona still hasn’t found brown rice at WalMart. The local population quickly learned when the “truck was coming” and vendors implemented rationing of goods.
- As the individual states open and the supplies of food make their way back to the shelves, there will be “short-term” emptiness (due to dumping, burial and plant closures) until those items in the production pipeline return and again reach intended markets. The restaurants which either closed completely or were limited to take-out will open slowly under “social distancing” rules which may create a lag to re-establish full capacity. Not all will reopen.
- Some firms began to donate food stuffs to food pantries and other distribution chains or employees to aid the now vast numbers in need instead of wasting the food items. Again, this is anticipated to be a short-term structural shift in the supply chain.
- Agricultural markets are under pressure as seen by decreased prices as trade both domestically and internationally has been affected by the pandemic.

Livestock

- USDA’s April report in full can be found at <https://downloads.usda.library.cornell.edu/usda-esmis/files/g445cd121/5d86pj126/bz60df867/LDP-M-310.pdf>

Dairy sector: USDA April 2020

- Dairy producers were hit early. Wholesale dairy product prices and milk price forecasts have been lowered substantially. Demand for dairy products is expected to be much lower due to the COVID-19 pandemic. Export forecasts have been lowered based on lower expectations for global demand.
- The decrease in prices is putting many small to mid-sized under tremendous pressure with acceleration of dairy farms failing and going out of business.



Beef sector

- Cattle prices have recently taken a huge hit. A recent study led by OSU livestock marketing specialist Derrell Peel estimates total beef cattle industry damages of \$13.6 billion as of early April 2020 (<https://extension.okstate.edu/coronavirus.html>) Damage estimates include:
 - Revenue losses of \$3.7 billion in 2020 to the cow-calf sector; equivalent to \$111.91 per head for each mature breeding animal in the U.S. If these damages are not offset, additional long-term damages of \$4.45 billion, or another \$135.24 per mature breeding animal, will impact the cow-calf sector in coming years.
 - Revenue losses of \$2.5 billion to the U.S. stocker/ backgrounding sector in 2020; equivalent to \$159.98 per head.
 - Revenue losses of \$3 billion to the U.S. cattle feeding sector in 2020; equivalent to \$205.96 per head.
 - The current situation is very fluid and uncertain. Additional damages are likely.

Pigs: USDA April 2020

- Pork producers are being increasingly hard hit as processors adjust to disruptions in slaughter schedules due to labor force absences caused by the COVID-19 virus. 2020 growth in U.S. pork exports is also likely to slow due to peso depreciation and demand uncertainties generated by the virus. Even so, U.S. pork exports are expected to increase more than 18 percent this year compared with exports in 2019.

Poultry: USDA April 2020

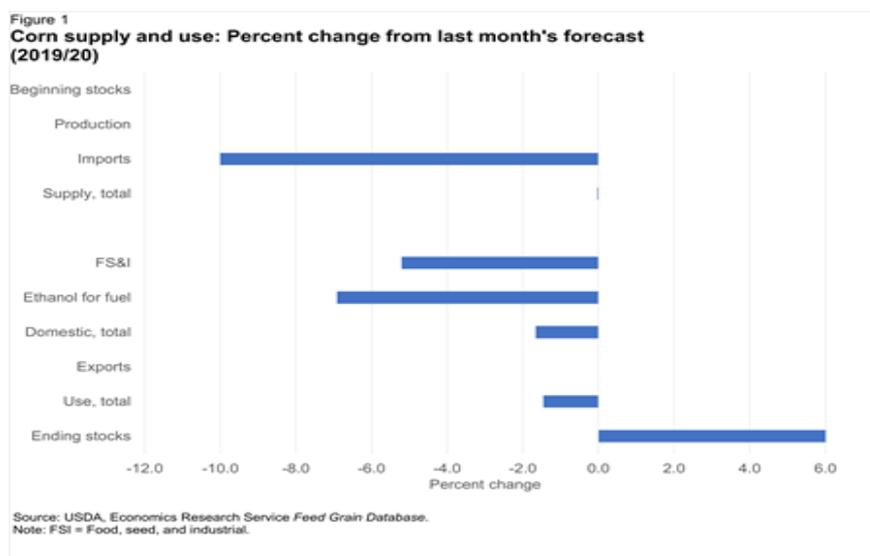
- The 2020 broiler production forecast was decreased on expectations for decreased demand from food service and foreign markets, while the price forecast was revised down on recent price movements and weakening demand. The 2020 export forecast was decreased on expectations for weakening economic conditions in global markets. The table egg production forecast was revised down on expectations for a smaller layer flock, while the 2020 price forecast was increased on expectations for strong demand and tightening supplies. The first-quarter egg export forecast was increased on strong export demand, while the second- and third-quarter forecasts were decreased on expectations for slowing exports due to higher egg prices and a strong dollar. The 2020 turkey production forecast was decreased on lower-than-expected average weights. Wholesale turkey prices for the remainder of 2020 were revised up on expectations for strengthening demand. Turkey exports for 2020 were revised down after lower-than-expected exports in January and February and expectations for weakening demand from Mexico.

Arable: USDA report link below

- <https://downloads.usda.library.cornell.edu/usda-esmis/files/44558d29f/3r075d46j/08613686n/FDS-20d.pdf>
- **Corn (Maize)** Projected corn disappearance for 2019/20 is reduced 205 million bushels to 13,865 million on lower food, seed, and industrial (FSI) use as gasoline consumption declines. Feed and residual use and ending stocks are raised 150 and 200 million bushels, respectively. The season average price of corn received by farmers is lowered \$0.20 per bushel to \$3.60.

As larger-than-expected sales to China advance sorghum global trade, U.S. sorghum exports in 2019/20 are projected to reach 4.7 million tons, up 1.3 million (185 million bushels, up 50 million for the local September-August marketing year) this month.

In recent weeks, U.S. corn sales and shipments have accelerated. The level of outstanding sales at the beginning of April reached 14.2 million tons, the highest since May 2019. Despite a pickup in recent sales and shipments, reflecting increasingly competitive U.S. corn export prices, the export projection is unchanged this month at 47.0 million tons (1,725 million bushels), as the current projection for the United States has enough built-in room for growth.



- **Soybeans (Soya)** This month, USDA boosts its forecast of the 2019/20 soybean crush by 20 million bushels to a record 2.125 billion, based on steady soybean meal demand. A current shortfall in Argentine shipments raises forecast soybean meal exports by 250,000 short tons this month to 13.45 million. A higher crush is more than offset by a decline for soybean exports (by 50 million bushels to 1.775 billion). Demand revisions boost the 2019/20 season-ending stocks forecast by 55 million bushels to 480 million.

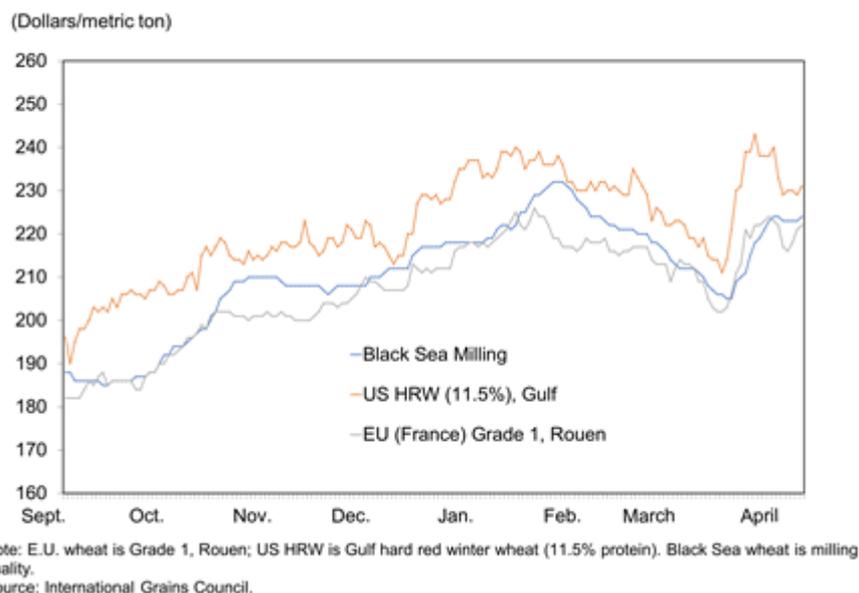
Outstanding U.S. export soybean sales lack signs of previous-summer revivals



Source: USDA, Foreign Agricultural Service, Export Sales.

- Wheat** On April 2, 2020, the Government of the Russian Federation imposed a 7-million-metric ton quota on total exports of wheat and other grains until June 30, 2020. This binding restriction combines with strengthening Black Sea prices to reduce the 2019/20 wheat export forecast for Russia by 1.5 million tons to 33.5 million (fig.1). Surging domestic wheat prices and a relatively strong dollar have also created headwinds for U.S. exports, lowered 0.4 million tons to 27.1 million. The European Union (EU) and Australia are the only major wheat exporters whose exports are raised month-to-month. On reduced competition from Russia and continued competitive prices, EU wheat exports are raised 1.5 million tons to 33.5 million. Australia's exports are increased 0.3 million tons to 8.5 million on a stronger than expected export pace.

U.S. wheat prices remain above most key exporters; E.U. wheat price near lowest



Horticulture USDA's Report

- <https://www.ers.usda.gov/webdocs/publications/98171/fts-370.pdf?v=3044.8>

Tree Fruit

As of mid-March 2020, U.S. citrus exports were down except for orange juice and tangerines. Reduced exports have increased the domestic supply of citrus, putting downward pressure on prices. The January 2020 price of all- grapefruit is down 36 percent from the year before, and all-oranges and oranges for the fresh market are down by 6.9 and 9.4 percent respectively. All-lemon prices are down 28.5 percent, and fresh lemons prices are down by 8.6 percent. Apple prices were down 21 percent in January 2020 from the year before. USDA, National Agricultural Statistics Service (NASS) estimates the 2019 total apple crop to be up 3.6 percent from 2018. The strong dollar and increased tariffs in several countries have reduced exports, putting downward pressure on prices.

Vegetables

- *USDA report April 2020*
- <https://www.ers.usda.gov/webdocs/publications/98295/vgs-364.pdf?v=4536>
- In 2019, total U.S. per capita vegetable use (availability) increased 2 percent to 409 pounds. Except for pulse crops, all major categories exhibited increases. Availability of pulse crops dropped 23 percent as pinto and navy bean output slipped, while chickpea and lentil production declined sharply on reduced area. Recovering from a 6 percent drop in 2018, fresh-market vegetable availability (including potatoes) rose 4 percent to 198 pounds in 2019. In fact, 16 of the top 25 fresh-market vegetables posted gains in



availability driven largely by increases for spinach, cauliflower, cabbage, carrots, green beans, and potatoes. Although processing availability increased in 2019, canning uses accounted for all the gain with vegetables for freezing declining 2 percent. After declining in 2017, per capita canning availability increased for the second consecutive year. In 2019, it rose 3 percent to 94 pounds—the highest level since 2010. Increases were noted for many of the top canning vegetables, with most of the gain from processing tomatoes.

Environmental

- Environmental policies in the United States are under pressure as changes to and review of past decisions are aimed at deregulation.

Current Research Issues

- The reach and outcome of the COVID-19 pandemic will provide ideas for continuing research relative to domestic and international impacts. How to evaluate and plan for the next “Black Swan” (Taleb, 2010) for policy makers and those that are on the ground producing food, fibre, fuel, and other primary sector products.

Other comments

- USDA’s economic analysis capacity has been greatly diminished as the Economic Research Service was required to move from Washington, D.C. to Kansas City. Many employees retired or took other jobs. The National Institute of Food and Agriculture, the federal agency that serves the Research, Education and Economics mission area which includes Experiment Stations and the Cooperative Extension Service across the country, was also moved to Kansas City and lost approximately 80% of their personnel so agency functions are minimized until new personnel can be hired.
- While it is disheartening to see the effects of the COVID-19 pandemic worldwide, IFMA has a continuing opportunity to encourage and seek to find new paths and ideas to further the world’s demand for food and to investigate supply chain management as we approach the Congress in Denmark summer of 2021.
- Significant decrease in demand due to “stay-at-home orders” have had devastating impacts on low oil/gas prices nationally as well as to the Oklahoma/Kansas economies; Kansas pump price \$1.52 US per gallon or €0.445/liter. The country’s oil industry is just beginning to report this Gross production receipts in April are based on oil field activity two months earlier (February when oil was still more than \$50 per barrel). Even so, collections this month were down by 24 percent from a year earlier. The average price of oil during April was less than \$20 per barrel. Oklahoma will be using Rainy Day reserves but still anticipate 4% or more budget cuts on top of the 25% cuts Oklahoma State University experienced in the past 5 years.

Guido van der Hoeven and Damona Doye – May 2020



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