

International Farm Management Association Country Reports May 2022





IFMACouncil Members 2021 - 2022

Executive Committee Members:

Role	Name	Country
Patron (ex-officio)	Rob Napier	Australia
President	Trevor Atkinson	UK
Vice President	Damona Doye	USA
Vice President	David Hughes	Argentina
Secretary/Treasurer	Richard Cooksley	UK

Council

Journal Representative:	Eric Micheels	Canada
Next Gen Programme	Robin Thompson	Australia
Africa – West & Central:	Grace Evbuomwan	Nigeria
Africa – Southern:	Frikkie Maré	South Africa
Africa – East:	Philip Nyangweso	Kenya
Australasia:	Robert Patterson	Australia
Europe – Central:	Agata Malak-Rawlikowska	Poland
Europe – West & Mid:	Abele Kuipers	The Netherlands
Europe – South:	Jaka Zgajnar	Slovenia
New Zealand:	Tricia Macfarlane	New Zealand
North America - Canada:	Heather Watson	Canada
North America – USA:	Guido van der Hoeven	USA
Scandinavia and 23 rd Congress:	Brian Jacobsen	Denmark
South America:	Mariana de Aragão Pereira	Brazil
UK and Ireland:	Tim Brigstocke	UK
22 nd Congress 2019:	David Armstrong	Tasmania



IFMA May 2022 Country Reports

Welcome to you all as readers of the IFMA 2022 Country Reports. I hope you find them to be a valuable insight into the world of Agriculture.

At the IFMA conference in Tasmania in 2019, the local TV made a point of reporting good news on a Friday. Whilst it seemed quite frivolous at the time, on reflection by bringing in the positives it left the viewer with a better perspective and balance of what was happening in the world.

Conflict, Covid, Climate and their Cash looming consequences seem to dominate our current news headlines. These are very serious headlines which are based on real issues and challenges. Whilst not to belittle them in anyway, the facts are quite often sensationalised so as to paint a slightly different picture that will better compete for a reader's interest. Good news headlines do not compete in the same way and are more difficult to sensationalise. News reporting is firmly in favour of the negatives, which can sow seeds of disillusionment in the world in which we live.

Lockdown induced virtual meetings have been very 'agenda' driven and time efficient; their downside has been less 'off agenda' discussions that come about spontaneously with face-to-face contact. In terms of productivity, friendships, motivation, balance, perspective, well-being etc. the importance of a face-to-face meeting is regaining significant value.

With IFMA 23 in Copenhagen this next month there is a wonderful opportunity to meet up, refresh the mind and paint your own, hopefully more balanced, picture of the world and its people. An IFMA congress has the ability to recharge from renewable sources your enthusiasm - such is the value within the programme, its delegates, and the openness of the network.

Facilitated by a well-prepared agenda - from which we will frequently stray, agricultural visits, and the friendship and beauty of Copenhagen provide a great opportunity to meet up, exchange ideas and discuss. As we catch up on the positives and negatives from individuals, their companies, and their countries, we will all hopefully return home safely with a healthy balance on the issues that agriculture faces around the world

To get you mentally warmed up for Copenhagen, it therefore gives me great pleasure to present to you the 2022 IFMA Country reports. They do take time to produce, and we thank all the people involved that bring this document together and particularly those who normally speak and write in a different language. As usual they are of high quality and give a good insight into world agriculture.

In conclusion I quote a line from the New Zealand report:

"The words challenge and opportunity roll into one in the current situation we face globally"

I look forward to meeting you in person at the IFMA Congress in Copenhagen or in person at another event or contact online as exchange of knowledge is a key to developing Agricultural Management skills.

Trevor Atkinson - IFMA President



The 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 2022 IFMA Congress which is the 23rd International Farm Management Conference will be hosted by the University of Copenhagen.

o 19th to the 25th June 2022 - 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 which opens on midsummer day.

o 25th to the 26th June 2022 – 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.

- o **26**th **June to the 1**st **July 2022 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.
- 1st to the 7th July 2022 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

10/05/22 Page **4** of **79**



• 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.



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



Page	Country	Author
	Argentina	David Hughes
	Australia	Robert Patterson Australia New South Wales, Robin Thompson & David Armstrong from Tasmania and John Noonan from Western Australia
	Brazil	Mariana de Aragão Pereira
	Canada	Eric Micheels and Heather Watson
	Denmark	Brian Jacobsen
	Japan	Yukio Kinoshita
	Kenya	Philip Nyangweso
	Netherlands	Abele Kuipers
	New Zealand	Tricia and Andy Macfarlane
	Nigeria	Grace Evbuomwan
	Poland	Agata Malak-Rawlikowska
	Slovenia	Jaka Zgajnar
	South Africa	Frikkie Maré
	UK	Trevor Atkinson
	USA	Damona Doye and Guido van der Hoeven



Argentina

Weather:

It has been a highly complicated year, the weather was good for a while, then we had an early frost, followed later in summer by hot and dry weather, and then in March we had an early frost. We have recovered soil moisture, so we look forward to a good season for our winter crops.

Economic Climate

Our government still does not understand how the world works, our inflation is on the rise, March was 6,7% for the month, which translates to over 58% p.a., April was lower, 6% for the month. The devaluation of the official exchange rate, value at which we get paid our grains and we purchase our inputs is lower, between 3 and 4% per month. So, it is quite a job keeping the cash flow in a good mood...

Our government has also set in export quotas, not sure why, but it is trying to get the price of food not rising too much, but it does not understand that grains are a very small portion of the end price of food.

Unfortunately, the war Russia is taking to Ukraine is hitting the world grain markets, increasing the price of grain, which is a short-lived help for us, but is putting in a bad situation many people with low incomes, pushing many into poverty and keeping food out of their reach.

Livestock:

The beef industry is suffering the governments export quotas. Prices are relatively good for cow calf enterprises, but those who fatten cattle do not have a good relation between calf prices and the fat cattle. With these grain prices, fattening cattle with grain is not for the fainthearted.

Crops:

We are ending our soybean and early planted corn, one farm where the summer was bad had a 40% drop in corn yield. Rest of farms have had an average yield, full season soybean overall average yields, soybean planted on winter crops stubble have yielded below average due to the early frost in March. Late planted corn looks good, harvest will be in a couple of months.

Soil moisture looks good, so will probably plant above average acres of winter crops, mainly wheat and barley. Input costs have increased a lot, but we managed to purchase some



inputs earlier than usual, so the end game does not look too bad. Hopefully weather shall be good.

Farmer selling has been slightly less than other years in tonnage, yet similar in value. Farmers are keeping the grain to save and keep the value of the product. So, grain is sold only to purchase inputs and cover costs.

Overall, we have a very challenging year ahead, both domestically as well as what is happening in the rest of the world

David Hughes – May 2022

Australia

Australian agriculture is very diverse; comprising a large number of different enterprises ranging from high rainfall tropical horticulture, to arid zone extensive grazing. This report comments only on the major agricultural enterprises and commodities with which the authors have some knowledge and experience.

Weather

Source: Australian Bureau of Agricultural and Resources Economics and Sciences' - ABARES Agricultural Commodities: March quarter 2022. Following a wet spring across much of Australia, rainfall continued to be average to extremely high between November 2021 and January 2022 in key production regions. This rainfall has supported average to above average pasture growth across eastern, central and northern Australia. However, rainfall was not favourable for agriculture in all of Australia's important agricultural regions. November 2021 rainfall was extremely high across much of Australia and caused widespread flooding resulting in a lack of field access, inundation of pastures and livestock losses for producers in the worst affected areas. Average December rainfall across most of northern and eastern Australia provided conditions for above average pasture growth, and by reducing the need to purchase feed increased incentives for livestock restocking. Well above average rainfall coupled with mild temperatures during January provided a boost to pasture production for this time of year across most grazing regions in New South Wales, Queensland, northern Victoria, South Australia, northern Western Australia and the Northern Territory. This is likely to have enabled farmers to continue to rebuild stock numbers and provide opportunities to replenish fodder supplies during late spring and early summer.

Launceston rainfall for the 12 months to the end of March 2022 has been well below average (530mm compared to the long-term average of 674mm). The spring months of 10/05/22 Page 8 of 79



October and November 2021 were above average, but the 4 months since have been drier. Spring pasture production was mostly excellent, but lower summer rains particularly in the higher rainfall areas of the state, has been reduced. Temperatures have mostly been warmer than average and summer and early autumn frosts less frequent than usual. Rain as a result of east Australian coastal lows, has provided significant rainfall to the eastern region of Tasmania with positive benefits to agriculture.

Fewer major cyclones traveling down Australia's west coast, resulted in reduced summer rainfall events, with a partially dry January and February. Rainfall in parts of northern Australia has seen record low levels and drought in the three months to the start of 2022. Much of the Western Australian wheatbelt has reduced soil water reserves preceding the winter cereal, pulses and oilseeds cropping season.

Rainfall through the second half of 2021 in the southern Mediterranean climatic zone, stretching from the south west of Western Australia (WA) to Victoria, was at or just below the long term average. However, dryland broad acre cropping operations received sufficient rainfall to enable a record breaking crop to be harvested in WA.

The cropping areas of New South Wales (NSW) received above average rainfall during the 2021 growing season, which resulted in record crop yields being obtained where waterlogging didn't depress yields.

Some areas of southern NSW have received almost three times their average rainfall for the period November 2021 through to April 2022. This caused havoc with winter crop harvesting, resulting in downgraded grain due to sprouting, plus bogged headers, field bins and trucks. Many paddocks which have been zero-tilled for several years, have had to be cultivated or had Wheel Track Renovators used to level the fields prior to sowing the 2022 winter crop.

The La Nina event underway since November 2021, weakened somewhat in February but strengthened again in April, as trade winds remain stronger than average over the western Pacific Ocean.

The three month outlook for April to June points to a very wet period in the tropical north and wetter than average conditions elsewhere, with the notable exception of the WA wheatbelt, where average to drier than average conditions are forecast. However, Australia's Bureau of Meteorology (BOM) notes that autumn long range outlooks typically have low confidence.

Agriculture Economic Climate

Source: ABARES Agricultural Commodities: March quarter 2022. The value of production is expected to reach a record A\$81 billion in 2021–22 – beating the previous year's record by



over A\$12 billion. Exports forecast to reach a record A\$64 billion. This unprecedented result stems from the combination of record high crop production, and the highest prices (in real terms) for Australian agricultural produce in 32 years. Australia has harvested what will be the most valuable winter crop ever, even after accounting for the widespread downgrades in grain quality experienced across regions of New South Wales following an exceptionally wet harvest period. In 2022–23 the value of production is not likely to break further records, and instead is forecast to fall 6% to A\$76 billion – still the second highest on record. An expected return to more average seasonal conditions in 2022–23 will mean lower crop production. International prices are also expected to retreat from very high levels as overseas production increases, and the volatility and disruption of the COVID-19 pandemic begins to abate. Agricultural prices could remain higher for longer in the event of continued disruptions and a slower global recovery, which would add around A\$2.3 billion to gross value in 2022–23.

Prices of perishable produce and animal protein products have risen above the general rate of inflation by some 2 to 5 per cent across the past year, in part a downstream effect of drought conditions in eastern Australia in previous years, followed by 1 in 100 year rainfall events. Over the medium term to 2026–27, the value of production in real terms is forecast to fall further as production and prices fall from record levels back to trend. Australia is likely to experience at least one very dry or drought year over the outlook period, which would reduce production and have implications for the years following, particularly for irrigated agriculture and the red meat industry. A continued focus on adoption of productivity-enhancing technologies and practices across all agricultural industries will be critical to achieving the forecast values.

Farm input prices will present a challenge to producers in 2022, with the price of Glyphosate increasing in price by between three and four times and the price of diesel fuel exceeding A\$2.00 per litre, while Australia's largest lender to Agriculture, National Australia Bank's NAB Fertiliser Index, was up 41% on a year on year basis in February and 119% compared with February 2020.

However, ABARES predicts that the increases in income are likely to far outweigh the additional pressure of higher input costs for fuel, fertiliser, chemicals and labour.

Key points

- Considerable uncertainty exists over global growth in the short-term which will have lasting implications for the global economy over the next 5 years.
- Ongoing supply chain disruptions and higher input prices are key risks.
- Inflationary pressures are expected to lead central banks to raise interest rates.



• The value of the Australian dollar is assumed to decline over the outlook period.

The price of Australian agricultural land has soared over the past four years, with the increase in 2021 compared with 2020, being 18.4%, a record national appreciation rate. However, a wide variation around the 2021 national average exists between states, with the highest being plus 41% in Western Australia and negative 30% in Northern Territory. Further rises are expected during 2022, as supply levels tighten further, according to Elders Rural Services (major sponsor of the IFMA22 Congress in Launceston).

Elders report that rural property values rose faster than commodity prices, resulting from influences other than commodity prices, including record low interest rates and farmers' access to increased equity from existing holdings, resulting from increased land values. Total transactions for sales in excess of 40 hectares, rose by 3.4%, the highest volume since 2017.

The national annual compound growth in rural land over the past five years according to Elders, is 8.8%, rewarding existing landholders with a great return, but making it increasingly difficult for younger or smaller operators to expand their landholdings.

Livestock

Source: ABARES Agricultural Commodities: March quarter 2022. The gross value of beef and veal is forecast to increase 8% to a record A\$15.7 billion in 2021–22. Average saleyard prices have doubled since 2014 and are forecast to increase 14% to a record A789 c/kg in 2021–22. Saleyard prices are forecast to fall in 2022–23 due to slower restocking. Global beef prices are forecast to stay high throughout the outlook period.

National Australia Bank's long standing view, is that the record high cattle prices experienced lately in Australia, are not sustainable in the face of a return to a "normal" or even below average season.

The value of the sheep meat industry is expected to surpass A\$5 billion in 2021–22 with saleyard prices more than doubling since 2014. Australia's sheep meat exports are expected to rise over the medium term. Rising supply of sheep meat will allow Australia to respond to growing global demand.

According to Meat & Livestock, Australia, lamb export volume in March was up by 18% from February and 8% from a year earlier, boosted by a 29% increase in exports to the United States of America, despite an 11% decline in exports to China.

Farmgate milk price is forecast to hit A58 cents per litre in 2021–22 and remain high over the outlook. Domestic production expected to decline due to lower cow numbers. Global production is expected to recover once high feed and fertiliser costs ease. Slower recovery could lead to economic scarring, lower incomes, and lesser prospects over the mediumterm.



Dairy production in Tasmania has been about average, but with good prices farmers are seeing good returns.

The value of the Australian wool clip is expected to grow strongly as flock rebuilding continues. Demand for fine and super-fine wool will lift the Eastern Market Indicator higher, with the differential between 17 micron and 20 micron wool being around a very high A1,250 cents per kilogram clean at present. The year on year increase for 17 micron wool has been 18% while that for 20 micron wool has been 4%, a reflection of the increased demand for the making of suits in Europe. Unfortunately, whilst production is increasing unit value of wool is steady or declining particularly in the case of that with a fibre diameter greater than 25 micron.

Although the strong seasonal conditions in wool growing areas will benefit production, woolgrowers have suffered delays in shearing due to wet weather plus a shortage of labour.

Australian woolgrowers are susceptible to a potential economic downturn due to China's zero-COVID-19 policy, as Australian wool comprises 74% of China's wool imports.

Cattle and sheep have continued to be shipped from Western Australia to eastern Australia to meet restocker demand as climatic conditions in eastern Australia improve.

Arable

Western Australia regularly delivers a third to half of Australia's broadacre cereal and oilseeds crops. In 2021, WA produced over 38% of Australia's grain in a year when all of the eastern states with the exception of South Australia, harvested record or near-record crops. The national total was a record 62 million tonnes for all grains.

Total grain production in WA was just over 24 million tonnes for all grains from the 2021 growing season, a record 30% more than any previous year. The exceptional result was due to a record area sown of 9.2 million hectares (7.8% more than 2020 and 16% more than previous record years), good subsoil moisture across the state, an early start to planting, warm growing conditions and higher than average fertiliser usage in the winter, effectively setting up very high yield potential for all crops, which was followed by very mild conditions during grain fill. This combination of factors rarely occurs over such a wide area as it did in the 2021 season in WA and across much of southern Australia. Coupled with average to above average quality outcomes and higher than average export prices, growers reaped the rewards of a once in a lifetime trifecta - good yields, good quality and prices, resulting in high marginal returns per hectare.

Source: ABARES Agricultural Commodities: March quarter 2022. The value of Australian wheat production and exports is forecast to reach record high in 2021–22. Prices are expected to ease but remain high in 2022–23 reflecting tight global supply. World 10/05/22

Page 12 of 79



production and consumption to increase over the medium term. Russia–Ukraine tensions are contributing to price volatility.

The value of Australian barley production and exports is forecast to reach record high in 2021–22, with record Australian barley harvest. Sorghum production is increasing. High coarse grain prices are forecast to continue, reflecting strong world demand and tight supply.

Canola production in 2021–22 will be a record reaching A\$5.8 billion. The value of canola is expected to fall in 2022–23, though still second highest on record. Canola prices are forecast to remain high, gradually easing due to recovering world supply of canola. Australian canola production forecast to be lower over medium term, remaining similar to historical averages.

It is reported that the high cost of inputs, such as chemicals, diesel and fertiliser, plus an acute shortage of labour, will be the major factor in 2022 winter crop planting intentions, particularly in more marginal areas, with the area sown in 2022 expected to reduce from the record levels of winter crop plantings recorded in 2021.

Mixed farmers are expected to dedicate more land to grazing, given high cattle and sheep prices, plus the reduced risk of grazing enterprises due to lower external inputs, compared with cropping.

Growers, within rotational constraints, are expected to maximise the area sown to canola in 2022, due to the high price outlook plus high yields experienced over the last two years. However, canola requires more inputs, especially Nitrogen, which will result in growers also having an increased focus on pulse crops in 2022, following large nutrient removal from previous high yielding cereal crops.

Australian grain prices are to some extent being shielded from exceptionally high global grain prices and trading at a discount to export parity, reflecting plentiful domestic grain stocks plus supply chain constraints, particularly shipping. This makes Australian grain some of the cheapest in the world at present.

Horticulture

Source: ABARES Agricultural Commodities: March quarter 2022. Improving labour availability is expected to support rising production prospects over the medium term. Growing production in some fruit and nut industries will contribute to higher exports. Government policy changes will further improve access to seasonal workforce.

In 2021–22, the value of horticultural exports is forecast to increase by 8% to A\$2.9 billion. Favourable seasonal conditions supporting production and quality attributes are expected to increase exports of almonds, cherries, macadamia nuts, stone fruit, potatoes, and table



grapes. However, costs of air and sea freight and shortages of refrigerated containers are expected to continue to constrain exports.

Wine grape prices are forecast to fall in the short term in line with elevated inventories – a result of disrupted sales to China for example. Higher production value is expected over the medium term, as global demand and supply chains recover.

Access to labour is a critical issue for intensive horticulture across Australia and noticeably in the higher labour input, less mechanised sectors (eg. berries and cherries in Tasmania and the cooler regionals of the country). COVID-19 has severely impacted on the availability of casual labour from overseas (eg. Timor, Tonga and other South Sea Islanders) for picking and similar work. The unemployment rate in Australia is low relative to historical levels (currently 4.0% - the lowest in the last decade). The Youth Unemployment Rate is higher at 9.3%, but it has proved difficult to attract young unemployed to the casual work in horticultural industries.

Seasonal conditions for berries (mostly in plastic tunnels) in Tasmania have been good and there is significant expansion in the state.

The disease Blueberry Rust continues to be identified in Tasmania and is probably unlikely to now be eliminated from the state. The response in other states has been to accept that it is endemic.

Australia has recently signed an interim free trade agreement with India, which will create new export opportunities for Australian horticultural producers.

Environmental

Climate change and emissions abatement have been difficult issues for the national Government. One component that Government is attracted to is the opportunity to sequester Carbon into soils. Australian soils are relatively low in organic Carbon, and the prevailing story is that increasing organic Carbon will improve nutrient and water holding capacity, soil structure and infiltration of rainfall. Productivity and sustainability will be improved. All true and appealing to the extent that the Government has offered Carbon Credits where increasing Carbon levels can be demonstrated.

Changing cultivation practices helps, for example no-till and minimum till for cropping.

But there are problems. The first is around the difficulties and costs to demonstrate that soil Carbon levels are increased. Perhaps costs will fall as new techniques for measuring soil Carbon are developed. Secondly, the accumulation of organic Carbon in the soil is most likely in response to good seasonal rainfall; in times of drought soil Carbon can be lost. In that event, the question from those involved in agriculture; is will there be a demand for repayment of Carbon Credits?



A further issue that is most apparent in pasture grazing situations is that maximising the accumulation of organic Carbon into the soil will be at the expense of dry matter consumed by grazing livestock. Stocking rates need to be reduced so that organic matter is contributed to the soil. There are therefore opportunity costs to be offset.

Many professional agriculturists believe that at present, it is difficult to make sequestration of Carbon into the soil financially attractive.

Some small-scale results have been achieved from supplement feeding ruminants with Asparagopsis spp seaweed extracts to reduce enteric methane production. Scaling this work to be applicable to a rangelands production system will be challenging.

Australian agriculture and the country as a whole are seen by many of the population as laggards in respect to addressing climate change mitigation. However, many of the perceived (by non-agriculturalists) Carbon abatement schemes, appear to be based on what may be highly optimistic soil Carbon sequestration opportunities and levels able to be achieved.

Political Issues

A federal election is to be held on 21 May 2022. Significant agriculture policy changes as a consequence are not expected.

The Ukraine war is elevating grain, fuel and fertiliser prices. The ability of growers of contracted crops such as potatoes to attract increased prices to compensate is challenging. Elevated fuel prices are reflected in increased input costs throughout the economy.

Chinese embargos on some agricultural commodities including wine, lobster and barley have resulted in alternative markets being sought, thereby reducing dependence on the Chinese market.

COVID-19 has also reduced the supply of shearers in Australia with the consequence of significant increased prices for shearing and delays in sheep being shorn. This is resulting in prime lamb producers investigating shedding breeds and chemical defleecing. Robotic shearing, despite huge investment over many years remains elusive.

COVID-19 has resulted in reduced export and import capability, consequently agricultural development projects such as irrigation installations have been delayed with increased costs.

Despite an estimated A\$3.3 billion, contributed by producers, the Commonwealth, State and Territory governments towards Australian agricultural R, D & E effort, as is the case in other countries, Australia has a declining increase in the rate of Total Factor Productivity improvement. Government has identified a need to shift the basis of R & D funding from



predominantly pure and base science R & D toward more systems level and applied science endeavours. The decimation of extension capacity in Australia, is how it has been described by a leading researcher. While still in its inception phase a A\$4.5 billion Future Drought Fund (FDF) has in part addressed the decline in the adoption of innovations on farm. The FDF has initially set up out to deliver a five year minimum A\$100 million per annum investment into a long term Climate Change and Drought Resilience response, part of which is likely to address elements of the decline in extension and knowledge transfer services.

Any other comments

IFMA members who attended the 2019 Congress in Tasmania will know that farms in Tasmania are generally very diversified, with a mix of livestock and arable cropping, often including higher value crops such as poppies and horticultural enterprises such as vegetable crops for seed and processing. The poppy industry appears to be entering a sunset or low footprint phase, with at least one company diversifying into medicinal cannabis. Hemp for food and fibre is receiving positive press, although its importance as a crop remains low.

Seasonal conditions and markets have generally been "kind" in the least 2-3 years, and the fortunes of most farm businesses have been very favourable. Add low interest rates and investment in plant and equipment, new technologies and more interest, particularly in irrigation has been encouraged. In addition, the purchase of land to increase the scale of operations has seen land values surge to upwards of A\$25,000 per hectare. Irrigation continues to be supported by the Australian and Tasmanian governments with new schemes being designed and constructed in Tasmania. Federal taxation arrangements are currently also encouraging capital investment in agriculture.

Livestock and dairy prices have been excellent and account for almost 50% of the total State Gross Farm Gate Value of production.

It is fair to conclude that most farming businesses in Tasmania are travelling very well.

Biosecurity

Japanese encephalitis is now reported in piggeries located in four Australian states. Being spread by specific mosquitoes, it is unlikely to establish in temperate and cool temperate regions. Minimal economic impact has been experienced to date.

It should be noted that Australia supports a large diversity of agricultural pursuits, spread over many agro-climatic regions encompassing about 30 degrees of latitude. This report can therefore only be very generalised and will ignore many relatively small agricultural enterprise types, about which the authors have no knowledge or experience.

Robert Patterson Australia New South Wales, Robin Thompson & David Armstrong from Tasmania and John Noonan from Western Australia - May 2022



Brazil

Weather

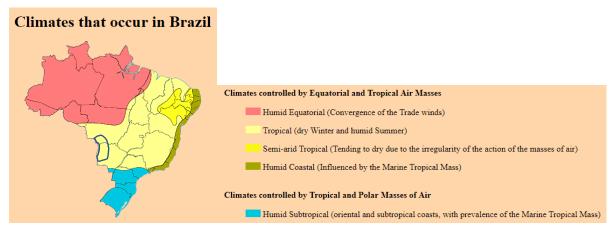


Figure 1. Climates occurring in Brazil.

Brazil's weather spans from Equatorial to Subtropical climate (Fig. 1). La Niña continued to impact the country in 2021, with stronger intensity than observed in 2020, according to Climate ScoreCard. Severe droughts occurred in the Midwestern and Southeastern of Brazil; the latter also affected by frosts. These are the main agricultural belt in Brazil. Meanwhile, the Northern part of Brazil (where Amazon Rainforest is located) had some of the largest floods of the last century. Weather instability became a real concern for farmers throughout the country. It also impacted the energy sector, increasing energy prices and, consequently, other related prices (e.g., agricultural prices).

Agriculture Economic Climate

- 1. In 2021, Brazil's GDP increased 4.6% overcoming the retraction of 3.9% observed in 2020. The unemployment rate reduced to 11.1%, but remains high with 12 million unemployed people in Brazil. Despite the more positive scenario compared to 2020, inflation reached 10%, corroding families' purchase power, particularly the poor.
- 2. With the advance of the vaccination around the country, the service sector performed well, helping the economy recovery. The industry sector was picking up, but the agricultural sector had a slight reduction of 0.2%
- 3. Over BRL 251 billion (~ USD 46.5 billion) was made available to finance sustainable agriculture, family farming, and technology adoption and innovation, through the new "Season Plan" 21/22. The Plan establishes interest rates varying from 3 to 7.5% a year,



depending on the activity, scale and subsector. These are 0.5% higher than the previous year.

4. The Brazilian currency, in 2021, continued to devalue (1 USD = 5,4 BRL, 2021 average), boosting agricultural exports. Brazilian agricultural exports increased close to 20%, reaching USD 120 billion in that year. Both price and volume increase contributed to such performance. The main exported products were: soybean, soybean meal, celluloses and meat. Nonetheless, domestic food prices rose significantly, contributing to increasing inflation rates.

Livestock

Beef

- a. The main challenges for beef farmers in 2021 were the severe drought and the increase in inputs prices. Despite significant beef price increases, the rise in fertilizers, corn, soybean and feeder cattle prices put pressure on the economic margins and many farmers rented their land.
- b. With the low supply of slaughter cattle along with high beef exports, beef prices increased significantly, in real terms, remaining, on average, above BRL 300 (USD 55.6) per arroba (15 kilograms) throughout the months. The prices negatively impacted the domestic consumption, which has remained very low since 2020, given the drop in the population's purchase power.
- c. Major meat companies, such as Marfrig, JBS and Minerva, are launching sustainable protocols for beef producers and indirect suppliers to ensure products free of deforestation, sustainably produced, with animal welfare and good agricultural practices. The direction these companies are taking is likely to shape their commercial relationships with farmers who will have to increasingly comply with the norms to remain as suppliers. How this will translate to farmers, particularly small low-income farmers, is still to be seen.

Swine

- a. Last year was particularly challenging for pig farming. According to CEPEA, "the purchase power of pig farmers in São Paulo decreased steeply between 2020 and 2021, by almost 30% against corn and 17.1% against soybean meal". Additionally, diesel and power prices rose by 49.6% and 31.9%, respectively.
- b. Due to continued limitation of the population's purchase power, demand for pork also reduced, bringing domestic prices down. Consumption, therefore, fluctuated around the year.



c. Regarding the exports, the performance was record with value and volume increasing 2.1% and 11.3%, respectively, between 2020 and 2021. The African Swine Pest, in Asia, and more recently, in Europe, is pushing the international demand up.

Poultry

The poultry sector faced similar challenges to the pork sector, in 2021, regarding production costs, given the increase in prices for soybeans and corn meals, imported inputs (like vet supplies) and power. According to CEPEA, a kilogram of chicken was worth 2.1 kilos of soybean meal and 3.4 kilos of corn meal in the wholesale market of Campinas (SP), which represents 9.5% more and 8.6% less than that in 2020, respectively.

a. Layers

Given the high prices for animal protein, in general, the consumption of eggs has been increasing since 2020. The average Brazilian consumed 251 eggs, in 2020, and 255 eggs in 2021, which is in sharp contrast to the level of per capita consumption of 148 eggs per year in 2010.

The high feed and freight prices increased production costs significantly and many farmers reduced their flock as a way to contain expenditures since they could not pass on the price rise to buyers. Future growth of this sector is expected from 2023, if the context of 2022 does not frustrate the expectations.

b. Meat

In 2021, Brazil produced 14.3 million ton, growing 3.5% in comparison to 2020, becoming the second largest producer of the world. Despite the higher production costs, the domestic supply increased 2% in response to higher consumers' demand due to shifts in their purchase preferences towards cheaper sources of protein.

Moreover, the devaluation of the Brazilian Real and the recognized sanitary status of the flock stimulated further exports of chicken meat, particularly now that many important producing countries are facing a bird flu outbreak.

Dairy sector

- a. Adverse climatic events in the Southern of Brazil, an important milk producing area, reduced pasture quality as well as impacted corn, soybean and silage production compromising the domestic milk supply. Allied with unfavourable currency exchange rates for milk imports, the overall availability of milk reduced in all five Brazilian regions in 2021.
- b. From October 2020 to October 2021, milk production costs increased 34.5%. The main components contributing to the price increase were: feedstuff, forage production, minerals,



power and fuel. Paid prices for milk, in real terms (deflated), reduced by 4%, constraining farmers' margins, that were set at BRL 0.15 per litre (~ USD 0.03/I).

Arable

- a. The crop season 2021/2022 is estimated in 261 million tonnes, 3.3% higher than last season, sown on 72 million hectares. Rice, corn and soybeans make up 92% of Brazilian crop production, and 87% of the total area. The rise in corn and soybean prices, however, and the high production costs for rice, led some rice farmers to change strategy to ensure margins. In Rio Grande do Sul state, in charge of 70% of the total rice production, farmers shifted about 400,000 ha to soybean-corn (2nd harvest) rotation.
- b. Irregular rain caused damage to production in the South of Brazil and Central-South region of Mato Grosso do Sul state, important crop belt areas. Droughts reduced productivity, and in some cases, compromised the entire harvest. The Federal government is supporting farmers financially, by extending repayments of debts and anticipating new credit lines.
- c. Most important fertilizers doubled prices within a year (March/21 March/2022), raising the breakeven point to 13 bags (60kg) of soybeans and 56 bags of corn, against 8 and 22 bags each, respectively, last year.
- d. Fuel prices increased about 22% in a year, raising 6.5% the machinery operating costs of the five main crops: soybeans, corn, beans, rice and wheat. Between February and March, 2022, operating costs rose for all five crops, much influenced by the increase in fertilizers and fuel as a result of the conflict in East Europe.
- e. The conflict is also affecting the international wheat supply. Brazilian farmers see an opportunity to shift land to sow more wheat in the next season, with promising margins ahead.

Horticulture

Brazil is one of the major horticulture producers. In 2021, the domestic market showed some signs of recovery along with the post-pandemic reopening of the service sector, but consumption remained limited by the population's tight income and high food prices.

On the farming side, the unstable climate and the raising costs were the farmers' main concerns in 2021. La Niña affected the rain regime, with droughts and frosts occurring in the Central-South region of the country. Given the prevalence of non-irrigated farming, many farms were impacted, particularly the citrus production.



Soft Fruit

Fresh fruits for exports performed well in 2021, while relevant fruits for the Brazilian markets, like papaw and watermelon, had a reduction in area. The trade balance was positive due to favorable currency exchange rates, despite higher costs and logistics problems. International demand for tropical fruits, such as lime, papaw, watermelon and mangoes, is still heated.

High costs also affected the horticulture sector, particularly related to fertilizers, other imported chemicals, power and fuel prices, which increased significantly. The banana production costs, for instance, increased from 27% to 38% depending on the type.

Vegetables

The vegetable production was still under the impact of the Pandemic, given the restrictions for businesses and the population in general. This affected people's pattern of consumption. As a result, fresh vegetables had their area reduced by 3.7% since 2019, while industrial vegetables, like potato and tomato, increased their sown areas. The reopening of schools, hotels and restaurants, in 2021, encouraged the cultivation of this type of vegetable to meet the demand.

Carrot farmers had reduced margins at the beginning of 2021, which discouraged further investments in the winter season. Even though, the prices increased in the second semester, so did the costs, keeping economic margins tight.

Environmental

The Ministry of Agriculture, Livestock and Supply launched the Strategic Vision for the ABC+, the 2021-2030 cycle of the Plan for Adaptation and Low Carbon Emission in Agriculture, intended to develop sustainable technological solutions within the Brazilian agriculture. The ABC+ Strategic Vision is framed upon three conceptual basis: "Integrated Landscape Approach"; "Synergy of adaptation and mitigation strategies"; and "Foster adoption and maintenance of Sustainable Systems, Practices, Products and Production Processes (SPSABC)". The ABC+ Plan considers seven national strategies:

- Maintaining motivation for adoption of conservationist and sustainable farming systems, fostering increased productivity and income, resilience and control of greenhouse gas emissions;
- Strengthening initiatives for technology transfer and diffusion, training and technical assistance;
- Encouraging and supporting applied research for development or improvement of SPSABC;



- Expanding mechanisms that recognize and reward farmers for adopting SPSABC;
- Fostering diversified financial and tax related instruments to support SPSABC;
- Improving the ABC+ SIN-ABC for putting in place effective Measurement, Reporting and Verification (MRV) Mechanisms; and
- Promoting an Integrated Landscape Approach in order to encourage compliance with environmental rules and sustainable production.

For further details, please visit: https://www.gov.br/agricultura/pt-br/assuntos/sustentabilidade/plano-abc/arquivo-publicacoes-plano-abc/abc-english.pdf

Current Research Issues

- a. After Cop-26, the methane discussion became even more intense amongst livestock researchers in Brazil. To the table, they are bringing new studies on integrated farming systems (i.e., crop-livestock-forestry), low carbon beef, feed additives, pasture recovery and no-till farming to respond to the challenge of increasing production, while reducing the environmental impact of Brazilian Agriculture.
- b. Mato Grosso do Sul state set the challenge to become the first Carbon Neutral state of Brazil. The state funding agency FUNDECT launched a research call to fund studies on bioeconomy, biotechnology, biodiversity, renewable energy and sustainable production. Projects started in 2022.
- c. Bioeconomy and, in particular, bio-inputs are getting a lot of attention from academia and businesses, in general. Ag start-ups are increasingly focusing on this promising area, given its environmental appeal and, more recently, the necessity of reducing the country's dependency on other countries. The war in Ukraine made it clear how risky it is to be highly dependent on imported fertilizers, for instance.

Sources of information

https://www.climatescorecard.org/2021/09/brazil-suffered-from-two-extreme-weather-events-in-2021-floods-and-droughts/#:~:text=Brazil%20Suffered%20from%20Two%20 Extreme%20Weather%20Events%20in%202021%3A%20Floods%20and%20Droughts,-September%2027%2C%202021&text=In%20June%202021%2C%20the%20Northern,119%2Dyear%2 Dlong%20history.

https://www.gov.br/agricultura/pt-br/assuntos/politica-agricola/plano-safra/2021-2022/banners/grafico-valores-1.png/view

https://agenciabrasil.ebc.com.br/economia/noticia/2022-01/ibge-inflacao-medida-pelo-ipca-fecha-2021-com-alta-de-

1006#:~:text=Publicado%20em%2011%2F01%2F2022,10%2C06%25%20em%202021.



https://www.cnnbrasil.com.br/business/economia-brasileira-cresce-46-em-2021-superando-perdas-de-2020-diz-

ibge/#:~:text=A%20economia%20brasileira%20avan%C3%A7ou%204,avan%C3%A7o%20de%200%2 C5%25.

https://www.cepea.esalq.usp.br/en/brazilian-agribusiness-news/exports-and-low-supply-underpin-cattle-prices-above-brl-300-most-of-2021.aspx

https://www.portaldoagronegocio.com.br/pecuaria/suino/noticias/em-2022-ano-de-desafios-mas-de-novos-recordes-da-suinocultura-brasil

https://www.aviculturaindustrial.com.br/imprensa/com-crescimento-de-35-avicultura-bate-recorde-de-producao-em-2021/20211216-144609-p378

https://www.aviculturaindustrial.com.br/imprensa/custo-de-producao-segura-otimismo-do-setor-de-ovos/20220207-160838-g507

https://agenciabrasil.ebc.com.br/radioagencia-nacional/economia/audio/2022-05/arroz-milho-e-soja-sao-92-de-toda-producao-de-graos-no-brasil

https://planetaarroz.com.br/safra-2021-22-cresce-4-em-relacao-ao-ciclo-anterior-e-esta-estimada-em-2657-milhoes-de-toneladas/

https://cepea.esalq.usp.br/br/opiniao-cepea/gasto-medio-com-fertilizantes-para-producao-degraos-dobra-em-um-ano.aspx

https://www.hfbrasil.org.br/en/magazine/yearbook-2021-retrospective-and-the-2022-perspective.aspx

Mariana de Aragão Pereira - May 2022



Canada

Weather:

The start of the spring seeding season has been mixed. Some late snows have brought much needed moisture to parts of SE Saskatchewan, but this precipitation and a cooler than normal temperatures has led to a slower start to seeding. Many growers may take that trade as much of western Canada has been in a multi-year drought and moisture is welcome whenever it comes at this stage.

In Saskatchewan, temperatures have been variable, but are currently forecasted to begin to warm up to normal.

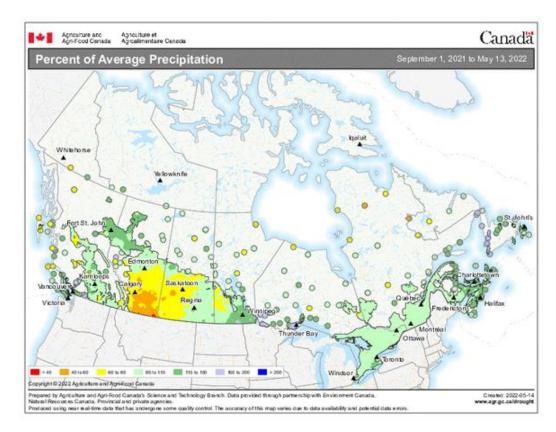


Figure 1: Percent of Average Precipitation

Source: Agriculture and Agri-Food Canada



Figure 2: Percent of Normal Soil Moisture

Source: Agriculture and Agri-Food Canada

Agriculture Economic Climate

- One of the main issues farmers are facing this growing season is the rise in the
 price of inputs, particularly fertilizer. This has led to downward pressure on
 expected margins and tightening cash flow for many Canadian farmers. The
 federal government has made changes to the Advanced Payment Program in
 order to give producers access to needed liquidity. However, more money in the
 farm economy may also contribute to inflationary pressure on farm inputs.
 - https://globalnews.ca/news/8814801/canada-farmers-inflation-federal-government/
- 2. Data from the 2021 Census of Agriculture was recently released and farm numbers have declined in every province in Canada except for Alberta and Quebec. The data show that in 2021 there were 189,874 farms in Canada, which represents a decrease of 1.9% from the 2016 number.



- 3. Russia's war in Ukraine is leading to increased volatility in crop prices in Canada. Since February 1, prices for the November Canola futures contract have increased by 30% (from 844.8 to 1099.6 CAD/tonne). Over the same time period, Hard Red Spring Wheat futures traded on the Minneapolis Grain Exchange are up 46% (from 9.0475 to 13.25 USD/bu).
- 4. The value of Canadian farmland continued its upward climb in 2021. Following a 5.4% increase in 2020, farmland was estimated to have increased by another 8.3% in 2021.

Livestock:

Dairy

- 2021 Census of Agriculture data report that there are 9,403 dairy farms in Canada, down from 10,525 reported during the 2016 Census.
- Both the United States and New Zealand feel that Canada is not adhering to established trade agreements relating to access to the Canadian dairy market.

Beef

- The 2021 Census of Agriculture reports there are 39,633 beef farms and ranches operating in Canada, up from 36,013 in 2016.
- Methane emissions continue to be a key focus for research within the beef industry. https://www.cbc.ca/news/canada/edmonton/why-methanecontinues-to-be-the-cattle-industry-s-biggest-climate-change-challenge-1.6278092
- Bob Lowe, the current president of the Canadian Cattlemen's Association, has been named as the incoming Vice President of the Global Roundtable for Sustainable beef in 2022.
- According to data from Canfax, the total number of cattle and calves on January 1, 2022, were down 0.5 per cent to 11.1 million.

Pigs

- The federal government is investing over \$500,000 CAD in developing new markets for Canadian red meat (beef and pork).
- The Federal and provincial governments have made significant investments into improving productivity and competitiveness of Canadian pork producers. Research will focus on precision feeding of sows and the promotion of increased animal welfare standards.

Sheep

- The number of sheep and goat farms in Canada has increased to 3,575 in 2021, up from 3,056 in 2016.
- New research out of the University of Calgary Faculty of Veterinary Medicine hopes to reduce the impact of drug resistance among parasites on sheep



production in Canada. Faculty within the UCVM have built a website that producers can use to access key research on best management practices relating to parasite control.

Poultry

• The major issue confronting poultry firms in Canada is Avian flu. Reporting by the CBC states that "So far, an estimated 1.7 million birds have been euthanized or killed by the virus in Canada, with the majority of infected animals in Alberta and Ontario. The Canadian Food Inspection Agency said at least 68 poultry farms have been affected by the virus across the country." https://www.cbc.ca/news/canada/british-columbia/avian-flu-b-c-1.6447384

Arable:

Seeding progress is quite a bit behind 5-year averages for the 2nd week of May.
 Late snows in SE Saskatchewan and southern Manitoba have led to a very late spring. Overland flooding is significantly delayed seeding.

Province	Percentage Seeded (May 14)	Five Year Average (%)
Saskatchewan	14	24
Alberta	20	22
Manitoba	0	50

• In Ontario, corn planting is underway. In the Exeter region, it is estimated that many producers are about 50% complete with corn planting. Other regions are still getting underway.

Horticulture:

Soft fruit

- Labour continues to be a key issue for B.C. strawberry producers. A new startup, Neupeak Robotics, hopes to help producers manage labour portfolio.
- The number of fruit, tree, and nut farmers in Canada fell from 7,845 in 2016 to 7,101 in 2021.

Vegetables

- The number of vegetable and melon farmers also decreased in 2021 to 5,076 from 5,514 in 2016.
- The government of Canada continues to work with partners in the United
 States to reopen the trade border for potatoes grown in Canada. This is a key



issue for provinces such as Prince Edward Island, where potato production is a key component of agricultural GDP.

Environmental:

- Over the next year, Walmart Canada will source 1.5 million pounds of beef sourced from CRSB Certified sustainable farms and ranches.
- The 2021 Census of Agriculture reports that more producers have adopted more
 environmental practices on their farms. In this definition, these practices include:
 in-field winter grazing or feeding, rotational grazing, plowing down green crops,
 planting winter cover crops, and having shelterbelts or windbreaks.
 In 2020, 64.5% of farms reported land practices, up from 53.7% in 2015.

https://www150.statcan.gc.ca/n1/daily-quotidien/220511/dq220511a-eng.htm

Government and Policy:

 The current 5-year agricultural policy framework – the Canadian Agricultural Partnership – is set to expire March 31, 2023. Federal, provincial and territorial (FPT) governments are currently working on the <u>Next Policy Framework</u> (NPF). Following preliminary consultations with industry last summer, the Guelph Statement was released in autumn outlining their priorities for the NPF.

Current Policy Framework	Next Policy Framework	
1) Science, Research, Innovation	1) Science, Research, Innovation	
2) Markets and Trade	2) Market Development and Trade	
Climate Change and Environment	Climate Change and the Environment	
4) Value Add and Processing	4) Building Sector Capacity, Growth	
5) Public Trust	and Competitiveness	
6) Risk Management	5) Resiliency and Public Trust	

The priority areas are quite similar to the past five years, with the exception of Value Add now residing under Building Sector Capacity and Risk Management residing under Resiliency.

Agriculture & Agri-Food Canada (AAFC) has further articulated their priorities for the NPF:

 Increase action on climate change and better integrate climate risk and readiness



- Renew and increase effort to enhance supply chain resilience and to reduce vulnerabilities, including through improving local food systems and domestic trade, growth in value added agriculture and automation, as well as preserving and expanding market access for Canadian businesses
- Better support human capital for inclusive and sustainable growth; ensuring that producers, including Indigenous, young and women farmers, have the opportunity to contribute, as well as supporting the mental health of all producers
- Driving towards results-based outcomes and targets to allow for enhanced measurement on the impact of framework investments

AAFC are now consulting with industry on these priorities and effective programming to meet NPF goals, however industry players including ourselves are concerned with timing as the framework must be in place, with bilateral agreements signed between FPT government and Federal programs open for applications in time for an April 1, 2023 start. It's typical that applications for Federal programs open in February, but funding agreements are not secured until September, or even later.

- 2. AAFC launched four <u>Sector Engagement Tables</u> to create dialogue between agriculture and agri-food sector representatives and government officials to advance growth and competitiveness in Canada. Each table will focus on an issue affecting the sector:
 - Agile regulations
 - Sustainability
 - Consumer demand and market trends
 - Skills development

Farm Management Canada is a member of the Skills Development Table, where a strategic plan has been created and working groups for each of the theme areas are being established. The four priority themes are:

- → Career pathways
- → Understanding skills required
- → Innovative and flexible training
- → Youth, new entrants and underrepresented groups
- 3. The Canadian Agricultural Human Resource Council, Canadian Federation of Agriculture and Food and Beverage Canada recently announced the launch of a National Workforce Strategy for Agriculture and Food and Beverage Manufacturing focusing on 5 key pillars to help address the labour gap:
 - Automation and Technology
 - Immigration and Foreign Workers
 - Skill Development
 - Perception and Awareness of the Industry and Careers



People and Workplace Culture

AAFC are also working on an agricultural labour strategy. The Canadian government recently announced changes to the temporary foreign workers program to address labour shortages. For example, employers of sectors with demonstrated labour shortages will be allowed to hire up to 30% of their workforce through the TFWP for low-wage positions for one year.

Climate Change:

- Canada has committed to net-zero emissions by 2050, and we're starting to see significant funding for agriculture. A few examples:
 - Natural Climate Solutions Fund \$4 billion fund managed by Natural Resources Canada, Environment and Climate Change Canada, and Agriculture and Agri-Food Canada and includes:
 - On-Farm Climate Action Fund \$182.7 million for 12 recipient organizations to provide direct support for farmers for cover cropping, nitrogen management and rotational grazing
 - Agricultural Climate Solutions Living Labs stream \$185 million to support carbon sequestration and GHG emission reduction
 - Agricultural Clean Technology Program \$165.7 million to support research, development and adoption of clean technologies
 - 2030 Emissions Reduction Plan \$1 billion in new funding to accelerate the agriculture sector's progress on reducing emissions and remaining a global leader in sustainable agriculture through
- Farmers continue to express frustration with carbon pricing and carbon tax schemes and the lack of recognition of farming's contribution to ecological goods and services.

Mental Health:

- 1. Mental health continues to be a priority in the agricultural space with organizations offering mental health first aid courses for farmers and other industry stakeholders with the support of private industry and government.
- 2. Farm Management Canada continues to deliver presentations to industry exploring the connection between mental health and farm management. Our 2020 research shows 75% of Canadian farmers are chronically stressed, and business practices, especially planning, contribute to positive mental health and peace of mind.



Supporting Under-Represented Groups:

- 1. The Federal government continues its work to address equality, diversity and inclusion ofd under-represented groups in agriculture and agri-good including youth, women, Indigenous populations and new Canadians in terms of attracting and supporting engagement in the sector. A Canadian Agricultural Youth Council has been established, along with an Indigenous Agriculture and Food Systems Initiative. The Minister of Agriculture continues to engage with Farm Women groups from across Canada to better understand and support their needs on a national scale.
- 2. Farm Management Canada is wrapping up a national study to better understand the experience of women on the farm and learn how we can better support their unique needs.

Farm Business Management:

- 1. We continue to see a lack of attention to a proactive, comprehensive approach to managing risk through farm business management practices in favour of government support programs to deal with the fallout from adverse weather and commodity prices. We continue to support and promote a balanced approach to managing farm risk.
- 2. We have developed an online platform called AgriShield to help farmers (and their advisors) assess and manage farm risk through proactive planning, which has been coupled with a national training program. Some agricultural colleges have invited us to provide risk management training to their students and we're seeing a positive impact. We are pushing for a national business risk management education strategy under the NPF and programming to provide incentives and reward proactive risk management.
- 3. Our National Farm Leadership Program continues to attract farmers who are seeking to improve their leadership skills and interpersonal relationships with their partners and employees. The program includes 11 weeks of online training, a 3-day residency to practice skills in real-time and 9 months of group and individual coaching to support personal development plans.

Heather Watson and Eric Micheels - May 2022



Denmark

Weather conditions

The crop yields in 2021 were just below average. There was some cold and then hot weather in the Spring, but then it was dry in June, which reduced the yield and the quality. Spring barley is still the largest crop (40%). There was an increase in the area with oil seed rape. Around 70% of the harvest is used for feedstuff for animals and 15-20% is exported. The rest is used domestically.

Agriculture Economic Climate

The wheat prices have increased from 2002 to 2021 and so it is at the highest level since 2012. The wheat and barley price was around €185-190/ton at the harvest in 2021 and they could be higher in 2022. The prices on piglets are still low at €30/piglet (7 kg.). The high energy prices mean that the production of finishers in Germany is reduced which has lowered the price of piglets, which is exported. Some expect suggest that both US, Europe and Asia might see a reduction in pork production at the same time. The pork prices increased from a very low €1.1/kg in the Autumn to €1.4/kg in the Spring (still relatively low).

The milk price has increased to 43 cent per kg, and the organic milk is at 51 cent per kg for the best quality. It has in March 2022 increased even more to over 44 and 52 cent per kg respectively including required Non GM support for farms which has had a climate check. The milk production was in 2021 at the same level as 2020, but a small increase (1%) in 2022 is expected. Some major EU countries are expected to have a smaller decline in milk production.

The overall average farm income was good in 2021, but not as good as 2020. There was an overall drop in income of 20%. The reduction was mainly due to lower income on pig farms and the higher production costs. An increase in the value of milk production and crop production counter this effect. For 2022 the results for arable farms especially are extremely dependent on the prices that have been achieved for both inputs and outputs. Some farms which have bought inputs early (low price) but with no contracts regarding selling (can now sell at high price) will do very well. The Covid 19 crisis has had little impact on farming in 2021 after the mink industry closed down in 2019.

The overall export of pork has increased where the lower export to China has been replaced by increased export to other countries in Asia. There has been problems with African swine fever in Germany in 2021 and the increased slaughtered pigs in Denmark has been a challenge for the slaughterhouse due to lack of staff following covid 19. Analyses indicate that the overall Danish imports and exports have increased by 10-20% in 2021 when compared to 2019. Imports from United Kingdom in 2021 is still around 30% lower than 2019 due to mainly Brexit, whereas the exports are approaching 2019 levels.



Environmental

The Danish farmers are still dealing with catch crop and other measures to reduce nitrogen losses. There has been a push to take more organogenic areas out of production to reduce CO2 emissions from agriculture. Several new subsidy schemes are on the way as the support is more linked to the environmental effect. The so-called ECO-schemes will help this and so the flat rate per ha subsidy will be reduced towards 2027 with the new CAP.

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. Acidification can be used both to reduce ammonia and methane emissions.

Other issues

All covid 19 restrictions were lifted early in 2022. However, it is clear that Denmark also suffers from international trade being reduced or delayed. Denmark is less hit by high energy prices as much of the electricity comes from renewables (80%). Some days the full electricity production comes from wind turbines. There has been high electricity prices also due to less wind than average (-15%). The lower level of precipitation in Norway and Sweden has reduced the amount of imported electricity from hydropower. The high electricity prices is a challenge for the production of plants in greenhouses.

New wind parks and solar parks are now running without subsidy due to the decrease in prices. They will also be needed in relation to bioethanol production based on the Power -to X approach. Furthermore, the move towards more bio pellets means that the impact of the high gas prices on heating costs has been more limited than in some European countries. The Danish biogas production covers today around 25% of the gas consumption and with an increase in biogas production it will cover 70% of the gas consumption in 2030.

Brian H. Jacobsen – May 2022

Note: We thank Brian for submitting this Country Report at a time when he is chairing the organising committee of the IFMA Congress which is taking place next month!



<u>Japan</u>

Weather:

Annual average temperature was unusually high nationwide due to continuing rising temperatures throughout 2020. Eastern Japan had the highest annual average temperature since 1946 when records were officially kept. Eastern and western Japan experienced an unseasonably warm winter, while northern Japan had the least amount of snowfall since initial recordkeeping in 1962. A long spell of rain occurred in many parts of the country in July. Notably, eastern and western Japan represented the shortest monthly hours of daylight in the month since 1946 when official records were kept.

Current economic situation in agriculture:

The livestock sector in Japan constitutes 36% of gross agricultural output, vegetables 24% and rice 20%. Gross agricultural output increased since 2010 (see Figure 1); however, gross agricultural output in 2019 slightly decreased to 8.9 trillion yen (approximately 82 billion USD), mainly due to a drop in vegetable prices and egg production. Agricultural income produced also decreased by 5% to 3.3 trillion yen (approximately 30 billion USD) in 2019. Annual sales per farm business entity have remained at the same level since 2017. Annual profit per farm business entity in 2019 slightly decreased to 1.94 million yen (17,842 USD) due to an increase in farming costs.

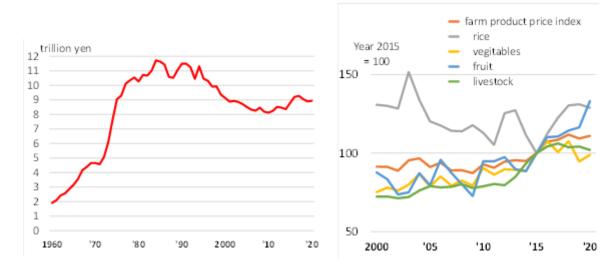


Figure 1. Gross agricultural output in Japan
Source: MAFF, Statistics of agricultural output
price

Figure 2. Producer price index in Japan
Source: MAFF, Statistics of agricultural



This following primarily references the Analysis Report on Farm Businesses published in December 2021 by the Japan Finance Corporation for summarising the financial performance of selected farms in 2020.

Livestock:

Dairy sector

- The price of milk for the table remained almost consistent.
- Herd sizes and milk produced per cow fed with improved fodder grew in the northern islands (i.e. Hokkaido), and the herd sizes per dairy farm increased in other areas of the country resulting from investment in larger facilities.
- o Annual sales per dairy farm increased due to a rise in milk price and herd size.
- Annual profit per dairy farm decreased due to the inflated costs of labour and depreciation.

Beef

- Market price in the first half of 2021 fell by 7% due to both shrinking demand from the food service industry and decreased inbound tourists in response to COVID-19.
- The herd number of non-Wagyu beef sold decreased, while the herd number of Wagyu beef sold increased by 5%.
- The cost of calves purchased fell.
- Annual profit per beef farm dropped due to reduced beef price.

Pigs

- Market price rose by 10% due to increased demand for domestic use.
- The herd number of pigs sold rose slightly due to fine breeding conditions.
- Imported pork decreased by 7% in response to COVID-19 and the retroaction of increased pork imports in the previous year.
- Annual sales and profit per pig farm increased due to higher pork price and stable costs.

Poultry

Layers

- Market price fell due to overproduction and decreased demand from food manufacturers and the food service industry in 2021. However, market price in early 2022 rose rapidly due to extensive culling in response to highly pathogenic avian influenza.
- The number of fowl fed decreased due to lower market price and depressed production.



 Annual sales and profit per egg farm fell slightly, and the government initiated a measure to support egg price for 9 months of the year.

Meat

- Due to growing demand for more healthy food, chicken production reached the highest rate in recorded history, whereas imported chicken decreased by 5%.
- Market price rose by 10% due to increased demand for domestic use.
- Annual profit per chicken farm remained consistent due to increased sales and costs.

Arable:

Rice

- Market price dropped by 7% in 2020, although 2019 recorded the second highest of the last decade.
- Rice production increased slightly despite reductions in cultivation area.
- Yield per area in northern Japan was higher than usual years, whereas it was lower in western and southern Japan due to typhoons and less hours of daylight.
- The proportion of high-quality rice was quite low due to insect damage in central and western Japan.
- Annual sales and profit per rice farm remained consistent due to increases in both the size of farms and production costs.

Wheat and soybeans

- The market price of wheat and soybeans increased by 5% and 9%, respectively.
- Farmers had a good harvest of wheat and soybeans due to fine growing conditions.
- Annual profit per farm decreased due to rising costs.

Fruits

- o The market price of mandarin oranges remained consistent.
- The market price of apples rose due to a shortage of reserved products.
- Annual profit per fruit farm increased due to both beneficial weather conditions and energy and depreciation savings.

Horticulture:

Vegetables

 The market price of major vegetables rose in summer due to a substandard harvest following poor weather conditions, while that in autumn/winter



- seasons fell due to both decreased food industry demand and overproduction.
- Annual sales per vegetable farm increased due to farm size expansions, while annual profit per vegetable farm decreased due to rising labour and energy costs.

Flowers

- Demand for flowers continued to shrink due to changes in traditional ceremonies (e.g. weddings and funerals).
- The market price of chrysanthemums and roses remained consistent.
- o Annual sales and profit per flower farm remained consistent.

Environmental:

- A new policy initiative to promote the Ministry of Agriculture, Forestry and Fisheries (MAFF) developed the Strategy for Sustainable Food Systems 'MeaDRI' in 2021, targeting major environmental outcomes by 2050, including carbon neutral agriculture, reductions in the use of chemical pesticides by 50% and chemical fertilisers by 30% and expansion of organic farming to a million-hectare designation.
- Direct payments to support and advance multi-functional agriculture have been further developed to subsidise farmers' activities, including conservation of sitespecific values, adoption of farming technologies using fewer chemicals and mitigation of natural disasters.
- Damage to crops from wild animals and birds is worsening. It was estimated at a loss of 16.1 billion yen (approximately 150 million USD) in 2020 and is one of the major reasons that farmers cease farming activities.
- The use of renewable energy in the farming sector is gradually expanding. Solar power generation on farmland and small hydroelectric power generation built into irrigation systems are popular.

Topics with increasing concerns in the industry:

- Sales in the food service industry have continued to drop since 2020 because of COVID-19 pandemic. Milk and rice were overproduced in 2021 due to cancellations of school lunches. The flower industry also faced overproduction due to public ceremony cancellations.
- New strategies for exporting food and agricultural products were developed in 2020 to identify market opportunities in selected countries related to the Trans-Pacific Partnership Agreement (TPP) and the recent Economic Partnership Agreements (EPAs) with the EU, the UK and the US. Target sales of food and agricultural export products are estimated to reach 2 trillion yen (approximately 18 billion USD) by 2025



- and 5 trillion (approximately 46 billion USD) by 2030. Annual sales of food and agricultural export products reached 1 trillion yen (approximately 9 billion USD) in 2021.
- A new policy initiative for 'Smart Farming' was developed in 2020, based on the
 results of pilot projects adopting robotics, Al and IoT on farms. The Agri-food DX (i.e.
 digital transformation of the farming and food sectors) policy was developed in 2021
 to build more efficient food value chains.
- A new collaborative campaign entitled the 'Nippon Food Shift' was initiated by the
 government and related private sector stakeholders in 2021 to deepen the
 understanding of the value of domestic agriculture and encourage manufacturers to
 increasingly use domestic agricultural products for their ingredients.
- Various channels (e. g. seasonal labour services, agri-workation (working + vacation))
 are developing to access human resources who are interested in living and working
 in rural areas.

Threats related to Ukraine's crisis for food and farming sectors:

- Domestic consumer prices in food, including wheat, have increased, reflecting the unpeaceful circumstances between Ukraine and Russia.
- Energy, chemical and feed costs will also be a significant burden to most farms due to the associated rise in international market prices.



Small hydraulic generator in irrigationPhotos by Yukio Kinoshita

Digitisation and intelligence sharing on a farm

For further reading regarding agricultural policies in Japan, please see:



Ministry of Agriculture, Forestry and Fisheries (MAFF) (2021). FY2020 Summary of the Annual Report on Food, Agriculture and Rural Areas in Japan. https://www.maff.go.jp/j/wpaper/w maff/r2/pdf/index-1.pdf

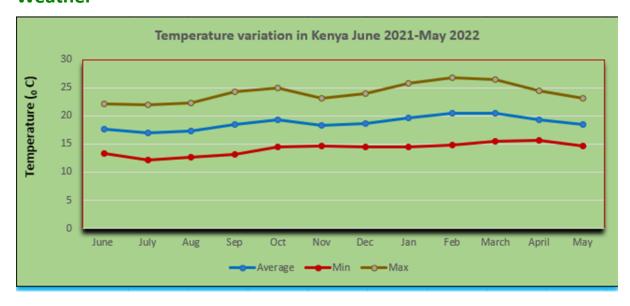
Sterly, S., Jongeneel, R., Pabst, H., Silvis, H., Connor, J., Freshwater, D., Shobayashi, M., Kinoshita, Y., Van Kooten, C., Zorn, A. (2018). A comparative analysis of global agricultural policies: Lessons for the future CAP, European Parliament.

https://op.europa.eu/en/publication-detail/-/publication/f6f26587-9d3c-11e9-9d01-01aa75ed71a1/language-en

Yukio Kinoshita – May 2022

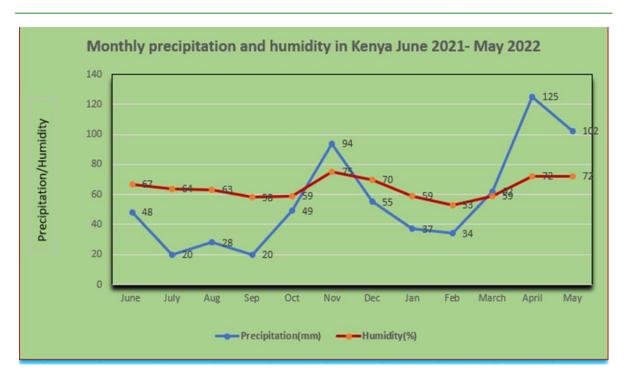
Kenya

Weather



February was the warmest month of the period, with an average temperature of 20.5 °C while July recorded the lowest average temperature of 17.0 °C. The lowest temperature reported was 12.2 OC in the month of July 2021 while the highest temperature reported was 26.8oC in the month of February 2022. The general variation of temperature was relatively stable without extreme limits being recorded.





The period June 2021-May 2022 witnessed a regular onset of rains in the short rain season (September- November 2021) and delayed onset of long rain season (February-May 2022). The difference in precipitation between the driest month (July) and the wettest month (April) was 105 mm. The month with the highest relative humidity is November (74.78 %). February recorded the lowest relative humidity of 53.25 % compared to November which recorded a relative humidity of 78 %. The country experienced good distribution of sunshine throughout the year.

Agriculture Economic Climate:

As the country started opening up in the late part of 2021 due to declining Covid-19 cases, more agricultural activities and movement of goods and persons were reported thus spurring economic recovery. Despite the delay in the onset of the long rains, the general distribution of rainfall was conducive for production of various agricultural commodities across the country considering that a huge proportion of Kenya's agriculture is rainfed. With global trade and international travel resuming as well as value chains getting unclogged export oriented agricultural production started increasing and most export-oriented firm started taking back employees who had been laid off.

Livestock:

While pastoral communities depend entirely on livestock production as their main livelihood, many small-scale mixed family farms across the country engage in livestock production as one of the farm enterprises. Pastoral communities in Kenya continued to face



many natural and manmade risks which increased their vulnerability to external shocks. Access to pasture and clean water for families and their livestock continue to be a major stumbling block during dry seasons. Such communities are forced to migrate with their animals in search for clean water and pasture.

During the early part of 2022 many families from pastoral communities lost their livestock to drought. Such families were exposed to hunger and food insecurity requiring emergency measures from both the government and non-governmental organizations to provide relief food. Unfortunately, some of these areas continue to face insecurity and cattle rustling which undermine efforts to stabilize livestock production. Community based and government coordinated proactive measures are required to not only forecast underlying causes of insecurity, conflict and starvation, but also provide lasting solutions that will build peace and economically empower the pastoral communities.

The main livestock enterprises reared by small scale family farms include zebu cattle, pigs, sheep, goats and poultry, exotic dairy animals and bee keeping among an assortment of livestock animals. As the country opened up supply of livestock products increased in the market and stabilizing the market prices of most livestock products towards the end of 2021. However, as political campaigns for this year's general election intensified and Russia invaded Ukraine shortage of fuel and inflationary pressure from campaign money escalated the cost of most commodities thus 'denying a number of households access to some livestock products. This also hindered access to livestock production inputs.

Private dairies increased supply of processed milk with the opening up of the economy in late 2021. However, with drought experienced in early 2022 leading to shortage of dairy products in the market accompanied by inflationary pressure from political campaigns market prices increased.

The demand for livestock products not only motivated farmers\processors to increase supply of meat, eggs, pork and milk during the reporting period, but also encouraged imports of livestock products from neighbouring countries like Uganda and Tanzania.

Arable:

Small-scale farmers continued to produce maize (main staple), wheat, rice, potatoes and various legumes. Despite the delay in the onset of rains in 2021 most crops performed relatively well. Early 2022 witnessed a rise in general prices of commodities including fertilizer (DAP, CAN) price which more than doubled from the traditional price of US16 to US\$ 60 per 50 kg bag. This resulted in an outcry from farmers that if the situation continues, they were unlikely to meet their production costs. The government was forced to provide a fertilizer subsidy early this year to cushion farmers from escalating cost of production. Unfortunately, bad timing, improper targeting and administration of the subsidy excluded



some farmers from the program. The farm gate price dropped after harvest in late 2021, but started rising again early 2022.

Horticulture:

Cut flowers

Kenya exported approximately 210,000 tons of flowers worth US\$952 million in 2021, making the fresh produce among the top foreign exchange earner alongside tea, diaspora remittances and tourism. Kenya exported to Russia and Ukraine cut flowers and ornamentals valued at approximately US\$155 million in 2021 with the balance going to the rest of Europe. The crisis in Ukraine has resulted in cancellation of orders to the two countries and if it continues it might result in loss of the market. Britain is the second largest export destination for the country's cut flowers after the Netherlands, taking nearly 18%. With opening up of the economy many flower firms have recalled permanent staff and rehired some casuals who had been fired.

Vegetables

Vegetable exports increased from US\$ 567 .4 in June 2021 to US\$604 in January 2022 due to opening up of the economy. The value of Kenya's vegetable exports dropped sharply by 94 percent or US\$ 8.11 million in January of 2022 as a result of low volumes. However, other vegetables grown on mixed farms by smallholder farmers for the local market include kales, cabbages, carrots, tomatoes, cow peas, indigenous vegetables. These categories of vegetables performed well across the country and were the main sources for vitamins for majority of Kenyans

Environmental:

The National Environment Management Authority (NEMA) continues to be at the forefront by promoting sustainable utilization of resources. Through licensing and oversight it ensures that all projects implemented in Kenya must account for environmental impact. Despite efforts to keep the environment clean, quite a number of environmental breeches were reported in the reporting period. Some of the major breeches include: biodiversity loss, plastic pollution, deforestation, air pollution, water pollution from urban and industrial waste, use of pesticides and fertilizers, flooding, water hyacinth, infestation in Lake Victoria, deforestation, increased soil erosion and global warming from fossil fuels.

Other Comments:

The African Chapter of IFMA held a successful AFMA12 Congress in Nairobi Kenya on21-25 November 2021. The conference was 70% physical and 30 % virtual allowing those delegates from across Africa, USA and Europe to participate in spite of their inability to



travel. It was resolved that the next Africa Farm Management Association (AFMA13) conference will be held in Durban South Africa in November 2023.

Philip Nyangweso - May 2022

The Netherlands

Environmental challenges for the Netherlands' agricultural sectors



The Dutch Agri & Food sector has developed very successfully after World War II and despite its small land area and relatively large population, The Netherlands is the second largest exporter of food in the world and an important exporter of associated knowledge and technology. This achievement is largely attributed to the application of the so-called 'efficiency paradigm': to maximize production at minimal costs. This has led to a production strategy creating homogenous low stress environments through the use of large quantities of external inputs (synthetic N-fertilizers and fossil energy), chemical control of pests and 10/05/22

Page 43 of 79



diseases (biocides), intensive soil intervention (ploughing and tillage) and breeding for plant and animal varieties adapted to those specific conditions. This strategy has been facilitated by an excellent infra-structure and by mechanisation, such as grass conservation techniques, robotic milking and manure injection in soil.

This has led to the present situation where the Dutch agricultural sectors are said to be responsible for a high national contribution to environmental impacts such as acidification of nature areas (mainly by ammonia) and global warming (emissions of methane) and biodiversity loss. Mostly the animal sectors are addressed as main contributors. These sectors (dairy, pigs and poultry) are said to contribute about 44% to the ammonia output in the Netherlands, which is still disputed by sectors itself. The N (ammonia) deposition on the 166 small national nature areas has to be < 0,7 gram N/ha nature land (for comparison: N/ha in Germany < 100 gr N/ha).

The dairy sector has become in recent years in the centre of attention. The dairy sector with about 15000 farms has been regulated as a land tied sector and occupies most of the agricultural land in the Netherlands. The dairy sector as land tied sector is therefore directly linked to the wish for more biodiversity in the Netherlands and more generally in Western Europe. Moreover, the relatively recent attention towards global warming puts the ruminating animals to the forefront. Cows produce methane as result of fermentation of fibre rich roughages in the rumen. We estimate that at farm level about 20% of the produced methane evades from the manure and 80% from the cows. Moreover, a high competition exists for land. The plan is to build 1 million additional houses in the next few years. In addition, there is a large demand for land to construct transhipment company buildings, data centres, sun parks and windmills.

Improvements and reductions have been achieved, to various extents, by single-issue approaches (policy) and solutions in the biophysical production system. For instance, run off of nitrogen and phosphorus to ground(water) have strongly been reduced. Last years, ammonia emissions are in the forefront of the political agenda. All house building, road, industrial and agricultural constructional project activities came to a stand-still in 2019 / 2020 because of a too high N-level in the air. The maximum allowed deposition level for nature areas was exceeded, according to the ruling of the National Court House, replying to a complaint of an environmental NGO.

New policies have been developed including the buy-out of dairy farms near nature areas. Also technical solutions are presented. An integrated approach is chosen by farmers, stakeholder companies and research institutes in which a plethora of technical solutions are developed. Besides genetic improvements and feeding practices, which adapt the animal to the environment, we focus on innovative cattle housing & technology and integrated



manure and air handling systems, which adapt the environment to the animal, and have potential in helping to reach the goal of a fully sustainable dairy farming sector. Technical solutions in various stages of development and application are flooring systems that segregate (keep separated) urine and faeces, manure treatment like acidification and digestion, floor cleaning robots, a cow toilet, ventilation systems, and air treatment systems for ammonia. Reduction of methane is a second national societal priority in the context of global warming. Happily, milk prices are presently very good, but energy, feed and fertilizer costs high.

Abel Kuipers – May 2022

New Zealand

Kia Ora, Tatou Katoa! Greetings from Aotearoa, New Zealand.

Maybe we could just call the last 12 months "the great disruption'. Covid, La Nina, Ukrainian/Russian conflict, inflation, record low interest rates but now rising fast, labour shortages, disrupted supply chains!

Weather

Another La Nina with more unpredictable effects than that of the La Nina summer of 2020-21. The normally dry East Coast of New Zealand has been wet and traditionally reliable rainfall areas dry. The net effect has been lower than normal pasture production nationally, impacting total dairy production and the speed of lamb and cattle kill.

The grain and small seed harvest has been one of the most difficult for decades.

For NZ, La Nina changes the weather pattern from westerly driven (the 'Roaring 40s') to unpredictable occasional big storms from near the Equator, more easterly dominated, low wind flow and warm sea temperatures.

Economic climate

We are now seeing the impact of the global stimulatory response to Covid 19, large scale supply chain challenges overlaid with climate and geopolitical impacts on international food production.

On the positive side, farmers would have to be happy with international product prices.

New Zealand maintained a policy of zero Covid until a managed release of Omicron in February 2022. We are now just over our Omicron peak, but March/April have been difficult



for processors. Managing meat and milk processing and the arable and horticulture harvests with high absenteeism (Covid) and closed borders for most immigrant labour has been challenging.

With 96% of New Zealand's food production being exported, exporters have also had to scramble with disrupted and expensive shipping costs.

Despite the disruption and high cost, the DIFOT (delivery in full on time) rates have been adequate.

We are now seeing high rates of both imported inflation and local inflation resulting from Covid related spending, with associated large increases in pay rates.

Borders have been opened to selected countries now, with access to all countries likely soon. We are already seeing many New Zealanders heading offshore so we need reciprocal travellers to patronize our tourist sector and provide a source of casual labour.

The most debated subject in the Ag sector is climate change and greenhouse gases.

New Zealand's primary sector has committed to costing greenhouse gases for agricultural producers (which in NZ is primarily methane), as the New Zealand Climate Change Commission has recommended.

One of New Zealand's pre-eminent farm management experts, Nicola Shadbolt, is a member of the Climate Change Commission who are advising the Government.

The scheme by which the primary sector will address GHG is called He Waka Eke Noa. (Maori for "we are all in the boat together").

There is farmer debate about whether food producers should have methane taxed or not, and the 'how', but the commitment has been made, backed by some of the largest exporters across sector.

Livestock

Dairv

Demand has continued to strengthen over the past year as a result of continued demand growth, but flat supply including from New Zealand.

The 2021-22 supply season (almost completed) is down slightly on past years as a result of climate factors impacting on pasture growth, some land use change (housing and horticulture mainly) and the impact of environmental regulations and expectations. There is a moratorium on new dairy conversions that traditionally offsets losses to other land use.

Meat

Complex global market dynamics are still at play with red meat.



Global demand for beef and lamb has been high and underpinned by Chinese demand. Demand by category (retail, wholesale, food service) has been volatile, with food service in particular, driven by Covid related lockdowns. Until March, China has been free of major lockdowns since Feb/March 2020.

Recovery of food service markets in the USA and Europe is stimulating demand. A factor to watch over the next year is the impact on food demand if cost increases for other essential expenditure such as fuel and house rental, erodes disposable incomes.

The venison industry has been through a tough two years as Covid hit the USA and Europe markets but lingered in Europe. Recovery is now apparent.

Arable

The 2022 harvest has been the most difficult for a long time. Yields have been lower due to low heat unit accumulation before Christmas and sustained periods of rain over harvest meant some crops sprouted or were poor quality.

We have recently seen a substantial rise in grain value per ton, partly in response to lower New Zealand yields and partly in response to the opportunity cost of imported grain (NZ is not self sufficient in grain).

Horticulture

The horticulture industries, dominated by wine, kiwifruit and pip fruit have had a reasonable harvest but the harvest dynamics have been difficult with labour shortages. Some short term visas for the normal Pacific Island workforce were issued but New Zealand's controlled release of Omicron coincided with the horticulture harvest, so available capacity was affected with Covid related absenteeism.

Supply chain logistics are difficult but exporters are finding ways to ensure New Zealand produce gets to market. The first kiwifruit is on the water now and the first wine is not far away.

Research Issues

Priorities have intensified around how we can migrate the food producing sector to 'net carbon zero' other than planting trees, the area of which is expanding rapidly.

Recent global events, both climate and geopolitical, also demonstrate the extent of the challenge we are trying to solve for. That is, feeding 9 billion people with the same raw material supply of meat, milk and grain that we fed 6 billion with, while substantially reducing our environmental footprint, with sufficient profitability to reinvest into capital development and research but retaining affordability of food to those not on high incomes. A wicked problem that will take not only concentrated efforts from producers, processors and marketers but also researchers and innovators all around the world.



Other Comments

• Farmer Sentiment

We have a real paradox at present.

- a) Food producers in New Zealand are benefiting from high global prices for most products so net returns are at record levels.
- b) Labour is short so many farmers are feeling overworked.
- c) Rising input prices are making farmers wary
- d) Rising regulatory, compliance and customer expectations are weighing on farmers' minds with a number of older farmers in particular probably not willing or able enough to adapt, and therefore more likely to retire.

So, in summary, record returns, very average (but variable) sentiment.

Summary:

We have been very fortunate in New Zealand to have lost very few people to Covid. We are now grateful to be 'off the leash,' able to travel and able to welcome visitors to New Zealand again.

The past two years have been trying for us all but amongst all the uncertainty and trials, we feel very fortunate to be farmers and even more so, in New Zealand.

The words challenge and opportunity roll into one in the current situation we face globally.

We look forward to meeting friends and looking to the future with you in Copenhagen.

Nga Mihi

Andy and Tricia Macfarlane

Nigeria

Weather

10/05/22

Nigeria has a tropical climate with the Temperature currently between 26 degrees centigrade in the coastal states in the south and 38 degrees centigrade in the drier north.

Agriculture Economic Climate

The agricultural sector in the fourth quarter of 2021 grew by 3.58% (year-on-year) in real terms, an increase of 0.16% points from the corresponding period of 2020, and an increase of 2.36% points from the preceding quarter which recorded a growth rate of 1.22%. It grew on a quarter-on-quarter basis at -1.69%. Nonetheless, an annual growth of 2.13% was

Page 48 of 79



recorded in 2021. This development indicates a steady recovery of the economy from the unsavoury effects of the COVID-19 pandemic that begun in 2020. Four sub-activities make up the agricultural sector: Crop Production, Livestock, Forestry and Fishing. Crop Production remained the major driver of the sector. This is evident as it accounts for 91.23% of overall nominal growth of the sector in the fourth quarter of 2021. Crop Production, Livestock, forestry and Fishing subsectors grew by 3.87 %, 0.41%, 1.41%, and 1.69%, compared to 1.36%, 0.12%, 1.98% and -3.97%, respectively, in the third quarter of 2021. This development was due to sustained policy support to the agricultural sector, such as the Anchor Borrower's Programme (ABP), and the Commercial Agricultural Credit Scheme Agriculture provides means of livelihood for over 50 per cent of the total Nigerian (CACS). population of about 200million people. Peasant agriculture predominates and account for 90 percent of both output and employment in the agricultural sector. In terms of contribution, the sector accounted for 25.88 % of overall GDP in real terms in 2021, with a growth rate of 2.13%, second to the Services Sector which contributed 53.56% to the overall GDP with a growth rate of 5.61% in 2021. The industrial Sector contributed the least to the overall GDP at 20.56% and it recorded a decline of 0.47% in 2021. The weakness in the Nigerian economy has been manifested in high inflation.

- d) Core inflation (year-on-year) rose to 13.85% in November, 2021, above the 13.24% recorded in October, 2021. The rise in core inflation was attributed to the surge in the demand for goods and services in preparation for the end of year festivities as well as continued challenges in supply chain delivery activities, insecurity and increased cost of transportation/logistics. On a month-on-month basis, core inflation rose to 1.26% in November 2021 from 0.80% in October 2021.
- e) Food inflation declined to 17.21% (year-on-year) in November 2021, from 18.34% in October 2021. The decline was driven by improvement in agricultural output, owing to improved harvest and reduction in input cost, following the various intervention programmes in agriculture mentioned earlier. However, on a month-on-month basis, food inflation increased to 1.07% in November 2021 compared with 0.91% in the preceding month, due to rising demand for foodstuff by households in preparation for the end of year festivities, in addition to persisting supply chain bottlenecks in food delivery. Available data from the National Bureau of Statistics (NBS) showed that the prices of major domestic food commodities declined in November, 2021. The decrease ranged from 0.1% for rice (medium grained) to 9.2% for tomato. Other commodities that witnessed price decreases were garri (white), garri (yellow), onion bulb, maize (yellow), Irish potato, maize (white) and sweet potato by 4.6%, 3.8%, 2.6%, 2.2%, 2.1%, 1.8%, and 1.8%, respectively. However, the prices of beans (brown), and rice (local) remained unchanged, while eggs and vegetable oils recorded price increases in the reporting month.



f) Intervention schemes by the Central Bank of Nigeria (CBN) focus on enhanced credit delivery to critical sectors, in a bid to enhance productivity and stimulate the real sector of the economy to which agriculture belongs. This include the Anchor Borrowers Programme, the Commercial Agricultural Credit Scheme, the Agricultural Credit Guarantee Scheme Fund, etc.

Livestock:

Nigeria is endowed with various livestock which include; cattle, sheep, goats, pigs, poultry, rabbit, donkeys, camel, horses, etc. Nigeria also has many fishery resources, which include various species of fishes like catfish, tilapia, croaker, shark, etc, as well as shrimps, crabs, etc. However, the full potential of these resources are yet to be tapped for lack of adequate investment capital and incentives.

Arable

Nigeria has five ecological zones, which supports a variety of arable crops such as cereals, grains, legumes, vegetables, seeds, fruits and nuts.

Horticulture

• Soft Fruit:

Soft Fruit includes: Bananas, Mangoes, Oranges, Pineapples, guavas, lemon, lime, grapefruit, watermelon, cucumbers, etc.

Vegetables:

okro, leafy vegetables (spinach, waterleaves, pumpkin leaves, etc.), tomatoes, peppers, onions, etc.

Environmental

Desertification and erosion problems continue to be concerns

Current Research Issues

Focus of research is on development of improved varieties of crops and livestock as well as improved agricultural practices.

Other comments

Nigeria is open to foreign investors who are willing to help modernize the agricultural sector to enhance the value chain.

Grace Evbuomwan – May 2022



Poland

Weather

The year 2021 in Poland was the coldest in 11 years history, due to the exceptionally late and cold spring and short summer. It was a significant change after 2019 and 2020 which were the two warmest years in the history of Polish meteorology. Due to a cooler and wet summer in 2021, the yields of most plants were slightly lower than in previous years, however weather conditions were generally favourable for agriculture.

[General climate characteristics in Poland: 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 see 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]

Agriculture Economic Climate

Main factors affecting the situation of polish farmers in 2021 were continuing COVID Pandemic and increased costs of production (higher costs of inputs mainly due to increased prices of energy, fuel and gas, but also inputs affected by the COVID disturbance to supply chains — mainly in machinery and equipment sectors). The important problem in agriculture related to pandemic was more difficult transfer of foreign workers to agriculture, which particularly affected the situation in the fruit and vegetable sector. In December 2021, the subjective expectations of farmers regarding both the general situation of farms, the profitability of agricultural production and the demand for agricultural products were unfavourable. However, farmers' attitudes were more optimistic than in the same period in 2020. Farmers look into the future uncertainly not only due to rising production costs, but also with uncertain challenges related to the European Green Deal Policy announced in December 2019 (European Green Deal). The future became a bit clearer with the draft strategic plan for the agricultural policy for the following years presented by the Polish



government in December 2021. Currently (May 2022) the plan is being consulted with the European Commission and needs some adjustments.

[The implementation of the European Green Deal requires taking a number of actions aimed at improving the state of the natural environment and stabilizing the climate through developing effective Europe-wide actions. The Communication presented a preliminary action plan covering the key policies necessary for achieving the European Green Deal: greening of the Common Agricultural Policy, including the Farm to Fork Strategy; preservation and protection of biodiversity; ambitious climate targets and linking to the European Climate Pact; clean, affordable, and secure energy, striving for a zero-pollution ambition for a toxic-free environment; industrial strategy for a clean circular economy; sustainable and smart mobility; mainstreaming the issue of sustainable development into all areas of EU policy. The implementation of the European Green Deal strategy entails many challenges to be faced by EC policy-makers, and then by the individual EU Member States, as well as society].

2022 brought new and unexpected challenges to agriculture. The Russian aggression against Ukraine, which began in February 2022, has significantly changed the outlook for this sector. The supply chain is completely changing. Those markets that were served by Russia and Ukraine will need products from other countries. Agri-food trade with Russia has already collapsed significantly in recent years after an embargo imposed on many EU food products in response to EU sanctions on Russia following the annexation of Crimea in 2014. Despite the embargo, Russia remains Europe's sixth trade partner in terms of buying EU agri-food products. The new EU sanctions imposed on Russia will disrupt food exports to Russia. When it comes to the loss of sales markets, Germany, the Netherlands and Poland will suffer the greatest losses here - each of them around EUR 1.5 billion. Neighbouring countries, namely Latvia, Lithuania and Estonia, which together with Poland, have an approximately 30% share in EU exports to Russia, Belarus and Ukraine will also suffer. Ukraine's share in EU maize imports is 52%, wheat - 19%, and oilseeds - 23%. Stopping these imports will hit the EU livestock sector. The consequences are difficult to predict, since the war has not finished yet.

[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 14.68 mln hectares (2020), which places Poland in the 5th place in the European Union. Polish agriculture absorbed around 8,7% of the total employment (2019) of the country (EU average 3,9% in 2019, EUROSTAT). The share of the agricultural sector in Gross Value Added in 2019 amounted to 2.7% (Statistical yearbooks, Polish Statistical Office).

The main agricultural products in Poland in 2020 were **cereals** (17,9% of Gross Agricultural Output in 2020, GAO), animals for slaughter 26,8% of GAO (mainly **pigs** 10,6% and **poultry** 10,8%), **cow's milk** (15,8%), **vegetables** (9,1%) and **fruits** (8,8%) and Industrial crops (6,7%). Poland is the net-exporter of agricultural produce and the one of the 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, 2022).

Polish agriculture is characterized by a large number of farms and **strong fragmentation of the farming sector**. In 2020 there were **341,1 thousand farms** with agricultural land over 10 ha, which utilized ca. 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.]

Livestock

According to the preliminary results of Main Statistical Office in 2020, the number of basic livestock species on farms amounted to:

- cattle 6 299 thousand. units and increased in relation to 2010 by nearly 10%.
- pigs 11,203 thousand units and decreased in comparison to 2010 by over 26%.

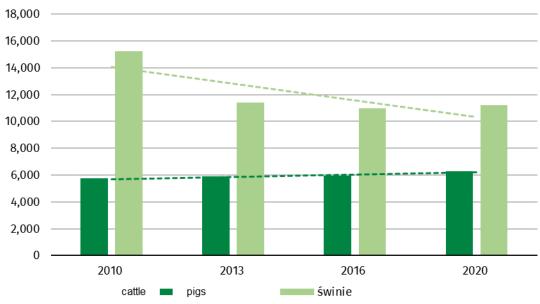


Figure 2. Number of basic livestock species on farms in Poland 2010-2020

Source: Polish Statistical Office 2022. Wstępne wyniki spisu rolnego.

Dairy sector

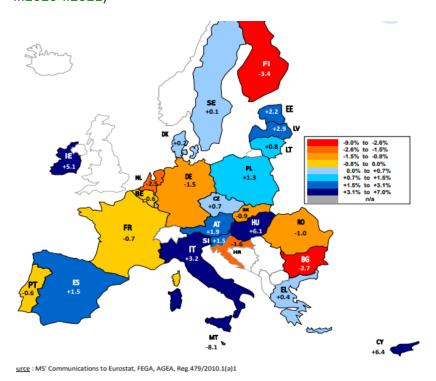
In **2021** despite production conditions affected by COVID pandemic, milk deliveries to dairy industry continued to grow, as is past years. However the growing trend slowed down to +1,3% (figure 3). In June 2021, as compared to the same period of 2020, the total number of dairy cows decreased by 4.7% to 2113 thousand. The decrease in the number of dairy cows was not compensated by a large increase (by 10.4%) in the number of cows used in the production of beef [Rynek mleka, IEIGŻ-PIB]. Structural



changes in agriculture are the main reason for the decline in the number of dairy cows, as purchase prices were high. The progressive concentration and modernization of milk production in medium and large farms resulted in an increase in the average production of dairy cows by 1.7% to 6,570 I / head in 2021. In 2021, the purchase prices of milk in Poland were at a high level, and were 12.6% higher than in the corresponding period of 2020.

[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.]

• Figure 3. EU Milk deliveries compared to last 12 months period (III2021-II2022 to III2020-II2021)



Source: MS' Communications to Eurostat, FEGA, AGEA, Reg.479/2010.1(a)1 - accessed 05/2022

Pig sector

The pig sector in CEE countries was in 2021, and is still seriously affected by African Swine Fever (ASF) (which since 2014/15 continues to spread across areas of Europe) but also growing prices of feeds. In June 2021, pig population amounted to 11.0 million heads and was by 3.5% lower than the year before. Piglet population decreased annually



by 5.1%. All parameters are expected to decrease also in 2022, due to dramatically decreased profitability of breeding. In the third quarter of 2021, the ratio of pig prices to rye prices was 1:6.3, and to barley prices 1:5.3. There have been no such narrow relations in the third quarter for years.

[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].

Arable and horticulture

In **2021 cereal crops** in Poland are estimated ca 3% down on the previous year at 34,5 million tons (Rynek Zbóż, IEIGŻ, 2021). The decline reflected lower than in 2020 yields which was not compensated by a slight increase in the area harvested. The largest decline concerned the crop of rye (by 15.2%) followed by triticale (by 12.2%) and wheat (by 4.3%). On the other hand the crops of grain mixes increased by 6.5%. The production of maize is estimated over 7% up on the previous year. Weather conditions during the harvest were less favourable, affected by a large rainfall, thus resulted in lower quality of the final produce. According to the IERIGŻ, 2021, estimates, **rapeseed harvest** in Poland in 2021 increased by about 1% to 3,2 million tonnes, as compared to 2020, as a result of an increase in the cultivation area to approx. 1 million ha (by approx. 1%) and yields up to 3.21 t/ha (less than 1%). Despite high harvest, purchase prices of rape in the period July-September were significantly higher than a year before, due to the continued high quotations of its prices on international markets, with a strong connection of the domestic market with external markets, especially with the European market.

a) In 2021, according to IERIGŻ 2022 (Rynek Owoców), **fruit harvest** in Poland increased, as compared to the previous year by 11.9%, to 5.0 million tonnes. Production of almost all species increased, especially apples, pears, cherries, and sour cherries. Harvest of field **vegetables** decreased from approximately 3,9 to approximately 3.8 million tonnes, and harvest of vegetables grown under cover increased from 1.0 to 1.2 million tonnes. The production results of Polish producers of fruit and vegetable preserves, as well as foreign trade turnover in products of this sector, both in the 2020/21 season and in the 2021/22 season, indicate the high flexibility of market entities in terms of functioning in the conditions of the COVID-19 pandemic. This also applies to fruit and vegetable producers. The effect of the pandemic, however, is an increase in prices in the world trade in horticulture products, but also other products. In Poland, the weakening of the zloty against the euro and other currencies may pose a threat to the level of imports and the volume of consumption. The increase in fertilizer and pesticides prices will also be significant



threat to the sector, stimulated by a significant increase in the prices of raw materials (gas, energy and fuel).

Agata Malak-Rawlikowska - May 2022

Slovenia (Europe)

Weather

In 2021, both changing weather conditions and the occurrence of extreme weather events continued, which had a strong impact on the volume of crop production. Autumn in 2020 was above average wet. Heavy rainfall in October made it difficult to prepare the soil and sow winter crops, which in some places were delayed by 10 days or more. During the months of meteorological winter, temperatures were above average, with intermediate cold periods and above average precipitation. The vegetation period, which is supposed to begin in April, began with a negative water balance after the dry March, but improved due to heavy rainfall in May. The spring in 2021 was also marked by heavy frosts that cut the yield of most fruit species. The second half of March, after a period of above-average temperatures, was marked by the first strong frost, which affected early fruit trees. In early April due to the polar air intrusion, the second strong frost occurred. Mainly fruit trees, vineyards and olive trees were affected. May was extremely cold and wet, which slowed down the phenological development of plants, hindered the sowing of corn and the first mowing. The conditions were extremely favourable for the spread of plant diseases and pests. The summer months were very hot, and agricultural plants were often under heat as well as drought stress. Hail storms and strong winds occurred in August. The vegetation period ended with above-average warm and below-average wet September, which was favourable for the ripening and harvesting of fruit trees and grapes.

Agriculture Economic Climate

- a. Farms and Agriculture:
 - The gross value added of agriculture in GDP is 1.2%;
 - 67,927 (-9% since 2010) agricultural holdings with an average of 7.0
 ha (+11% since 2010) of utilised agricultural area and 9.1 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 6,899 EUR;

b. Impact of COVID-19

According to the Office of the Republic of Slovenia for Macroeconomic Analysis and Development (IMAD, 2021), the continuation of problems with the covid-19 epidemic in 2021 predicts that Slovenia's gross domestic product (GDP) will be 6.1% (in 2020: -4.2%). Increased economic activity will be mainly due to the recovery of activities related to international trade. Growth was also recorded in investments in equipment and machinery, and in imports and exports. Private consumption is also strengthening, while growth in government consumption will remain solid. It is estimated that economic activity in 2021 will exceed the pre-crisis level of 2019, to which the continued implementation of government assistance measures to mitigate the negative effects of the covid-19 epidemic will also contribute.

Many years of favourable labour market developments were interrupted by the covid-19 epidemic in 2020, in which employment declined. For 2021, however, forecasts show an improvement in indicators. According to initial estimates, employment will increase by 0.8% in 2021 (2020: -0.6%).

In 2021, consumer prices at the general level rose slightly. According to initial estimates, inflation will average 1.4% (in 2020: -0.1%). Mainly higher energy prices will contribute to this, as will the rise in the prices of non-energy industrial goods. Growth in food and service prices are expected to be moderate.

c. Economic results of Agriculture in 2021

In 2021, according to the first estimates of statistics, the prices of agricultural products at the overall level will be noticeably higher, nominally by 6.2%. Considering the projected inflation of 1.4% (IMAD, 2021), the real increase in prices will be less pronounced (+ 4.8%). According to initial estimates, the prices of agricultural products in 2021 will be noticeably higher than in the last ten-year average and the highest since 2013, which will be influenced mainly by a marked increase in the prices of crop products.

The first estimates of the indicators of economic accounts for agriculture, prepared by Agricultural institute of Slovenia, show that agricultural incomes in 2021 will be significantly lower than in the previous year, and will also be significantly below the average of the past five years. According to initial estimates, the deterioration in economic performance will be mainly due to lower physical volumes of crop production and a significant increase in production costs.



According to initial estimates, the physical volume of agricultural production will decrease by about a tenth compared to the previous year, with crop production declining significantly (by about 18%) and livestock production increasing by only about 1%. Compared to the previous year, prices at the aggregate level will be significantly higher in crop production and slightly higher in livestock production. With a slightly higher volume of intermediate consumption, its value (production costs) will be significantly higher than in the previous year due to significantly higher costs, especially fertilizers, energy and feed (this trend is even more significant in the year 2022 due to the war in Ukraine). Only the costs of seeds and seedlings are expected to be lower, while veterinary costs are expected to remain at a similar level as year before. As there will be less domestic fodder available, according to initial estimates, the need for purchased strong fodder will be greater. According to these facts, the factor income of agriculture will decrease by more than a quarter in real terms compared to the previous year and will be significantly below the level of the last five-year average.

Incomes are still strongly influenced by direct payments and also rural development programme (especially payments for LFA, agri-environment-climate payments and investments in the modernization of agricultural production). Budgetary support, which is extremely important in the structure of income in agriculture, will continue to be slightly higher at the aggregate level in 2021 than in the previous year (estimate of Agricultural institute of Slovenia). More payments will be made from interventions in connection with the covid-19 epidemic and the elimination of the consequences of natural disasters.

Livestock

For livestock farming, the first estimates based on available data show that the total volume of meat production in 2021 decreased slightly. According to statistical data, an increase in the volume of meat production is obvious in the production of cattle and pigs, while a decrease in the production of poultry is noticeable. The volume of small ruminants will be similar to the previous year. The production of cow's milk and eggs will also be higher than in 2020. Compared to a year ago, dairies produced much less cream and butter. Dairies produced almost 17% less cream, about 10% less butter and more than 2% less drinking milk. On the other hand, they increased the production of acidified milk products by about 8%, of cheese by about 6% and of powdered milk by almost 40%. Honey production in 2021 was one of the worst so far. Compared to 2020, it is estimated that about 70% less honey was produced. This is a consequence of extremely unfavorable weather conditions in the spring and early summer of 2021.

According to initial estimates, higher prices for animals and animal products are expected for 2021. These are nominally higher by 3.0% (in real terms +1.6%), but prices are still lower



than the last ten-year average. This increase in prices is at the aggregate level mainly due to the markedly higher price of beef (+ 6.7%) and also cow's milk (+ 2.5%). Lower prices are expected for other animal products. The price will fall the most for pork (-7.4%) and slightly for poultry (-2.0%). Thus, according to initial estimates, in livestock farming, economic results at the aggregate level will be worse in pig production (a significant drop in prices, despite slightly higher production) and poultry (slightly lower production at lower prices). Poorer economic results are also estimated for honey production, despite a significant increase in prices, as the harvest in 2021 was extremely poor. In such a manner in the context of animal production, better economic results are expected for cattle production (higher production, higher prices), and the results are also expected to be more favorable in the production of small ruminants (higher prices). For milk and egg production, the improvement of economic results compared to the previous year is also estimated, mainly due to higher production in both, but also due to higher prices in milk.

Arable

Yields of most crops were lower in 2021 than in 2020. In cereals, they were mostly lower than in the previous year, except for maize for grain, which was higher than the average in 2016-2020. The wheat harvest was close to a record hectare yield in 2020, while the quality lagged behind the average. At 9.1 t/ha, the yield per hectare was more than 15% lower than in 2020 and slightly below the average of the last five years. The harvest of oilseeds was below average due to lower yields of all major oilseeds. Compared to a very large yield per hectare in 2020, the yield of hops was also lower by almost 40%.

Based on available data, it is estimate that in 2021 the total grain yield will be about 8% lower than in 2020, mainly due to the poorer harvest of maize, but also a slightly lower yield of grains. Despite the decline, cereal yields are likely to remain among the largest so far and just under a tenth above the average of the last five years (2016-2020). The expected yield of oilseeds is also lower, which is 8% lower than in the below-average year 2020 due to the poor harvest of all major oilseeds and also due to the much smaller area of oilseed rape.

The prices of crop products in 2021 are estimated to be 11.2% higher in nominal terms than in 2020, which means a significant increase in producer prices. The largest increase in prices is expected in cereals, at the overall level for 38.0%. The largest increase is expected in the price of maize for grain (+56.8%) and in the price of wheat (+21.0%). Significantly higher prices are also for oilseeds (+ 30.9%), potatoes (+ 13.9%), fruit (+ 11.0%) and vegetables (+ 9.4%).

In crop production, according to initial estimates, there are significantly less favourable indicators of income at the aggregate level, which is mainly due to lower yields in most



groups. Thus, in fruit production, viticulture and winemaking, as well as in hop and potato production, the value of production is significantly lower due to much lower yields, despite significantly higher prices (except for hops and wine). Thus, in the context of crop production, according to initial estimates, income indicators at the aggregate level are significantly more favourable in the production of cereals (good harvest of small grains), fodder plants, oilseeds and vegetables. All of them mainly due to significantly higher prices.

Horticulture

• Soft Fruit

The total yield of fruit in 2021 was significantly lower than in the previous year, mainly due to severe frosts. It is expected to be only a tenth higher than in 2017, when the least fruit was harvested so far. According to estimates based on current data, in 2021 more than 60% less fruit was harvested in intensive orchards and extensive orchards than in the previous year (2020). Thus, the total yield will be only one third of the average yield in the period 2011-2015. In extensive orchards, only about a fifth of last year's harvest is expected due to the frost and also due to the pronounced alternative fertility, while in intensive orchards more than half less fruit is expected to be harvested than in the previous year (2020).

According to the first statistic data, the yield of grapes in 2021 is the lowest so far, mainly due to spring frosts and other unfavourable weather conditions. The yield of white varieties is lower by 18% and the yield of red varieties by 24%. However, the quality of the harvested grapes was excellent and a top quality wine is predicted for this year. The grape harvest is estimated at about 83 thousand tons, which is one fifth less than in 2020 and compared to the average of the last five years (2016-2020).

Current Research

In this year also one national project interesting from the perspective of farm management has been finished, where typical agricultural holdings (TAH) have been defined. They reflect Slovenian agriculture from different viewpoints (production orientation, specialization, diversification, size structure, production conditions of the region, etc.) and considering the knowledge of experts on technical production characteristics of individual defined agricultural holdings. The aim was to prepare TAHs in a way that will enable analysis and simulation using the farm model. Not only at the farm level, but also to perform an aggregate analysis with the bottom-up approach, based on the results of individual TAHs, for monitoring at the sectoral and national level.

In the framework of the project 146 typical agricultural holdings were defined, with which we tried to simulate the full spectrum of Slovenian agriculture. Given the high diversity of TAHs, it is not surprising that the results obtained, where we focus specifically on gross



value added per hour of work involved, show mainly on smaller TAHs even negative values and, in particular, in plant production very favourable results, which in some cases approach 50 €/h (in table 1 average results per sector are presented). The analysis carried out offers interesting and fairly in-depth comparisons between sectors, and in addition brings fresh insight into the structure of the entire aggregate. Both physical aggregates and key economic indicators show satisfactory coverage with comparable values based on statistical data.

The results obtained are likely to be surprising for many readers, but for a better informed one with expert knowledge of developments in individual sectors, it is likely to be much anticipated. The differences in the economic performance of individual sectors are very large, so it is not surprising which way changes are taking place in Slovenia in relation to natural conditions, the size of agricultural holdings, the engagement of available labour, etc., and not least also from budgetary payments, which represent an extremely important source of revenue in individual sectors. In many years on aggregate of Slovenian agriculture budgetary payments are getting close to gross value added achieved. All the more so true at the level of individual holdings. By understanding these and additional factors, it is possible to give fairly reliable forecasts of how much impact budgetary payments have and the projected changes in this area on the economic indicators of individual agricultural holdings and sectors as a whole, which is of high interest during this period due to CAP reform and preparing Strategic plan for the next policy period after 2023.

Table 1: Key economic indicators by sectors

	No. farms in Slovenia	No. TAHS	Revenues [mio €]	Variable costs [mio €]	mio €]	No FTE	GM/FTE [000 €]	GW/N [€]
Dairy	6,400	32	296.6	196.8	148.49	8,398	17.7	9.82
Suckler cows	13,630	11	48.5	68.3	11.42	5,673	2.0	1.12
Beef	3,630	12	44.8	43.3	8.51	796	10.7	5.94
Small ruminants	5,085	8	17.1	10.0	14.39	895	16.1	8.93
Pigs	6,575	7	143.0	89.3	64.68	1,182	54.7	30.40
Poultry	7,180	7	77.3	63.2	15.21	400	38.0	21.13
Crops	3,160	11	94.9	93.0	30.16	696	43.3	24.07



Норе	155	2	20.6	9.3	11.88	150	79.2	44.00
Fruit growing	785	14	51.6	21.2	32.27	933	34.6	19.22
Olive growing	445	4	18.3	9.5	9.57	423	22.6	12.57
Viticulture	4,610	15	148.9	56.7	96.24	2,603	37.0	20.54
Vegetable	370	11	29.4	16.7	14.00	285	49.1	27.29
Total	52,025	134	991.0	677.3	456.82	22,434	20.4	11.31

Important result of the project is also the Catalogue of Typical Agricultural Holdings, which is an independent publication and is available on-line (https://repozitorij.uni-lj.si/IzpisGradiva.php?id=135226). The catalogue is intended to find different information by reference type of agricultural holdings and also to consult their contribution at aggregate level. The user can find different physical, economic and environmental indicators by individual type. The results shown can be judged from different viewpoints. For someone the results of individual typical holdings are interesting, or differences between farms within sectors, as well as between sectors e.g. for a similar size based on a particular production source. Alternatively, someone can try to find an approximation of the most similar concrete holding and look for parallels.

References (in Slovene):

- BEDRAČ M., BELE S., BREČKO J., HITI DVORŠAK A., KOŽAR M., LOŽAR L., MOLJK B., TRAVNIKAR T., ZAGORC B. Prva ocena stanja v kmetijstvu: 2021. Ljubljana: Kmetijski inštitut Slovenije, 2021. 58 p.
- SI- STAT 2022 Statistical Office of the Republic of Slovenia <u>www.stat.si</u>
- Rural development programme of the Republic of Slovenia for the period 2014-2020.
 Republic of Slovenia. Ministry of Agriculture Forestry and Food. https://www.program-podezelja.si/sl/knjiznica/163-rural-development-programme-of-the-republic-of-slovenia-for-the-period-2014-2020-basic-information-on-measures-areasfirst-update-with-regard-to-the-second-amendment-to-the-rdp/file
- <u>ŽGAJNAR J., KAVČIČ S., TOMŠIČ M., ZAGORC B., BREČKO J., HITI DVORŠAK A., MOLJK B., VERBIČ J., BEDRAČ M., KOŽAR M., CUNDER T., JERIČ D. 2022. Razvoj modela za sistematično spremljanje ekonomskega položaja in analizo vpliva kmetijske politike na ravni tipičnih kmetijskih gospodarstev : zaključno poročilo. Ljubljana: Biotehniška fakulteta, feb. 437 p.</u>

Jaka Zgajnar - May 2022



South Africa

South Africa is a country on the most southern tip of the African continent with;

- A population of approximately 60 million people.
- Total land size is 1 214 470 km², of which 79.4% are used for agricultural production.
- Only 9.9% of the total land is arable, while 0.3% is covered with permanent planted crops and 69.2% with permanent natural pasture.

Weather

The 2021/2022 summer rainfall area received the best rainfall in years and it seems as if the lingering drought is finally broken in many areas.

- Some districts in the central great karoo received significant amounts of rain for the first time in 7 to 9 years.
- Although large parts of the country received good rain, some areas still have water challenges with dam levels that did not increased much.
- Although we are thankfull for the rain, it did create some problems as well with flood damage to summer crops as well as to infrastructure.
- The wet conditions also caused the largest brown locust outbreak in years causing extreme damage to natural pasture.

Agriculture Economic Climate

The economic condition in agriculture is improving as weather patterns return closer to normal.

- Debt levels in agriculture are, however, stil on its highest ever will take some time to return to lower levels.
- It seem that producers are currently more at ease about land reform as the government did not manage to change the Constitution.
- The minimum wage for the agricultural sector was increased with 6.9%, which is higher than the inflation rate.
- The Russian-Ukraine conflict hit South Africa quite hard with sharp increases input prices such as fertilizer. It did however also increased the commodity prices in South Africa.

Livestock

Red Meat

- Red meat prices in the second halve of 2020 and first halve of 2021 remained strong with especially the beef price doing much better than previous years.
- It seems like the "home cooking" habit from the Covid time stick with consumers and butcheries are doing extremely well in terms of turnover.



 A2 beef and lamb carcass prices was respectively 16.4% and 7% higher in March 2022, compared to March 2021.

Poultry

 The poultry market are also doing well with March 2022 prices being 11% higher than in March 2021. Further price increase are also expected due to import tariffs being applied.

Pork

 After a very good year in 2021 with the price of pork being as much as 41% higher in some months compared to the same months in 2020, the price of pork decreased a bit year on year with March 2022 price being 15.8% lower than the March 2021 price.

Arable

Summer crops

- The 2021/22 summer crop production looks promising in most parts of the country, even though certain parts experienced flooding early in the season.
 Certain regions from the free state and North-West have reported flood damage. Farmers are also facing higher input costs this season, with the prices of fertilizer, herbicides and insecticides increasing more than 100% year on year.
- The government's Crop Estimates Committee (CEC) expects a total maize harvest of 14 723 350 tons in the 2021/22 production season, 9.76% less than 2020/21. South African farmers have planted 2 623 000 hectares of maize in 2021/22, which is 4.81% lower than 2020/21.
- 670 700 hectares of sunflower were planted in the 2021/22 production year,
 40.37% more than the 477 800 hectares in 2020/21.
- Domestic Grain price is at an all-time high mainly due to the ongoing conflict between Russia and Ukraine. Both of these countries are major exporters of wheat, sunflower and maize.
- The following data were obtained from the latest crop estimates:

Crop	Final cro	change	
	2021	2022 (CEC 3 rd forecast)	
White maize	8 600 000	7 553 050	-12.17%
Yellow maize	7 715 000	7 170 300	-7.06%



Sunflower	678 000	963 000	42.03%
Soybeans	1 897 000	1 885 850	-0.59%

Winter crops

- According to the CEC, South Africa's farmers intend to plant 538 350 hectares of wheat, 2.84% higher than the 2020/21 production year. The increase in wheat hectares is mainly due to the Freestate, which intends to plant 35.71% more wheat than the 2021/22 production year.
- Canola hectares are also expected to increase by 20%, reaching 120 000 hectares.

Frikkie Maré – May 2022



United Kingdom

UK Weather

Temperature (C)	Sunshine (hrs)	Rainfall (mm)		
0 5 10 15 20	0 50 100 150 200 250	0 50 100 150 200		
lay-21 (////////////////////////////////////				
un-21				
Jul-21 ////////////////////////////////////				
ug-21				
ep-21				
Oct-21	(((((((((((((((((((((((((((((((((((((((
ov-21 ///////	(11111)			
ec-21 /////	((()			
an-22	11111			
eb-22	<i></i>			
lar-22				
pr-22				

Agriculture Economic Climate:

- Farm Business Income (Forecast England 2021/22)
- a. With the exception of specialist pig and specialist poultry farms, average Farm Business Income is forecast to increase in 2021/22. Higher prices for key outputs such as cereals, meat and milk coupled with increased yields are expected to drive a rise in output, although this will be offset to some degree by higher costs, particularly for feed and fertilisers.
- b. For specialist pig and specialist poultry farms the impact of substantially higher costs, particularly for feed (reflecting price increases to feed ingredients such as wheat), is expected to more than offset a smaller rise in output.
- c. Compared to 2020, the average 2021 Basic Payment is expected to fall by around 9 percent across all farm types, reflecting the first year of progressive reductions to the payment.
- d. Cereal farms Average income is forecast to increase by around 51 percent in 2021/22 to £108,000 driven by an increase in crop output of 42 percent, the result of higher prices, reflecting tight global supplies, and increased yields. Compared to 2020, when many crops were badly impacted by the adverse weather, more favourable conditions in 2021 are expected to bring a return to more normal cropping patterns, with a larger proportion of higher yielding winter crops. Wheat, barley, oats and oilseed rape will all see higher yields compared to the previous year, with the area of wheat increasing due to the return of winter planting and the area of barley falling after a big drop in the spring crop area. The increase in crop output is forecast to more than offset an 18 percent rise in input costs. Higher crop costs are expected to be the main driver, notably fertiliser costs which are forecast to more than double, reflecting higher prices and the increased area of winter



cropping. Agri-environment payments are expected to rise by around 9 percent while the Basic Payment is predicted to fall by around 11 percent on cereal farms.

- e. General Cropping Farms Average Farm Business Income on **general cropping farms** is forecast to rise by 70 percent to £113,00 in 2021/22. As with cereal farms, this will be primarily driven by higher crop output, particularly from cereal crops. Peas, beans, oilseed rape and sugar beet are also expected to see higher values for the 2021 harvest, coupled with increased yields compared to 2020. These are forecast to more than offset reductions in crop area for oilseed rape, potatoes and sugar beet. At the same time, input costs on general cropping farms will rise by around 12 percent. Like cereal farms, fertiliser costs will more than double compared to 2020/21, driven by the return to normal patterns of winter cropping and higher prices. Building depreciation, other farming costs and property costs will also see rises. It is anticipated that the Basic Payment will fall by 11 percent on this type of farm.
- f. Dairy Farms In 2021/22, average income on **dairy farms** is expected to increase by just over a fifth to £112,00. A rise in output from livestock will be mainly driven by a 9 percent increase in output from milk and milk products: slightly lower production than 2020/21 will result in tight supplies and higher farmgate prices. It is important to note the wide variation in milk prices with some farmers receiving considerably more or less than the average. Prices for cull, finished and store cattle are all predicted to rise across the survey year, increasing output from other cattle enterprises by around 13 percent. Crop output is also expected to be higher (by around by 39 percent) driven by higher yields and firm prices. These rises are forecast to more than offset a 10 percent increase to input costs; feed costs are expected to be 11 percent higher while crop costs will rise by more than half. For dairy farms, the Basic Payment is forecast to fall by around 7 percent.
- g. Lowland Grazing Livestock Farms On **lowland grazing livestock farms**, average income is predicted to rise by 3 percent in 2021/22 to £19,000. Buoyant prices for fat and store lambs across the survey year are expected to increase output from sheep enterprises by 15 percent. At the same time, output from cattle enterprises is forecast to rise by 9 percent: although a tight market will see higher average prices for finished and store cattle, these will be slightly offset by lower throughput. A change in livestock valuation is also expected to bolster cattle output with the value of finished and store cattle estimated to be higher at the closing, compared to opening, valuation. Crop output is forecast to rise by 3 percent. Higher crop costs and building depreciation will be the main drivers increasing inputs by 8 percent. The Basic Payment is predicted to fall by around 6 percent on lowland grazing livestock farms.
- h. LFA Grazing Livestock Farms The average income on LFA grazing livestock farms is expected to increase very slightly to £34,000, with similar value increases to outputs and input costs largely offsetting each other. Livestock output is forecast to rise by 11 percent with similar trends for cattle and sheep enterprises to those seen on lowland farms. Sheep breeding stock prices are also forecast to be higher compared to 2020. Crop output is predicted to rise by 15 percent. Overall, agricultural output is expected to go up by 6 percent while costs are predicted to increase by 6 percent, notably crop costs and building depreciation, which will rise by 62 percent and 21 percent respectively. Agri-environment



payments, which represent an important source of income for this type of farm, are expected to be around 11 percent higher while the Basic Payment will fall by 9 percent.

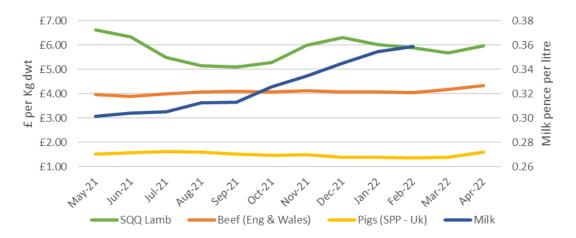
- i. Specialist Pig Farms Forecasts for **specialist pig farms** are subject to a considerable degree of uncertainty reflecting both the structure of this sector and the relatively small sample of these farms in the Farm Business Survey. For this type of farm average Farm Business Income is expected to fall by nearly three quarters in 2021/22 to £13,000, the result of input costs rising considerably more than output. Feed costs (which typically represent around half the total costs on these farms), are expected to rise by 22 percent, tracking price increases for key feed ingredients such as wheat and also reflecting more pigs on farm due to abattoir and supply chain issues. Other livestock costs, building depreciation and crop costs are also forecast to see notable increases. In comparison, output is expected to rise by 7 percent. For pig farms who grow crops, crop output will increase, particularly for wheat. It is anticipated that higher throughput and heavier carcase weights will partially offset a fall in finished pig prices, which are expected to be around 6 percent lower than 2020/21. Weaner, store and cull sow prices are also forecast to be lower. Combined, these factors are expected to result in a 5 percent increase to output from pig enterprises.
- j. Specialist Poultry Farms Forecasts for **specialist poultry farms** are subject to a considerable degree of uncertainty reflecting both the structure of this sector and the relatively small sample of these farms in the Farm Business Survey. In 2021/22, average income on specialist poultry farms is forecast to be £38,000, around half the average income of 2020/21. Input costs are expected to increase by 14 percent, as with specialist pig farms it is anticipated that rising feed costs (which are forecast be 19 percent higher than the previous year) will be a key contributing factor along with higher crop costs and general farming costs. These rises will be partially offset by an increase in poultry output of 7 percent, reflecting higher egg prices and production. Output from broiler enterprises is also forecast to rise, although lower slaughter numbers for turkeys and other poultry indicate a reduction in other poultry meat production.
- k. Mixed Farms On **mixed farms** incomes are expected to rise by just under a third to £52,000. This type of farm reflects all the enterprises found in the more specialist farm types reported above. Overall output is forecast to increase by 14 percent with a rise in crop output of 33 percent a key determining factor. Output from livestock is also expected to go up, primarily driven by higher revenue from sheep enterprises. In comparison, input costs are forecast to rise by 11 percent compared to 2020/21 with crop costs increasing by over a third. It is anticipated that the average Basic Payment will be around 9 percent lower than 2020/21 on mixed farms.
 - Farm Business Income (Forecast Scotland 2020/21)
 - a. Average farm income has risen to the second highest level since 2012, after adjusting for inflation. The average farm income is estimated to be £39,300 in 2020-21. Farm income rose by £10,000 between 2019-20 and 2020-21. This upturn is against the backdrop of the COVID-19 Pandemic.



- b. Total input costs decreased five per cent to £207,900 according to analysis from the survey of around 400 farms. This indicates that the upturn in income is mostly due to reduced total input costs. This small change in inputs had a large positive impact on overall income.
- c. Commercial dairy farms had a good year. Average milk prices and yields both increased in 2020-21, contributing to higher dairy incomes. Average income was estimated at £99,600, the highest value since 2012.
- d. Diversification continues to be an important factor for farm income. Farms with diversified activities, such as renting out farm buildings and electricity generation, on average generated £16,100 more income per annum in 2020-21 than farms without diversified activities.
- e. Support payments continue to play an more important role in farm income for some farm types. Including support payments, around 81 per cent of all farms made a profit in 2020-21; without support this would decrease to 37 per cent of all farms. Livestock farms, particularly those in Less Favoured Areas (LFA), are the most reliant on support payments only 7 per cent of LFA sheep farms were profitable in 2020-21 without support.

Livestock:

1. Livestock Sale Prices (2020/21)



Dairy

a. The continued inflation in key input costs, combined with the uncertainty of the impact of policy changes on farm profitability, has not provided much encouragement for farmers to increase production. As such, expectations for the current milk year are a further drop of anywhere from 0.8% to 5.3%, depending on the degree to which higher input costs are offset by rising milk prices.



- b. For processors, the prospect of further drops in milk production will be fast-tracking milk price increases. And this will be necessary, particularly for processors operating in fresh product markets who aren't able to rely on reserve stocks. For these buyers, there is perhaps a greater need to pay a price which makes sure farmers have enough cash to continue operations and incentivise production amid high costs.
- c. The share of GB farms operating block calving systems has increased to 17.1%, and AYR systems have increased to 32.0%. The increased focus on actively operating a defined calving system has meant the share of farms falling between the defined systems has dropped from 58.5% to 50.9%.
- d. 20/21 year-end production ended 1.5% below 20/21 due to rising input costs.
- e. Forecast deliveries are projected to be down 0.9% which could increase further as the cost of inputs increases further.
- f. Farm gate prices have continued to rise to encourage production.

Beef

- g. Cattle prices continue on an upward trend. The average GB all-prime deadweight cattle price rose by a further 4.1p per kg for the week ending 16th April to average 436.3p per kg. This is 33p above year-earlier levels and 80p per kg higher than the five-year average.
- h. The average GB deadweight cull cow price, for the same week, rose by 2p to average 353.7p per kg. Although the smallest weekly rise since mid-January this is 77p higher than the same week in 2021. Cull cow prices have risen hugely since mid-January with the gap to prime cattle prices closing.
- i. The UK exported 10,500 tonnes of fresh and frozen beef in February, up 54% from the same month a year ago. This was the highest February beef export figure since 2011
- j. The uplift appeared to be largely driven by an increase in the quantity of fresh carcases, especially those sent to France, which saw tremendous growth compared to the same month in 2021. There was also growth in shipments of fresh boneless beef, again with growth to France, but also Ireland. Elsewhere, fresh, and frozen shipments to the Netherlands also saw notable growth, doubling on the year before to 1,900 tonnes in February.

Sheep

k. The GB liveweight Old Season Lamb (OSL) SQQ has remained fairly steady over the first 4 months of the year. It has been running below last year's high price since about February but is still strong at about 40p per kg above the five-year average. For the week ending 20th April it dropped just 0.12p to average 276.20p per kg liveweight. The cull ewe price remains impressive, averaging £115.88 per head for the same week, as demand for Ramadan continues.



- I. During February UK imports of fresh and frozen sheep meat grew 66% (1,900 tonnes) year-on-year to 4,700 tonnes, according to the latest data from HMRC. This puts import volumes at their highest level for a February since 2018. Although there was a small rise in shipments from New Zealand and Australia (up 400 tonnes and 300 tonnes on the year respectively) the majority of the increase was recorded in shipments from Ireland, up 1,100 tonnes.
- m. Traditionally imports of legs have made up around 40% of UK imports during the early part of the year. However, over the past two years this volume has dropped sharply, and this February, less than a quarter of the growth in imports can be attributed to leg cuts. It was expected that volumes would be higher than last year, reflecting the fact that the UK wasn't in lockdown and the foodservice sector was open for business.
- n. In the year to February total import volumes stood at 9,100 tonnes, up 2,300 tonnes compared to year earlier levels.
- o. Exports also recorded a sharp year-on-year rise because last year trade was disrupted due to both the end of the Brexit transition period, and Covid-19 pandemic related restrictions. In February this year, exports totalled 6,300 tonnes, up 37% (1,700 tonnes) year-on-year. This volume is similar to prepandemic and pre-Brexit levels and the EU remained the main destination.
- p. In the year to February, UK exports totalled 10,400 tonnes, up 2,200 tonnes on the year.

Pigs

- a. The UK exported 19,800 tonnes of pig meat (excluding offal) in February, according to data from HMRC. This was 9% (1,600 tonnes) more than in February last year, when the effects of Brexit were still being felt on trade, but nearly 2,000 tonnes more than was exported in January this year. However, the unit price of these exports was only £1.62/kg, nearly 30p lower than in the same month last year, reflecting the difficult trading conditions at that time.
- b. February's exports to the EU nearly tripled year-on-year to 11,200 tonnes, while volumes to China fell by 61% to just 4,200 tonnes. In January and February together, total pig meat exports were 37,800 tonnes, 30% more than during the same period a year ago.
- c. Energy and feed ingredient prices continue to rise and whilst pig prices have also significantly increased, the SPP reported price (164.92p /kg) has failed to keep pace with the impact of these increasing input costs. Current estimated cost of production is in the region of 203p/kg 216p/kg. Feed price increase alone is expected to add 20p/kg onto the cost of production

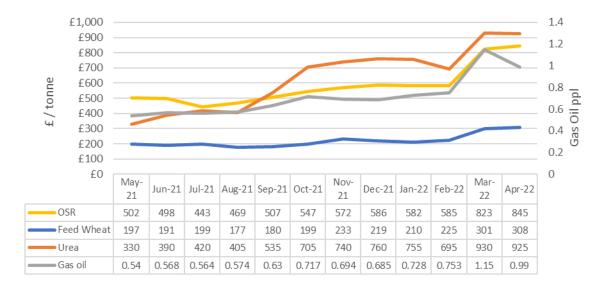
Poultry



- a. As of Monday 21st March, free range eggs are no longer available in the UK. Due to Avian Influenza, the Government introduced housing measures back in November 2021 to minimise the disease spreading. Eggs cannot therefore be marketed as free range. This restriction on keeping all birds indoors was eventually lifted on May 2nd
- b. There is growing concern for how the impact of rising costs will truly start to bite in the months to come.
- c. The EU is proposing to ban all cage systems for farmed animals. This would cover laying hens, broilers, other poultry, rabbits, sow stalls, farrowing crates and individual calf pens. It is proposed legislation would be put forward before the end of 2023 with any ban coming into force in 2027. With higher animal welfare in the UK, this move would mean that there is less chance of our farm produce being undercut by lower-standard produce from our closest neighbour and European friends.

Arable:

Sale / Purchase prices (2021/2022)



Cereals

- a. Winter cereals were generally well-established last autumn and have come through a kind winter and dry spring looking well. Conditions being too dry will now start to be of a concern and the impact this may have on yield.
- b. Whilst spot fertiliser prices are high, the majority of the 2022 crop fertiliser was purchased at more normal prices. Fertiliser for the 2023 crop would normally be purchased forward in this next couple of months. Price will be a major challenge to next year's cashflow management and resulting bottom line.



Oilseeds

- a. Rapeseed prices have also risen dramatically on the underlying basis that Ukraine is a key producer of sunflowers and rapeseed. Ex-farm oilseed rape prices are quoted at more than £845 per tonne; a 40% increase since 25th February.
- b. For the UK, only a modest increase in area for harvest 2022, will mean imports are still required to meet domestic demand (should an average yield be achieved). This will sustain UK prices, being necessary to keep them at import parity, and likely make UK crush margins a little less than those on the continent. The UK will be looking to the EU, for a production rebound, to help meet some import demand.
- c. Ukrainian volumes are likely to be significantly constrained. Last month, the Ukrainian Government stated they were looking to harvest c.70% of crops this season. Although they didn't specify which crops. However, with logistical networks highly compromised due to the conflict, exported volumes will likely be limited and sporadic
- d. Overall, winter crops are looking well.

Sugar Beet

- a. Contract price for all Sugar Beet has risen to £27/t for the 2022/23 campaign. This is to help cover the increased cost of inputs.
- b. Neonicotinoids have been authorised by DEFRA for emergency use on the 2022 sugar beet crop.

Potatoes

- a. Potato prices are currently high but due to rising costs, grower confidence is dwindling. The big rise in fuel, fertiliser and energy costs could deter any increase in the 2022 potato area. The very high cost of growing potatoes compared to other crops will probably mean a smaller potato area possibly the smallest ever. A crop of less than five million tonnes is quite possible, which could give further support to prices during the 2022/23 season.
- b. Maris Pipers for packing are making between £130 and £250 per tonne, while the best bagged chipping potatoes can also fetch £250 per tonne.
- c. The trade of seed potatoes between the EU and UK is still restricted by post-Brexit rules that do not mutually recognise plant health rules in each territory. The situation has been criticised by UK exporters to the EU and EU suppliers to the UK. In 2020, before the rules came into force, a quarter of the 113,000 tonnes of British potato seed exported were to the EU. The UK imported 11,500 tonnes of seed from the EU giving the UK an exportable surplus of almost 19,000 tonnes.



Horticulture:

Soft Fruit & Vegetables

- a. Fruit and vegetable growers are facing inflation rates of up to 24% on their cost of production. The key drivers of inflation for growers are energy and fertiliser. Labour continues to be the biggest cost for businesses, representing 30-70% of turnover.
- b. Of the last 6 months, only February has seen rainfall above trend. March and April have both been below average rainfall which coupled with warmer temperatures and wind, has left soils and crops dry. Irrigation has therefore started earlier than normal for many, and farmers are closely following the weather forecasts and therefore water availability as the irrigation season builds.

Other Issues:

- Retail and Consumer Insights.
 - a. During the pandemic, we saw a rise in home-made meals cooked from scratch but as the busyness of everyday life returns, shoppers are turning back to quick and easy meals. After seeing a huge drop at the start of the pandemic, convenience has been on a strong upward trend and now 11.5% of meals have little to no preparation time. Convenience meals are defined as pizzas and ready meals.
 - b. Convenience meals are much lower effort, taking only 27 minutes to prepare and cook compared to 41 minutes for meals cooked from scratch. However, this comes at a cost with convenience meals costing £2.18 per person, which is 68 pence per person more than scratch cooked meals (Kantar Usage, 52 w/e Nov 21). Easy-to-make dishes have become more important than quick meals, which means some shoppers may not be put off by longer cooking times, as long as the meal is easy to prepare.
 - c. Sales of red meat pre-prepared meals have grown 2.4% in the last year, with the number of shoppers choosing convenient meals now at a five-year high.
 - d. People are willing to pay more for convenience products if the benefits are clear. Therefore, packaging and point-of-sale material need to work cohesively to communicate and inspire
 - e. Added Value shoppers tend to be flexible in their approach to shopping, so there are greater opportunities to influence when at fixture
 - f. Price promotions have more of an influence on shoppers of Added Value products than on fresh primary meat, so finding the right promotional strategy is key
 - g. Communications should lead with taste, with imagery supporting this
 - h. Health and quality are the two main areas of relative weakness for Added Value, making these key areas for innovation



- i. The complex, changing nature of convenience demands a range of products that appeal to different consumer segments
- j. Added Value provides opportunities for manufacturers to better balance the carcase sales. Continued innovation with different cuts can ensure the product, and its packaging, demonstrate taste and quality.
- k. Added Value for retailers can help attract shoppers and provide a point of differentiation in the meat aisle. This can be done through promotions with clear signalling of meal inspiration and convenience (preparation time).

Trevor Atkinson - May 2022

United States

General

2022 is shaping up to be a challenging year following a generally profitable one in 2021 for many types of farms. Last year's high incomes and government support helped contribute to rising land prices throughout the U.S. with double digit percentage increases widespread. While interest rates are increasing, the averages for both fixed and variable rate loans remain below the average of the last 20 years. While they are expected to continue to increase, US rates are low compared to many other parts of the world. Lingering pandemic supply chain issues have presented some challenges which are now being compounded by the war in Ukraine. For example, our OSU Soil, Water and Forage Lab is having trouble sourcing helium which is a critical element in some of the tests.

Oklahoma's economy is faring well due to high oil and gas prices, but legislators are committed to continuing to build reserves and not increasing spending, which likely means flat budgets for education, Extension and ag research, which took roughly 30% cuts in the last decade. The legislature has made an exception to provide a \$698 million economic incentive package for a large unnamed manufacturer (presumed to be Panasonic) to diversify the economy and create jobs

Crops and Forages

Drought is wreaking havoc on winter wheat and forage crops through the plains state and western U.S. The drought is said to be the worst in more than 1,000 years and is contributing to outbreaks of wildfires in multiple states.



Crop prices are high (e.g., corn prices in Kansas touched \$8 per bushel in local markets up from \$6 at the end of 2021) and volatile due to the war in Ukraine and uncertainty about how production and trade will be impacted for not only this year but years to come. Fertilizer prices have producers taking hard looks at soil fertility and the need to add fertilizer. Higher input costs are leading to larger loan requests.

Livestock

Derrell Peel, extension livestock marketing specialist at OSU says the U.S. beef industry in totality is the most complex set of markets on the planet: cattle are produced in multiple production sectors with many small, part-time producers involved at the cow-calf stage; cattle are moved all over the country and in all sorts of environments; once harvested and fabricated, it gets really complicated because we turn those animals into many thousands of different products in markets that all interact with each other. Key pressures facing the cattle industry are extreme weather conditions (currently drought is the critical issue), supply chain vulnerabilities and shifting consumer demand. Regenerative ranching is a term that is getting more consideration. The poultry industry is more nimble as is the pork industry given the shorter life cycle and integrated nature of production.

The threat of Avian Flu is being monitored. Recently reports of several wild bird species, such at the American Bald Eagle, have contracted Avian Flu. Homeowners who practice feeding wild birds have been asked to not feed as bird feeders provide a gathering place for bird species which may result in creating a vector for further spread of the disease. Should Avian Flu become a larger problem, the protein complex may experience additional challenges to meet demand.

Tax

Mid-cycle political elections occur in the United States this fall. Seemingly, the current Administration's goals, objectives and agenda have stalled. While a stated goal to "increase taxes on the wealthy", in part, to pay for the COVID relief provided over the past two years, some economists fear this will be a difficult ask with inflation reaching 40-year highs. University and farm consultants working at the intersection of farm business management and taxation are wary of reported changes in various proposals, one such is dealing with "estate taxation", a perennial target.

Today, the estate exclusion amount is just over \$12 million dollars US with a full step-up in basis (discussed in last year's report). One proposal is to reduce the exclusion amount by half and eliminate step-up in basis. Some proposals require payment of tax on the appreciation over time at the time of death. The loss of step-up in basis reverses nearly 100



years of public policy in the USA. If these proposals become reality, family farm succession and transition will, in the near term, be a challenge.

Timber

Timber prices have moderated by about 10% as compared to last year. Supply chain issues at the mills, the access to resins and glues continue to be problematic. Housing construction costs have increased, depending on market conditions and location, \$35,000 to \$100,000 for dimensional lumber for the "typical" single family home. House size, trending up over time (1,129 ft sq in 1930, 1,500 ft sq in 1970, 2,657 ft sq in 2014; Evan Comen, 12/20, 2021) due in part to low interest rates, available lumber, and rising values. However, this trend may be changing in the near term.

Other

United States Department of Agriculture's (USDA)/National Institute on Food and Agriculture which provides federal funding for agricultural experiment stations and the Cooperative Extension Service nationally has been undergoing leadership changes over the last year and a new interim director was recently named. NIFA priorities are:

- Climate
- Workforce Development
- Health
- 4-H Positive Youth Development
- Urban Ag
- Broadband/Infrastructure
- Diversity, Equity and Inclusion

At OSU, work is underway for a New Frontiers Ag Hall, originally a \$100 million project, now approved for \$115 million cost. Because of a lack of federal and state investment in infrastructure, a private fundraising campaign for \$50 million was required and that is almost complete. The new facility is expected to be complete by fall 2024 and will include office space for faculty and staff, new lab space, classrooms, and a Dairy Bar, which was a tradition for decades of alumni.

COVID

Oklahoma was one of the states who never had a mask mandate and we've been business as usual most of the past year despite relatively low immunization rates and COVID surges.



Kansas has had on and off again mask mandates. More off in the western 2/3rds of the state and more on in the urban areas: Wichita, Topeka, Kansas City, and Lawrence. Currently, there is not a mask mandate in place in Kansas.

Guido van der Hoeven and Damona Doye – May 2022





Come and join the IFMA Family in Copenhagen at the next International Farm Management Congress, share experiences, learn, make lifelong friends and contacts within International Farm Management



www.ifma23.org