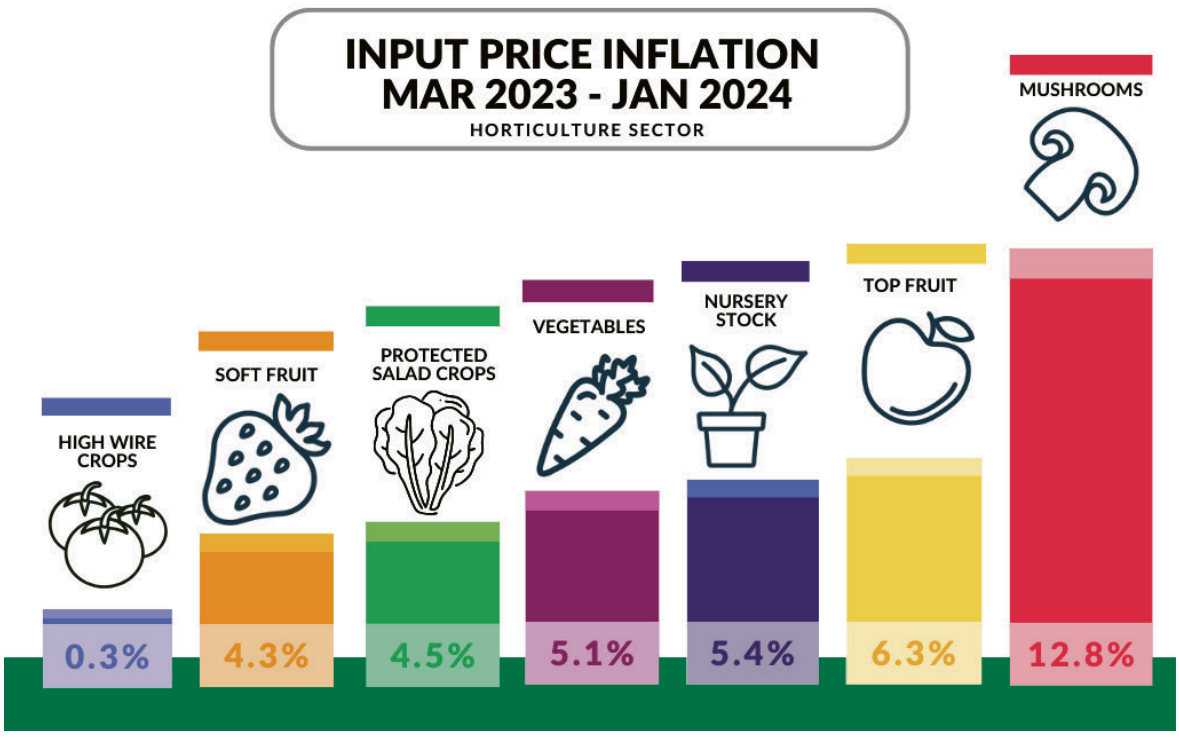
Teagasc
Agriculture and Food Development Authority

Horticulture Development Department

Horticulture Crop Input Prices 2024

- In recent years, input price inflation in the horticulture sector in Ireland has been significant.
- 2024 is no exception with average input prices rising across the horticultural sector.
- We have taken a snapshot of input prices in Jan 2024 compared to 2023. All sub sectors of horticulture show input price inflation across many inputs with some exceptions like energy.
- In 2024, the standout issue is labour costs and this is a key driver of overall input price inflation.
- Since the first report of this type in 2021, combined horticultural inputs have risen by on average 40%.
- Geo-political and climate change issues have affected international arrangements for sourcing fruit and vegetables. A market response will be required to ensure the economic and environmental sustainability of Irish horticultural production into the future.
- Technologies exist to support the evolution of Irish production systems, which permit more horticulture crop production closer to consumption while reducing labour requirements, food waste and packaging associated with long supply chains.
- Margin over costs for primary producers will need to improve to incentivise investment and allow generational renewal of businesses.
- Horticulture fresh produce has a comparatively low environmental footprint compared to other foods and has significant health benefits for consumers.



Introduction

Key Objective

The key objective of this report, as with previous reports is to surface up to date facts about specific inputs prices in January 2024 compared to 2023. This is an important exercise, as prices negotiated now for product delivered in 2024 will need to reflect these increases in variable costs along with other considerations producers need to cover production costs.

This report takes account of the most important and the relative importance of inputs to the different sectors of horticulture production arriving at average increases in input prices in each sector for 2024. The report also comments on the status of each sector and potential impacts of very high input prices for primary producers now and for the rest of 2024 season. This is now the fourth report of this type, first produced in 2021.

Background

The operating environment for Irish horticulture producers is constantly evolving. While Brexit, Covid-19 and the Russian invasion of Ukraine characterised the commentary on input prices during 2021 to 2023, this year the commentary emphasises the subject of climate change, specifically the increased frequency and spatial pattern of extreme weather leading to difficult growing conditions right through from plant establishment to harvesting. All inputs become very expensive when margins evaporate on the back of marketable yield reductions.

In 2024, Growers have seen very significant increases in labour costs. Labour is a key input in the horticulture sector and represents on average 42% of total input costs. Growers have been negotiating with their consolidator or supermarket buyer for price increases over recent years with varying degrees of success. Increases will be required in 2024 to cover input price inflation and provide margin to de-risk the business model with regard to the vagaries of climate, incentivise generational renewal and allow margin for additional capital investment to mitigate these headwinds.

Table 1 summarises the compound inflation on variable costs experienced by horticulture sub sectors since 2021.

Table 1: 3-year compound inflation on input prices by sub-sector

Horticulture Sector	% increase 2021-2022	% increase 2022-2023	% increase 2023-2024	3-YR Total since 2021
Mushrooms	18.5%	10.2%	12.8%	47.3%
Nursery stock	13.0%	10.8%	5.4%	32%
Soft Fruit	14.0%	7.7%	4.3%	28%
Top Fruit	16.0%	9.6%	6.3%	35.1%
Vegetables	26.0%	7.9%	5.1%	42.9%
High Wire Crops	49.0%	2.8%	0.3%	53.6%

Methodology

Across the various farm sectors, including horticulture, access to timely official data on input prices, remains a challenge across Ireland and the EU. Official data sources tend to lag behind the actual market situation. It is therefore necessary to reference additional data sources, industry expertise and direct contact with stakeholders to form an up to date assessment of input prices to empower producers trying to maintain margin over costs.

Through direct contact with primary producers, product and service suppliers, producer organisations and other state agencies, we have assessed the real input price increases across a myriad of inputs in the main horticulture sub-sectors, as currently quoted to the sector. We have assessed the relative importance of inputs to sectors, and calculated percentage increases between March 2023 and January 2024. We have also directly engaged with companies supplying products and services to the sector.

Note: While every effort has been made to reflect the reality for a grower in a particular sector, it should be noted that there is significant variation in the shape and size of production facilities, product mix and average price. This year we have separated protected salad crops out as an additional sector. We have looked at the following sectors: **Field Vegetable, High wire crops, Protected Salad production, Mushroom production, Soft Fruit, Nursery Stock** and **Top fruit (apples)**. While averaging has been used to best express the increases in input prices, it may not accurately reflect the actual increases for specific growers or crops. We have limited the exercise to production facilities and primary producer facilities. It has not been possible to cover all enterprise types or sub-sectors in this analysis.

Costs not captured

Growers in similar enterprises have different overheads in their business and require a margin to meet these overheads. This report does not fully capture these costs, which typically relate to legal or professional fees, accountancy, sundry expenses, administration, repairs and maintenance and loan repayments. **Bank finance** in the form of asset finance, overdrafts and term debt are important financial products for primary producers in managing and expanding their business and commentary is required for 2024. There is no one size fits all when it comes to individual businesses within sectors.

According to Central Bank, interest rates on outstanding loans for the primary agriculture sector continued to increase over the third quarter in 2023 and the year to stand at 5.57% (March 2023 was 5.01%). This mirrors increases for weighted average interest rates on outstanding loans to SMEs over the same periods. The interest rates on new loans for the primary agriculture sector increased over the third quarter in 2023 and the year, and now stands at 5.72% (March 2023 was 5.53%). Conversely, the weighted average interest rates on new SME loans decreased across a majority of sectors over the quarter, reversing previous increases (source: Central Bank website)

The impact on a business will depend on the borrower, the lender, amount borrowed and loan term.

Capital expenditure and Construction costs

As the horticulture sector is capital intensive, increases in construction and development costs associated with capital expenditure in the horticulture sector requires commentary. Producers continuously invest in equipment, facilities, and infrastructure to remain viable. Adopting technology or the latest production system requires significant investment over time. The Central Bank have

stated that construction costs in Ireland are at the higher end of the price spectrum in Europe. The outlook for construction costs in Ireland remains challenging with expectations of further increases in costs owing to a number of factors including supply chain issues as well as increases in commodity prices. (source: Central Bank website).

According to the SCSI's Tender Price Index, (TPI), the annual median national rate of inflation for the calendar year 2023 was 3.9%, down from the 11.5% recorded for 2022. (source: SCSI's website). The availability of suitable labour is becoming the more dominant concern for the sector, driven by skilled labour shortages and wage demands.

Key Horticulture Inputs

Table 2: Relative importance of inputs as a percentage of total input costs in 2024

Horticulture Sector	Labour	Packaging	Fertiliser	Plant Protection	Energy	Sector Specific Inputs	Other
Mushrooms	46.3%	7.7%	0.0%	1.8%	5.9%	35.2%[1]	3.1%
Nursery stock	36.5%	7.2%	5.5%	6.1%	7.2%	4.9%[1]	32.5%
Soft Fruit	43.1%	4.6%	4.8%	4.9%	9.6%	9.6%[3]	23.4%
Top Fruit	46.9%	9.2%	2.4%	13.8%	3.3%	0.0%	24.4%
Vegetables	38.7%	5.4%	6.5%	4.9%	5.5%	10.2%[2]	28.8%
Protected salad crops	39.9%	9.0%	5.7%	4.9%	6.4%	16.5%[3]	17.6%
High Wire Crops	41.6%	5.6%	3.2%	2.0%	19.2%	10.0%[3]	18.4%

[1] Compost or Growing Media | [2] Land Rent and Machinery Maintenance | [3] Growing Media, Seed and/or Plants

Labour

In the context of this report, labour is a key input. In 2024, labour cost is the key driver of inflation and outweighs reductions in other input categories including energy. Labour represents on average 40% of total input costs for most sectors. As an input, it has increased by between 12.5% and 24.3% depending on sector dependence on the General Employment Permits (GEP) and a combination of factors, which include the national minimum wage (NMW) increases.

Table 3: Labour unit price inflation Mar 2023 v Jan 2024

	2023 NMW[3]	2024 NMW	GEP[2] rate 2024
Hourly rate	€11.30	€12.70	€14.79
Annual wage (39 hr week)	€22,916	€25,756	€30,000
% increase on previous year	8%	12.40%	30.9%[4]
Employer contribution (22.55%)[1]	€5,168	€5,808	€6,765
Permit cost	€0	€0	€1,000
Total labour unit cost per annum	€28,084	€31,564	€37,765
Total labour unit cost hourly	€13.85	€15.56	€18.62

[1] Employer's contribution accounts for PRSI (11.05%), 20 days annual leave and 10 public holidays (11.5%) | [2] General Employment Permit (GEP).
[3] National Minimum wage | [4] 2024 GEP rate percent increase on NMW 2023

There has also been increases in costs associated with advertising, recruitment and training over the period, which are more difficult to assess in terms of overall labour unit increases and have not been included above. Many growers expend resources on agency recruitment, visa applications, sourcing staff accommodation and providing other welfare services for staff.

Packaging

Packaging includes cardboard boxes and trays, polypropylene net bags, LDPE vegetable bags, PET & PP containers (Punnets/Trays), Polyethylene (PE) packaging, labels including metallic elements and foil. It also includes flow wraps, films, strapping, plastic outer crates and wooden pallets and bins.

For 2024 we have found a wide variance in the price of packaging products, ranging from -6% to +24%. Increases will depend on the mix and type of packaging required in a sector and will be detailed under sector specific commentaries. While the pulp (cardboard) products have stabilised in price, the proportion of paper-based packaging is increasing as a trend and leading to increased unit packaging costs in certain sectors. Plastic based products in general are down significantly more as high-energy prices have subsided.

Our sources of information on packaging prices include growers, producer organisations who buy packaging centrally, and packaging suppliers directly.

Fertiliser

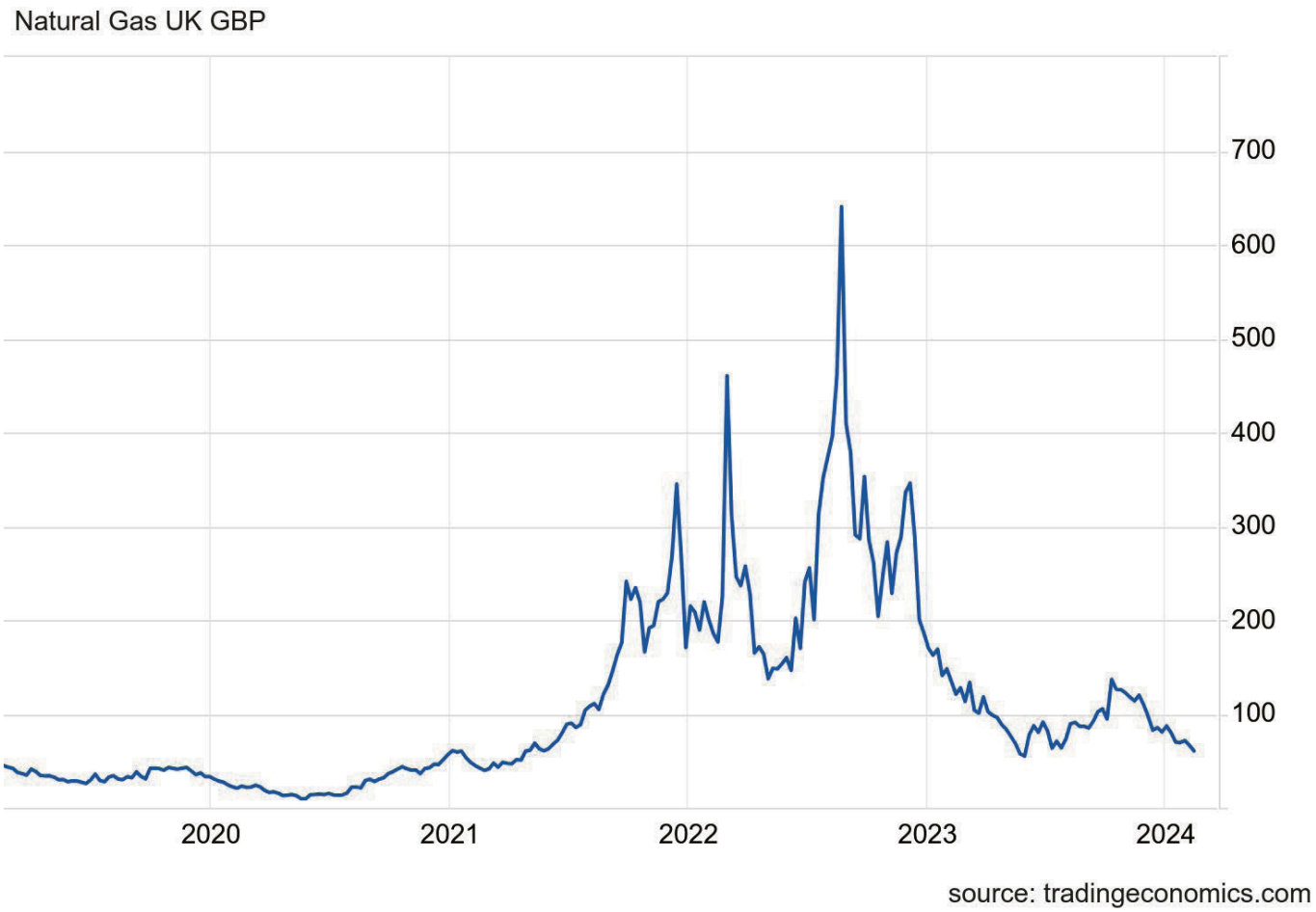
Fertiliser represents between 3% and 7% of total input costs. There have been significant reductions in straight fertiliser costs in the last year. CSO figures show CAN prices per tonne fell from €883 to €399 (54.8% reduction) from November 22 to November 23. In the same period 7-6-17 fell from €1008 to €697 (30.8% reduction). The cost of speciality horticultural fertilisers such as liquid feed have fallen back by 18-20% however some speciality resin coated (controlled release fertilisers) have only reduced in price by 3-4%.

Energy

We have referenced data from growers on electricity costs and heating costs provided by oil, gas, biomass and the grid. Energy is a significant cost for many horticulture enterprises as crops are grown indoors in glasshouses and protected greenhouse structures. While Electricity and fuel prices soared during 2022, stabilised and reduced in 2023, we have seen a reduction in energy prices in the reference period for all sectors. **Electricity and oil costs have reduced** by on average 5% to 10%, in general, any exposure to energy price reductions is dependent on crop type, contracts, and the specifics of the energy system in use.

Protected high wire crops are dependent on gas for heat and carbon dioxide supplementation. Wholesale gas prices have reduced significantly in the reference period, current wholesale prices (Natural Gas UK GBP (GBp/thm) are in similar territory to January 2021 levels.

Figure 1: Natural Gas UK GBP



Commentary by Sector

Table 4: Input price inflation Mar 2023 v Jan 2024

Horticulture sector	Labour	Packaging	Fertiliser	Plant protection	*Energy	Sector specific Inputs	Other	% increase costs of production 2023-2024 (weighted)
Mushrooms	24.3%	24.2%	0.0%	0.0%	-5.1%	3.2%[1]	0.0%	12.8%
Nursery stock	10.0%	-5.0%	-3.0%	8.0%	-5.0%	3.0%[1]	7.0%	5.4%
Soft Fruit	12.4%	-5.0%	0.0%	3.0%	-20.0%	0.0%[1]	8.5%	4.3%
Top Fruit	12.5%	3.0%	-5.0%	5.0%	-13.0%	0.0%	8.0%	6.3%
Vegetables	13.1%	-6.0%	-32.0%	3.0%	-3.0%	19.0%[2]	8.0%	5.1%
Protected salad crops	12.8%	-6.0%	-25.0%	2.0%	-5.0%	8.0%[3]	8.0%	4.5%
High Wire crops	12.8%	-6.0%	-20.0%	2.0%	-23.0%	12.0%[3]	8.0%	0.3%

**Energy includes electricity, oil, natural gas, and biomass where applicable | [1] Compost or Growing Media*
[2] Land Rent and Machinery Maintenance | [3] Growing Media, Seed and/or Plants

Mushroom Sector

From a **labour** perspective, the mushroom sector is labour intensive although significant R&D is ongoing in Ireland and abroad to evolve the production system and automate more of the picking process. This will take more development time before technology solutions are investment-ready. Meanwhile the industry needs to remain viable. Labour currently accounts for **46.3%** of costs of production on mushroom farms and has increased by **24.3%** in the reference period. The mushroom sector is dependent on employees under the General Employment Permit scheme (Table 3). The 2024 GEP pay rate has accelerated over and above the national minimum wage increases during the reference period leading to very significant labour unit cost inflation compared to 2023. While the GEP 2024 rate is 31% ahead of the National minimum wage in 2023, the sector does not rely exclusively on the GEP scheme so inflation is estimated to be 24%. This increase eclipses any of the reductions noted in energy, and is the key driver of the overall input price inflation for the sector.

Mushroom substrate price has increased by **3.2%** in the reference period. Mushroom substrate represents 35.2% of total input costs, of which mushroom compost represents 31% and mushroom casing represents 4.2%. The increase is due mainly to an increase in straw price, on the back of reduced straw volume. A reduction of 6.4% in the cereal area, lower area of winter cereals, lodging and difficult weather to save straw are the main reasons for the lower volume in 2023. (Teagasc, 2023).

Mushroom **packaging** represents 7.7% of all input costs. It has increased by an average of 24% since March 2023. This increase is driven by an increase in use of cardboard packaging as some of the UK retailers are moving towards more sustainable packaging and have targeted mushroom packaging in their campaigns. (source: Sainsbury's website)

This average requires qualification however as the cost for some growers not currently using cardboard has remained neutral while those supplying large volumes of mushrooms in cardboard trays have seen substantial two and three-fold unit price increases. Specific price movements to reflect the use of cardboard trays have occurred but a wider trend towards cardboard is emerging.

Energy is a significant cost for mushroom growers as crops are grown indoors year round with heating and cooling systems utilised. While a large number of producers have invested in renewable technologies such as solar PV and biomass boilers, biomass wood pellets and woodchip are the primary fuel source used for **heating** Irish mushroom farms. Pellet prices have stabilised in 2023 with only slight increases in woodchip. **Electricity** costs have decreased in the reference period. Overall energy prices have reduced by 5% while energy accounts for 5.9% of the overall cost of production for mushroom producers.

Soft Fruit

The largest of the soft fruit crops grown in Ireland is strawberries. The largest production takes place in Leinster with counties Wexford, Meath and Dublin being the largest producers. We estimate that input price inflation for this sector to be **4.3%**.

Labour is the biggest production cost. This accounts for 43% of the total inputs. This is mainly for harvesting but also includes labour for plant management, lifting modules and pack house. We estimate that the labour cost has increased by 12.4% due mainly to National Minimum Wage increases (Table 3). The soft fruit sector does not use many general employment permits due to the seasonal nature of labour requirements, a seasonal workers scheme would be more preferential.

Plant material and growing media is a significant cost for soft fruit production. Strawberry tray plants are imported primarily from the Netherlands and prices have increased by another 10% in the reference period.

Energy in the form of heat provided by gas predominantly, is used in modern **glasshouse production of strawberry** for season extension on the shoulders of the season, which now runs from February to December. With the exception of price volatility in October and November 2023, prices have settled down as charted at Figure 1.

Most soft fruit growers run pack house and distribution operations. In addition to costs already mentioned like labour, these costs include cold storage and transport costs. Transport and associated costs have increased over last year, estimated at 15%.

Protected Crops

High Wire Crops 0.3% Inflation

Protected Salad Crops 4.5% Inflation

The protected vegetable sector includes a range of edible crops grown in greenhouse structures where controlled environments are required for crop production. Input costs vary significantly between crops. Tomatoes, cucumbers and peppers are grown on a high wire system, in a heated and air conditioned environment and in soil-less growing media (coir, peat or rockwool). Lettuce and herbs are frequently

grown in the soil under glass in an ambient temperature or 'cold glass' as referred to in the sector. Some heat is applied in other lettuce and herb growing contexts. There are however, exceptions to this and averaging across the protected vegetable sector can unfortunately mask specific spikes in input costs, for specific production systems and producers. **In relation to high wire crops**, with deflation on energy and some other smaller inputs in this sector, the significant inflation in the cost of labour and the weight it carries in the overall cost of production, means costs are slightly up, compared to March 2023, with **an average inflation of 0.3%**. **For protected salad crops**, significant inflation in key inputs like labour and seed, mean there is **inflation of 4.5%**, despite deflation on fertiliser, packaging and energy. Issues such as downy mildew in lettuce is becoming a very significant problem and growers, without access to plant protection products, are achieving lower marketable yields. Growers are continuously adopting and investing in effective sustainable crop protection solutions which is vital to the long term viability of the sector.

Similarly to other horticulture sectors, the protected vegetable sector is highly labour intensive. The cost of **labour has increased by 12.8%** since March 2023, now making up on average, 40% of the cost of production of protected vegetables. These crops require skilled labour to carry out wide range of crop husbandry and harvesting tasks. While a modern protected glasshouse provides good working conditions, staff recruitment and retention remains challenging.

The **cost of seed** in the protected vegetable sector has **increased by an average of 12%**. Development of new varieties with tolerance or resistance to various pest and disease issues is an important part of integrated pest management in protected vegetables. These varieties can enable growers to produce more sustainable crops, helping to significantly reduce or eliminate the need to use crop protection products, while also retaining the required yield and market qualities in the produce. The development of new varieties and production of seed for these specialised crops has become more expensive in recent years. These costs have been passed to the grower.

Fertiliser is this sector is more specialised than other sectors in agriculture or even the field vegetable sector and has not reduced to the same extent as some of the basic straight or compound fertilisers. However, a significant decrease is observed since March 2023 and is **down 25% in soil-grown crops and 20% in hydroponically grown crops**, where more niche fertiliser is used. On average, **the cost of packaging** in the protected vegetable sector has **decreased since March 2023 by 6%**.

The high wire crop sector is dependent on gas for heat and carbon dioxide. Supplemental carbon dioxide is critical for optimal plant growth and performance in modern high wire crop production (e.g. Tomatoes, Cucumbers, and Peppers). These crops require heating and supplementary CO_2 as low night temperatures (below 12°C) and carbon dioxide levels falling below ambient can significantly impact on yield (30% decrease approx.). **Average price of natural gas**, which was volatile during the season, **has reduced since March 2023 by approximately 23%**, prices currently close to Jan 2021 levels (see Figure 1).

Vegetable sector

Input price **inflation in the field vegetable sector continues at a rate of 5.1%** for this reference period, totalling over 43% inflation since the first report in March 2021. Following favourable growing seasons in 2021 and 2022, extreme weather during key periods of the season in 2023 resulted in reduced yield, quality and complete crop loss in certain cases. In 2023, marketable yield was reduced by an estimated 10-15% on 2021/2022, which far outweighs input inflation in terms of overall business impact. Extreme weather events and climate change holds the potential to erode profitability and 2023 has exemplified this. This risk and the costs associated with natural capital maintenance like soil health needs to be factored into the price of field vegetables in the future for producers to remain economically and environmentally sustainable. For this reason, the 5.1% rate of inflation on inputs reported here should not be taken in isolation as the basis for price increases. Real and meaningful discussions about longer term supply arrangements are required to underpin this sector.

Growers have expanded, innovated and invested to maximise efficiency but need longer-term supply arrangements at sustainable prices in order to make significant investments to mitigate climate risk and put their businesses on an economical and environmentally sustainable pathway. **Margin over costs for primary producers will need to improve to incentivise investment and allow generational renewal of businesses**.

Referencing last year's report (Figure 1&2) prices for both fruit and vegetables declined in real terms over the period 2003 to 2022. While there have been some recent increases, the general downward trend has not been corrected. Fresh vegetable prices hit their lowest level of €1.46/Kg in August 2020, and peaked at €1.87/Kg, in December 2007 (Bord Bia, 2023). From a field vegetable producer perspective, margins have reduced over this timeframe while the costs associated with field crop production have increased immeasurably during this nineteen-year period, by 42.9% since 2021.

The vegetable sector is very labour intensive, particularly for crops harvested and graded by hand. Labour is the most significant cost in vegetable crops accounting for an **average of 38.7% of the cost of production. Since March 2023, there has been a 13.1% increase in the cost of labour** for field vegetable growers as they try to attract staff into their business in a very competitive labour market. Availability and cost of accommodation, particularly in the Dublin area is a major barrier to attracting staff and the seasonal nature of the vegetable sector compounds this challenge.

The cost and availability of suitable land, a basic requirement for rotational purposes is a major challenge to the vegetable sector. Prices are up by an average of 20% since March 2023 but the average here does hide significant spikes in the price of rental land for certain crops in particular regions. Competition for land has ratcheted up in recent years due to changes to nitrate regulations for the dairy sector, and competition for land in vegetable growing areas from a variety of farming enterprises, but also solar farms and the construction industry. Rental land for vegetable production needs to be suitable to vegetable growing, ideally with irrigation possibilities and be close to packing facilities to avoid excessive costs. It is becoming increasingly difficult to source and is one of the most significant challenges to the sector.

Diesel and electricity make up the main energy requirement for the field vegetable sector. While there has been some volatility during the year for diesel, generally it is cheaper than last year. With electricity, we estimate energy costs to be down by 3%.

The vegetable sector is highly mechanised, particularly for crops that are machine harvested, washed, graded or stored. The sector is characterised by significant capital investment every year (supported by the Scheme of Investment Aid for the Development of the Commercial Horticulture Sector). Since March 2023, the cost of new machinery has increased by 6%, the **cost of machinery parts have increased by 12%** while maintaining and **repairing machinery has increased by an average of 18%**. Together they make up approximately 4.5% of cost of production.

Global volatility around the price of energy has been a major driver of inflation across many key inputs in the vegetable sector in recent years. However, the reduction in the cost of natural gas, used in the manufacturing process of many **fertilisers**, has seen a **deflation of 32%** on average for nitrogen and regularly used compounds since March 2023. While there is variation, speciality fertilisers in the vegetable sector have reduced by 20% on average, partially due to the increased manufacturing process involved. Fertiliser makes up approximately 6.5% of the overall cost of production.

Cardboard and plastic packaging required in the vegetable sector are somewhat variable in terms of price changes. Having increased significantly in recent years in line with the energy crisis, there was a lag before deflation was observed in packaging, despite reductions in energy costs. Since March 2023, the **price of cardboard boxes and trays has deflated by approximately 8%, while plastic bags, film and trays/punnets have dropped by 5% and net bags remain unchanged**.

The cost of field vegetable seed has increased by an average of 6% since March 2023 due to the poor growing season affecting seed production. High volume, established varieties are less effected due to existing seed stocks, however, crop failure on some specialised varieties intended to fill a particular part of the season have resulted in limited or no availability in some cases.

The cost of crop protection products has not been released in many cases for the 2024 season but while there is often variation, major increases on products like we have seen in recent years seems to be unlikely. To supply carrots during the winter, crops are covered with straw for frost protection. Due to high demand for straw from several sectors and limited availability, the price of straw has increased by 20% on average since March 2023.

Organic vegetables

Organic vegetable production can range from highly mechanised field-scale systems with fewer crops, to labour intensive market gardens growing a wide range of crops.

Costs vary considerably depending on scale of production, type of crop(s), level of mechanisation and equipment (field and pack house), the impact of weather and market.

Labour comprises a significant portion of organic vegetable production (planting, weeding, harvesting etc.) and post-harvest costs (grading, cleaning, and packing). We have some information that labour makes up a larger proportion (53%) of variable costs compared to conventional but our sample size is too small to be conclusive.

Nursery Stock & Ornamental Sector

There a number of distinct subsectors of the ornamental sector: young plant propagation, containerised nursery stock, field production of trees, protected production of bedding and pot plants, hedging and cut foliage. Each sector has a different profile of input material and labour. Growers may overlap one or more sub sector resulting in a spread of prices. **We estimate the broad sector inputs are up by 5.4%.**

Young plant material

The inputs for producing young plants are labour, pots and growing media. Labour has increased as outlined where pots and growing media have remained stable. Demand has remained steady in 2023.

Whips/hedging plants have increased further depending size and species of lines. In particular native hedging plants have increase by up to 100%. The cost of grafted young trees had doubled since 2021 and has not decreased since then. Young shrubs have seen a rise of c. 5%. Bedding and protected ornamental plants have seen a rise in plug costs of c.3-4%. Plug growers in Netherlands have seen energy costs reducing and are again ramping up production after cutbacks in 2022/23 with potential for oversupply in 2024.

Labour

Increased costs of labour have been in line with other horticultural sectors and are detailed in Table 3. Labour remains tight and for many is a limiting factor in crop production. These sub sectors have not used the work permit scheme due to the mostly seasonal nature of their sectors and its lack of suitability for this sector.

Energy

Energy costs have moved in line with other sectors. Electricity costs have fallen back in the last twelve months by 5% though many growers have been on contract at higher rates and will seek better terms as contracts expire. A small number of growers have heated glass and are using biomass in the form of woodchip or pellets for base heat with top up from gas. Wood pellet costs have stabilised or reduced by 10%.

Transport

Transport of plants varies depending on product: curtain sided truck for trees, pallets/pallet boxes for whips and bare root hedging, Danish trolley for pot and young plant material. Costs for dedicated transport of Danish trollies in the sector have remained high in the reference period.

International transport from Netherlands for trolleys has stayed at a high level having seen an increase of up to 33% in 2022. Trolleys from NL to Ireland cost between €125 and €215 depending on the destination in Ireland. Additional fuel surcharges in the order of 22-25% are applied separately to trolley costs. Transport of pallets ranges greatly €330-500 also attracting fuel surcharges. The main export of plants from Ireland is to GB, where customs, admin and SPS fees were introduced in 2022.

Transport in Ireland for pallets had risen by 10% in 2022 and have not decreased since then with costs of €45-70 depending on distance and courier. Cost for trolleys transport remains high at €80 up from €55 in 2022. An additional fuel surcharge is also applied with no reported reduction in the last 12 months in spite of recent reduction in fuel.

Packaging

Plastic pots, bedding packs, trays and labels pricing varies depending on source material. In general prices have fallen by about 5%. Due to market demand there is a move from black polypropylene to more expensive taupe/coloured plastic that can more easily be segregated and recycled. These are roughly 5% more expensive than black PP. Forestry bags have come back in price by 2-3% after a 53% increase in 2022.

Fertiliser

Large reductions have been seen in straight fertiliser costs in the last year. CSO figures show CAN prices per tonne fell from €883 to €399 (54.8% reduction) from November 22 to November 23. In the same period 7-6-17 fell from €1008 to €697 (30.8% reduction). The cost of speciality horticultural fertilisers such as liquid feed have fallen back by 18-20% however the most common resin coated controlled release fertilisers have only reduced in price by 3-4%.

Growing media

There have been some minor price changes in growing media with limited impact of better supply of wood fibre and some niche inputs such as perlite becoming cheaper due to a reduction in energy costs. This is helpful, as growers have been increasing the percentage of non-peat elements in recent years. This price reduction has been offset by an increase in cost of peat in part due to very limited stocks and harvesting. The cost of coir transport has increased in recent week due to the gulf attacks on shipping. Cost of growing media per m^3 can be in excess of €70.

Plant protection products

This sector includes biological control agents, bio traps, bio pesticides, weed control, fungicides and pest control. The overall trend in this very diverse input category is for an increase in cost in line with inflation or as high as 10%. Some lines have however fallen back e.g. glyphosate 25%, nematodes down by 4%.

Cut flowers and foliage

This €10m industry includes daffodils primarily for the domestic market and cut stems of greenery (Eucalyptus, Pittosporum & Laurel) for local markets and export (80%) to UK and Holland. In common with other horticultural enterprises, the pattern of changes in input costs are broadly similar, however the increase in labour cost alluded to in Table 3 will have a very significant inflationary impact on cut flower and foliage businesses given it can represent up to 60% of cost on some of these highly specialised farms. Transport and materials account for approximately 22% of the cost.

Increases in production costs coupled with reduced domestic, UK and European market demand has made the operating environment more difficult. The cost of living crisis and continued recession in the UK and wider Europe, the increased cost of phyto-sanitary regulation for export of some products into the UK and competition from third countries have created headwinds for the sector.

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