# COSOSC AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY

## 2027 SECTORAL ROAD MAP: HORTICULTURE



## Market and policy issues

Excluding potatoes, the horticultural sector contributes close on €400m (Source: Department of Agriculture, Food and the Marine (DAFM) 2019) to agricultural output at farm gate level and provides over 6,600 jobs in the production sector, and a further 9,000 in the amenity services sector. The market challenges can be summarised as a general cost-price squeeze for producers and downward price pressure from imported goods applied from the supermarket multiples. The opportunity to mitigate primary producer risks related to market access and price have not been well taken up in terms of the formation of producer organisations (POs) up to now, for a variety of reasons.

Recent increased activity related to new PO formations will be instrumental in defining the future profitability of horticultural enterprises. In the context of Ireland as a highcost economy, technology adoption will be the key focus to maintain and grow the value of the sector. Access to labour, including seasonal labour, is a pre-requisite for horticultural businesses. The existing pilot permit scheme has delivered significant help to a sector which struggled in a competitive labour market. A permanent horticulture workers' scheme will be required to maximise access to labour. Additionally, the sector will need to strive to deliver and adopt laboursaving technologies. Most sub-sectors of horticulture can be characterised as having consolidated in grower number terms, where the increased size of individual operations has led to changing requirements in terms of the research and advisory agendas.

Most sectors of horticulture are currently in a growth phase due in part to the increased demand for plant-based products on the edible side and to increased demand for planting material on the back of more construction activity. The opportunities for development of the sector require investigation. There is a requirement for significant market opportunity investigation in the UK and wider afield to understand the potential for horticulture enterprise development in Ireland, whether for import substitution or export.

Generally, horticulture producers face the challenge of the marketplace on a daily basis. There are no subsidies, so profit from productivity is paramount. In the face of increasing consumer demand for plant-based nutrition, sustainability and quality-assured products, growers and producers will need to constantly innovate to increase volume while maintaining competitiveness and viability.

## Shape and size of the sector in 2027:

- continuation of consolidation, specialisation and vertical integration in grower numbers and in the supply chain;
- anticipated 400 sustainable, profitable commercial production units, down in numbers but up in volume and value; and,
- increased participation in producer organisations by growers in non-competing product lines.

### Targets proposed for the horticulture sector:

- adoption of technologies to reduce labour needs and to compete with lower-cost economies;
- exploit the demand for whole foods and plant-based nutrition; and,
- increase economic and environmental sustainability. The horticultural sector will exploit the development potential of international demand for more whole foods and plant-based nutrition. Amenity horticulture will exploit the increase in demand for plants on the back of increased construction activity and general demand for planting material. There are also positive demand drivers for plants in the retail environment. Teagasc will:
- continue to support innovation that creates diversity in the nursery stock/cut foliage sector;
- support the development of market opportunities for edible horticultural products and diversification opportunities for producers;
- support producers in sustainable production techniques by making best use of integrated pest management (IPM) in crop production, which meets the increasing consumer demands around sustainability and quality-assured products; and,
- support those producers who are investing for sustainability and efficiency in their production system.

## Horticultural programme

The Teagasc horticultural programme will focus on applied technology adoption and identification of breakthrough technologies which will lift the sectors of horticulture to a new level of performance and efficiency. Focus will be on labour-saving technologies, evolving production systems to limit the requirements for crop protection products, and increasing economic and environmental sustainability.

## **HORTICULTURE (CONTINUED)**

## Technical performance

- Mushrooms: at the process end, harvester productivity and yield will increase through innovation in the application of precision technology. A more sophisticated mushroom product portfolio will emerge in the coming years, including growing functional foods for the medicinal market.
- Cut foliage: continuation of the programme of screening a range of plant material to identify 'newer' and innovative types to continuously excite an expanding market. Expansion of the sector in area terms from 400ha to 650ha, leading to an increase in value terms from €7m to €10m.
- Vegetables: crop management and protocols will need to change to incorporate IPM strategies, in the context of reduced pesticides and new regulations. There will be additional demand for micro greens and sprouted seeds.
- Fruit: adoption of protocols to improve quality in supply of a range of varieties over maximum season. Particular attention is to be given to the Malling Centenary variety of strawberry and other developing opportunities.
- Nursery stock/ornamentals: use market intelligence (developed in concert with Bord Bia) and understand that Ireland has a high plant health status with 24 protected zones, to deliver actionable advice to the plant producers about new market opportunities in export markets and their positioning within the value chain.
- Support the horticulture industry in the area of compliance management, in the context of increasing regulatory and consumer demands around sustainable and quality-assured food, assisting sectors with management of new pests of horticulture and where significant knowledge gaps exist, conduct more risk assessments, taking account of changing supply chains and source of inputs to get ahead of emerging issues.

## Environmental and land-use implications

■ Horticulture production only uses 0.5% of available agricultural land yet is worth over €360m per annum at the farm gate. It is a sector more dependent on high levels of capital investment and high-value crop production under glasshouses and protected structures. Sustainable food production systems already exist in horticulture but are costly in terms of infrastructure. Opportunities for input reduction and

- increased output recovery have been developed and further environmental measures are in deployment to reduce negative impacts on the environment.
- In the context of the circular economy, horticulture is well placed to maximise waste utilisation and increase energy-use efficiency.
- IPM adoption and restricted pesticide availability will reduce environmental loading.

## Research and advisory actions

- Continue to revitalise Teagasc's capacity in horticultural research, particularly in mushroom research and IPM. Focus advisory services in the nursery stock, vegetable, fruit and mushroom areas, supported by the basic services of pathology and entomology.
- The sustainability of peat use in horticulture will need to be a focus. It is essential to research materials which can replace peat while fulfilling the sustainability and environmental criteria demanded by consumers.
- Shaping the research and advisory agendas for horticulture sub-sectors in consultation with stakeholders, including supporting market opportunity analysis and initiatives in the sector, with partners Bord Bia and the DAFM plant health and horticulture division.

#### Comment

The key drivers for the sector in terms of market demand for fresh produce and plants are strong. The need for ongoing industry development remains a priority to maximise the opportunities which are emerging for this sector.

Significant development potential exists but will need to be detailed and developed and ultimately delivered. The goal of Teagasc will be to provide the industry and growers with the knowledge and skills to take advantage of these opportunities, while enabling growers and the industry to deliver increased profit from productivity.

#### Contact

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The road map for horticulture is available on www.teagasc.ie.