

Irish agriculture and agricultural policy during the hot, dry summer of 1976*

by David R. Stead

Abstract

This article focuses on the experiences of Irish agriculture, and agricultural policy initiatives, during the final months of the mid-1970s pan-European drought. Overall, Ireland's agricultural sector experienced some production problems arising from heat and moisture stress but was not severely affected. Nationally barley and potato yields fell most markedly, and with grass growth generally depressed, purchases of animal feedstuffs rose substantially. Milk yield increased, as did farm-gate output prices, strikingly so for potatoes. In many cases, rises in nominal family farm income surpassed considerably the rate of general inflation. Immediate policy measures included aids to private beef storage and thwarting the potato smuggling incentivized by export restrictions and higher prices overseas. By and large central government responded well. The main focus of political concern was the adverse impact of weather-induced food price rises on low-income consumers.

In the summer of 1976, the Republic of Ireland experienced its highest air temperature recorded in the twentieth century, and the final months of a prolonged spell of low rainfall, part of the iconic pan-European drought of the mid-1970s. Yet there has been no account of the effects of this extreme weather event on Irish farmers, or of how the government in Ireland responded, comparable to the studies published for, say, Britain.¹ The closest historical work is

* For invaluable comments, the author thanks the editor, anonymous referees, John Martin, Cormac Ó Gráda, Jacqueline O'Reilly and conference and seminar audiences in Cork, Dublin, Leicester and Marcham. The usual disclaimer applies.

¹ Contrast the minimal coverage across T. W. Moody, J. G. Simms and C. J. Woods, 'Chronology 1921–76', in T. W. Moody, F. X. Martin and F. J. Byrne (eds), *A new history of Ireland*, VIII (1982), pp. 469–72; J. C. I. Dooge, 'Droughts in Irish history', in É. de Buitléar (ed.), *Irish rivers* (1985), pp. 26–8; J. J. Lee, *Ireland, 1912–1985: politics and society* (1989), pp. 469–87; M. E. Daly, *The first department: a history of the Department of Agriculture* (2002), ch. 10; D. Keogh, 'Ireland, 1972–84', in J. R. Hill (ed.), *A new history of Ireland*, VII (2003), pp. 365–73; G. Kiely *et al.*, *Extreme weather, climate and natural disasters in Ireland* (2010); E. Sweeney, *Down down deeper and down: Ireland in the 70s and 80s* (2010), ch. 5; D. Ferriter, *Ambiguous Republic: Ireland in the 1970s* (2012); T. Hennessy and A. Kinsella, *40 years of Irish farming since joining the European Union* (2013), ch. 3; C. Meehan, *A just society for Ireland? 1964–1987* (2013), ch. 6; Raidió Teilifís Éireann (RTÉ) television programme 'Behind closed doors: 1976' (2007); with e.g. E. S. Carter, 'The effect of the drought on British agriculture', *Proc. Royal Society of London, Series A (PRSLA)* 363 (1978), pp. 43–54; G. E. B. Morren, 'The rural ecology of the British drought of 1975–1976', *Human Ecology* 8 (1980), pp. 33–63; J. Kay, 'Dust to dust: the summer of 1976', *Weather* 59 (2004), pp. 247–50; J. Martin, 'Long hot summers revisited', *Rural Hist. Today* 19 (2010), pp. 1, 8.

Brennan's recent discussion of water supply in the Dublin area.² Irish historians have instead given more attention to cold and wet weather episodes.³ This article seeks to address this neglect by analyzing the experiences of agriculture and agricultural policy initiatives in Ireland during 1976. What follows, therefore, is not a general account but a focused case study on a very narrow period and one country, which only considers immediate on-farm impacts and short-term domestic policy responses such as thwarting potato smuggling. As it transpired, generally the year was not a particularly bad one for Ireland's farmers, despite the existence of some production problems. Hence the main focus of political attention was on the adverse impact of weather-induced food price rises on low-income consumers, especially for potatoes, rather than the direct effects of heat and moisture stress on farm output and incomes.

I

The exceptionally warm, dry and sunny Irish summer of 1976 was part of a longer, broader anomalous weather pattern, which extended over much of western Europe more or less from May 1975 to August 1976. Contemporary meteorologists put the unusual weather down to, *inter alia*, a northward shift in the position of the mean jet stream.⁴ Ó Laoghóg of Ireland's Meteorological Service dated the beginning of the 'dry period' in the Republic back to October 1974, since large areas in the south and east of the country (where the land generally most favours agriculture) did not experience the wet March and April 1975 that occurred elsewhere in Europe to break up the weather pattern following the rather dry winter of 1974/5.⁵ In the north and west of Ireland, however, there was no material rainfall deficiency until after January 1975. Altogether, during 1975, nationally rainfall totalled just 83 per cent of average, the chief drought period being from approximately mid-May until the first week in July inclusive. Generally the first three months of 1976 were balanced between wet and dry, yet April was very dry: the driest April so far that century at the National Botanic Gardens, Dublin. Rainfall was well above normal in many parts of Ireland during May; dry weather returned in June. Late June and early July were remarkably warm, dry and sunny: air temperatures peaked on 29 June, with a national twentieth-century record 32.5°C at Boora, county Offaly, and historic highs of at least 31.5°C at Kilkenny city and Shannon airport, county Clare. Some other stations

² N. Brennan, 'Dublin region water supply area – a case study of the 1976 drought' (Irish Met. Society conference poster paper, Dublin, March 2012).

³ E.g. D. Dickson, *Arctic Ireland: the extraordinary story of the great frost and forgotten famine of 1740–41* (1997); K. R. Hickey, *Deluge: Ireland's weather disasters, 2009–2010* (2010); K. C. Kearns, *Ireland's arctic siege: the big freeze of 1947* (2011).

⁴ European Commission, 'Communication from the Commission to the Council concerning the effect of the drought on agriculture', COM(76)480/final (Sept. 1976), pp. 1–4; R. M. Morris and R. A. S. Ratcliffe, 'Under the weather', *Nature* 264 (1976), pp. 4–5; R. A. S. Ratcliffe, 'Meteorological aspects of the 1975–76 drought',

PRSLA 363 (1978), pp. 3–20.

⁵ Met. Service (now Met Éireann) internal memo. 88/79 by S. S. Ó Laoghóg, Jan. 1979. Complementary weather data sourced from *ibid.*, 82/76, Feb. 1976; Department of Agriculture and Fisheries (DAF), *Annual report of the Minister for Agriculture and Fisheries, 1976* (1977), p. 121; Central Statistics Office (CSO), *Statistical abstract of Ireland, 1976* (1978), pp. 6–10; M. MacCárthaigh, 'Assessment and forecasting of drought flow conditions in Irish rivers' (paper to the Institution of Engineers of Ireland, Nov. 1992); *id.*, *An assessment of the 1995 drought: including a comparison with other known drought years* (1996); Hickey, *Deluge*, Figure 2.1; Brennan, 'Dublin water supply'; Met Éireann website, www.met.ie.

from county Donegal to county Kerry reached their (still-unbroken) record peak temperature for June or July. At the National Botanic Gardens, 27 June was the sunniest day of the year with 15.2 hours. After outbreaks of mostly thundery rain around 5 to 15 July, the main drought period began, lasting through August until about 7 September.

Figure 1 reproduces Ó Laoghóg's map of aggregate rainfall during April to August 1976 expressed as a percentage of the long-term average. Overall the Republic received just 66 per cent of average rainfall during that five-month period. The north west, west and south west suffered least from deficient precipitation. Most of the rest of the country, however, had only between 50 and 70 per cent of average rainfall, the worst-affected areas with less than 50 per cent being largely confined to isolated pockets on the east coast. Across large parts of the east, midlands and south, these five months were among the half-dozen driest such periods in 150 years. Nine heat waves (five consecutive days with maximum temperature above 25°C) were recorded at synoptic stations, a total exceeded in only one year between 1947 and 2013, including the two longest: 10 days at Kilkenny, ending on 23 August; and 14 days at Birr, county Offaly, ending four days later. The drought broke in early September with heavy rains, especially in the east: this became one of the wettest months then on record at the National Botanic Gardens. These continued into October and were to some extent a product of the unusual summer arising through elevated sea temperatures, among other things, and caused flooding in much of Leinster.⁶ There was no general lack of precipitation during the following winter. Although groundwater was a widely used supply source on Irish farms, surface water was important too,⁷ and the river flows measured in 1976 were among the lowest ever documented in Ireland. At most hydrometric stations around the country, there was a steady trend decline in daily mean flow from April or May, typically reaching a nadir around early September, followed by a generally rapid recovery with the heavy autumn rains.⁸ If the 1976 low flows were unconnected to the comparable low flows of the previous year, nonetheless water stored in many aquifers and reservoirs had already been reduced to below-normal levels in 1975; and crucially precipitation over the winter of 1975/6 was very often inadequate to restore storage sufficiently to meet the higher demand from agriculture, and other users, during the subsequent summer. Many wells in rural areas dried up. In August 1976 part of one of Dublin's principal reservoirs, Roundwood, was described by a television reporter as 'more like a parched desert waterhole', being overall approximately less than half full, although the shortfall was considerably less evident at Poulaphouca on the other (western) side of the Wicklow Mountains.⁹ As the drought continued, a meeting of farmer representative groups saw '[g]reater emphasis on aid to farm water supplies ... as an urgent need'.¹⁰

⁶ The island of Ireland contains the provinces of Leinster (east), Ulster (north), Munster (south/south west) and Connacht (west). Three Ulster counties are in the Republic.

⁷ H. Richards, 'Water everywhere?', *Nature* 264 (1976), p. 6.

⁸ MacCárthaigh, 'Assessment and forecasting'; id., *Assessment*; L. Brogan and C. Cunnane, 'Low flows and low flow distributions for Ireland' (National Hydrology

Seminar paper, 2005), pp. 86–7, 90; C. Murphy *et al.*, *HydroDetect: the identification and assessment of climate change indicators for an Irish reference network of river flow stations* (2013).

⁹ Met. Service memo. 88/79, p. 6; *Irish Times* (IT), 2 July 1976, p. 1; 17 Aug., p. 11; 19 Aug., p. 11; 28 Aug., p. 1; RTÉ television programme 'Reeling in the years: 1976' (2002); Brennan, 'Dublin water supply'.

¹⁰ *Irish Farmers' J. (IFJ)*, 11 Sept. 1976, p. 37.

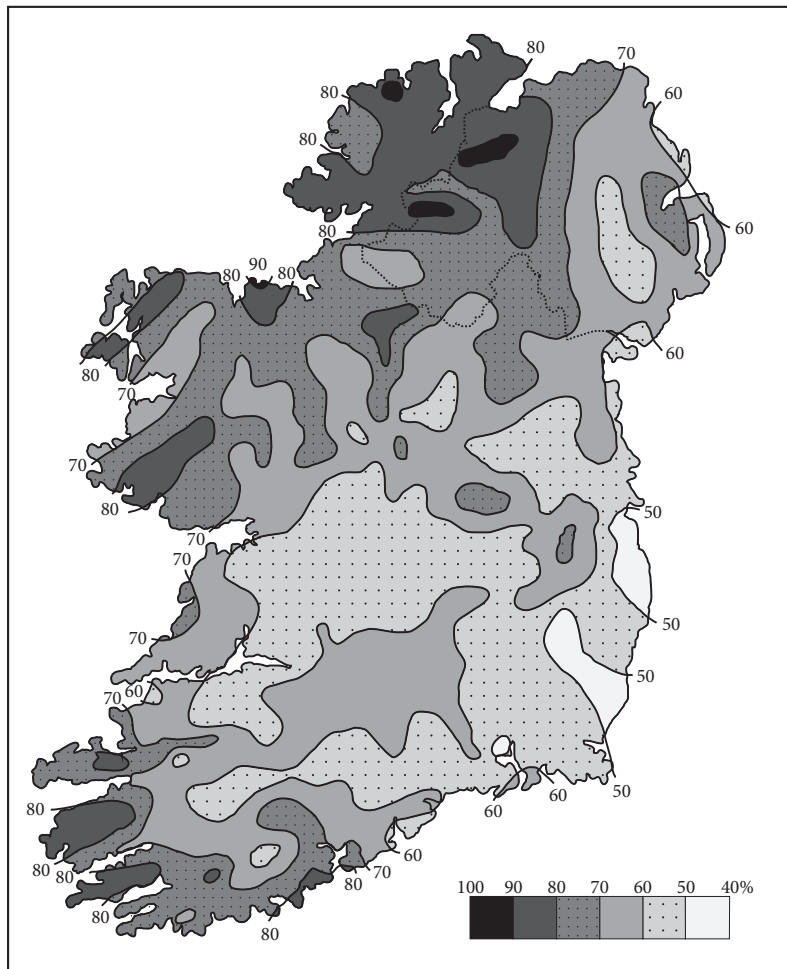


FIGURE 1. Total rainfall during April to August 1976, island of Ireland, expressed as a percentage of the long-term average (1941–70)

Note: Northern Ireland is outside the scope of this article.

Source: Met. Service internal memo. 88/79, Figure 6.

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For agriculture, one drought indicator is the divergence between the water need of crops and that actually available via precipitation and soil reserves, that is the difference between potential and actual evapotranspiration. Figure 2 reproduces Mills's spatial estimate of the annual water deficit for Ireland in 1976.¹¹ Naturally the broad regional pattern reflects that in Figure 1, with the highest deficits again being in the south east (it also reflects his calculated long-term average, although of course the absolute values in Figure 2 are substantially greater). Due to local circumstances, however, serious on-farm water shortages were reported as far west as north Limerick, south Roscommon and east Galway.¹² The previous year was also exceptionally dry, with almost all of the country experiencing a deficit of over 20mm. Data on soil moisture deficit at three locations show values rising to very high levels by August 1976, then recovering quickly to virtually zero by the end of September with the

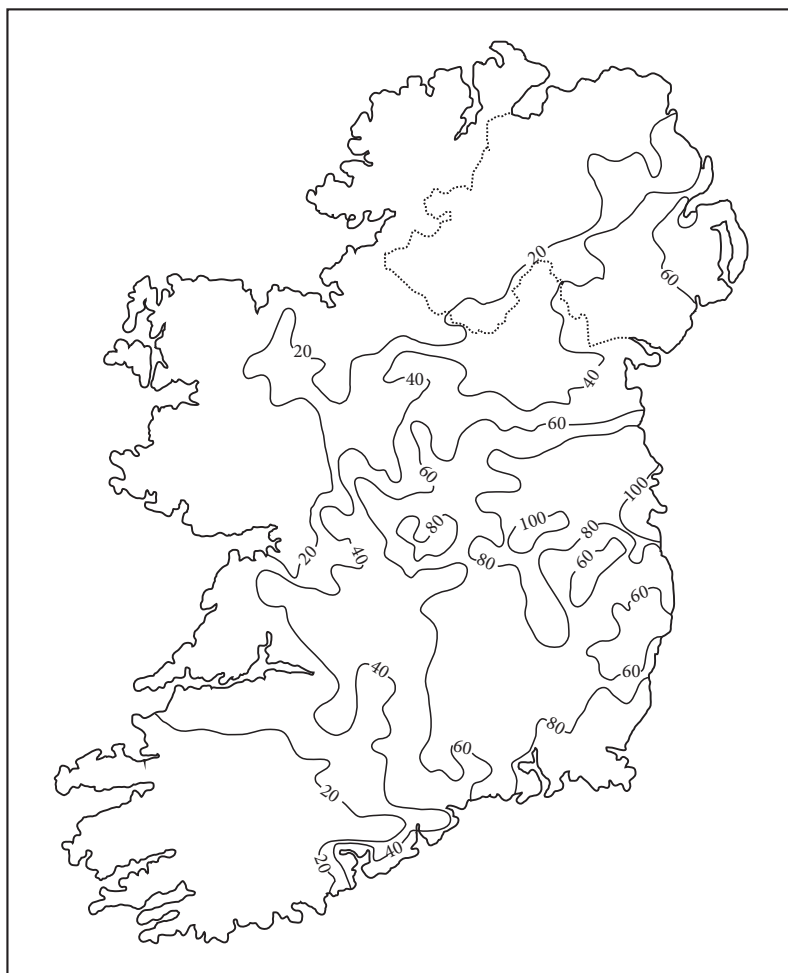
¹¹ G. Mills, 'Modelling the water budget of Ireland – evapotranspiration and soil moisture', *Irish Geography* 33 (2000), pp. 99–116. Met. Service memo. 88/79,

Figure 4, gives thrice monthly statistics for two stations.

¹² *IFJ*, 28 Aug. 1976, p. 3; 11 Sept., p. 10.

FIGURE 2. Estimated annual water deficit (mm), island of Ireland, 1976

Source: G. Mills, 'Modelling the water budget of Ireland – evapotranspiration and soil moisture', *Irish Geography* 33 (2000), Figure 8. © Geographical Society of Ireland, reprinted by permission of the author and Taylor & Francis Ltd on behalf of the Geographical Society of Ireland.



heavy rain.¹³ Offsetting these water deficits through irrigation was probably unlikely to have been cost effective for many farmers, apart for some high value crops such as fruit in badly affected areas.¹⁴ Yet for all the extremities of the summer weather by national historical standards, even greater irregularities occurred in other parts of Europe. In Britain, total rainfall during April to August 1976 relative to normal was 18 percentage points below the corresponding figure for Ireland; rainfall maps show central-southern Britain and northern France to be the driest regions. In Fitzgerald's comparison, meanwhile, soil moisture deficits were more severe and prolonged at Cambridge, compared to Kilkenny.¹⁵

¹³ Met. Service memo. 88/79, p. 5, Figure 4; D. Fitzgerald, 'Farming weather in the drier areas of Ireland and England in 1976', *Biata* 30 (1976), p. 205.

¹⁴ J. F. Collins, F. J. Larney and M. A. Morgan, 'Climate and soil management', in T. Keane and

J. F. Collins (eds), *Climate, weather and Irish agriculture* (sec. edn., 2004), pp. 127, 130; J. I. Burke *et al.*, 'Weather and crop production', in *ibid.*, pp. 161–210.

¹⁵ Fitzgerald, 'Farming weather', p. 205; Morren, 'British drought', p. 44; references in n. 4 above.

II

The volume of total gross Irish agricultural output in 1976 decreased by only 4.6 per cent year-on-year; the decline in net output was a more notable, though still not disastrous, 10.0 per cent due to an increase in purchased farm materials. The annual rise in the nominal value of aggregate output approached 20 per cent in both gross and net terms, but this performance looks much less impressive when compared against the general inflation rate of 18.9 per cent.¹⁶ Meanwhile nominal aggregate income from self-employment in agriculture rose 12.9 per cent year-on-year, an outcome close to a forecast that '[f]armers' incomes' would increase by at least 10 per cent.¹⁷ Quill and Teahon's new estimates of real gross value added in agriculture, together with forestry and fishing, for 1972–86, and Matthews's series of real aggregate income from self-employment in agriculture during 1970–98, provide inflation-adjusted data to place 1976 into a longer-term perspective. In neither series does it stand out as a particularly bad year.¹⁸ Indeed, real income from agricultural self-employment in 1976 was higher than during most of the 1980s and 1990s, and worse annual declines occurred in other years, such as 1979. Furthermore in 1977 real gross value added had almost recovered to its 1975 level, while real self-employment income had surged to an historic peak.

Table 1 shows that Irish crop yields were consistently lower in 1976 than in 1975, and apart from sugar beet, were also below their three-year mean. The former finding provides reasonably strong evidence for overturning Ó Laoghóg's claim, based largely on drought indicators and without citing output statistics, that the effect of drought on Irish tillage was more severe in 1975 than 1976.¹⁹ Nationally yields fell most heavily for malting and then other barley, with moisture stress during the growing season and an unusually high level of mildew reducing grain quantity and quality. 'This must now rank as one of the worst malting barley harvests ever', complained the *Irish Farmers' Journal*. 'Large quantities of the crop have gone straight for feed'. In one experimental trial, the yield of the then standard malting barley variety was 20 per cent below its five-year average, and drought forced the abandonment of another trial. This marked impact is unsurprising, not least because malting barley was often grown on lighter soils which are more susceptible to water stress; moreover it was

¹⁶ CSO, *Statistical abstract*, Tables 62–3, summary. The sources herein warn about data quality and explain the indicators utilized. Keane and Collins (eds), *Climate*, summarize the agricultural science literature on how water stress, sunlight and high temperatures affect farm production in Irish conditions.

¹⁷ National Archives of Ireland, Dublin (NAI), TAOIS/2006/133/247, memo. to An Taoiseach (Prime Minister), 20 Jan. 1976; CSO, *Statistical abstract*, Table 65.

¹⁸ P. Quill and P. Teahon, 'Structural economic change in Ireland 1957–2006: statistics, context and analysis', *J. Statistical and Social Inquiry Society of Ireland* 39 (2009/10), Table 5.2, but note discussant F. Barry's surprise, p. 140; A. Matthews, *Farm incomes:*

myths and reality (2000), Figure 1.1. The same conclusion applies to the indicators in Hennessy and Kinsella, *40 years*, Figures 1–4.

¹⁹ Met. Service memo. 88/79, pp. 6–7. This paragraph and the next draw on *Dáil debates* 291, cols 579–80; 293, col. 894; *IFJ*, 26 June 1976, p. 2; 3 July, p. 2; 14 Aug., pp. 1–3; 28 Aug., p. 3; *IT*, 19 Aug. 1976, p. 14; *Irish statistical bulletin (ISB)*, Dec. 1977, p. 307; March 1980, p. 63; Fitzgerald, 'Farming weather'; DAF, *Annual report*, pp. 71, 78–9, 118 (source of most of the quotations); CSO, *Statistical abstract*, Table 62; Burke *et al.*, 'Weather', pp. 177, 195; M. J. Hennerty and M. J. Maher, 'Amelioration of climate for horticulture', in Keane and Collins (eds), *Climate*, pp. 221, 223.

TABLE 1. Percentage change in estimated 1976 crop yields, Ireland and Britain:
1976 yields relative to 1975 and preceding three-year mean

Crop	Ireland		Britain	
	vs. 1975	vs. 1973-5	vs. 1975	vs. 1973-5
Wheat	-9.2	-6.6	-10.8	-15.1
Oats	-4.5	-5.5	-0.6	-7.5
Malting barley	-15.9	-14.8	n/a	n/a
Other barley	-14.2	-11.2	n/a	n/a
Total barley	-14.2	-11.7	-1.7	-8.6
Potatoes	-1.0 ^a	-7.8 ^a	-7.6 ^b	-26.7 ^b
Sugar beet	-1.2	+3.9	+24.3	+6.2

Note: Irish yields calculated using area grown; unclear for Britain.

^a For 'sound' potatoes; the figures for 'diseased' potatoes were -12.5 and -19.2 respectively.

^b Main crop; figures for the early crop were +15.6 and -7.7 respectively.

Sources: *Irish statistical bulletin*, Dec. 1974, p. 270; Dec. 1977, p. 307; March 1980, p. 63; E. S. Carter, 'The effect of the drought on British agriculture', *Proc. Royal Society of London, Series A* 363 (1978), pp. 44-6.

frequently planted in the spring whereas some barley intended for animal feed was winter sown. Table 1 also indicates that Irish wheat was more adversely affected than oats: the warm weather encouraged aphids in the former, though reduced the risk from other diseases, and the latter was frequently planted in naturally wetter soils. The potato yield figures need to be interpreted especially cautiously because presumably a varying proportion of the harvest was classified as 'diseased'. In fact, no tillage crop experienced a greater year-on-year percentage decline in the volume of national output (-13.7 per cent) – even though the area planted with potatoes for 1976 had increased by 16.7 per cent, despite, or more probably because of, the crop being badly drought affected in 1975. The wet weather during March 1976 had generally delayed sowing of sugar beet, yet beet made 'excellent progress' until August when drought reportedly 'completely stopped growth in many parts of the country', with the crop apparently 'wilting under the sun'. Subsequent rains produced 'a flush' of regrowth of leaves and roots, resulting in yields being the least impacted of those reported for Ireland in Table 1. As with potatoes, however, harvesting conditions were difficult and the rapid late autumn growth meant that sugar content was 'very low'. Overall it was quite a turnaround from late June when the editor of the *Irish Farmers' Journal* wrote that 'we could end up with record yields [of cereal crops]'.

For what the comparison is worth, considering that the Table 1 statistics mask crucial regional variations, and differences between winter and spring sown crops, Britain's tillage sector was apparently not as consistently adversely affected relative to Ireland as might be expected from the drought indicators noted in section I above. Declines in British yields were indeed greater than in Ireland for wheat and probably potatoes, but the evidence for oats is mixed and barley and sugar beet fared better in Britain. Despite some initial concerns, Irish supplies of cereal seeds for planting for 1977 were said to be unproblematic, even for malting

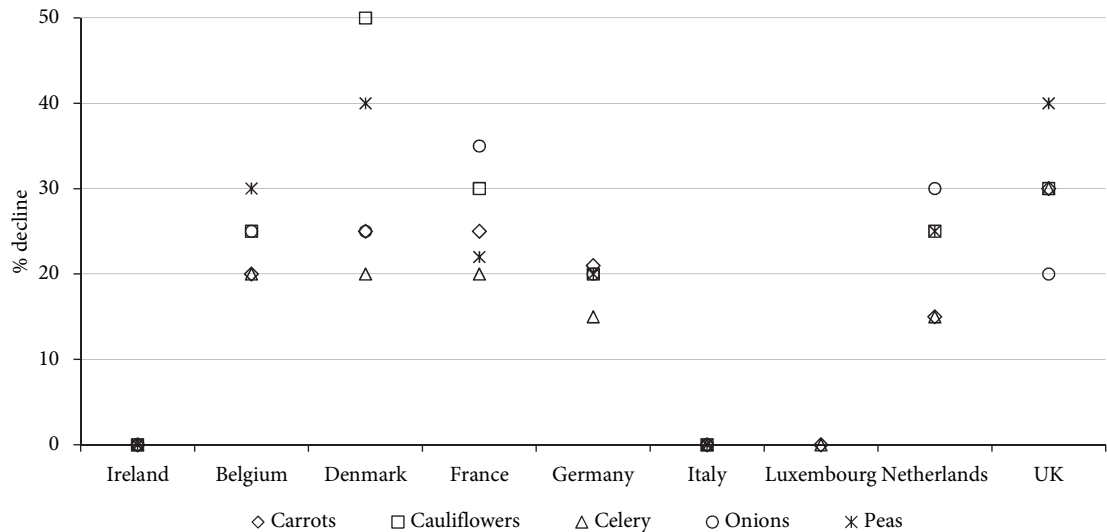


FIGURE 3. Estimated annual percentage decline in national vegetable production volumes, EEC member states, 1975–6

Source: National Archives of Ireland, DFA/2010/19/699, note regarding Special Committee on Agriculture meeting, 8 Sept. 1976, annexes 1, 3.

barley;²⁰ and again encouraged by very high prices (see below), the acreage under potatoes rose substantially (12.8 per cent). Apart from sugar beet, national crop yields were uniformly much higher in 1977 than in 1976, with the estimated nitrogen content and brewing extract of malting barley more favourable for brewers. In horticulture, meanwhile, the long, dry summer of 1976 had a 'slight adverse affect' on the yield of 'some' field vegetables, 'but this was compensated by excellent quality in most crops'. Nationally cropping of top fruit was 'satisfactory', although as with tillage, water stress impacted quite severely in some localities: irrigation trials on apples undertaken in county Dublin in 1976 found yields to be a statistically significant 27 or 28 per cent higher on irrigated trees compared to the control group.²¹ European Economic Community (EEC) forecasts made around early September 1976, the type of information on which policymakers were basing decisions, show Ireland to be the joint least affected member state in terms of the year-on-year percentage falls in national vegetable production, along with Italy and where data are available, Luxembourg (Figure 3). The same judgement applied to the sugar harvest. Germany and the UK were noted as suffering the worst declines from their normal aggregate potato crop.²²

The extraordinarily high temperatures at the turn of July 1976 had Irish farmers focusing on haymaking rather than selling cattle, especially since the heat was depressing retail beef

²⁰ NAI, GIS/1/73, speech by the Minister for Agriculture, 30 Sept. 1976.

²¹ The difference was far larger in 1975, yet generally horticulture had 'a reasonably satisfactory year in 1975. While ... the yield of certain crops was affected by

drought, overall quality was good'. *Dáil debates* 291, col. 580.

²² European Commission, 'Communication', pp. 8, 14.

sales with prices for fat cattle generally holding steady at best. Yet '[t]hose farmers who are still buying store cattle [to later sell fat] seem to have plenty of confidence'.²³ Subsequently chronic moisture stress in affected regions depressed the growth and digestibility of grass, the main animal feedstuff. According to the *Irish Farmers' Journal* in late August, 'the situation for ... grass has become critical, particularly in the eastern half of the country'.²⁴ Mills, utilizing a formula derived from 1970s experimental evidence and making sound assumptions, calculated that yields from managed pasture were approximately 10 per cent below potential in areas with an annual water deficit of 60mm in Figure 2 above.²⁵ Seasonal estimates of herbage dry matter production at four sites, three in the south east, suggest that yields during the critical period of May to August inclusive were actually much better in 1976 than 1975, being extremely high in two locations; and exceptionally poor in September through December 1976.²⁶ Nonetheless overall, despite the use of failed intended cash crops, reports of 'heavy' hay, silage and straw crops, and reduced intake by heat stressed livestock, lower-than-normal grass growth and digestibility coupled with mixed fodder crop yields and (to some extent) shortage prices forced a substantial increase in purchased animal feed during 1976, spilling over into 1977. 'This must be the first time in living memory', bemoaned one commentator, 'that Irish farmers were feeding hay and straw to dry cattle in the fields in August'.²⁷ The challenges were covered in the farming press;²⁸ nationally purchased feed surged 38.6 per cent in value terms and 12.6 per cent by volume, far outstripping the rises in 1975, although causal factors other than drought existed, including the ongoing international commodity price boom (the increase in total feed costs had been even larger in 1973). There were calls to restrict hay exports, as in France – however animal feedstuff exports rose 39.7 per cent by value year-on-year.²⁹ Another additional expense was transporting water further distances to animals that were usually exceptionally thirsty as a result of the hot weather: some private carriers charged around £1 per 100 gallons.³⁰

Actual and anticipated increases in feed costs, longer periods of animal rest instead of grazing, and a shortage of drinking water in 'many' cases where farmers relied on surface water,³¹ reduced weight gain efficiency and incentivized premature slaughtering of livestock, without finishing them. But the degree of this was apparently not particularly pronounced, at least when viewed at national level. Monthly data on the numbers of slaughtered cattle, calves, sheep and pigs, expressed as a percentage of the respective annual totals, show little clear upsurge in relative slaughtering during the summer of 1976, compared to the previous summer, except in June and for pigs where a cost-price squeeze induced by higher feed costs was beginning to materialize. Yet even in these instances any month-on-month annual increase

²³ *IT*, 1 July 1976, p. 14. Also *IFJ*, 26 June 1976, p. 2; 24 July, p. 16; 21 Aug., p. 4.

²⁴ *IFJ*, 28 Aug. 1976, p. 3; Fitzgerald, 'Farming weather'; DAF, *Annual report*, p. 121.

²⁵ Mills, 'Water budget', p. 114, based on A. J. Brereton and T. Keane, 'The effect of water on grassland productivity in Ireland', *Irish J. Agricultural Research* 21 (1982), pp. 227–48, who estimated drought losses in 1956–75.

²⁶ Burke *et al.*, 'Weather', pp. 175–6.

²⁷ *IT*, 19 Aug. 1976, p. 14; Hennessy and Kinsella, 40 years, p. 19.

²⁸ E.g. *IFJ*, 14 Aug. 1976, p. 3; 4 Sept., pp. 6–7; 11 Sept., pp. 2, 8, 10, 18, 24–5; 9 Oct., p. 48.

²⁹ *IT*, 2 Sept. 1976, p. 14; CSO, *Agricultural output, 1976 (1977)*, Table 3; DAF, *Annual report*, pp. 32, 72–3; CSO, *Statistical abstract*, Table 64.

³⁰ *IFJ*, 28 Aug. 1976, p. 3.

³¹ *IT*, 9 Sept. 1976, p. 12.

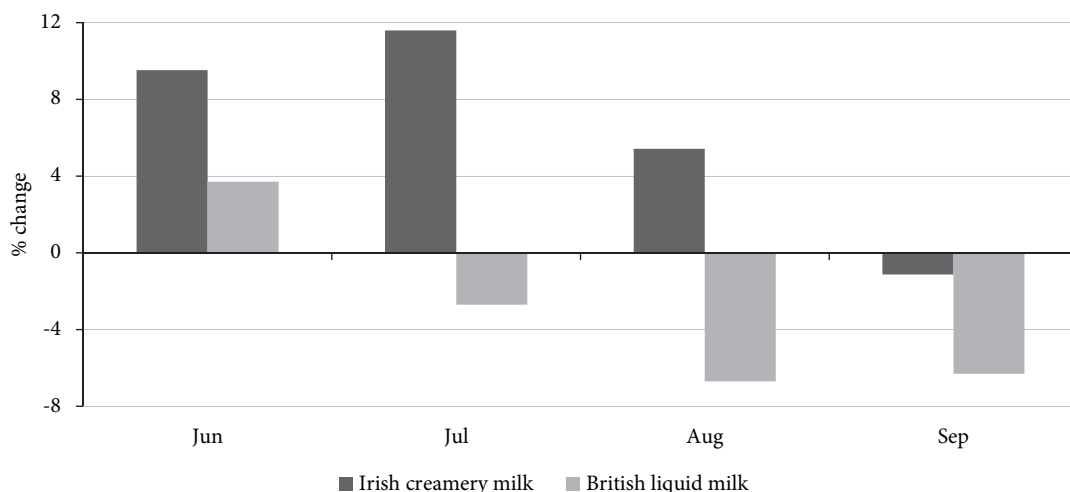


FIGURE 4. Percentage change in monthly total intake of cows' milk by Irish creameries and pasteurisers, and sales of liquid milk from British farms, 1975-6 (volumes)

Sources: Central Statistics Office StatBank, AKM01, www.cso.ie; E. S. Carter, 'The effect of the drought on British agriculture', *Proc. Royal Society of London, Series A* 363 (1978), p. 48.

never exceeded 2.2 percentage points.³² There was a 5.9 per cent fall in the mean weight of beef exported per head of cattle slaughtered at meat export factories in 1976, the exact reverse of the 1975 situation. Elsewhere in the livestock industry, however, mean hen eggs per ordinary fowl aged over six months rose by 5.2 per cent, and crucially milk yield per dairy cow increased by 4.9 per cent over the calendar year, above the 4.0 per cent rise in 1975.³³ Indeed Figure 4 shows that the overall intake of cows' milk by Irish creameries was substantially higher in June, July and August 1976 relative to those months a year earlier, with just a small decline in September. Compared to Britain, Ireland apparently had the greater requirement for additional purchased feedstuffs, based on relative changes in hay production and concentrate use. But, tellingly, the lack of direct comparability in Figure 4 notwithstanding, aggregate liquid milk sales from British farms 'showed a severe drop' over the summer, in contrast to Irish creamery milk supplies.³⁴ The same divergence existed relative to EEC aggregate production: total milk deliveries to dairies 'between 1 July and 30 September will be 3½ to 4% lower than in the corresponding period of 1975', with reduced output noted in six member states, not including Ireland. The heat wave seemingly increased European consumption of fresh milk products but depressed butter sales. Meanwhile in France and Germany, unlike in Ireland, summer cattle slaughterings rose sharply year-on-year.³⁵

³² CSO StatBank, ADM01, www.cso.ie; DAF, *Annual report*, p. 55.

³³ ISB, Sept. 1975, p. 199; DAF, *Annual report*, pp. 40-1; CSO, *Statistical abstract*, Tables 50, 52, 62.

³⁴ Carter, 'Drought', pp. 47-8.

³⁵ *IFJ*, 18 Sept. 1976, p. 13; European Commission, 'Communication', p. 12. A fuller comparative analysis, extending beyond data from some secondary literature and Irish primary sources, is outside the scope of this article.

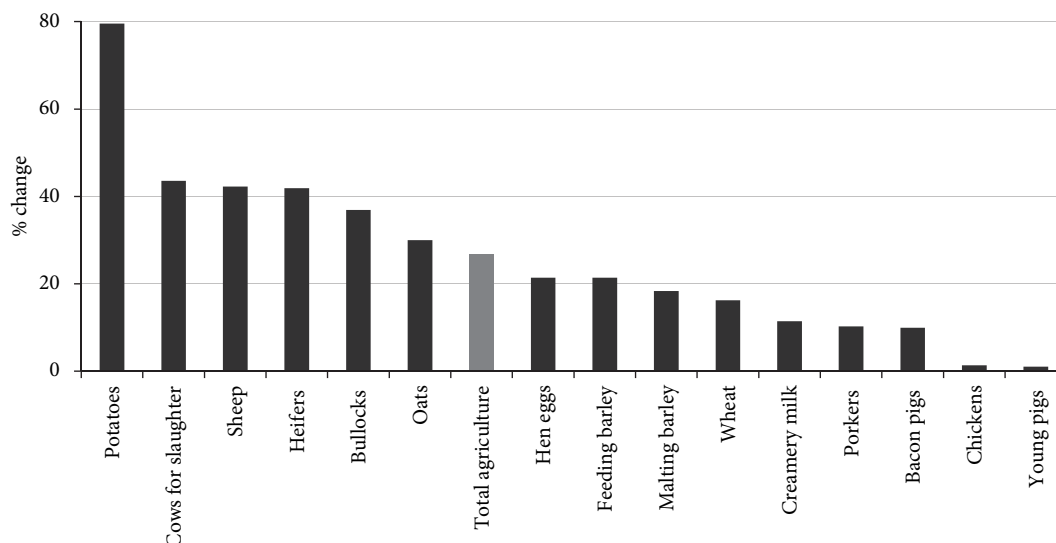


FIGURE 5. Annual percentage change in Irish agricultural output prices, 1975–6

Notes: Liveweight for all livestock except porkers and bacon pigs (deadweight) and chickens (live pair). Middle weight class used where possible.

Sources: Central Statistics Office, *Statistical abstract of Ireland*, 1976 (1978), Tables 311, 313, 315–6; *Irish statistical bulletin*, March 1978, pp. 75–7.

Figure 5 shows that the prices Irish farmers received for their outputs increased across all sectors year-on-year, including beef. The rise in the price of potatoes is striking, being far above any other commodity and much more dramatic than the declines in potato yields (recall Table 1). A similar situation, if less extreme, applied to oats. Doubtless differences in own price elasticities of demand at least partly explain the variations between products. Catch-all contemporary attempts to estimate these elasticities were inconclusive,³⁶ yet, in particular, potatoes are often perceived as being characterised by fairly inelastic demand, with changes in supply therefore having a greater effect on price compared to commodities for which, say, more substitutes existed.³⁷ As later sections describe, however, other causal factors also operated, such as potato smuggling and the presence – or absence – of market support under Europe's Common Agricultural Policy (CAP).

The overall effects of these changes in the prices and quantities of outputs and inputs are summarized in Figure 6, which reports the 1975–6 percentage change in mean nominal family farm income (FFI) for eight farm systems in each of Ireland's four provinces. Unfortunately systematic Irish data at individual farm level are not readily available for the period under consideration.³⁸ However the sample size in each provincial group in Figure 6 is usually

³⁶ W. K. O'Riordan, 'The demand for food in Ireland, 1947–1973', *Economic and Social Rev.* 7 (1976), pp. 401–15.

³⁷ Illustrated in G. E. Clayton, *Economics: principles and practices* (2005), Figure 6.3. Potato price inflation

had been even higher in 1975.

³⁸ L. Connolly, 'The history of the Teagasc national farm survey', in Hennessy and Kinsella, *40 years*, p. 79. It is difficult to identify farms on manuscripts recording

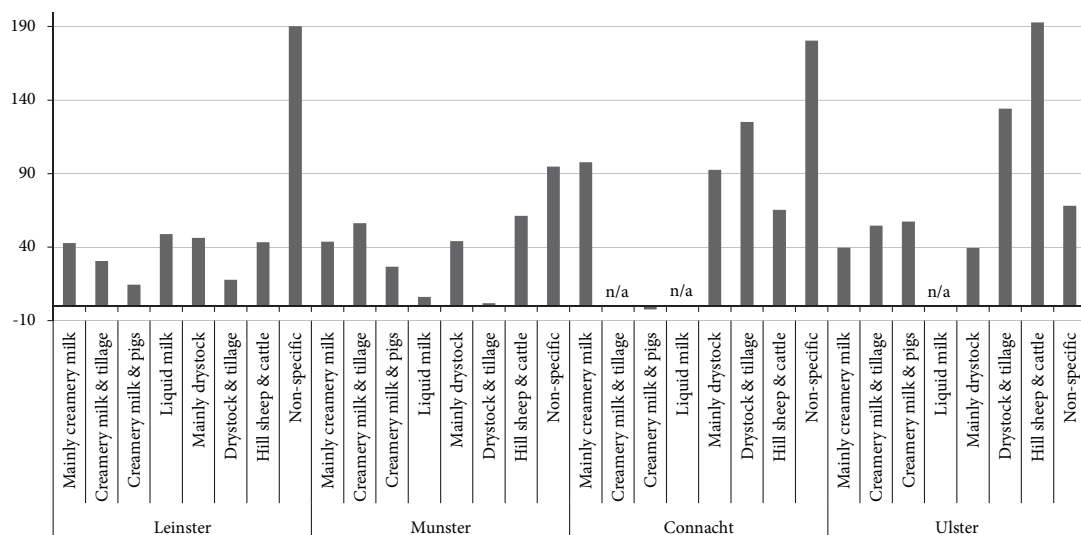


FIGURE 6. Annual percentage change in mean nominal family farm income per farm, various farm systems in each province, 1975-6

Note: n/a denotes not available due to sample size <5.

Sources: J. F. Heavey *et al.*, *Farm management survey, 1972-1975* (1977), Tables 68, 74, 80, 86; *id.*, *Farm management survey, 1976* (1978), Tables 68, 74, 80, 86.

less than 50, and sometimes just five. In only one category, creamery milk and pig farms in Connacht, did nominal FFI actually fall year-on-year, although it was relatively static across liquid milk and drystock and tillage holdings in Munster. That neither province was at the drought's geographical centre strongly suggests the existence of spillover effects. Across these three worst-affected provincial farm systems, the production cost categories where increases were proportionately greatest included general upkeep of land and buildings, crop protection, the fodder crop inventory adjustment and machinery operation. In Leinster, where water deficits were typically most pronounced, FFI rose notably in every system, in all but two cases by well in excess of the general rate of inflation. Comparing systems across provinces, strikingly drystock and tillage farms fared comparatively well in Connacht and (three-county) Ulster, but relatively badly in Leinster and Munster. Creamery milk and pig farms consistently performed relatively poorly outside Ulster, with the largest proportionate cost rises generally being in crop protection, purchased concentrates, machinery use and rent. Yet crucially FFI for the two most numerically important systems nationally, mainly creamery milk and mainly drystock, rose by at least 39.4 per cent in all provinces, considerably above the general inflation rate. The miscellaneous category non-specific experienced the highest FFI increase, by a

Note 38 continued

rent arrears or rate waivers e.g. Boole Library Archives, University College Cork, BL/EP/B/709, Bantry estate rents, 1976-8; and only about 7% of farmland was leased: J. F. M. Swinnen, 'Political reforms, rural crises, and land tenure in western Europe', *Food Policy* 27 (2002), Table 2.

sizeable margin, in three of the four provinces. Here, only potatoes always featured in the list of the top third sources of proportionate increases in receipts, suggesting that these holdings also benefited from the 'natural hedge' provided by output diversification in the testing environment.³⁹ Many Irish farmers, then, if they profited from higher prices, were actually better off in 1976 compared to 1975, perhaps substantially so. This must have contributed to the very buoyant sales of, for instance, private cars, new and second hand tractors and, as outlined below, store cattle at the time.⁴⁰ Indeed it is tempting to speculate that some of the largest farmers undertook such on-farm investments with a view to offsetting tax liabilities in the current financial year.

Beyond the farm gate, the unusual weather had a mixed impact on the costs of initially processing the malting barley crop. In internal correspondence on the setting of commission rates for its barley agents, Guinness Brewery called it 'an extremely dry and easy harvest with lower than expected drying and handling costs'; one agent later acknowledged that the 'extraordinary weather gave us a saving of oil'. Yet the crop's screenings content was generally around four times the norm due to increased tailings (small grains), raising labour, energy and plant depreciation costs. In the circumstances the brewery paid a 60 per cent supplementary screening allowance to its agents. Lower domestic malting barley yields (Table 1) and quality issues, coupled with supply problems internationally, forced Guinness to incorporate some feeding varieties of barley to stretch out their malting varieties; ultimately there was a 'modest' improvement in brewing trading profit.⁴¹

An Irish EEC delegation neatly summarized the national experience: 'while we had escaped the worst of the early season drought we had extremely low rainfall in the late [s]ummer with resulting low cereal yields and poor grass growth. In regard to beef we were facing difficulties because of low prices on the Continent [and] reduced demand due to the hot weather'. A 'greatly reduced supply of dried fodder and catch-crops and forage beet' forced early broaching of winter fodder stocks, although shortages were 'affecting some categories of fodder more than others'. This and other EEC level discussions,⁴² together with domestic commentators and farmers' representatives, were unequivocal that 'British and Continental farmers are, of course, far worse hit than we are'.⁴³ Despite the extreme air temperatures, there was not much comment on behavioural or productivity changes in livestock arising from heat stress.⁴⁴ Reassuringly these remarks are generally quite consistent with the quantitative evidence presented above. However, the output and income indicators utilized usually fail to isolate the effect of the weather *ceteris paribus*, or show the great local and temporal variety in production impacts due to factors such as differing terrain and microclimates, farm size and commercial

³⁹ In their commentary, J. F. Heavey *et al.*, *Farm management survey, 1976* (1978), emphasize the general large improvement in FFI and do not mention the weather.

⁴⁰ *IT*, 30 Dec. 1976, p. 10; *IFJ*, Jan. 1977 tractor supplement; 5 Feb., p. 16; 1 Oct., p. 3.

⁴¹ Guinness Archive, Dublin, GDB/RMo4/0029, barley commissions file, 9 Jan. 1976 to 10 July 1977; *IFJ*, 14 Aug. 1976, pp. 1, 3; *IT*, 19 Aug. 1976, p. 14; 9 Sept.,

p. 12; 15 Dec., p. 14.

⁴² NAI, DFA/2010/19/699, file on EEC drought situation, 19 July 1976 to 18 Feb. 1977.

⁴³ *IT*, 19 Aug. 1976, p. 14; and, especially, *IFJ*, 4 Sept. 1976, p. 34.

⁴⁴ See *IFJ*, 17 July 1976, p. 33; 14 Aug., p. 13; 28 Aug., p. 14; P. B. Lynch, 'Effect of the climatic environment on farm animals', in Keane and Collins (eds), *Climate*, p. 330. Also *IT*, 20 July 2013, p. 14.

orientation, water supply infrastructure, crop varieties and stages of development, and animal breeds and ages.

III

Ireland's government comprised a Fine Gael–Labour coalition, with Liam Cosgrave as Taoiseach and Mark Clinton the Minister for Agriculture (both Fine Gael). As a new EEC member, Irish agricultural policy was determined largely within the parameters of the CAP. Forward planning at this level was not helped by the failure of long-range forecasters to predict Europe's anomalous summer weather,⁴⁵ although given the inevitable very wide margins of forecast error and a predicament that only emerges slowly over time, it is a moot point how seriously an accurate prediction would have been taken.

With the cattle sector in a number of member states badly drought affected, emergency CAP measures were implemented. The two main policy instruments whose application extended to Ireland comprised the introduction of financial aids to private operators for the storage of beef, and higher export 'refunds' (subsidies) for sales of cattle and beef outside the EEC. With conditions encouraging increased slaughtering, and consumer demand reduced, the intention was to mitigate downward pressure on farm-gate prices by artificially removing supply from the internal market. Unfortunately the very few contemporary DAF files deposited in the NAI contain almost no relevant material,⁴⁶ necessitating discussion of national action in the cattle industry and elsewhere at one remove via published sources and official papers from the Departments of An Taoiseach and Foreign Affairs – which rarely provide the details necessary for sustained insight on the political economy issues that arose, such as interest group behaviour.

A private beef storage scheme commenced in Ireland in May 1976, working through tendering, and covered carcasses and sides from intervention grade cattle together with forequarters from other cattle. Just 200 tonnes of beef were taken into storage. A second scheme introduced in July was more generous, being a fixed aid scheme with coverage expanded to also include carcasses and sides of non-intervention category animals such as cows. 'It was much more successful', publicly acknowledged the DAF: take-up was 23,000 tonnes, approximately half of which comprised the newly eligible non-intervention grade carcasses. Together, these schemes removed from the market a volume equivalent to about 15 per cent of national beef trade exports in 1976.⁴⁷ Figure 7 presents the average monthly prices of bullock liveweight expressed relative to the annual average price for that year. By removing the influence of year-on-year inflation (one year of which was depicted in Figure 5), this index facilitates an examination of seasonal price changes. It suggests another possible explanation for the minimal demand for the May scheme, since the size of the rise in bullock prices over the first four months of 1976 was not dissimilar to the mean increase across the preceding six years. Operation of the second storage scheme did not prevent an unusually large seasonal price decline between July

⁴⁵ Ratcliffe, 'Meteorological aspects', p. 9. Also NAI, DFA/2012/59/636, conference report, 9 July 1976; *IT*, 27 Aug. 1976, p. 11; 30 Aug., p. 1.

⁴⁶ E.g. NAI, AGF/8/15/98, 113, 180, files on local

markets/fairs, 3 Dec. 1974 to 12 Dec. 1978. The Department's Records Branch holds no pertinent papers (pers. comm.).

⁴⁷ DAF, *Annual report*, pp. 38–9, 41.

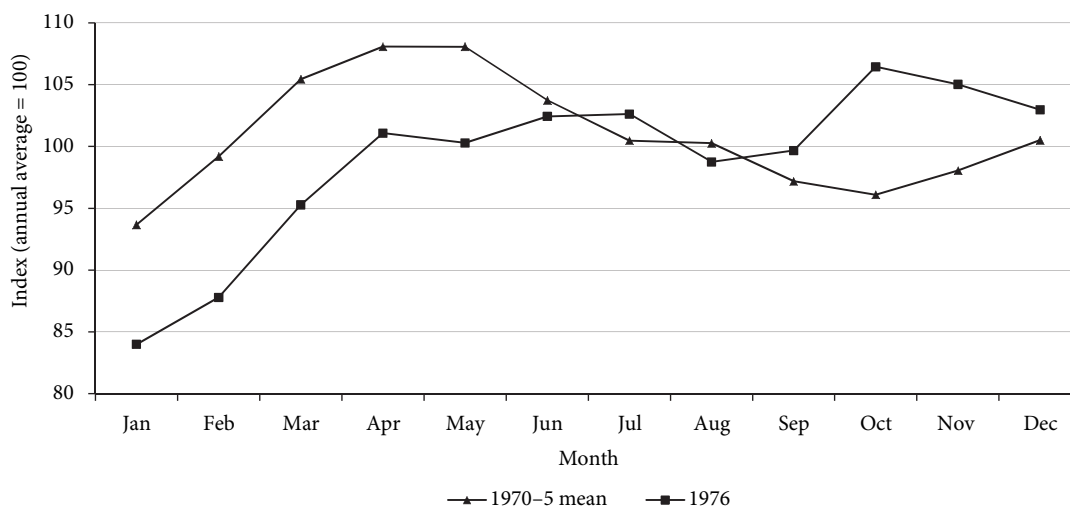


FIGURE 7. Monthly average price per cwt liveweight of bullocks at auction marts, relative to annual average in that year, 1970-6

Note: Pertains to bullocks between 9 and 9.99 cwt.

Source: Central Statistics Office, *Statistical abstract of Ireland*, 1976 (1978), Table 314.

and August 1976; as reported in late August: 'Dry weather is forcing more beef onto the market ... Again this week both fat and store prices are down all over the country ... With very good prospects for beef next spring a good week's rain should reverse the present downward trend in prices'.⁴⁸ Yet the overall price fall from April to August in Figure 7 was noticeably less pronounced than the six-year mean, indicating that this policy had some success in alleviating short-term price pressure. However, this analysis lacks a clear counterfactual of what would have occurred had the government not acted.

Appraising the effectiveness of increased export refunds is harder still, but the share of non-EEC countries in Irish live cattle exports rose 10 percentage points year-on-year, suggesting at least some impact, although the corresponding figure for beef dipped by four points.⁴⁹ Britain, though, remained by far the most important destination for exports of live cattle, and by the early autumn of 1976, with British farmers often forced into premature slaughtering, 'a scarcity' of finished prime cattle drove a 'buoyant trade in fat cattle': 'Heavy bullocks are being shipped live [from Ireland] to drought hit England for immediate slaughter'. Irish beef prices 'shot up'; the price of stores 'responded ... in spite of the drought', reportedly 'breaking all records for the time of year'. Such market developments help to explain the abnormal price rises in September and October 1976 in Figure 7. Indeed during those months commentators expressed some concern over, especially, the high prices store cattle were fetching, which partly reflected demand from some large farmers seeking to reinvest profits and, potentially, to offset tax liabilities.⁵⁰ Nonetheless the overall number of live cattle exported to the UK from Ireland

⁴⁸ *IFJ*, 28 Aug. 1976, pp. 2-3. Also 21 Aug., p. 2.

⁴⁹ DAF, *Annual report*, pp. 40-1.

⁵⁰ *IFJ*, 14 Aug. 1976, p. 3; 11 Sept., pp. 2-3; 18 Sept., p. 13; 16 Oct., p. 57; *IT*, 14 Oct. 1976, p. 15; 21 Oct., p. 14.

was down 57.7 per cent on 1975, and 46.1 per cent on 1974. Considering all destinations, exports of live fat cattle were well below the numbers of the previous year and the preceding three-year mean, while store cattle exports slumped by 55.1 and 43.5 per cent respectively.⁵¹

At the beginning of July 1976, with first-half milk deliveries up six per cent on 1975, the EEC Commissioner for Agriculture, Pierre Lardinois, had seemed quite sanguine about the general supply situation in Europe's dairy sector.⁵² Yet by early autumn it was apparent that some member states, not including Ireland, were unable to produce sufficient skimmed milk powder (SMP) to meet demand. To ensure adequate supply to these markets, on 10 September Regulation 2213/76 was adopted, authorizing the immediate sale of SMP from public intervention stocks, as long as the commodity had been stored for at least six months, at 'slightly above' the intervention price: 'an amount', according to the legislation, 'which takes into account the market situation and storage costs'. Under this regulation, and helped by favourable exchange rate movements, 44,000 tonnes of Irish intervention SMP were sold in 1976, equal to approximately four fifths of the amount taken into intervention during the year.⁵³ Lardinois had used Europe's reduced harvest to counter criticism that CAP price support created overproduction and thus required reform: 'Yesterday's [food] mountain has become today's stock. Yesterday's political mismanagement is today's good sense'.⁵⁴ Nonetheless he was clear that policies addressing the structural output surpluses in European dairying should not be delayed; and in early September 1976, supported by the EEC farmers' organization, advocated rapid implementation of recent proposals to subsidise the non-marketing of milk and milk products, and for dairy farmers to convert to beef. These measures, it was argued, would not only reduce overproduction but also relieve demands on fodder supplies and financially assist dairy farmers. The Irish government was one of several to express reservations.⁵⁵ For Lardinois, 'at present Ireland would be less affected by the proposed incentives than other member states which have a severe shortage of fodder'. Ultimately a decision was postponed and the subsidies not introduced until 1977.⁵⁶ In Dublin, proposals from the DAF to increase the minimum domestic producer price for liquid milk, following rises in EEC institutional creamery milk prices, met with some resistance in government, despite the inevitable pressure applied by farmer representative groups through meetings, letters and telephone calls. The inflationary impact was one of the key concerns, especially when in some quarters it was felt that: 'All milk producers are enjoying high – and largely untaxed – returns at present'.⁵⁷

The potato received most attention from Irish policymakers.⁵⁸ Since common EEC

⁵¹ DAF, *Annual report*, p. 40; CSO, *Statistical abstract*, Table 68.

⁵² European Commission, press release IP(76)145, 5 July 1976; id., 'Communication', p. 12.

⁵³ DAF, *Annual report*, pp. 48–9; EUR-Lex website, <http://eur-lex.europa.eu>. The regulation was suspended from March 1977.

⁵⁴ Commission press release IP(76)145. Wagenin-gen memo., 'Reform of the European Community's Common Agricultural Policy', *European Rev. Agricultural Economics* 1 (1973), pp. 151–60, had been one call for change.

⁵⁵ NAI, DFA/2010/19/699. One reason given was 'our very heavy cow slaughterings over the last year'. Yet the number killed at meat export factories was 44.1% lower in 1976 than in 1975: DAF, *Annual report*, p. 40. The reason for this apparent discrepancy is unclear.

⁵⁶ Daly, *First department*, pp. 513, 608.

⁵⁷ NAI, TAOIS/2006/133/496, 2007/116/447, files on dairy produce, 2 April 1976 to 6 May 1977; DAF, *Annual report*, pp. 52–3. Inflation was a great concern of the time: e.g. TAOIS/2006/133/32, file on sugar prices, 6 Feb. to 1 Oct. 1976.

⁵⁸ What follows is based on NAI, DFA/2010/19/699,

organization of the market in this product was only at the proposal stage, Dublin possessed greater policy autonomy. More fundamentally, the European Commission identified potatoes as the sole major basic foodstuff where difficulties might exist in providing supplies from EEC or world markets to consumers at reasonable prices, although it was hoped that price increases in Ireland would be relatively moderate. The Irish government's principal policy measures were to impose restrictions on potato exports and to permit 'limited' imports. The latter action followed the successful precedent of 1975, apparently agreed on the initiative of the Minister for Foreign Affairs Garret FitzGerald despite DAF opposition, probably primarily on the grounds of the risk of importing plant and animal diseases. At the end of January 1976 Clinton decided to again grant import licenses, 'but because of the overall scarcity in Western Europe it was difficult to get supplies'. The position 'improved' from April when the Mediterranean crop became available, yet in mid-May Irish wholesale and retail potato prices were 2–3 times higher than a year earlier. In this context it is unsurprising that soon afterwards a DAF proposal to raise the guaranteed minimum output price under the state's potato price support scheme was withdrawn from the cabinet agenda. Ireland imported around 1400 tonnes of potatoes during 1976, under strict phytosanitary conditions. These imports, the equivalent of a mere 0.4 per cent of domestic output that year, were largely absorbed by producers of chipped and pre-peeled potatoes for catering outlets, and were facilitated by an EEC decision in late July 1976 to suspend the common customs tariff duty on ware (table) potatoes. On 9 September that suspension was extended until the end of the year, and at the request of Italy, to seed potatoes. Ireland's delegation had advocated a shorter extension until details of the main crop harvest became known, but given subsequent events the EEC's decision looks prescient. The export of ware potatoes, meanwhile, was subject to licensing control from the DAF. Caught between consumer concern and industry pressure ('Export surplus potatoes now' thundered a newspaper headline in late June 1976), on 2 July the cabinet agreed that they would receive advance notification of any granting of export licences. But with prices persistently high, no licences were issued for at least four months after 29 July. Some growers claimed 'great difficulty in recovering their high production costs' (including fertilizer and especially seed, caused chiefly by – respectively – high oil prices and reduced 1975 yields), despite the considerable farm-gate price rise (recall Figure 5). They complained that this policy contravened the spirit of the EEC, juxtaposing it with Dublin's contemplation of a legal challenge to French restrictions on lamb imports, and advocated a weekly export quota. European policymakers did express concern over the use of emergency national measures which risked hindering the free movement of goods within the common market, yet France's fodder export restrictions were highlighted more than Irish potato policy.

With potatoes selling wholesale in the UK for at least approximately 40–50 per cent more than in Ireland, the non-issue of export licenses incentivized potato smuggling, especially across the border to Northern Ireland. This became a public concern by mid-August. Soon afterwards

Note 58 continued

TAOIS/2006/133/55, file on potato supply and price, 20 May to 9 Dec. 1976 (source of most of the quotations); PRO of Northern Ireland, Belfast, AG/38/30, unlawful potato imports file, 18 Aug. 1976 to 12 Jan. 1977; *IFJ*, 26 June 1976, pp. 2–3; 14 Aug., pp. 2–3; 4 Sept., p. 5; *IT*, 31 Aug. 1976, p. 6; DAF, *Annual report*, pp. 74–7; G. FitzGerald, *Just Garret: tales from the political front line* (2010), pp. 168–9.

the Consumers' Association of Ireland were claiming weekly illegal movement of 1000–2000 tons and blaming it for the recent sharp rise in retail potato prices; a DAF spokesman said that anti-smuggling measures were under discussion with the customs authorities. The *Irish Farmers' Journal* put the illicit trade at 800–1000 tons per week, summarizing: 'This is bad business, bad policy and bad for the future of the potato grower'.⁵⁹ By mid-September the problem had reached cabinet level. Special steps implemented included inspecting all ostensibly empty containers leaving Irish ports, making spot checks on loaded containers and other vehicles, and from 21 September, requiring carriers of potatoes using roads crossing border salients to obtain a transport permit in advance. The even more drastic measure of prohibiting the movement of more than 1–2 tons of potatoes within five miles of the border, unless certified by the DAF, was considered but deemed unfeasible. Customs officers, though, faced formidable challenges in proving intent: 'it is commonly given as an excuse that they [potatoes on lorries on border roads] are being delivered to local State [i.e. southern] farmers who usually corroborate the story'; and indirectly from the continuing 'Troubles': 'Normally we could count on the unofficial co-operation of the British Customs ... but ... there is only one point where they operate in the border area and ... [otherwise] are rarely seen within fifteen or twenty miles'. Northern officials did make at least two seizures, yet equally highlighted the difficulties, for instance: 'One can not be sure that the potatoes actually crossed the border unless the offence is witnessed'. Nevertheless, on 12 October, in a note seen by Taoiseach Cosgrave, the DAF was 'satisfied' that illegal exports had been 'checked ... for the present'.⁶⁰ Overall the Irish authorities reported 11 seizures, mostly during September 1976 in border-adjacent areas, totalling just approximately 193 tons. Even then confidential official papers did not attempt to quantify the scale of potato smuggling, and no one claimed it had been eliminated, yet prices at one major retailer reportedly tumbled by 17.5 per cent following the introduction of transit authorizations and a series of successful tip-offs. However, as in 1975, prices remained high, and into early December ministers were requesting continued customs vigilance. One north-west consumer's letter to Cosgrave provides a personal insight into the impacts felt: 'I am disabled [sic] and have six children and I cant [sic] afford to bye [sic] potatoes [e]very day ... they are to expences [sic]'. Conversely local farmers were allegedly prospering from high prices and could still collect state benefits, 'in their new cars'.⁶¹ Seed potatoes were unaffected by export restrictions, but smuggling through Northern Ireland also occurred, at least before the official exporter announced substantially increased prices.

In a rare parliamentary discussion of the abnormal summer weather,⁶² the long-serving Fianna Fáil deputy for Longford-Westmeath, Frank Carter, raised the 'emergency situation in regard to a prime source of food' in two Dáil questions on 20 October 1976 and a subsequent adjournment debate. '[S]ome of those in the chain of production and distribution', he argued in emotive language, 'are creating what is tantamount to a famine'.⁶³ Highlighting

⁵⁹ Quotation from *IFJ*, 14 Aug. 1976, p. 2.

⁶⁰ NAI, TAOIS/2006/133/55, informal note on potatoes.

⁶¹ *Ibid.*, letter to An Taoiseach, circa 1 Dec. 1976.

⁶² A search of the full text of debates during 1976–7 at <http://historical-debates.oireachtas.ie> generated just

nine occurrences of 'drought' and none of 'heat wave'.

⁶³ This was not a clear reference to the Great Irish Famine (1846–52), the proximate cause of which was potato blight: C. Ó Gráda, *Ireland's Great Famine: interdisciplinary perspectives* (2006). No obvious reference was found in the policy discourse.

cross-border smugglers in particular, and expressing especial concern for lower-income households, Carter asked the Minister for Agriculture to initiate steps to ensure price stability, such as combating smuggling, encouraging producers (including cottiers and gardeners) to sow more potatoes, and operating a buffer stock scheme to guarantee 'a fair price', thereby discouraging speculators. Clinton admitted that, while Irish consumers currently had the cheapest potatoes in Europe, 'I regret that it [price] has gone so high'. Noting the government's export restrictions and anti-smuggling initiatives, he said that smuggling was 'not the real reason' for the scarcity: that was low yields. 'I do not think that there is any reasonable way to try to control the price', Clinton continued. Although not ruling out the possibility that middlemen's margins were excessive, retail prices could not be lowered without consumer subsidies and the government, since 1975, were already paying 'enormous subsidies' on some other foodstuffs; EEC market organization proposals were confined to artificially removing surpluses in years of overproduction to provide a safety net for growers; '[t]he fellow who used to grow half-an-acre or a couple of acres is gone'; and any institution running a potato buffer stock scheme 'could not get down to the retailing of them in stones and small packs'. 'I am sorry', Clinton concluded, 'that I cannot find a way, no matter how anxious and concerned I am about the price that poor people have to pay'. The impact of black market activity on consumer prices had been raised previously in the Dáil in early June 1976, and potato prices returned briefly to the chamber in December. Blaming drought and 'some speculation on a European scale' for the very large price rise, the Minister for Industry and Commerce outlined how the increased cost of potatoes relative to bread, and 'in some circumstances' actual scarcity of the former, was one of the causes of an unexpected switch towards the consumption of standard bread in 1976, growing the total expense of consumer bread subsidies by 30.2 per cent.⁶⁴ Estimated national per capita consumption of potatoes in 1976 fell 6.7 per cent from the previous year, over and above a 4.6 per cent decline in 1975 and the pre-drought trend reduction of 1.6 per cent per annum.⁶⁵

There was also no common market organization for sheep meat. Ireland's government, though, did not obviously show great concern about the effects of the extreme weather on sheep farming. Indeed at the height of the drought, in late August 1976, the cabinet decided to discontinue the, albeit quite modest, subsidy for finishing mountain lambs for export. The Minister for Finance argued that 'prices for sheep meat have never been higher than at present', and also highlighted the need to limit public expenditure. He added that fodder supplies for fattening lambs were 'well above normal due to the good summer'. His last statement must largely reflect the generally favourable weather effect on sheep production in upland areas, illustrated in Figure 6. These points carried more weight than Clinton's counterarguments about, *inter alia*, the uncertain trade outlook and 'widespread criticism of Government policy by sheep producers' if the subsidy was withdrawn. The Irish Farmers' Association was indeed '[d]eeply disappointed': 'it is the small hill and mountain producers who will be directly hit'.⁶⁶

⁶⁴ *Dáil debates* 291, cols 812–3; 295, cols 413–31. Compare NAI, TAOIS/2006/133/31, flour and bread prices file, 11 Aug. 1975 to 1 Nov. 1976. Clinton also later repeated some points.

⁶⁵ ISB, Dec. 1978, p. 300.

⁶⁶ NAI, TAOIS/2006/133/180, file on sheep exports and subsidies, 11 Dec. 1975 to 27 Aug. 1976; *IFJ*, 14 Aug. 1976, p. 3; 21 Aug., p. 5; 11 Sept., p. 37; DAF, *Annual report*, ch. 6.

Domestic policymakers were also seemingly little worried about the vegetables sector. Unlike Denmark and the UK, Ireland did not request EEC sanction to suspend totally duties on certain vegetables imported from non-EEC countries, and were not minuted as emphasizing the high price inflation of beans and onions. Overall, the relative lack of impact of the pan-European drought in Ireland is perhaps best symbolized by Dublin being the only EEC government which by early September 1976 had clearly ruled out granting special national aid to farmers.⁶⁷

IV

Records from three county councils provide some indication of the immediate policy response at local government level. Attention here was overwhelmingly on the operation of water services, for which councils were responsible. In county Cork, part of the heartland of Irish dairying, the council expressed no drought concerns, beyond resolving on continued investment in local water supply schemes. Indeed in August 1976, 'in the interests of good relationship', the county manager offered to sell water to drought-stricken Wales, since a temporary surplus existed at a new scheme.⁶⁸ In the midlands county of Offaly, where air temperatures peaked, questions regarding water supplies featured in every monthly council meeting from June to October 1976, although no rationing was planned. Sometimes the situation was used in making the case for service improvement. Thus a deputation from Killurine village on 16 August said that 'little or no water was available over the last three weeks' from their group scheme, yet 'the problem was not only one of scarcity of water but of unauthorised manipulation of the valves'.⁶⁹ Finally, in the south-eastern county of Wexford, on 6 September 1976 one council sub-committee 'complimented the Engineering Staff on the success of the various schemes in the County in maintaining [water] supplies during the present exceptionally dry year'. In late August, Enniscorthy District Committee agreed to contribute towards filling in a disused reservoir, evidently little concerned about maintaining potential future storage capacity. In Gorey district, 'although there was no actual shortage of water this year there was a shortage to the consumer due to deficiency in the distribution pipes'; a pumping system was one remedy considered.⁷⁰ County Wexford therefore escaped the worst of the local authority water restrictions, unlike two neighbouring areas: by mid-August, water pressure in Kilkenny city was being reduced overnight; and at the resort town of Tramore, county Waterford, supplies were turned off from 8pm to 8am, boreholes sunk, and water distributed by fire tender to the new housing estates. Meanwhile in south Roscommon, some well drilling businesses were fully booked out for two months ahead.⁷¹ Yet in a decision suggestive of the challenges faced by at least a few Wexford farmers,

⁶⁷ NAI, DFA/2010/19/699.

⁶⁸ Cork City and County Archives, Cork, CC/CO/M/42, County Council minutes, 21 June to 18 Oct. 1976; county manager's orders, 28 July to 7 Sept. 1976; CC/NO/Newberry box 381(11), Minehill pump file, 14 Sept. to 13 Dec. 1976; *IT*, 17 Aug. 1976, p. 4; 18 Aug., p. 11; 21 Sept., p. 11; E. J. Marnane (ed.), *Cork County Council, 1899-1985* (1985), pp. 500-13.

⁶⁹ Offaly Local Studies and Archive, Tullamore, Offaly County Council minutes, 21 June to 18 Oct. 1976; county manager's orders, 30 July to 7 Sept. 1976; *IT*, 17 Aug. 1976, p. 11.

⁷⁰ Wexford County Archive, Wexford County Council and other committee minutes, and associated county manager's orders, 14 June to 11 Oct. 1976.

⁷¹ *IT*, 17 Aug. 1976, p. 11; *IFJ*, 28 Aug. 1976, p. 3.

in October 1976 the council waived the requirement that abated rates on agricultural land, if not paid on time, would revert to the original amount.

National level political discussions highlighted the increased capital expenditure on water services in recent years, which was beginning to address the serious investment backlog. 'There is no great glory in the provision of water and sewerage', Cosgrave was advised in September 1975. Hence 'the service tends to be neglected' with 'still enormous arrears to be overcome'. That the higher budget remained inadequate was repeatedly underlined by the Minister for Local Government and his department, in public as well as in private, and ensured that Cosgrave regularly received representations for improved local water services. Nonetheless, an outside expert noted that Ireland as a whole was better placed in regard to underlying pressure on water resources than other European countries. In the Dáil, the absence of a more severe Irish drought was ascribed to perhaps 'more rain than other areas' and the foresight of constructing Poulaphouca reservoir which served Dublin and Wicklow.⁷²

V

In short, then, almost no issues were clearly mishandled by central government. Moreover the sources do not suggest any obvious inter-agency coordination problems, although absence of evidence does not necessarily equate to evidence of absence. It would, too, probably be unfair to criticise Cosgrave's administration for insufficient preparations given the weather forecasting errors, and far more fundamentally, the existence of CAP market stabilization tools for most of the main farm products. Indeed Clinton was already advocating the expansion of tillage desired by one opposition deputy who viewed it, in particular, as a feed standby for when grass was scarce due to adverse weather.⁷³

In hindsight, however, the policy response might have been improved in a few instances. While there were general public appeals for water conservation, exhortation of water reuse was said to be neglected.⁷⁴ The crackdown on potato smuggling probably should have begun around a fortnight sooner with, as ever, policymakers needing to react as swiftly as possible to unfolding events. A more open attitude towards potato imports may also have been desirable, considering the very substantial potato price inflation. This is perhaps where the strongest case could be made that the interests of farmers were unnecessarily prioritized over those of consumers and taxpayers, with measures in the beef sector being another potential target for neo-liberalists: the second private storage scheme, particularly, provided an outlet for cow and other beef of manufacturing quality, and later in the year beef farmers also had the advantage of increased prices arising from, in part, Britain's prime cattle shortage. Yet if the other major component of potato policy, restricting exports, helped to mitigate retail price rises in Ireland, it must have exacerbated the inflation experienced by consumers in other countries. Comment from the public about profiteering farmers, merchants and speculators underlines the need for

⁷² NAI, TAOIS/2006/133/366, water schemes file, 16 Sept. 1975 to 28 July 1977; *Dáil debates* 293, cols 494–524; Richards, 'Water everywhere?'; Ferriter, *Ambiguous Republic*, pp. 496, 613.

⁷³ *Dáil debates* 291, cols 579, 803, 820–3. Compare *IFJ*, 11 Sept. 1976, p. 18.

⁷⁴ *IT*, 17 Aug. 1976, p. 11; 21 Aug., p. 9.

excellent communications by ministers, but Clinton seemingly did not make a formal speech for two months after 29 July 1976.⁷⁵ Locally, the business community at afflicted Tramore felt that Waterford County Council failed to learn from 1975, and took inadequate precautions to conserve water during the winter of 1975/6. A major new water scheme was sanctioned soon afterwards, thereby addressing the situation in one of the worst hit localities.⁷⁶

Correspondents to national newspapers called for ministers to stop 'gadding about in Brussels' and arrange proper rural water services, and 'to have farmers exempt from rates this year'.⁷⁷ Unsurprisingly most complaints from the agricultural industry centred on potato export restrictions: 'The Department's refusal to issue export licences for main crop varieties this year, thereby directly encouraging producers to get involved in smuggling to cash in on the most attractive prices, is no way to encourage the development of a potato industry'.⁷⁸ But there was not the same widespread strong public criticism of central government action, or more accurately inaction, which was characteristic of other extreme weather events in modern times. Neither, unlike two years earlier, was there great disappointment with EEC assistance.⁷⁹ At the start of September 1976 the Irish Farmers' Association called for more liberal intervention arrangements if cattle and beef prices did not improve, yet they subsequently did (Figure 7).⁸⁰ Hence few political consequences are easily discernible. Clinton retained his seat in the 1977 general election, and was offered the deputy leadership of his party. Drought management might have been a minor contributor to the decline in the government's opinion poll rating between August and October 1976, and the weather's exacerbation of food price rises cannot have helped their very low approval rating on handling inflation, one of the more important factors in the coalition's surprise election defeat. Large farmers, however, were more concerned about the government's taxation policies.⁸¹ The agricultural policy response to the testing weather, then, seems to be a specific instance supporting the largely favourable academic assessment of Clinton's ministerial tenure, and of the DAF's performance over recent decades, at least in terms of promoting the short-term farm interest; and a positive element in the somewhat mixed record of Cosgrave's administration.⁸²

Of course extreme temperatures and drought were far from the most formidable challenge faced by the state in 1976. Ireland began the year with the highest number unemployed since 1940, and in the Troubles, the British ambassador was assassinated: the government declared a national emergency on 1 September, the ensuing legislative process producing the President's resignation. Clinton had to contend with, among other issues, a dispute with the Irish Veterinary Union. Furthermore both the agricultural policy decisions, and the ability of most farmers to cope with

⁷⁵ NAI, GIS/1/73, speeches 29 July to 30 Sept. 1976.

⁷⁶ *IT*, 17 Aug. 1976, p. 11; 9 Sept., p. 15.

⁷⁷ *IT*, 10 Sept. 1976, p. 9; 30 Sept., p. 9; *IFJ*, 11 Sept. 1976, p. 10.

⁷⁸ *IFJ*, 18 Sept. 1976, p. 7.

⁷⁹ Ferriter, *Ambiguous Republic*, p. 414; references in n. 3 above.

⁸⁰ *IFJ*, 4 Sept. 1976, p. 34.

⁸¹ R. Sinnott, 'The electorate', in H. R. Penniman (ed.), *Ireland at the polls: the Dáil elections of 1977* (1978),

pp. 35–67; B. Farrell and M. Manning, 'The election', in *ibid.*, pp. 133–64; B. M. Walker (ed.), *Parliamentary election results in Ireland, 1918–92* (1992), pp. 224, 228, 232; FitzGerald, *Just Garret*, pp. 176–7, 282.

⁸² Matthews, *Farm incomes*, p. 85; n. 1 references above; C. Curtis, 'The implications of independent government for the farm labourer in Ireland, 1922–76' (Trinity College, Dublin, Centre for Contemporary Irish History seminar paper, April 2014).

the anomalous weather, must have been facilitated greatly by learning from the experience of past dry summers, especially 1969 and 1975; from access to unprecedented CAP support; and by the continuing recent general buoyancy in farm-gate prices and real farm incomes and wealth due to rising world commodity markets and EEC entry (along with drought-induced and other causes), including six devaluations of the 'green pound' during 1975–6.⁸³ Recall that beef prices increased quite substantially year-on-year (Figure 5), despite generally greater European slaughtering; an expected green pound change was one reason behind a recommendation to buy store cattle in early September 1976, for example. Regarding that devaluation, the editor of the *Irish Farmers' Journal* believed that 'in the present drought situation Mark Clinton must push for a good deal more than the suggested five per cent', although the fundamental reason why the industry desired devaluation was to reduce the monetary compensatory amounts charged on Irish agricultural exports;⁸⁴ and if the government saw it as a drought assistance policy, this is not evident in the available sources. The importance of the CAP notwithstanding, there was no price-stabilizing common market organization for two of the three commodities whose prices rose most rapidly in Figure 5, potatoes and sheep meat; here, farmers benefited from the upside of price volatility. Neighbours, farm organizations and local agricultural advisers would also have assisted farmers, although that bank workers were on strike for most of the summer hindered access to credit. Meanwhile Figure 6 verifies that on-farm output diversification provided some insurance against challenging weather, albeit presumably at the cost of forgone profits from specialization.

Yet, fundamentally, Ireland's agricultural sector was, on the whole, one of the least affected by heat and water stress in the EEC. It did not even turn out to be the worst year experienced nationally during the 1970s. The greatest water supply problems were quite localized, and although many farmers were affected by higher feed costs, FFI fell in only one case in Figure 6. Admittedly some of the observed variations in costs, output and income might have been larger in the absence of government initiatives, and the regional evidence presented above is unfortunately insufficient. But there were no widespread disastrous effects on grass growth, milk yields and creamery deliveries, and the two crops whose yields nationally fell most markedly, unsurprisingly barley and potatoes, comprised only around eight per cent of mid-1970s aggregate production value.⁸⁵ In addition to some issues in the beef and pig sectors, possibly only a few barley, potato and apple growers in the east and south east experienced a very serious decline in yields. There is also evidence, albeit mixed, that Irish agriculture benefited commercially from market opportunities created by greater weather-induced production problems elsewhere in Europe, most obviously in the export sales of intervention SMP and increased autumn beef prices. Thus on this occasion *ex post* financial compensation to farmers was eschewed. Political concern focused especially on the adverse implications of the extremely high retail potato prices, which accentuated the ongoing trend to reduced per capita consumption, not farm production and incomes in circumstances where many Irish farmers profited from price increases.

⁸³ *Inter alia*, Matthews, *Farm incomes*, pp. 3, 9–10, 47–8, 53. The green pound rate was used to convert CAP prices into their equivalent in Irish pounds.

⁸⁴ Arising from a difference between the green and

market exchange rates. *IFJ*, 4 Sept. 1976, p. 6; 11 Sept., pp. 2, 37; *IT*, 6 Oct. 1976, p. 1.

⁸⁵ CSO, *Statistical abstract*, Table 62.