



WDC Insights

*providing insights on key issues for  
the Western Region of Ireland*

# Agriculture, Forestry & Fishing Employment in the Western Region

## Regional Sectoral Profile

April 2019

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## 1.0 Introduction

The [Western Development Commission](#) (WDC) is a state agency charged with promoting the economic and social development of the Western Region of Ireland.<sup>1</sup> To effectively deliver this remit the WDC carries out detailed analysis of a range of socio-economic issues of relevance to the region to inform policy debate and formulation.

This report forms part of a series of 'Regional Sectoral Profiles' analysing the most recent employment data for the Western Region on specific economic sectors and identifying key policy issues.<sup>2</sup>

The two-page **WDC Insights: Agriculture, Forestry & Fishing Employment in the Western Region** summarises the main points from this report. It is available [here](#).

### 1.1 Agriculture, Forestry & Fishing

Agriculture, Forestry & Fishing is the Western Region's sixth largest employment sector. It includes all those working on farms (farmers, labourers), fishing vessels, aquaculture farms, forestry, logging and stables. As the data used here is drawn from the Census, it counts people who recorded their main economic status as being 'at work' in this sector. Therefore a person who farms part-time but has another 'main' job or is retired would not be included. Thus, **this report examines those whose main economic activity is working in Agriculture, Forestry & Fishing.**

This sector includes the primary production of agricultural, marine and forestry products but not the processing of these products. Agri-food processing forms part of the Industry (manufacturing) sector and was examined in a previous Regional Sectoral Profile.<sup>3</sup>

Agriculture, Forestry & Fishing is a highly complex sector with many different elements, inter-linkages and roles in the economy, society and environment. In this report however we examine one aspect, direct employment of those whose main economic activity is working in this sector. It therefore underestimates the full employment and economic impact of the sector in the regional and rural economy but focuses on those whose primary activity is in this area.

Employment in Agriculture, Forestry & Fishing plays a central role in the Western Region's economy and in the viability of rural and coastal economies in particular. Agriculture in the Western Region is characterised by smaller scale farms,<sup>4</sup> with extensive cattle and sheep production the main activities. Due to limited dairy and tillage activity, agri-food processing accounts for a far smaller share of total Industry employment in the region compared with nationally.<sup>5</sup> The region plays a strong national role in the fishing and seafood industry however, with Killybegs a strategic national asset.

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<sup>1</sup> Counties Donegal, Sligo, Leitrim, Roscommon, Mayo, Galway and Clare.

<sup>2</sup> Previous Regional Sectoral Profiles examined the Industry, Wholesale & Retail, Health & Care, Education and Accommodation & Food Service sectors and are available here <https://www.wdc.ie/publications/reports-and-papers/>

<sup>3</sup> WDC (2019), Industry in the Western Region: Regional Sectoral Profile <https://www.wdc.ie/publications/reports-and-papers/>

<sup>4</sup> Average farm size in the Western Region is 26.3ha compared with a state average of 32.7ha. CSO, Census of Agriculture 2010

<sup>5</sup> Agri-food accounts for 11.2% of total Industry employment in the region compared with 17.1% in the state.

Following a description of the data that will be used, Section 2 outlines current employment in Agriculture, Forestry & Fishing in the Western Region. Some key employment issues are outlined in Section 3.

## 1.2 Data used

The Census is used to examine employment in the Agriculture, Forestry & Fishing sector in the region.

**Census of Population:** The Census provides comprehensive data on employment by sector at both county and town level. No other data source provides this level of geographic breakdown. However there are a number of issues to bear in mind:

1. Most recent Census data is 2016.
2. Census data refers to where a person lives which may not be the same as where they work.<sup>6</sup> Data presented here on the number of people working in a sector in a specific county refers to the number of residents of that county working in the sector, even if they work elsewhere. However the Agriculture, Forestry & Fishing sector is less influenced by commuting than other sectors.
3. Census data does not give an indication of whether employment is full or part-time. Each person who works in the sector, regardless of how many hours per week they work, is counted the same. It only counts people who reported their 'main' job as working in Agriculture, Forestry & Fishing.

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<sup>6</sup> See WDC (2018), [Travel to Work and Labour Catchments in the Western Region: A Profile of Seven Town Labour Catchments 2018](#), for an analysis of travel to work patterns in the region.

## 2.0 Employment in Agriculture, Forestry & Fishing

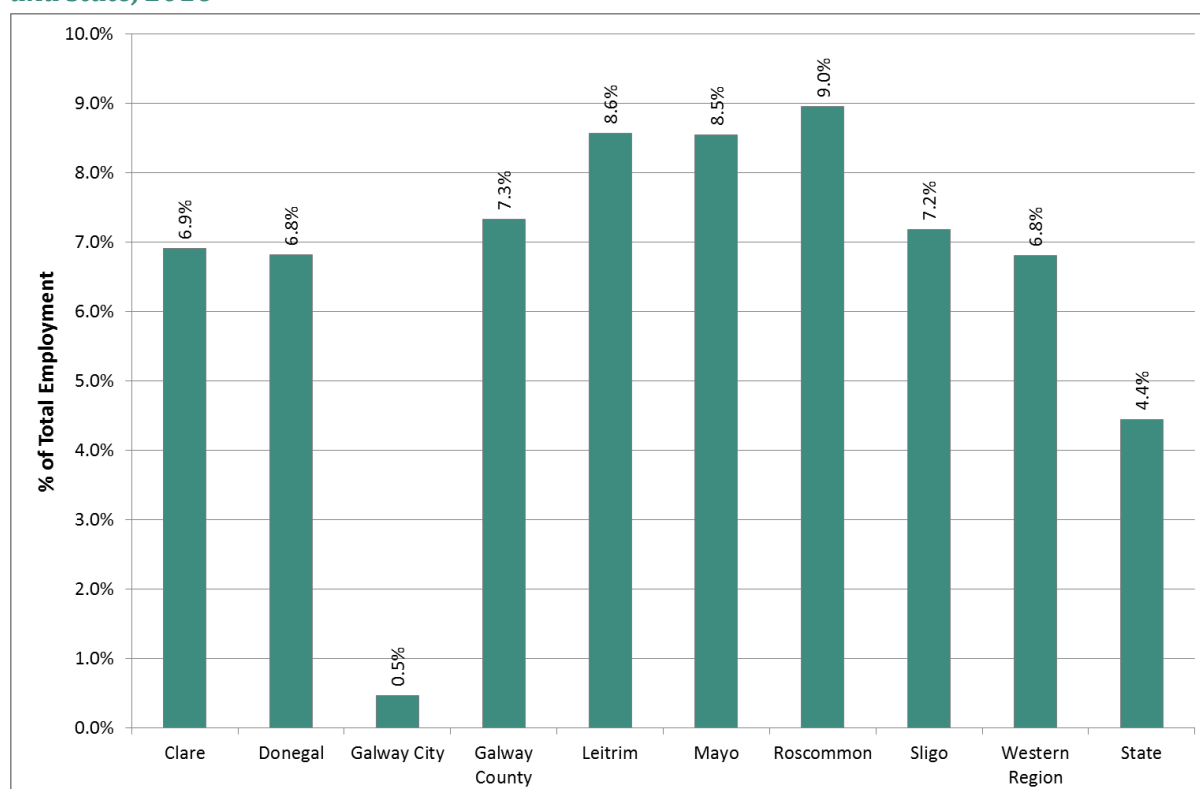
In this section we examine employment over time and by gender, as well as self-employment, in Agriculture, Forestry & Fishing in the Western Region and western counties. Employment in specific Agriculture, Forestry & Fishing sub-sectors is also analysed, as well as Agriculture, Forestry & Fishing related occupations.

### 2.1 Employment in the Western Region and its counties

According to Census 2016, 22,733 people were employed in Agriculture, Forestry & Fishing in the Western Region.<sup>7</sup> Agriculture, Forestry & Fishing plays a greater role in the region's labour market than nationally (Fig. 1). In 2016 it accounted for 6.8% of total employment in the Western Region compared with 4.4% nationally. It is the Western Region's sixth largest employment sector.<sup>8</sup>

The significance of Agriculture, Forestry & Fishing to employment in the region is also clear from the region's share of national employment in the sector. Of everyone working in Agriculture, Forestry & Fishing in Ireland, 25.5% of them live in the Western Region, far higher than the region's 16.6% share of total national employment. **Of all economic sectors, Agriculture, Forestry & Fishing is the sector where the Western Region accounts for its highest share of total national employment.**

*Fig. 1: Percentage of total employment in Agriculture, Forestry & Fishing in Western Region and state, 2016*



Source: CSO, Census 2016: Summary Results Part 2, Table EZ011

<sup>7</sup> These are people who recorded in the Census that their main employment was in this sector. Therefore someone who farms/fishes part-time but has another job (which they recorded as their 'main' employment) would not be included.

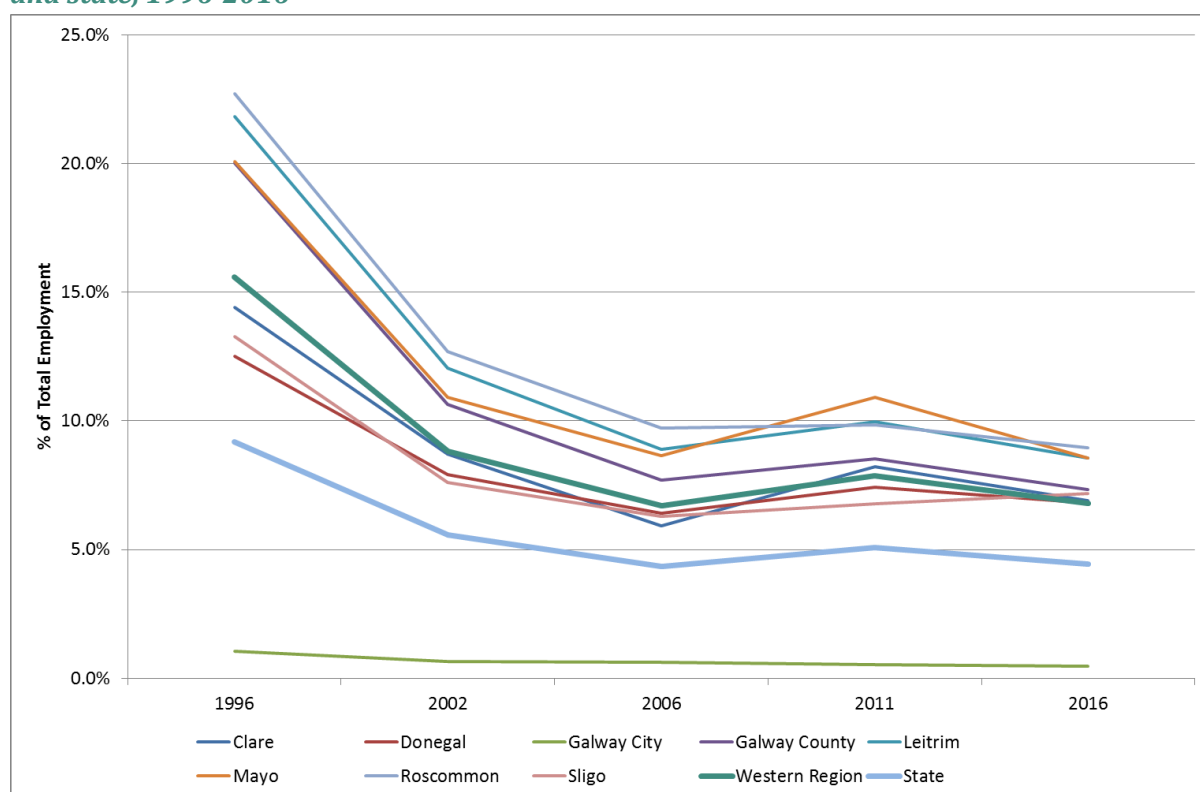
<sup>8</sup> After Industry, Wholesale & Retail, Health & Care, Education and Accommodation & Food Service.

Among western counties, it is most important in Roscommon accounting for 9% of all employment, followed closely by Leitrim (8.6%) and Mayo (8.5%). These three counties have the fourth, fifth and sixth highest shares working in Agriculture, Forestry & Fishing in Ireland.<sup>9</sup> All other western counties have around 7% working in the sector and are considerably above the national average.<sup>10</sup> This is not surprising given the highly rural nature of the region. The sector's significant employment role in western counties is also partly due to lower levels of activity in some other sectors e.g. financial services, ICT, which leads to greater reliance on jobs in primary production.

### 2.1.1 Trends in Agriculture, Forestry & Fishing employment

Agriculture, Forestry & Fishing's share of total employment has changed dramatically over the past two decades (Fig. 2). The restructuring of Ireland's economy towards more service-based activity and high-tech manufacturing, as well as intensification and increased productivity in the agricultural sector, has substantially changed its significance as a source of full-time employment.

**Fig. 2: Percentage of total employment in Agriculture, Forestry & Fishing in Western Region and state, 1996-2016**



Source: CSO, Census 2016: Summary Results Part 2, Table EZ011; CSO, Census of Population 2006, Volume 7 - Principal Economic Status and Industries, Table C0713; CSO, Census of Population 2002, Volume 5 - Principal Economic Status and Industries, Table B0513; CSO, Census of Population 1996, Volume 5 - Principal Economic Status and Industries, Table A0513

In 1996 15.6% of total employment in the Western Region was in Agriculture, Forestry & Fishing, the share declined very substantially to just 8.8% by the next Census in 2002 and continued to decline. The recent recession however saw a slight rise in the sector's share in 2011. This was due to two

<sup>9</sup> Cavan (11.3%), Monaghan (11.2%) and Tipperary (10.6%) have the highest.

<sup>10</sup> At 0.5% of total employment (163 people), Galway City is an exception. Given the low numbers involved, Galway City will be excluded from much of the following analysis but it is included in the figures for the Western Region as a whole.

factors. Firstly there was an actual increase (4.9%) in the number of people working in the sector in the region between 2006 and 2011. Massive job losses in construction meant that some part-time farmers who had been working in the building industry reverted to full-time farming. Secondly, the massive job losses elsewhere in the economy increased the relative importance of this sector. 2016 saw a return to the downward trend.

The Western Region has consistently had a far higher share working in this sector than nationally. While the region and state followed similar patterns over the two decades, the gap between them has narrowed. In 1996 the share of total employment accounted for by Agriculture, Forestry & Fishing in the region was 6.4 percentage points higher than in the state (15.6% compared with 9.2%) by 2016 the gap had narrowed to 2.4 percentage points (6.8% compared with 4.4%).

At a county level the most dramatic changes occurred in Roscommon, Leitrim, Galway County and Mayo where over 20% of employment was in Agriculture, Forestry & Fishing two decades ago. Among these, Galway County has seen the greatest decline, partly due to strong growth in Industry over the same period.

Mayo, Leitrim and Clare, saw notable 'bumps' in the sector's role in 2011 in response to the recession, followed by decline. Sligo was the only western county where the sector's importance actually increased between 2011 and 2016 rising from 6.8% to 7.2% of employment.

Donegal had the region's lowest share (excluding Galway City) working in the sector in 1996 partly due to the strength of manufacturing in the county at that time. Donegal also saw the least change in the importance of Agriculture, Forestry & Fishing over the period declining from 12.5% to 6.8%. This was because Donegal experienced the region's smallest decline in the numbers working in the sector (see next section) and also dramatic job losses in manufacturing meant the relative importance of other sectors remained higher.

The share of total employment in Agriculture, Forestry & Fishing is determined both by the number of people working in the sector and the total employment level in the economy. If the number working in Agriculture, Forestry & Fishing did not change but total employment grew or fell dramatically e.g. during the construction boom and bust, then its share of total employment would change. The next section looks at changes in the actual number working in the sector.

### ***2.1.2 Change in employment in the Western Region and its counties***

The number of people working in Agriculture, Forestry & Fishing in the Western Region declined by 41.4% between 1996 and 2016 (Table 1), a considerably greater decline than nationally (33.5%). It must be remembered that, as this refers to people who record Agriculture, Forestry & Fishing as their main employment, some of these people may have continued to farm but on a part-time basis. Given the dominance of cattle and sheep farming in the region, which are more amenable to part-time farming than dairy or tillage, as well as smaller farm size, part-time farming is more common in the region.<sup>11</sup>

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<sup>11</sup> 43% of farmers in the Border region and 39% of farmers in the West region had off-farm employment in 2017, the highest shares across all regions. In the South West only 17% have off-farm employment. Teagasc (2018), [National Farm Survey 2017](#)

Roscommon saw the largest decline, losing almost half of employment in the sector over twenty years, with Galway County, Leitrim and Mayo also seeing very substantial falls. Donegal had the region's smallest decline and was the only western county with a lower decline than the national average. This contributed to the less dramatic decline in the sector's importance in that county (see Fig. 2).

**Table 1: Number employed in Agriculture, Forestry & Fishing in Western Region and state, and percentage change**

County	Agriculture, Forestry & Fishing					Total Employment
	1996	2011	2016	% Change 1996-2016	% Change 2011-2016	% Change 2011-2016
Clare	5,571	3,751	3,423	-38.6%	-8.7%	8.6%
Donegal	5,427	3,947	3,977	-26.7%	0.8%	9.5%
Galway County	10,124	5,908	5,505	-45.6%	-6.8%	8.5%
Leitrim	1,993	1,194	1,091	-45.3%	-8.6%	6.3%
Mayo	7,963	5,354	4,395	-44.8%	-17.9%	4.8%
Roscommon	4,529	2,405	2,311	-49.0%	-3.9%	5.9%
Sligo	2,934	1,721	1,868	-36.3%	8.5%	2.2%
<b>Western Region</b>	<b>38,804</b>	<b>24,448</b>	<b>22,733</b>	<b>-41.4%</b>	<b>-7.0%</b>	<b>7.5%</b>
<b>State</b>	<b>133,969</b>	<b>91,526</b>	<b>89,116</b>	<b>-33.5%</b>	<b>-2.6%</b>	<b>11.0%</b>

Source: CSO, Census 2016: Summary Results Part 2, Table EZ011

Due to the low numbers involved (163 in 2016) Galway City is not included in the table but is included in the Western Region total.

In the most recent 2011-2016 period, Sligo and Donegal actually saw an increase in the numbers working in the sector. The 8.5% growth in Sligo is particularly notable and this was the third highest growth among counties in Ireland.<sup>12</sup> In fact Sligo and Carlow were the only counties where Agriculture, Forestry & Fishing saw stronger jobs growth than that county's total jobs growth.

All other western counties saw a decline in numbers over the period. The 17.9% fall in Mayo is particularly striking and this was the largest decline in the sector in Ireland. From Fig. 2 above, we saw that Mayo experienced a particularly strong 'bump' in the sector's importance in 2011 in response to the recession and the considerable decline in numbers 2011-2016 was partly a reversal of this, as well as a return to a downward trend.

## 2.2 Employment in Agriculture, Forestry & Fishing sub-sectors

Census data on employment in Agriculture, Forestry & Fishing is sub-divided into six separate activities. For ease of interpretation, these have been combined into four sub-sectors.<sup>13</sup>

The sector is entirely dominated by the very broad sub-sector of 'Animals & Mixed Farming' which accounts for 88.6% of total employment in the sector in the region, a notably higher share than

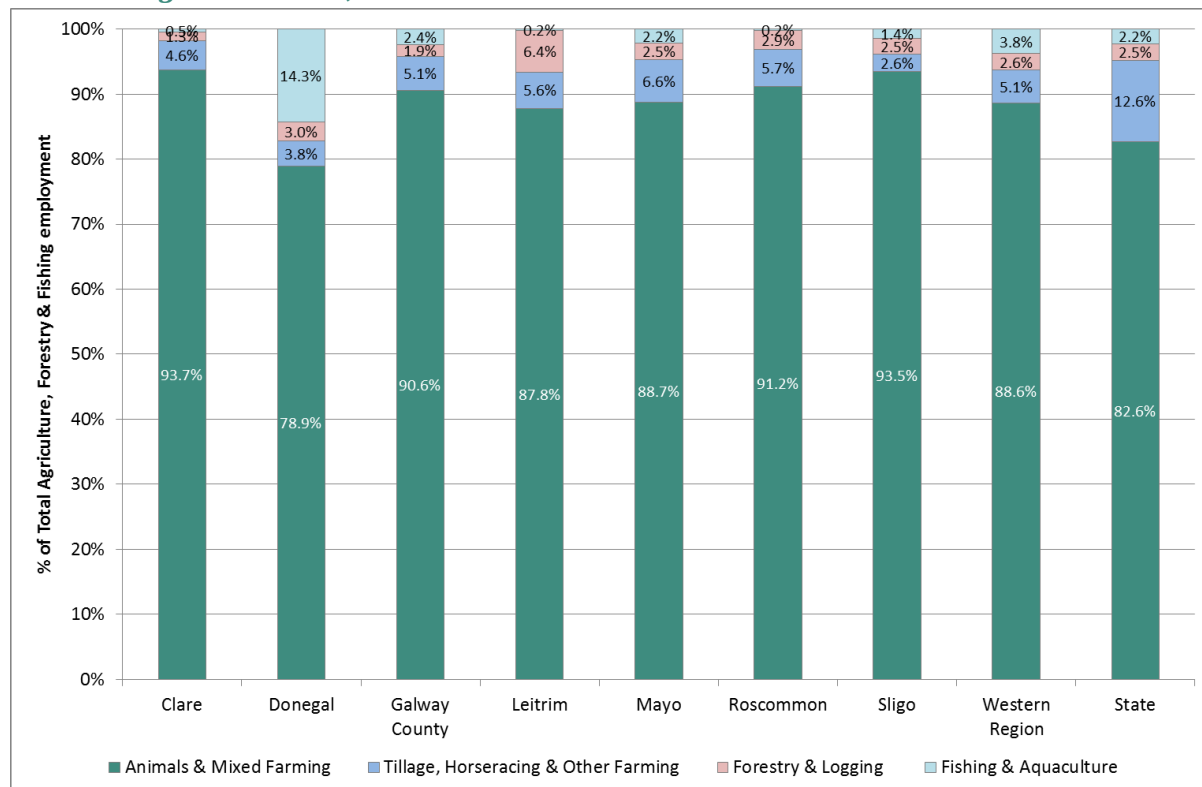
<sup>12</sup> Carlow (14.5%) and Cork City (14.3%) were highest, though clearly Cork City involved very small numbers, 120 in 2016.

<sup>13</sup> The three categories of 'Growing of perennial and non-perennial crops plant propagation', 'Horseracing activities' and 'Other agricultural activities and agricultural activities n.e.c.' have been combined here as Tillage, Horseracing & Other Farming. Appendix 1 provides detailed data for all six activities for all western counties.



nationally (Fig. 3). The Western Region is home to 27.4% of everyone in Ireland working in ‘Animals & Mixed Farming’ compared with the region’s 16.6% share of total employment. This sub-sector dominates in all counties, particularly in Clare and Sligo. It is least important for Donegal.

**Fig. 3: Percentage of total Agriculture, Forestry & Fishing employment in each sub-sector in Western Region and state, 2016**



Source: CSO, Census 2016: Summary Results Part 2, Table EZ011

Due to the low numbers involved, Galway City is not included in the chart, but is included in the Western Region total.

The next largest sub-sector is ‘Tillage, Horseracing & Other Farming’ which accounts for a small share in the region, less than half this sub-sector’s share nationally. This reflects the region’s reliance on cattle and sheep farming, partly due to climatic and soil conditions, with only 10.3% of total national ‘Tillage, Horseracing & Other Farming’ employment located in the region. Of western counties, Mayo has the highest share working in this activity (6.6%, 288 people).

‘Forestry & Logging’ accounts for 2.6% of all Agriculture, Forestry & Fishing employment in the region. A quarter of national ‘Forestry & Logging’ employment is located in the region, showing the region plays a significant national role. At 6.4% (70 people), Leitrim is where ‘Forestry & Logging’ is most important in the overall employment profile, followed by Donegal (3%, 119 people).

The role of ‘Fishing & Aquaculture’ in Donegal’s economy is clear. It accounts for 14.3% of total Agriculture, Forestry & Fishing employment in the county (567 people) with Killybegs likely the main location. Galway County (2.4%) and Mayo (2.2%) are the only other western counties with a notable

share working in this activity. The Western Region makes a very substantial contribution to this sector being home to 43% of national 'Fishing & Aquaculture' jobs.<sup>14</sup>

### 2.5.1 Change in employment in Agriculture, Forestry & Fishing sub-sectors

Clearly, given its dominance, any changes in employment in 'Animals & Mixed Farming' will have the most significant impact. Between 2011 and 2016, the number working in this sector in the Western Region fell by 8.7%, a greater fall than nationally (Table 2). Mayo saw employment decline by a fifth, explaining its overall large loss of Agriculture, Forestry & Fishing employment. Leitrim and Clare also saw large losses in this activity, while Sligo's growth of 10.2% drove its overall increase.

**Table 2: Percentage change in employment in Agriculture, Forestry & Fishing sub-sectors in Western Region and state, 2011-2016**

County	% Change in Employment 2011-2016				
	Animals & Mixed Farming	Tillage, Horseracing & Other Farming	Forestry & Logging	Fishing & Aquaculture	Total
Clare	-8.8%	-4.8%	-23.2%	21.4%	-8.7%
Donegal	-2.3%	-11.1%	-0.8%	28.0%	0.8%
Galway County	-8.5%	10.1%	12.0%	22.4%	-6.8%
Leitrim	-10.3%	-4.7%	18.6%	-33.3%	-8.6%
Mayo	-20.2%	4.0%	-3.4%	25.0%	-17.9%
Roscommon	-5.0%	-2.2%	36.0%	300.0%	-3.9%
Sligo	10.2%	-21.0%	-17.5%	44.4%	8.5%
<b>Western Region</b>	<b>-8.7%</b>	<b>-0.6%</b>	<b>3.2%</b>	<b>27.7%</b>	<b>-7.0%</b>
<b>State</b>	<b>-5.2%</b>	<b>7.5%</b>	<b>18.6%</b>	<b>33.1%</b>	<b>-2.6%</b>

Source: CSO, Census 2016: Summary Results Part 2, Table EZ011

Due to the low numbers involved, Galway City is not included in the table, but is included in the Western Region total.

There was a mixed experience for 'Tillage, Horseracing & Other Farming' ranging from a 21% decline in Sligo to 10.1% growth in Galway County. In Sligo the losses were in both crops and other farming, while in Galway County there was particular employment growth in crops. 'Forestry & Logging' employment grew most strongly in Roscommon and Leitrim, while declining notably in Clare and Sligo.

'Fishing & Aquaculture' grew in every county, except Leitrim, though in many cases the numbers involved are very small e.g. 300% growth in Roscommon was an increase from 1 person to 4 persons, while Leitrim's 33.3% decline was a drop from 3 persons to 2. The 28% jobs growth in Donegal however, as well as 20+% growth in Galway County and Mayo, is a welcome indication of the strength of the region's seafood industry.

### 2.3 Employment by gender

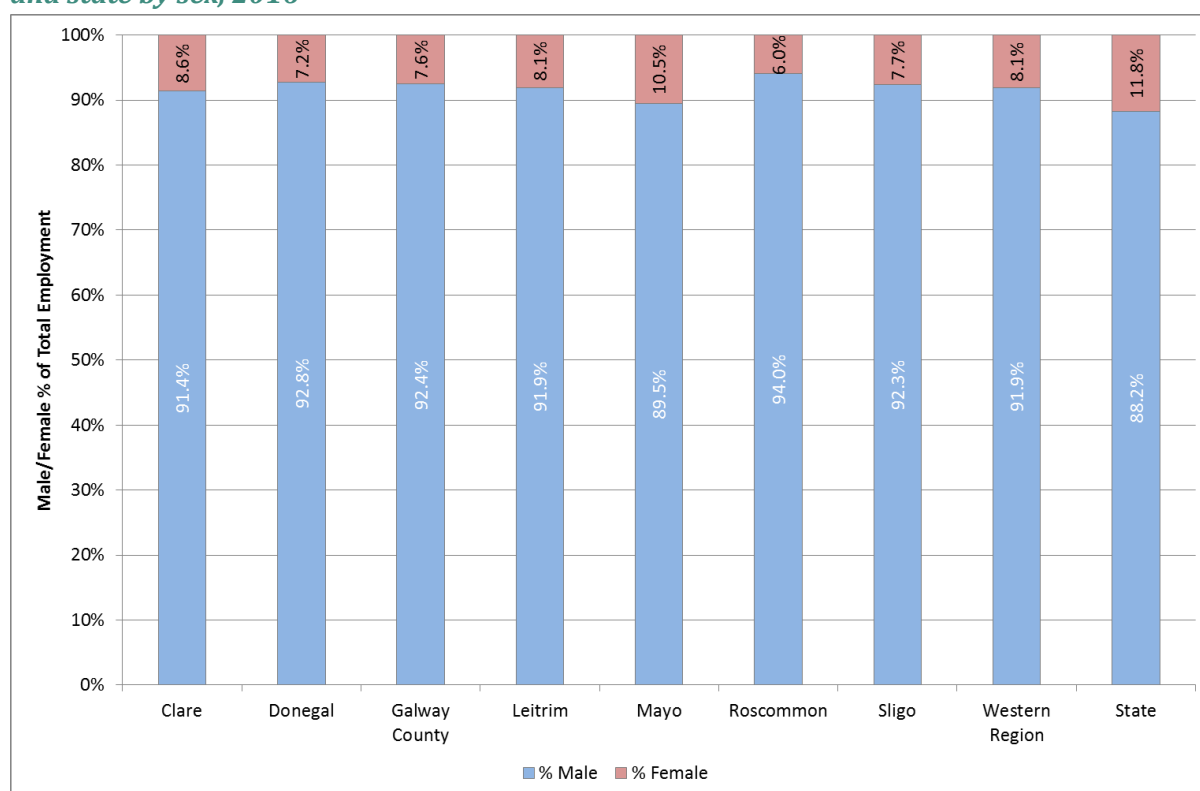
As would be expected, this sector is strongly male-dominated. In the Western Region 91.9% of people working in Agriculture, Forestry & Fishing are male, a somewhat higher share than nationally

<sup>14</sup> This regional strength is also reflected in the region's 47.6% share of national employment in seafood processing, see WDC (2019), Industry in the Western Region: Regional Sectoral Profile

(88.2%) (Fig. 4). The male share actually increased marginally since 2011, when it was 90.9% in the region, indicating that female involvement has declined.

The male share is highest in Roscommon and lowest in Mayo, although this is still above the national average. All western counties, except Donegal, saw a decrease in the female share between 2011 and 2016.

**Fig. 4: Percentage of total employment in Agriculture, Forestry & Fishing in Western Region and state by sex, 2016**



Source: CSO, Census 2016: Profile 11 – Employment, Occupations and Industry, Table EB027

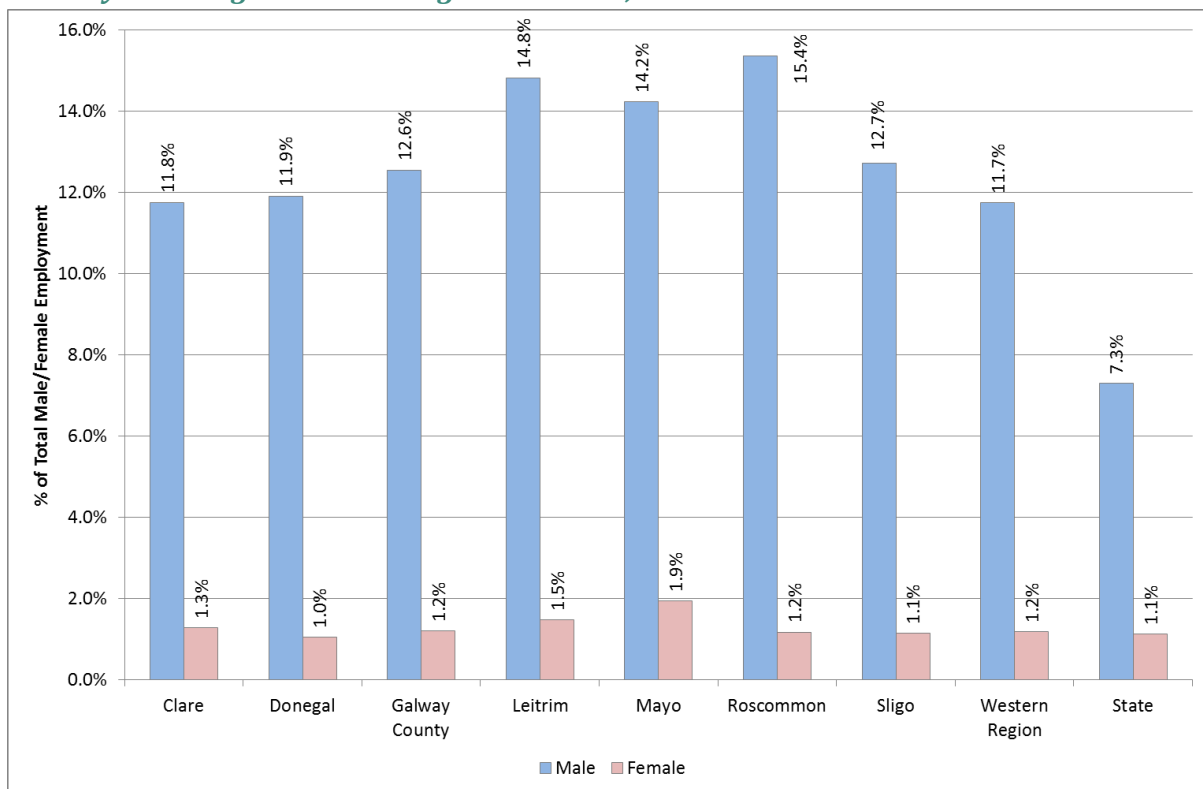
Due to the low numbers involved, Galway City is not included in the chart, but is included in the Western Region total.

In terms of the sector’s relative importance to total male and female employment (Fig. 5), 11.7% of all working men and 1.1% of all working women in the Western Region work in Agriculture, Forestry & Fishing. The sector plays a considerably more significant role in male employment in the region than nationally, 11.7% compared with 7.3%.

In Roscommon (15.4%), Leitrim (14.8%) and Mayo (14.2%) the share of men working in this sector is around twice the national average.<sup>15</sup> While still well above average, Clare and Donegal is where it plays its smallest role in total male employment. At 1.9% of total female employment, Mayo is where the sector is most important for women.

<sup>15</sup> These counties have the fourth, fifth and sixth highest shares of male employment in the sector in Ireland after Cavan (17.7%), Tipperary (16.8%) and Monaghan (16.1%).

**Fig. 5: Percentage of total male and total female employment that is in Agriculture, Forestry & Fishing in Western Region and state, 2016**



Source: CSO, Census 2016: Profile 11 – Employment, Occupations and Industry, Table EB027

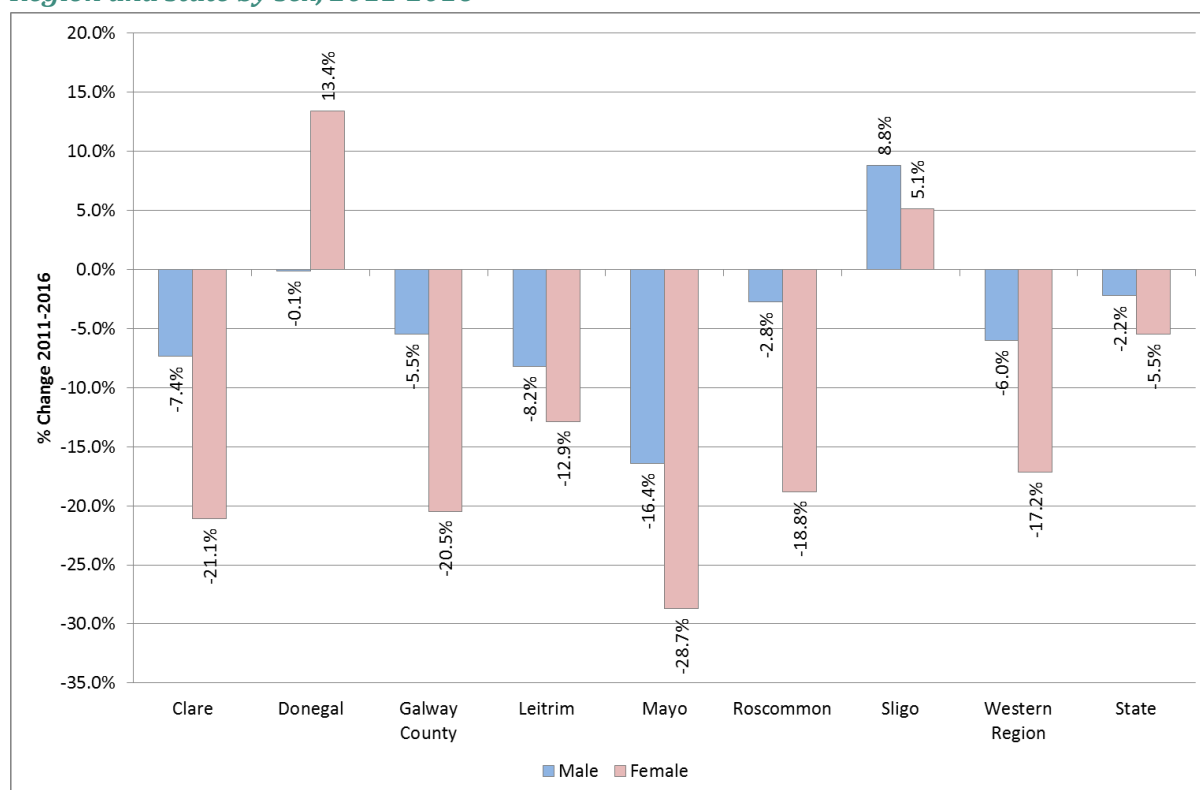
Due to the low numbers involved, Galway City is not included in the chart, but is included in the Western Region total.

### 2.3.1 Change in employment by gender

The period 2011 to 2016 saw male employment in Agriculture, Forestry & Fishing fall by 6% in the region while female declined by 17.2% (Fig. 6). This explains why the male share of total employment increased. The region had a larger fall in employment than nationally among both men and women, but particularly among women. This shows deterioration in the level of involvement of women, as their main economic activity, in Agriculture, Forestry & Fishing in the region.

Most western counties experienced employment declines for both men and women and more strongly among women. While Donegal experienced a marginal decline in the number of men working in the sector, it had strong growth in female employment, albeit from a very low base. Sligo’s overall jobs growth in the sector resulted from increases for both men and women.

**Fig. 6: Percentage change in employment in Agriculture, Forestry & Fishing in Western Region and state by sex, 2011-2016**



Source: CSO, Census 2016: Profile 11 – Employment, Occupations and Industry, Table EB027

Due to the low numbers involved, Galway City is not included in the chart, but is included in the Western Region total.

## 2.4 Self-employment

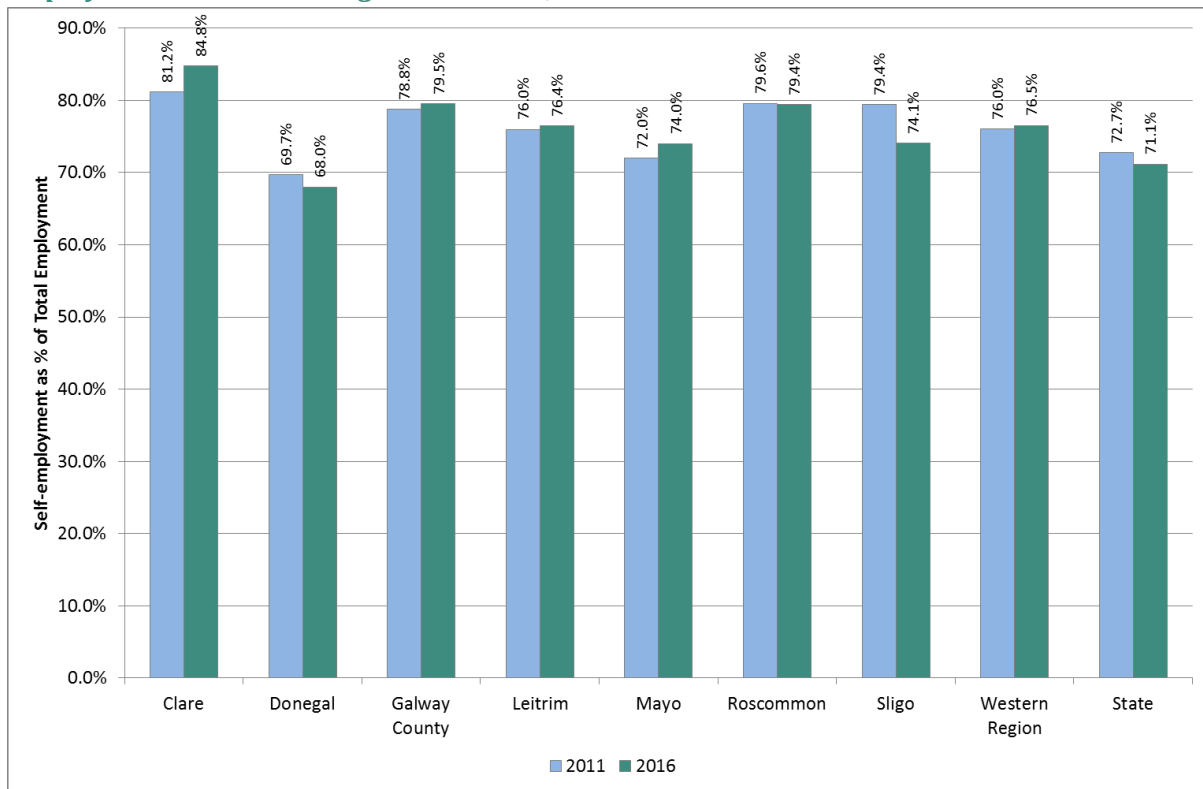
Of the 22,733 people working in Agriculture, Forestry & Fishing in the Western Region in 2016, the vast majority (76.5%, 17,391 people) were self-employed (employer or own account worker). The Western Region has a higher incidence of self-employment than the national average (71.1%) (Fig. 7). Given that many people associate this sector primarily with farmers,<sup>16</sup> some may have expected even higher self-employment levels. Those who are not self-employed are primarily employees (22%) but at 1.5% this sector has the largest share of people categorised as ‘Assisting Relative’.

At 80+%, Clare, Galway County and Roscommon have the highest incidence of self-employment. Fig. 3 previously showed that Clare has the highest share working in ‘Animals & Mixed Farming’ with the others also having high shares in this activity, which clearly has high self-employment. In contrast Donegal has the lowest level of self-employment (68%) and given the role of ‘Fishing & Aquaculture’ in the county, it seems likely there is lower self-employment in that activity.

The extent of self-employment remained at a relatively similar level in the region in 2016 as in 2011 and this was also the case for most of the counties. Clare however saw the share of self-employment increase. This implies that its overall jobs decline in the sector (-8.7%) impacted more on those were working as employees rather than self-employed. The self-employed share declined notably in Sligo, indicating that its strong jobs growth (+8.5%) was driven by increasing numbers of employees.

<sup>16</sup> Section 2.5 examines occupational data for the sector including the number of farmers.

**Fig. 7: Percentage of total employment in Agriculture, Forestry & Fishing that is self-employment in Western Region and state, 2011 and 2016**



Source: CSO, Census 2016: Profile 11 – Employment, Occupations and Industry, Table EB033. Special run from CSO. Due to the low numbers involved, Galway City is not included in the chart, but is included in the Western Region total.

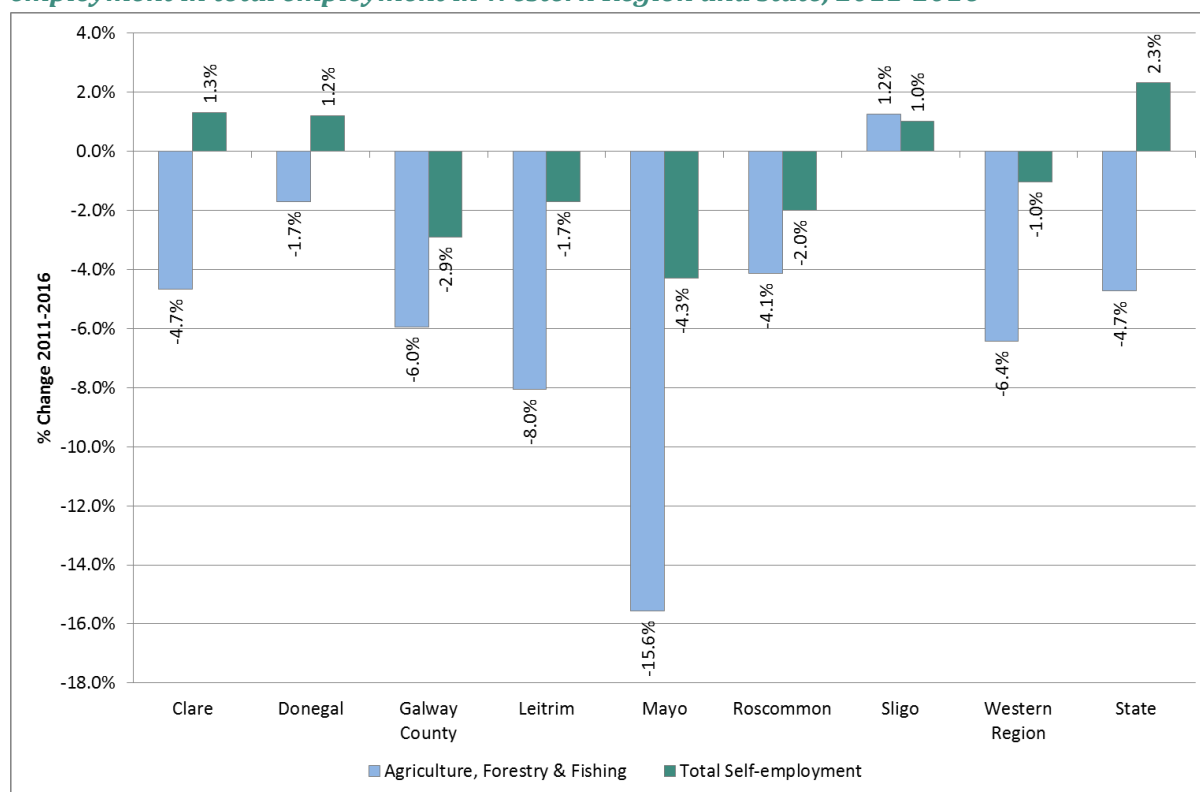
### 2.4.1 Change in self-employment

In the Western Region, the number of self-employed people working in Agriculture, Forestry & Fishing fell by 6.4% between 2011 and 2016 (Fig. 8), a greater decline than nationally (-4.7%). This compares with a 1% decline in total self-employment in the region showing a greater decline in the incidence of self-employment in this sector than elsewhere in the economy.

Given that self-employment is very common in this sector, the decline in self-employment (-6.4%) is very much in line with the overall jobs decline in the sector (-7%, see Table 1). All counties, except Sligo, saw a fall in self-employment numbers, most notably Mayo (-15.6%) and to a lesser extent Leitrim and Galway County. In every case this sector performed worse than total self-employment in the county.

Sligo had 1.2% growth in the number of self-employed. As noted above, despite this growth, self-employment's share of total employment in the sector declined (from 79.4% to 74.1%). This was because the number of employees grew even more strongly (40.6%) indicating something of a change in the profile of employment in the county.

**Fig. 8: Percentage change in self-employment in Agriculture, Forestry & Fishing and self-employment in total employment in Western Region and state, 2011-2016**



Source: CSO, Census 2016: Profile 11 – Employment, Occupations and Industry, Table EB033. Special run from CSO. Due to the low numbers involved, Galway City is not included in the chart, but is included in the Western Region total.

## 2.5 Agriculture, Forestry & Fishing related occupations

The previous sections examined total employment in the Agriculture, Forestry & Fishing sector. People working in this sector are engaged in a range of different occupations. Eleven of the 328 detailed occupational groups reported in the Census can be considered to be primarily ‘Agriculture, Forestry & Fishing related’ occupations.<sup>17</sup> In 2016, there were 24,014 people in the Western Region who reported themselves with an Agriculture, Forestry & Fishing related occupation (Table 3).

This figure differs from the total number employed in the sector (22,733) for a number of reasons. Firstly, unemployed persons are included in occupations data (assigned to their previous occupation) but are not counted in the number currently working in a sector. Similarly some retired persons may have recorded their occupation as ‘farmer’ but would not have counted their economic status as ‘at work’ in the sector. Secondly some people working in an Agriculture, Forestry & Fishing related occupation may work in a different sector e.g. a person whose occupation is ‘skilled horticultural trades’ may work for a landscaping company.<sup>18</sup> Finally, some people working in the Agriculture, Forestry & Fishing sector do not fall within the occupational groups considered here e.g. a bookkeeper who works for an aquaculture farm.

<sup>17</sup> These eleven occupational groups have been combined here into four categories for ease of interpretation. Full data for all eleven occupational groups are included in Appendix 2.

<sup>18</sup> The occupational group of ‘Skilled horticultural trades’ is included in the analysis here but the two occupational groups of ‘Gardeners and landscape gardeners’ and ‘Groundsmen and greenkeepers’ are not as they would not be primarily engaged in the ‘Agriculture, Forestry & Fishing’ sector.

**Table 3: Percentage in Agriculture, Forestry & Fishing related occupations in Western Region and state, 2016**

	Managers & Proprietors Agriculture Related Services	Farmers	Other Skilled Agricultural & Related Trades	Elementary Agricultural Occupations	TOTAL
Clare	0.5%	92.7%	2.5%	4.3%	100.0%
Donegal	0.8%	76.2%	11.8%	11.2%	100.0%
Galway County	1.2%	88.9%	4.3%	5.6%	100.0%
Leitrim	1.6%	86.8%	2.3%	9.3%	100.0%
Mayo	1.0%	87.6%	3.7%	7.7%	100.0%
Roscommon	1.4%	89.7%	1.8%	7.2%	100.0%
Sligo	0.9%	91.6%	3.3%	4.2%	100.0%
<b>Western Region (%)</b>	<b>1.0%</b>	<b>86.9%</b>	<b>4.9%</b>	<b>7.1%</b>	<b>100.0%</b>
<b>Western Region (No.)</b>	<b>246</b>	<b>20,880</b>	<b>1,177</b>	<b>1,711</b>	<b>24,014</b>
<b>State</b>	<b>2.0%</b>	<b>79.8%</b>	<b>5.2%</b>	<b>13.0%</b>	<b>100.0%</b>

Source: CSO, Census 2016: Profile 11 – Employment, Occupations and Industry, Table EB049

Due to the low numbers involved (181 in total) Galway City is not included in the table but is included in the Western Region total.

The vast majority (86.9% in the Western Region) of those in Agriculture, Forestry & Fishing related occupations are farmers.<sup>19</sup> At 20,880, farmers are the Western Region’s second largest single occupational group. Farmers dominate the Agriculture, Forestry & Fishing related occupations in all counties, most strongly in Clare. This is consistent with previous findings of the importance of ‘Animals & Mixed Farming’ in that county, as well as its higher self-employment. Farmers also account for close to 90% in Sligo, Roscommon and Galway County. Donegal is where farmers account for their smallest share (76.2%) which is clearly due to the strength of the fishing industry.

After farmers, the next largest occupational group is ‘Elementary Agricultural’ which includes unskilled occupations such as farm, forestry, horse-racing and fishing workers. Such occupations are most important in Donegal (11.2%), with a high proportion of both farm and fishing workers. Leitrim has the next highest share (9.3%) mainly due to forestry workers.

Next is ‘Other Skilled Agricultural & Related Trades’, this includes horticultural trades and skilled fishing and horse-racing trades. Again Donegal is where this is most important (11.8%) almost entirely due to skilled fishing trades, Galway County is next highest (4.3%) and for the same reason.

### 2.5.1 Change in Agriculture, Forestry & Fishing related occupations

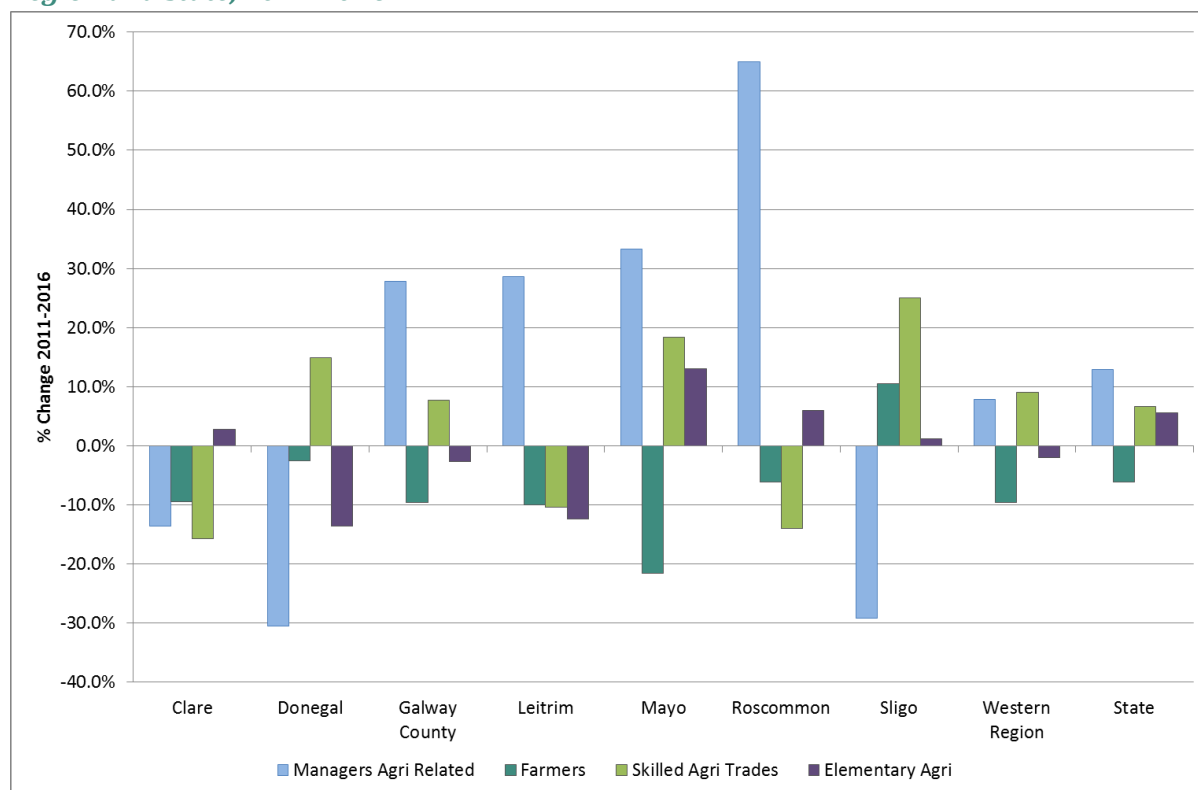
Between 2011 and 2016 there was a 9.6% decline in the number of farmers in the Western Region (Fig. 9), greater than the 6.2% decline nationally. There was also a decline in the number in ‘Elementary Agricultural’ occupations in the region (-2.1%) though the numbers grew in the state

<sup>19</sup> See this WDC Insights blogpost ‘[How many farmers are in the Western Region?](#)’ for a discussion of different definitions and ways to measure the number of ‘farmers’.



(+5.6%). 'Other Skilled Agricultural Trades' had the strongest growth in the region, while nationally it was 'Managers & Proprietors of Agriculture Related Services'.

**Fig. 9: Percentage change in Agriculture, Forestry & Fishing related occupations in Western Region and state, 2011-2016**



Source: CSO, Census 2016: Profile 11 – Employment, Occupations and Industry, Table EB049

Due to the low numbers involved, Galway City is not included in the chart but is included in the Western Region total.

The number of farmers fell in all western counties, except Sligo. At 21.6%, Mayo had the largest decline in farmers, which is consistent with earlier findings. Mayo in fact had growth in all other occupational categories, notably a 33.3% increase in the number of Managers & Proprietors, however given the small numbers involved in these other categories, this could not compensate for the decline in the number of farmers. This pattern however points to something of a change in the structure of employment in the sector.

Roscommon, Leitrim and Galway County also saw growth in the number of Managers & Proprietors over the period. Sligo, Donegal and Mayo, saw quite strong growth in Other Skilled Agricultural Trades. In most cases this was driven by skilled fishing trades, with horticulture trades showing strong growth in Galway County and Sligo, which was the only county to also see growth in the number of farmers (10.5%).

'Elementary Agricultural' fell notably in Donegal and Leitrim (though as noted above these are the two counties where it remains most important). In the case of Donegal, some of the growth in skilled fishing trades and decline in elementary occupations could be due to some people working on fishing vessels gaining a qualification which changed their occupation from unskilled to skilled.

### 3.0 Key Employment Issues for Agriculture, Forestry & Fishing

As the sixth largest employer in the Western Region, Agriculture, Forestry & Fishing plays a central role in the regional economy and an even greater and multidimensional role in the rural economy. The focus of this report has been direct employment of those whose main economic activity is Agriculture, Forestry & Fishing. Some of the employment issues facing the region's Agriculture, Forestry & Fishing sector are discussed below.

#### Despite declines, Agriculture, Forestry & Fishing continues to play a larger role in the region's labour market

Despite the fact that Agriculture, Forestry & Fishing as an employment sector has declined significantly over the past two decades, it continues to employ a greater share of the workforce in the Western Region than nationally (6.8% of total employment compared with 4.4%) with 1 in 4 of everyone working in this sector in Ireland living in the region. The rural counties of Roscommon, Leitrim and Mayo have among the highest shares working in the sector nationally.

Any changes in activity and employment in the sector, for example as a result of Brexit or climate mitigation efforts would have a particular impact on the region's labour market and rural areas in particular. Agriculture, Forestry & Fishing must therefore be considered as a priority sector in national, regional and county strategies aimed at sustaining and revitalising the regional and rural economy.

#### The sector is highly exposed to Brexit

The Agriculture, Forestry & Fishing sector, together with agri-food processing, is considered to be the most exposed to the impact of Brexit as the UK is the main market for Ireland's agri-food exports and imports. All analyses of the potential impact of Brexit on Ireland's agri-food sector agree that it will be 'unambiguously bad'.<sup>20</sup> In 2018 Ireland exported agri-food products to the value of €5.6bn to the UK.<sup>21</sup> The sector's higher share of employment in the region increases its vulnerability to the impact of Brexit.

The sector is already facing challenges from exchange rate fluctuations. Future challenges will depend on the nature of the EU-UK trading relationship and the degree of regulatory divergence between the UK and Ireland. Considerable efforts have been underway for the past number of years to mitigate the impact of Brexit on this sector, including through product and market diversification, and it is important that the needs and issues of the sector in the Western Region, characterised by smaller scale operations, is addressed in Brexit adaptation efforts.

#### Western Region plays a strategic role in Ireland's Fishing & Aquaculture sector

Of total employment in Fishing & Aquaculture in Ireland, 43% is located in the Western Region, which is also home to 47.6% of total employment in seafood processing.<sup>22</sup> Killybegs in Donegal is a key strategic asset in the country's seafood sector with €125m in landings in 2017<sup>23</sup> the highest of any port. The region is also home to a number of key assets to support the development of the

<sup>20</sup> Department of Agriculture, Food & the Marine (2019), [Brexit Fact Sheet, Irish Agri-Food Sector](#)

<sup>21</sup> Department of Agriculture, Food & the Marine (2019), [Trade Factsheet](#)

<sup>22</sup> Of 145 detailed industrial groups, Fishing & Aquaculture is the sector where the region has its fourth highest share of national employment and seafood processing is where it has its second highest share.

<sup>23</sup> BIM (2018), [The Business of Seafood 2017: A Snapshot of Ireland's Seafood Sector](#)

sector including the Marine Institute, NUIG's Martin Ryan Institute, BIM's National Fisheries College in Greencastle and GMIT's Marine and Freshwater Research Centre, among others.

Ireland's seafood sector has shown strong recent growth which has been predominantly export-led with the EU the biggest market (mainly France, UK, Spain and Italy). There has also been an increase in domestic seafood sales. Demand for seafood is growing globally, particularly in Asia, while increased interest in healthier eating is also driving demand.

Brexit however poses many challenges for the sector such as future access to fishing grounds, quota allocation and regulatory divergence, in addition to the general issues impacting all economic sectors such as the future trading relationship, routes to market, supply chains and transport logistics. Addressing these issues will be vital to future jobs growth in the sector.<sup>24</sup>

### **Further potential for Forestry & Logging sector**

A total of 580 people are employed in Forestry & Logging in the Western Region, this is 25.6% of everyone working in this sector in the state, indicating the region's important national role. At a county level the sector is most important in the employment profile of Leitrim and Donegal.

The region's forestry resource is a highly valuable asset supplying the construction industry with quality product for the domestic and export market. The Western Region is well placed to further develop a wood energy sector using by-products such as thinnings, contributing to increased renewable energy use particularly in the heat market.<sup>25</sup> Given the nature of the sector, wood energy involves local supply chains. Local impacts include new direct and indirect jobs, money remaining in the local economy rather than being spent on imported fossil fuel, investment in new facilities and reduced carbon emissions.<sup>26</sup> These impacts would primarily benefit rural areas and there is an opportunity to further develop the wood energy sector in the region to stimulate local job creation as well as increase renewable energy use.

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<sup>24</sup> Ibid

<sup>25</sup> WDC (2008), [Wood Energy Strategy for the Western Region](#)

<sup>26</sup> WDC (2014), [A Study of Local Economic and Social Benefits of Bioenergy Installations and their Associated Supply Chains in the West of Ireland](#)

## 4.0 Conclusion

Agriculture, Forestry & Fishing plays a key role in the employment profile of the predominantly rural Western Region. Although its significance as a 'main' employment sector has declined substantially, it is vital to sustaining the rural economy and is an important source of jobs, particularly for men in more rural counties.

The main activity is cattle and sheep farming with generally smaller scale operations than elsewhere in the state. The nature of the sector has implications for the region's agri-food processing sector. The region, and specifically Donegal, has a key strength in Fishing & Aquaculture and this area holds considerable growth potential as does further development of Forestry & Logging products and as a renewable energy resource.

There is a high level of self-employment with farmers the largest occupational group, though some counties are showing a slight change in the sector's structure with a decline in the share of farmers and growth in other occupations. While there have been initiatives to encourage greater involvement of women in the sector, the female share has in fact declined.

One of the greatest issues facing the sector at present is Brexit, given that the UK is its largest market. This could have significant employment impacts and the specific nature and issues of the region's agricultural sector needs to be addressed in efforts to mitigate the impact of Brexit.

Future changes in the pattern and activities carried out by the Agriculture, Forestry & Fishing sector as a result of climate change mitigation and transition to a low carbon economy, could have significant positive and/or negative impacts on employment. The nature and scale of such impacts is currently unclear and will be one of the most important factors influencing this sector's long term future.

Download **Agriculture, Forestry & Fishing Employment in the Western Region: Regional Sectoral Profile** and **WDC Insights: Agriculture, Forestry & Fishing Employment in the Western Region** [here](#)

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**Appendix 1: Population aged 15 years and over by detailed industrial group in the Agriculture, Forestry & Fishing sector NACE Rev 2 in Western Region 2011 and 2016**

Detailed industrial group	Clare			Donegal			Galway City		
	2011	2016	% Change	2011	2016	% Change	2011	2016	% Change
Farming of animals mixed farming	3,516	3,206	-8.8%	3,213	3,139	-2.3%	116	96	-17.2%
Growing of perennial & non-perennial crops	68	57	-16.2%	95	67	-29.5%	14	13	-7.1%
Other agricultural activities	60	65	8.3%	63	69	9.5%	2	5	150.0%
Forestry & logging	56	43	-23.2%	120	119	-0.8%	12	18	50.0%
Fishing & aquaculture	14	17	21.4%	443	567	28.0%	13	20	53.8%
Horseracing activities	37	35	-5.4%	13	16	23.1%	11	11	0.0%
<b>Total Agriculture, Forestry &amp; Fishing</b>	<b>3,751</b>	<b>3,423</b>	<b>-8.7%</b>	<b>3,947</b>	<b>3,977</b>	<b>0.8%</b>	<b>168</b>	<b>163</b>	<b>-3.0%</b>

Detailed industrial group	Galway County			Leitrim			Mayo		
	2011	2016	% Change	2011	2016	% Change	2011	2016	% Change
Farming of animals mixed farming	5,452	4,988	-8.5%	1,068	958	-10.3%	4,885	3,900	-20.2%
Growing of perennial & non-perennial crops	43	64	48.8%	39	27	-30.8%	164	177	7.9%
Other agricultural activities	121	133	9.9%	21	22	4.8%	85	83	-2.4%
Forestry & logging	92	103	12.0%	59	70	18.6%	116	112	-3.4%
Fishing & aquaculture	107	131	22.4%	3	2	-33.3%	76	95	25.0%
Horseracing activities	93	86	-7.5%	4	12	200.0%	28	28	0.0%
<b>Total Agriculture, Forestry &amp; Fishing</b>	<b>5,908</b>	<b>5,505</b>	<b>-6.8%</b>	<b>1,194</b>	<b>1,091</b>	<b>-8.6%</b>	<b>5,354</b>	<b>4,395</b>	<b>-17.9%</b>

Detailed industrial group	Roscommon			Sligo			Western Region		
	2011	2016	% Change	2011	2016	% Change	2011	2016	% Change
Farming of animals mixed farming	2,219	2,107	-5.0%	1,584	1,746	10.2%	22,053	20,140	-8.7%
Growing of perennial & non-perennial crops	49	41	-16.3%	16	12	-25.0%	488	458	-6.1%
Other agricultural activities	66	75	13.6%	33	25	-24.2%	451	477	5.8%
Forestry & logging	50	68	36.0%	57	47	-17.5%	562	580	3.2%
Fishing & aquaculture	1	4	300.0%	18	26	44.4%	675	862	27.7%
Horseracing activities	20	16	-20.0%	13	12	-7.7%	219	216	-1.4%
<b>Total Agriculture, Forestry &amp; Fishing</b>	<b>2,405</b>	<b>2,311</b>	<b>-3.9%</b>	<b>1,721</b>	<b>1,868</b>	<b>8.5%</b>	<b>24,448</b>	<b>22,733</b>	<b>-7.0%</b>

Source: CSO, Census 2016: Summary Results Part 2, Table EZ011

**Appendix 2: Population aged 15 years and over in Agriculture, Forestry & Fishing related occupations in Western Region, 2016**

	Clare	Donegal	Galway City	Galway County	Leitrim	Mayo	Roscommon	Sligo	Western Region
<b>Managers &amp; Proprietors in Agriculture Related Services</b>	<b>19</b>	<b>32</b>	<b>10</b>	<b>69</b>	<b>18</b>	<b>48</b>	<b>33</b>	<b>17</b>	<b>246</b>
<i>Managers &amp; proprietors in agriculture &amp; horticulture</i>	9	14	1	32	11	22	16	9	114
<i>Managers &amp; proprietors in forestry, fishing &amp; related services</i>	7	17	8	31	7	24	17	8	119
<i>Managers &amp; proprietors in horse-racing &amp; related industries</i>	3	1	1	6	-	2	-	-	13
<b>Farmers</b>	<b>3,237</b>	<b>3,185</b>	<b>102</b>	<b>5,225</b>	<b>986</b>	<b>4,144</b>	<b>2,190</b>	<b>1,811</b>	<b>20,880</b>
<b>Other Skilled Agricultural &amp; Related Trades</b>	<b>86</b>	<b>492</b>	<b>38</b>	<b>253</b>	<b>26</b>	<b>174</b>	<b>43</b>	<b>65</b>	<b>1,177</b>
<i>Horticultural trades</i>	35	24	12	48	12	32	13	15	191
<i>Skilled workers in horse-racing &amp; related industries</i>	10	6	1	30	2	17	4	4	74
<i>Agricultural &amp; fishing trades n.e.c.</i>	41	462	25	175	12	125	26	46	912
<b>Elementary Agricultural Occupations</b>	<b>149</b>	<b>470</b>	<b>31</b>	<b>331</b>	<b>106</b>	<b>365</b>	<b>176</b>	<b>83</b>	<b>1,711</b>
<i>Farm workers</i>	77	235	4	140	25	95	69	35	680
<i>Forestry workers</i>	24	83	10	63	51	70	28	24	353
<i>Elementary occupations in horse-racing &amp; related industries</i>	9	8	4	27	4	6	6	7	71
<i>Fishing &amp; other elementary agriculture occupations n.e.c.</i>	39	144	13	101	26	194	73	17	607
<b>TOTAL</b>	<b>3,491</b>	<b>4,179</b>	<b>181</b>	<b>5,878</b>	<b>1,136</b>	<b>4,731</b>	<b>2,442</b>	<b>1,976</b>	<b>24,014</b>

Source: CSO, Census 2016: Profile 11 – Employment, Occupations and Industry, Table EB049